THE TIMES OF INDIA

DIRECTORY & YEARBOOK

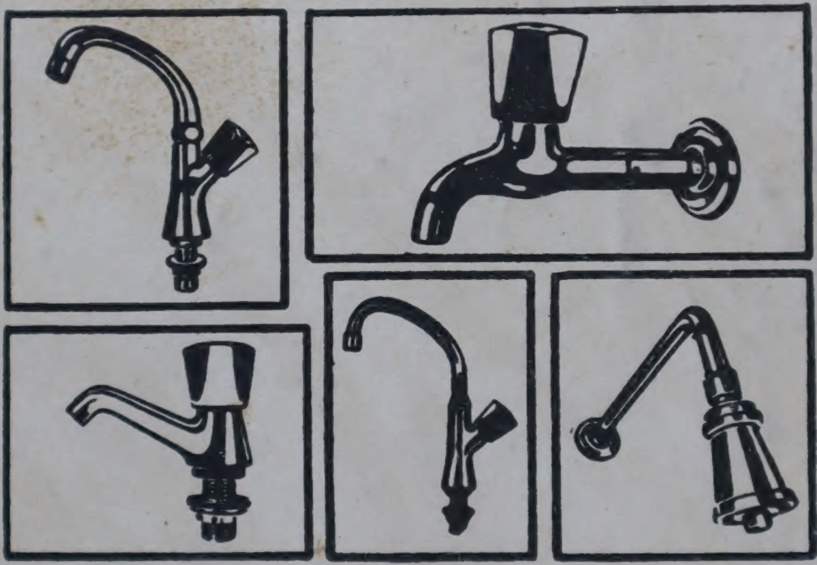
INCLUDING WHO'S WHO

1982

ARK

Your best buy

C.P. BATHROOM FITTINGS



KHANNA INDUSTRIES

121, INDUSTRIAL AREA, CHANDIGARH-160002.

Outstanding features :

1. **Guaranteed Performance**
2. **Integrally Lubricated Valve Assembly**
3. **Sturdy Construction**
4. **Heavy Chrome Plated**
5. **Easy to install and easier to maintain**

CHOICE OF

IMPORTANT

PROJECTS

- * **Commercial Flats Bldg. Corpn.,** Hyderabad.
- * **Hotel Sri Venkateswara Pvt. Ltd.,** Kakinada.
- * **Dhananjaya Hotels Pvt. Ltd.,** Hyderabad.
- * **Dolphin Hotels Limited,** Visakhapatnam.
- * **Maanasa Hotels Private Ltd.,** Kakinada.
- * **Kanhiya Hotel Private Ltd.,** Varanasi.
- * **Balaji Yantrashala,** Nepal.
- * **ICRISAT,** Hyderabad.
- * **Shankar Hotel,** Kathmandu (Nepal).
- * **Tourism Hotel,** Paro (Bhutan).
- * **Picadilly Hotel,** Chandigarh.

For your requirements correspond with :

Sole Selling Agents

ARKSAN PRIVATE LIMITED

121, Industrial Area, Chandigarh 160 002.

P. B. No. 606.   Grams : " ARK ".   Phones : 26557, 26523.

THE TIMES OF INDIA

DIRECTORY & YEARBOOK

INCLUDING WHO'S WHO

1982

Editor : **Girilal Jain**

Acting Directory-in-Charge : **Saroj Satija**

Assistants : K. Krishnan Kutty, Shefali Ghosh and K. S. Ramanujam

Cover Designer : Nitin C. Keer

NOT FOR EXPORT

Copies of the edition of the DIRECTORY are not to be sold outside India. A separate De-luxe edition is simultaneously published for EXPORT. Enquiries from the trade and exporters are solicited.

THE TIMES OF INDIA PRESS, BOMBAY

Branches : 7, BAHADURSHAH ZAFAR MARG, **NEW DELHI 110 002;** 13/1 & 13/2, GOVT. PLACE EAST, **CALCUTTA 700 069 ;** 63, MONTIETH ROAD, **MADRAS 600 008;** 139, ASHRAM ROAD, **AHMEDABAD 380 009;** 26, STATION APPROACH, SUDBURY, WEMBLEY, MIDDLESEX, **U.K.**

PRICE : Rs. 100.00

ACCURATE MEASUREMENTS + ACCURATE TESTING =

PRECISION

G.D.R. INSTRUMENTS

Exported by:

VEB CARL ZEISS JENA GDR

- Pneumatic Measuring Instruments (Air Gauges)
- Automatic Grinding Gauge
- Dial Gauge Tester
- Square Tester
- Gear Tester
- Hob Tester
- Optikator Accuracy 0·1 & 0·2 Microns
- Taper and Angle Tester
- Mykators 1·0 & 0·5 Microns
- Indicating Micrometer
- Tooth Pitch Tester
- Tap Tester

Agents for:

Rubert U.K.	MECRIN 3 Portable Surface Finish Tester
Wyler AG	Precision Levels
Elektro Physik	Mikrotest ' Coating Thickness Gauge
Verdict U.K.	Dial Test Indicator
Martin & Tschopp AG	Thread Measuring Wires

JAFUJI Products:

Bench Centre, Comparator Stands, Surface Plates, Straight Edges, Machine Shop Tools etc.

M/s. BOMBAY TOOLS SUPPLYING AGENCY

T. G. Shah Building, Pydhonie Jn., P. B. No. 3334, BOMBAY 400 003.
Phones : 326495 & 344094. ● Cable : " TERRATOOLS "

Sales Office : 50, Nagdevi Cross Lane, Bombay 400 003. Phones : 321226 & 320877.

Associates : BANGALORE ● MADRAS ● HYDERABAD ● CALCUTTA n2,N N82

CFTRI LIBRARY MYSORE-2A
1028(ω)
20

CONTENTS

(General Index on Page 918)

possible care is taken to check the information given in this volume. But the publishers cannot take responsibility nce errors or omissions. Authoritative corrections will be gratefully received.

Scientific & Research Library
No. 399
16 MAY 1986
C.F.T.R.I. Expriment Station. LUDHIANA-6

Page

o Advertisers V
Directory for Buyers cxxix

COUNTRY

titution of India .. .. ..
orology .. 9
siography .. 7
rist's Guide, A 12

URE & RESOURCES

ught 98
rgy 100
heries 115
ods 99
od and Agriculture 106
rests 103
nes and Minerals 54

RO-BASED INDUSTRIES

nimal Husbandry 113
recanut Industry 22
ashew-nut Industry 26
ocoa Industry 28
offee Industry 29
oir Industry 30
otton and Cotton Textile Industry 31
Dairy Industry 34
Fertiliser Industry 42
Jute Industry 48
Lac Industry 49
Oilseeds and Vanaspati 62
Rubber Industry 74
Silk Industry 77
Spices Industry 84
Sugar Industry 89
Tea Industry 91
Tobacco Industry 93

DUCATION & SCIENCE

Atomic Energy 147
Education 117
Research 135
Space Research 145
Vocational Guidance Bureaux 134

Page

WELFARE PROGRAMMES

Family Welfare Programme 262
Indian Child 252
Institutions for the Handicapped 242
Public Health 267
Rehabilitation Centres 256
Social Welfare 241

DEMOGRAPHY

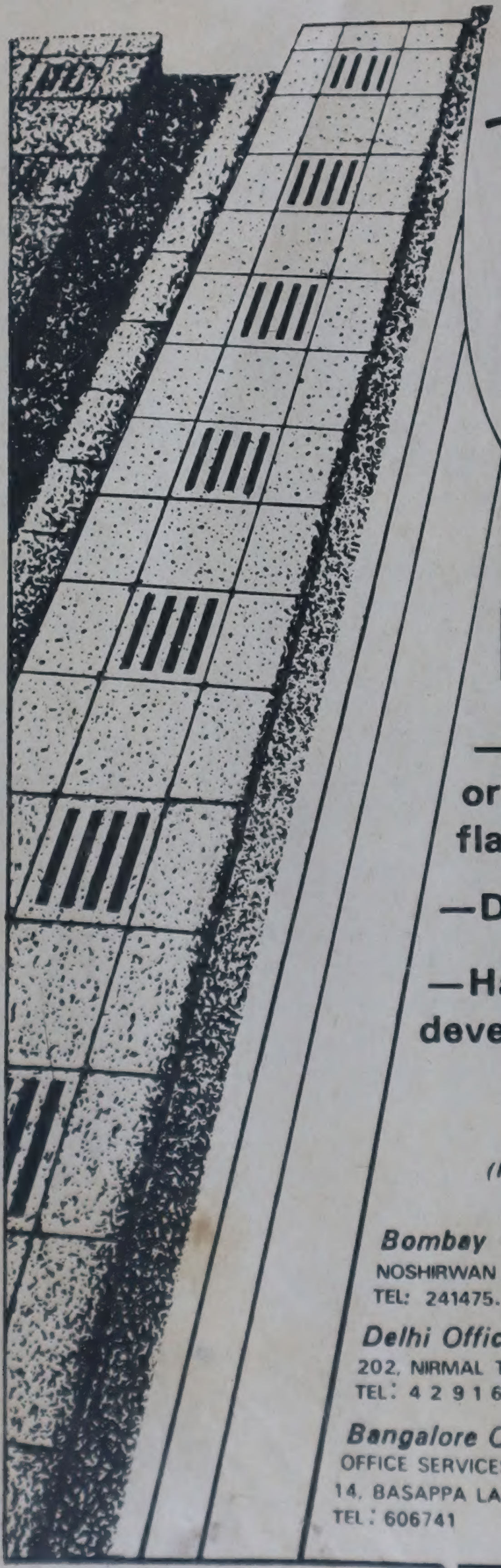
Population 270

GENERAL COMPENDIUM

Associations, State 366
Awards and Prizes 305
Deaths 1980 239
Defence Services 296
Events 1980, Foreign 238
Events 1980, Indian 237
Historic Dates 1900–1979 216
Housing 198
Important Legislations 1980 276
Labour 300
Municipal Corporations 1980 212
Museums & Libraries 315
Newspaper Statistics 215
Sports 316
Time Difference 305
Trade Unions 304

TRADE & INDUSTRY

Automobile Industry 23
Cement Industry 27
Chambers of Commerce 405
Commercial Firms :
  Manufacturers 410
  Dealers 706
  Services 754
Company Affairs 326
Corporate Giants in India 1979–80 325
Drugs & Pharmaceutical Industry 36
Electronics Industry 38
Film Industry 46
Government of India Undertakings 330



THE S F ENGINEE
GROUP

DEVELOPERS, REALTORS AND CONTRACTO

LET'S
HOUSE THE NATION

—Are you in the market to buy or sell? Lease or Licence?.....Land, flats or other property?

—Do you have a housing problem?

—Have you been looking for a reliable developer, contractor or estate agent

TRY US—— WE TRY HARDER!

(Reputed Professionals in the field for over 40 years)

Bombay Office:
NOSHIRWAN MANSION, 3RD FLOOR, HENRY ROAD, COLABA, BOMBAY 400 039.
TEL: 241475. 241491 TELEX: 011-5449-SFE GRAMS: LANDESTATE

Delhi Office:
202, NIRMAL TOWER, 26, BARAKHAMBA ROAD, NEW DELHI 110 001.
TEL: 4 2 9 1 6 GRAMS: LANDESTATE NEW DELHI

Bangalore Office:
OFFICE SERVICES PVT. LTD.
14, BASAPPA LAYOUT, BANGALORE 560019.
TEL: 606741

Page
Man-made Fibre Industry 50
Miscellaneous Manufactures 60
Paper Industry 65
Petro-chemical Industry 66
Petroleum Industry 68
Plastics Industry 73
Public Sector 328
Shipping Industry 76
Small-Scale Industry 79
State Government Undertakings 349
Steel Industry 87
Woollen Industry 96

INANCE

Banking 284
Bullion 285
Central Budget 1981–82 292
Economic Situation 291
Foreign Aid to India 277
Import and Export Trade 281
National Income 288
Sixth Five-Year Plan 293

COMMUNICATIONS

Civil Aviation 200
Communications 202
Ports 204
Railways 208
Roads 210

STATES & UNION TERRITORIES

Andaman and Nicobar Islands 149
Andhra Pradesh State 152
Arunachal Pradesh (U.T.) 154
Assam State 154
Bihar State 156
Chandigarh (U.T.) 158
Dadra and Nagar Haveli (U.T.) 159
Delhi (U.T.) 160
Goa, Daman and Diu (U.T.) 160
Gujarat State 162
Haryana State 164
Himachal Pradesh State 166
Jammu and Kashmir State 167
Page
Karnataka State 169
Kerala State 171
Lakshadweep (U.T.) 172
Madhya Pradesh State 173
Maharashtra State 176
Manipur State 180
Meghalaya State 182
Mizoram (U.T.) 182
Nagaland State 183
Orissa State 184
Pondicherry (U.T.) 185
Punjab State 187
Rajasthan State 188
Sikkim 189
Tamil Nadu State 190
Tripura State 193
Uttar Pradesh State 194
West Bengal State 196

ADMINISTRATIVE & DIPLOMATIC PERSONNEL

Foreign Diplomatic Representatives in India .. 880
Government of India Personnel 850
Indian Diplomatic Representatives Abroad .. 876
States Administrative Personnel 863
U. N. and Other Bodies in India 885

ELECTIONS & LEGISLATURES

General Elections 815
Legislative Assemblies and Councils 822
Lok Sabha 819
Rajya Sabha 817

LATE PARTICULARS 915

WHO'S WHO 886

GENERAL INDEX 918

MAPS OF INDIA, STATES & THE WORLD
(Facing last page of Index)

PHOTO SUPPLEMENT
(Between pages 96 & 97
,, ,, 384 & 385)

Thousands of families are re-discovering the time-tested qualities of Clove Oil in

Promise

the unique toothpaste with Clove Oil

Isn't it time you discovered it too?

"Wonder why nobody thought of it before!"
The unique toothpaste with time-tested
CLOVE OIL
Promise
for healthier teeth and gums, fresher breath
Promise
The Unique toothpaste
Pro
for healthier teeth and

A Balsara Product

Promise

- Helps prevent tooth decay
- Refreshes the mouth
- Prevents bad breath

Healthier teeth and gums.
Fresher breath.
That's a Promise.

CHAITRA-BLS-453

OTHER PRODUCTS

'PROMISE'	Tooth Powder with Clove Oil	**'ODOPIC'**	Cleaning Powder
'PURITAS'	Storage Water Filters	**'SANIFRESH'**	Lavatory Cleanser
'PURITAS'	Pressure Water Filters	**'EXPEL'**	Drain Cleaner
'ODONIL'	Air Purifier (Freshner)	**'ODOMOS'**	Mosquito Repellent Cream

Balsara Hygiene Products Ltd., 12-A, Jorawar Bhuvan, M. Karve Road, Bombay 400 020.
Phone : 256241 Cable : "BALHYGIENE" Telex : 011-6678 BHPB IN.

INDEX TO ADVERTISERS (1982)

Page

A

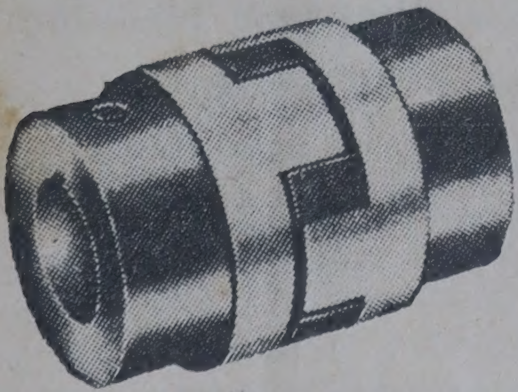
A-1 Industries .. xv
A. Lunar Engineering .. 503
ABC India Ltd. .. 808
Abdulhusein Peerbhoy & Sons .. 800
Academic Enterprises .. xvii
ACD Machine Control Co. Pvt. Ltd. .. xix
Advance Components & Instruments Pvt. Ltd. .. xxiii
Advance Trading Co. .. xix
Advani-Oerlikon Ltd. .. cclxxxiv, cclxxxv, cclxxxvi, cclxxxvii
Aggarwal Marketing Co. .. xxii
Ahmedabad Electricity Co. Ltd. .. 499 & xxi
Ahura Printing Press .. 796
Ahura Transport Syndicate .. 806
Air India .. 758
Ajax Industries .. 421
Akay Industries .. 615
All India Medical Corporation .. 593
Allibhoy Sharafally & Co. Pvt. Ltd. .. 718
Alloys Industrial Products .. xxii
Altex Pvt. Ltd. .. 750
Aluminium Industries Ltd. .. xx
AMK Associates .. xvi

Page

Ampi Agencies Pvt. Ltd. .. xviii
Amrutlal Bhurabhai & Co. .. 722
Anant Engineering Works Pvt. Ltd. .. xxiii
Anupam Marketing Pvt. Ltd. .. xx
Arc Brazer Pvt. Ltd. .. 695
Argo Industries .. xvii
Arunodaya Foundries Pvt. Ltd. .. 521 & 522
Aryavaidya Sala .. xvi
Asbestos Gaskets & Jointing Co. .. 527
Asea Ltd. .. 773
Asha Rubber Industries .. 624
Associated Abrasives Pvt. Ltd. .. 411
Associated Agencies (Bombay) .. 722
Associated Cement Companies Ltd. .. 450
Associated Chemical Syndicate .. 721
Associated Soapstone Distributing Co. (P) Ltd. .. 740
Associated Traders & Engineers Ltd. .. xxi
Atul Glass Industries Pvt. Ltd. .. xvi
Atur Rubber Products .. xxi
Audco India Ltd. .. 689

B

B. B. Metal Industries .. xxix
B.B.C. Advertising Service .. 754



LOVEJOY
FLEXIBLE COUPLINGS

PATENT NO. 108782

Why design engineers specify LOVEJOY couplings

LOVEJOY COUPLING FEATURES

- **Positive protection . . .** jaw-to-jaw construction offers fail-safe contact even if cushions wear abnormally during operation.
- **Production economy . . .** quick and easy to install: "eye-ball" alignment.
- **Operating dependability . . .** no lubrication, reduced maintenance.
- **Equipment versatility . . .** standard and special models available for all needs.
- **Long lasting . . .** precision machined and balanced. Lovejoy couplings never wear out. Positive load transmission under all operating conditions.

With Technical knowhow from
LOVEJOY INC. CHICAGO U. S. A.
World's largest producer of flexible couplings

Manufactured in India by:
RATHI ENGINEERING WORKS
27, Shankarshet Road, POONA-9

Sole Distributors:
JOSEL CORPORATION
Rama Niwas, Laxmi Road, POONA-30
Phone: 444055

Distributors:
R. S. V. AGENCIES
19/21, Ambalal Doshi Marg, Fort, BOMBAY-400023
Phones: 271598, 271654

Page

Bajeria Industries. (Facing Trade Directory Buyers) .. cxxviii
Balsara Hygine Products Limited (Facing Index to Advertisers)
Bank of Baroda .. 760 & 761
Basp Engineers & Consultants Pvt. Ltd. .. xxvii
Batliboi & Co. Ltd. .. xxv
Bee Gee Consultants Pvt. Ltd. .. 788
Bengal Industries .. xxiv
Bennett, Coleman & Co. Ltd. .. 572
Bhandari Homoeopathic Laboratories .. vi
Bharat Asbestos & Rubber Co. .. 708
Bharat Auto Parts .. 710
Bharat Containers Pvt. Ltd. .. xxix
Bharat Earth Movers Ltd. .. xviii
Bharat Electronics Ltd. .. 500
Bharat Engineering Corporation .. xvii
Bharat Industries .. 611
Bharat Techno Mechanical Industries Pvt. Ltd. .. 523
Bharatiya Metal Smelting & Refining Corporation xxv
Bhutan Fruit Products Ltd. .. 515
Bioscience Corporation .. 548
Blue Diamond Engineering Corporation .. xxvi
Blue Star Ltd. .. 418
Bombay Acid & Chemical Company .. 412
Bombay Andhra Transport Company .. xxx
Bombay Samachar .. 571

Page

Bombay Tools Supplying Agency .. (Facing Contents)
Bonafide Industrial Works .. 552
Booksell Agencies .. xiii
Boolani Engineering Corporation .. 789
Boxage .. xxv
Bralco Metal Industries Pvt. Ltd. .. 563
Bramson Enterprises .. 587
Brimco Plastic Machinery Pvt. Ltd. .. 601 & 603
British Bank of the Middle East .. 759
Business Press Pvt. Ltd. .. 715

C

CIDCO .. xxxiii
C. Bole & Company .. cclxxxiii & 554
C. Doctor & Co. Pvt. Ltd. .. 417
Carborundum Universal Limited .. xxxvi
Castrol Limited .. xiv
Catholic Syrian Bank Limited .. 762
Central Bank of India .. 763
Century Spinning and Mfg. Co. Ltd. .. 671
Chandok Automotive Mfrs. Pvt. Ltd. .. xxxii
Chase Bright Steel Ltd. .. xxxix
Chemical Solvent Centre .. 721
Chemoleums Pvt. Ltd. .. xxxix
Chemox Chemical Industries .. 726
Chemox Overseas Corporation .. 726
Chloro Control Equipment Company .. xxxiv

Eutectic
FIRST IN MAINTENANCE WELDING TECHNOLOGY
Castolin

EWAC ALLOYS LIMITED

Registered Office :

L&T House, Ballard Estate, Bombay 400 038.
Phone : 268181. *Grams :* "EUTECTWELD".

Factory : Saki-Vihar Road, Post Bag 8933, Powai, Bombay 400 072. *Phone :* 581401.

Manufacturers : EUTECTIC Special Welding Electrodes, Micro Powder Alloys, Gas Welding Rods, Welding Fluxes, Welding Torches and Accessories.

Directors : N. M. Desai, R. D. Wasserman, H. Holck-Larsen, F. W. Glaser, U. V. Rao, J. L. Henry, B. G. N. Patel, F. M. Del Gaudio, K. S. S. Mani, F. Balchandani, T. Pooran (Alternate for F. W. Glaser).

Selling Agents :

LARSEN & TOUBRO LIMITED
P.O. Box 278, Bombay 400 038.
Phone : 268181. *Grams :* "LARSENBRO".
Telex : TLX 2246.

Always insist on Bhandari

Bhandari
Homoeopathic &
Biochemic Medicines

★

Manufactured by:

BHANDARI HOMOEOPATHIC LABORATORIES
Faridabad.

Available at :

BHANDARI HOMOEOPATHIC STORES
43-44, Municipal Market,
Opp. Yorks Hotel, Connaught Circus,
New Delhi 110 001.
Phone : 320560.

Page
City Bank N.A. 764
Cochin Port Trust xxxv
Colgate Palmolive (I) Ltd. xxxviii
Colour Chem Ltd. xxxii
Commercial Center xxxiv
Commercial Combines Company xxxiv
Commercial Credit-Corporation Pvt. Ltd. xxxii
Commercial Steel Corporation 736
Commonwealth Packaging Industries 582
Consolidated Pneumatic Tool Co. (I) Ltd. 608
Continental Device India Limited 501
Continental Steel Corporation xxxi
Crescent Dyes & Chemicals Limited 456
Crescent Springs 637
Crompton Greaves Ltd. 496

D

D. K. Publishers Distributors xli
Daisy Trading Corporation 659
Darly Photographers & Dealers xliii
Dattatraya Industries Pvt. Ltd. 488
Debha Glue Products xl
Devarsons Private Ltd. xxxix
Dey's Medical Stores (Mfg.) Ltd. 484
Dilip Trading Co. .. .. (Inside Back Cover)
Doburg Lager Breweries Pvt. Ltd. xlii
Dominion Radios xxxix

Page
Drewet Chowna & Co. 735
Driplex Water Engineering (P) Ltd. xli
Dwarkadas Velji Talpatriwala 659

E

E. H. Turel & Company 749
Eagle Engineering Company 644
Ebrahim Adamji & Company 726
Electro Fabricators Private Ltd. xi
Electro Magnet Winding Wires xliv
Elgi Equipments Ltd. xliii
Encee Electric Heat Corporation 498
Engineering Construction Corpn. Ltd. 774
Esoofali Esmailji Karachiwalla & Co. 557
Everest Advertising Private Limited 755
Evergreen Wirecloth Factory Pvt. Ltd. 701
Ewac Alloys Limited vi

F

F. E. Hardcastle & Co. Pvt. Ltd. xlvi
Fair Deal xlvi
Falcon Enterprises 554
Farouk Sodagar Darvesh & Co. ix
Federal Bank Ltd. 765
Fibreglass Pilkington Ltd. xlv
Fixit Hardwares 440

Telex :
VINY IN 021-2675

Telegrams :
" DHINGRASON "

Telephones :
Office : 27-8931, 27-8962, 27-6813, 27-6817
Resi. : 47-0690

Western India Machinery Co.

24, Ganesh Chandra Avenue, Calcutta 700 013.

ENGINEERS & MACHINERY MERCHANTS

Authorised Dealers and Distt. Distributors :

- KIRLOSKAR ELECTRIC MOTORS
- DIESEL OIL ENGINES
- GENERATING SETS
- TRANSFORMERS, PUMPING SETS
- STARTERS & SPARES

Kirloskar® GENERATING SETS
OUR SPECIALITY

	Page
Fluidline Systems	xlvi
Fort Gloster Industries Ltd.	xlvii
Four Field	814
Frigsales (I) Private Limited	706

G

G. A. Randerian Limited	l
Gammon India Ltd.	770
Gannon Norton Metal & Diamond Dies Ltd.	682
Garg Industrial Corporation	liii
Gaurav Agencies	li
Geekays India (Engineering & Agencies)	728
Geoffrey Manners & Co. Ltd.	477
Glaxo Laboratories (I) Ltd.	478
Gloheat Instruments Corporation	566
Glotile Electricals	liv
Gokak Patel Volkart Ltd.	liv
Gorakhram Haribux	419
Goregaon Acid Supplying Co.	412
Government of Goa, Daman And Diu	lii
Grace Paper Industries Pvt. Ltd.	li
Graham Firth Steel Products (I) Ltd.	650
Grauer & Weil (India) Ltd.	504
Greater India Tubes Co.	li
Greaves Cotton & Co. Ltd.	xlviii & xlix
Greaves Foseco Limited	liv
Grindlays Bank Ltd.	766
Guest Keen Williams Ltd.	640

	Page
Gujarat Transformers Pvt. Ltd.	liii
Gujchem Distillers India Limited	457
Gulamally & Brothers	liv

H

H. Mangaldas & Co.	772
H. P. Kharawala	lvii
Hami & Co.	591
Handicrafts Development Corpn. of Kerala Ltd.	lix
Handmade Paper Directorate	586
Harshad Engineering Works	lvi
Heatly & Gresham (India) Ltd.	lxi
Heavy Metal & Tubes	564
Hemco Corporation	739
Heni Chemical Industries	479
Himalaya Shipping Co. Ltd.	803
Hindustan Construction Co. Ltd.	lx
Hindustan Lever Ltd.	636
Hindustan Motors Ltd.	485
Hindustan Platinum Pvt. Ltd.	lix
Hindustan Scale Co.	752
Hindustan Steel & Metal Works	lv
Hiralal & Co.	lv
Hoechst Pharmaceuticals Limited	480
Hoist-O-Mech Ltd.	lviii
Holmes Laboratory	lvi
Horstmann India Pvt. Ltd.	616

MANUFACTURERS OF :

Automatic P. P. Cap Plants
Semi-Automatic P. P. Cap Plants
Precision Die Sets for Metal Container Components
Automatic Rubber Solutioning Machine Gang Slitter
Thread Rolling/Curling Machines of Different Capacities

CONSULTANTS FOR :

Tin Container Manufacturing Units
Bottle Closures Manufacturing Units

★

RESULTS ENGINEERS & CONSULTANTS

35, Sarvodaya Industrial Estate,
Mahakali Caves Road,
Andheri (E), BOMBAY 400 093.
Phone: 575954.

For your
PROBLEMS
Pertaining to
PROPERTY

Contact :

PREMIER
Real Estate Service

"SWAPNA-SAPHALYA",
105-E, Tara Baug,
Seth Motishah Road (Lovelane),
Mazagaon, Bombay 400 010.
Phones : 869487 & 867748.

Week Days : 10·00 A.M. to 6·00 P.M.
Sundays & Holidays : 10·00 A.M. to 1·00 P.M.

Page
Hortico .. lvii
Hotel Hiramani .. 782
Hotel Vrindavan .. 781

I

I.A.E.C. .. lxvi
I. V. P. Limited .. 517
Ideal Motors .. xiv
Indian Cardamom Board .. lxv
Indian Council of Social Science Research .. 805
Indian Hotels Co. Ltd. .. lxiv
Indian Overseas Bank .. 767
Indian Oxygen Limited .. lxiii
Indian Steelworks Construction .. 775
Indo-Steel Corporation .. lxi
Indrajit Industries .. lxvii
Industrial Commercial Corporation .. 413 & 752
Industrial Testing Laboratories .. lxvii
Intermark .. 635
International Licensing Ltd. (Facing Inside Back Cover)
ION Exchange (India) Limited .. lxii
Iteng Engineering Pvt. Ltd. .. 790

J

J. B. Metal Industries Private Limited .. lxxi
J. C. Industries .. 705

Page
J. I. Harkin Crafts .. lxviii
J. K. Organisation .. lxvii
J. K. Overseas .. 732
J. Khushaldas & Company .. 709
J. M. Baxi & Company .. lxxii
Jafkay Engineering Corporation .. lxviii
Jafreez Engineering Industries .. 466
Jagannath Dudadhar .. lxx
Jaimpex .. 495
Jain Glass & Instrumentation .. 676
Jairamdas Khushiram .. lxx
Jashvant C. Shah & Company .. 738
Jayashree Industries .. lxix
Jeram Shivji & Sons .. 661
Jyoti Limited .. 614
Jyoti Marketing & Projects Ltd. .. 489
Jyotishi M. Sharma .. lxx

K

K. L. Industries .. 553
Kamani Tubes Limited .. 686
Kamala Type Foundry .. lxxii
Kanubhai Engineers Private Limited .. 698
Karur Vysya Bank Limited .. 767
Kazaf Engineering Company .. 735

LEADING EXPORTERS TO
MIDDLE EAST AND EUROPE

Gram: DARVESHTIM
Telex : 11-6230
FSD-IN
Phones : (Office) 395427, 372470
(Resi.) : 533574, 536259

Largest Stockists & Exporters of
All Types of Wood & Wood Products

FAROUK SODAGAR DARVESH & CO.
TIMBER MERCHANTS & EXPORTERS

Authorised Stockist of 'ANCHOR' Brand Plywood Products
& 'CHARMINAR' Brand Asbestos Cement Products.

85-A, Sant Savta Marg, Mustafa Bazar, Post Box No. 6216,
Mazagaon, Bombay 400 010.

	Page
Keeta & Company	416
Keltron Ltd.	lxxv
Kerala Kaumudi	lxxvi
Kerala State Civil Supplies Corpn. Ltd.	lxxviii
Khandelwal Electricals	lxxii
Khanna Industries	(Inside Back Cover)
Kheraj Electrical Industries	lxxiii
Kirloskar Brothers Limited	lxxix
Kobra Cement Products	lxxvii
Kohinoor Rubber Works Pvt. Ltd.	628
Kores (India) Limited	688
Krishna Engineering Works	529
Kumar Industries	lxxiv
Kumudchandra & Company	668

L

L. & T. McNeil Limited	xii
Labour Laws & Personnel Service Pvt. Ltd.	lxxxii
Lallubhai Amichand Ltd.	421
Larsen & Toubro Ltd.	lxxx & 487
Lawrence & Mayo (I) Pvt. Ltd.	580
Lawrence Watch Co.	691
Lion Pencils Pvt. Ltd.	lxxxi
Luthra Engineering & Radiator Co.	426
Luthra Import Substitute Industries	459

M

	Page
M. A. Kachwalla & Sons	533
M. J. Patel & Company	597
M. S. Decorators	lxxxvi
Madan Sales Corporation	lxxxvi
Madura Coats	lxxxiv
Mafatlal Industries Ltd. & Associates Co's	lxxxv
Mahavir Tube Corporation	744
Maheshwari Industrial Corporation	lxxxv
Mahindra Spicer Ltd.	lxxxiv
Mangaldas Velji & Co.	lxxxiii
Martin Burn Limited	lxxxv
Masood Contracting & Establishment	730
Mazda Chemicals	723
Mazda Manufacturing Company	546
Mek Engineering Works Ltd.	lxxxii
Metal Tube & Rolling Mills	lxxxvi
Metallica Metals India	648
Metasafe Trading Corporation	697
Mistri Devshibhai Trikamji & Sons	453
Modern Spring Co.	638
Mohamadi Fine Art Litho Works	797
Monitron Security Pvt. Ltd.	799
Morarji Peraj & Co., Talpatriwala	660
Mukand Iron & Steel Works Ltd.	641
Mysore Crystal Glass Industries	532

SPRING
DOWEL
PIN

AS PER DIN
1481
OR IS 5988

SALES OFFICE :

R. K. Engineering Co.

CIRCLIPS & DOWEL (SPRING) PINS
TAPER PINS & OIL SEALS

12, Bell Lane, Off. Medows Street, Ground floor
FORT, BOMBAY-400 023 Phone : 2 7 1 1 4 1

A most trusted name in
PAPER TRADE

Wholesale Dealers
BALLARPUR INDUSTRIES LTD.
Paper Division,
Unit : **Ballarpur.**

Haryana Coated Papers Ltd.,
Faridabad.

●

OM PRAKASH JITENDRA KUMAR
& COMPANY
63, Daryaganj, New Delhi 110 002.
Phones : 271380, 270191-92.

80, Chawri Bazar, Delhi 110 006.
Phone : 268068.
Grams : " OJACO ".

	Page
Mysore Paper Mills Ltd.	588
Mysore Sugandhi Dhoop Factory	591

N

Narichania Consultancy & Agency Pvt. Ltd.	xci
National Consultants	xci
National Foundry	lxxxviii
National Industrial Machinery Co.	xc
National Rayon Corporation Limited	621
Nav Bharat Corporation	801
Navbharat Industries	530
Neelam Marbles & Industries Pvt. Ltd.	lxxxvii
Neeta Industries	lxxxviii
Nestler Boilers Pvt. Ltd.	436
Netel Chromatographs	lxxxix
New Engineering Enterprises	xc
Nitin Castings Limited	447
Noormohameds	xc
Novelty Plastics	xc
Nylo Plast Indus. Pvt. Ltd.	814

O

Omex Builders & Decorators	xci
OM Prakash Jitendra Kumar & Company	x
Otis Elevator Co. (India) Ltd.	490

P

	Page
P. R. Patel & Co. Pvt. Ltd.	800
Panchsheel Engineering Corporation	677
Pankaj Mill-Gin Corporation	713
Panyam Cements & Mineral Industries Ltd.	xcii
Parry & Company Limited	570
Patel Enterprises	412
Peico Electronics & Electricals Ltd.	696
Perfect Chemicals	722
Perfect Tubes	539
Pethe Industrial Marketing Co. Pvt. Ltd.	710
Pfizer Limited	481
Phoenix (India) Rubber Products	xcii
Pilot Products	xciv
Pioneer Mfg. Corporation	604
Pitambardas Lallubhai & Co.	422
Plastika Enterprise	606 & 607
Plyking	xcii
Podar Silks & Synthetics Ltd.	634
Polythene Industries	608
Popular Machinery Corporation	555
Poultry Times	xcv
Power-Pack Enterprises	684
Pratik Industries (Facing Constitution)	cclxxxviii
Precision Industrial Components	438

ELEFA LIFTING EQUIPMENTS

WE ALSO MANUFACTURE JIB CRANES & GOODS LIFT UP TO 5 TONNE CAP.

ELECTRO FABRICATORS PVT. LTD.

WORKS A 301 WAGLE INDUSTRIAL ESTATE RD NO 32 THANA 400604

MODEL: MAXILIFT
ELECTRIC
WIRE ROPE HOISTS
SHORT HEAD ROOM
100 KGS. TO 9000 KGS
MODEL: LOADSTER
HEAVY DUTY
2000 KGS TO 20000 KGS
SINGLE & DOUBLE GIRDER TYPE
UP TO 20 TONNES
CRANE CRABS
2 TONNES
TO 20 TONNES

	Page
Premier Real Estate Service	viii
Pressure Piling Co. (I) Pvt. Ltd.	xcvii
Pressure Tube Industries	745
Prince Marble Industries	xciii
Prince Plastics	601
Punjab Refrigerators	xcvi
Purolator India Limited	xii

R

R. K. Engineering Co.	x
R. K. Furnaces	ci
R. Khanna & Co.	xcix
R. S. V. Agencies	xcvii
Raj Lubricants	594
Rajesh Roadways	xcix
Rallis India Limited	xcix
Rameshchandra Limited	707
Rameshchandra Santram	746
Ranbaxy Laboratories Ltd.	475
Rashtriya Cargo Movers	809
Rasik Publicity Company	756
Rathi Engineering Works	v
Regal Industrial Corporation	xcviii
Remington Rand of India Limited	xcvii & 577

	Page
Results Engineers & Consultants	viii
Rick Mack Associates India	547
Rivets & Fasteners	623
Ronuk Industries Ltd.	c
Rotex Mfgrs. & Engrs. Pvt. Ltd.	(Facing Index to MAP)
Rubber Products Pvt. Ltd.	c

S

S. F. Engineering Group	ii
Sadana Brothers	cviii
Saferun Press	797
Sagar Steel Pvt. Ltd.	494
Sam Storage & Packing Corporation	795
Sandoz (India) Ltd.	482
Sanghvi Traders	cvii
Sanjay Engineering Works	cv
Savita Chemicals Pvt. Ltd.	595
Scientific Instruments Co. Ltd.	543
Scindia Steam Navigation Co. Ltd.	803
Sea Rock	784
Sen Harvic	652
Sewri Engg. Construction Co. Pvt. Ltd.	ciii
Shah Engineers (India)	527
Shah Metal Industries	cvi

PUROLATOR
MICRONIC FILTERS

FILTRATION FOR EVERY
KNOWN FLUID

PUROLATOR INDIA LTD.

I, Sri Aurobindo Marg,
New Delhi 110 016.

Telephones : 664666, 664542, 664557.
Telex : 031-2763
Cable : PUROLATOR.

14, Sector I, Parwanoo Industrial Estate,
Parwanoo 173220.
(Himachal Pradesh).

Telephone : 230 431. (Kalka Exchange).

L&T-McNEIL LIMITED

(A subsidiary of Larsen & Toubro Limited)
Registered Office : L&T House, Ballard Estate,
Bombay 400 038.
Phone : 268181. Grams : " LARSENBRO ".
Factory & Administrative Office : Mount-Poonamallee
Road, Post Bag No. 977, Madras 600 089.
Phone : 431932. Grams : " SHAPOMATIC ".
Telex : 017-406 LTM IN

Manufacturers of : Rubber Processing Machinery like Tyre and Tube Curing Systems (Bag-O-Matic Tyre Curing Presses, Post Cure Inflators, Tube Curing Presses, Mechanical Goods Presses, Bladder Presses, Shaping Units), Mixers and Mills, Dip Units, Calender with Line Equipment, Extruder with Line Equipment, Squeegee Calenders with Line Equipment, Fabric and Steel Cord Cutters, Band Building Machines, Tyre Building Machines, Tyre Building Drums, Rubber Injection Moulding Machines, Tube Splicers and Allied Rubber/Tyre Processing Machinery.

Under Licence from :
McNeil Akron Inc., 96, East Crosier Street,
Akron, Ohio 44311, U.S.A.

Directors : N. M. Desai, K. S. S. Mani, D. L. Pradhan, B. G. N. Patel, Bernard Riveau, P. de Croisset, J. L. Gibney, Premjit Singh, M. H. Pherwani (alternate for P. de Croisset).

Sole Selling Agents in India : Larsen & Toubro Limited, P. O. Box 278, Bombay 400 038

	Page
Shakti Textile Engineers Pvt. Ltd.	665
Shankar's Book Agency	719
Shaparia Dock & Steel Co. Pvt. Ltd.	cxi
Shaw Wallace & Co. Ltd.	ciii
Shilpa Industries	cx
Shree Mahalaxmi Trading Corpn.	609
Shri Mahila Griha Udyog Lijjat Papad	cxiv
Shri Ramtirth Yogashram	cix
Shroffs Industrial Chemicals Pvt. Ltd.	594
Simplicity Engineers Pvt. Ltd.	524
Sinter Kings Virmani Pvt. Ltd.	civ
Siyaram Kumar Engg. Works Pvt. Ltd.	civ
Social Science Documentation Centre	805
Sorabji Nowroji & Co.	733
Southern Asbestos Cement Ltd.	cxiii
Spencer & Co. Ltd.	ciii
Sri Krishna Temple : Guruvayur	cxii
Sri Vijayalakshmi Agarbathi Works	590
Standard Engineering Works	687
Standard Garage	cxxi
Stead Electronic Industries	cviii
Steel Corporation	cvi
Steel Tubes of India Limited	651
Suessen Textile Bearing Ltd.	663
Sugesan & Co. Pvt. Ltd.	cvii
Sugesan Finance Investment	cii
Sunbeam Exports	731
Sunlight Glass Works	534
Supreme Equipments	512
Supreme Industrial Works	528
Surat Goods Transport Pvt. Ltd.	807
Syndicate Bank	768
T	
Tata Engineering & Locomotive Co. Ltd.	cxv
Tata Industries Limited	cxix
Tata Iron & Steel Company Ltd.	cxv
Tata Oil Mills Co. Ltd.	cxix
Tata Sons Ltd.	cxix
Taylor Instrument Co. (I) Ltd.	cxvi
Technis Industries	678
Tempo Industrial Corporation	cxvii
Textile Art Machinery	667
Thakkar Warehousing Agency	cxviii
Thomas Cook (India) Ltd.	812
Tolia Brothers	741
Top Syringe Mfg. Co.	cxvii
Tractor Engineers Ltd.	cxxi
Trading Engineers (International) Pvt. Ltd.	471
Travel Corporation (I) Pvt. Ltd.	813

Cable "BOOKSAGE" Phone 272402

For Wide Range of Books & Catalogues on Architecture. Interior Decoration and Furniture Designs.

Always Contact:

BOOKSELL AGENCIES

22 BOMBAY SAMACHAR MARG OPP STATE BANK
POST BOX 1228 BOMBAY-400 023 (INDIA)

Page

Trident Metal Profiles Pvt. Ltd. cxxi
Triveni Engineering Works Ltd. 654
Tube Well Corporation of India cxix
Tulsi Fine Chemical Industries Pvt. Ltd. cxx

U

Udayraj & Sons 542
Unit Trust of India cxxii
United Catalysts India Ltd. 449
United Electrical Industries Ltd. 497
United Industries cxxi
United Mill Stores (India) 736
United Phosphorus Pvt. Ltd. cxxiii
Unity Auto Industries 711
Universal Oil Seals Mfg. Co. Pvt. Ltd. 579
Universe Trade Enterprises cxxiii

V

Veekay Enterprises 646
Victory Mercantile Agencies cxxv
Video K. Library cxxiv
Vijay Commercial Corporation 711
Vikram & Co. 714
Virgo Marketing Pvt. Ltd. 642
Voltas Ltd. cxxvi

W

Welcomgroup Hotel Druk 783
Welcomgroup Sea Rock 784
Weldsafe Corporation 631
Western India Machinery Co. vii
Whatman Limited 510
World-Wide Import Export Promotion Centre .. 717

Y

Yoshama & Company Private Limited 639

Z

Zenith Fire Services 518
Zephyr Electronics 520
Zoom Films Ltd. cxxiv
Zoom Films Ltd. (Video K. Library) cxxvii

CASTROL LIMITED

White House, 91, Walkeshwar Road,
Bombay 400 006.

Manufacturers of :

The famous 'CASTROL' Motor Oils, Industrial Lubricants, Wood Preservatives, Hydraulic Brake Fluids, Greases, Lustrol the Multipurpose Cleaner and Automotive/Industrial Specialities.

General Manager's Office

General Manager for India : Dr. B. K. Barman ; Marketing Manager : P. K. Das ; Technical Manager : S. R. Bhatnagar ; Manager, Administration & Management Services : M. Y. Gaitonde ; Controller of Operations : D. G. Baljekar ; Finance Manager : A. M. Doshi.

Western Region — Bombay

Castrol Limited, 'White House', 91, Walkeshwar Road, Bombay 400 006.

Regional Manager (West) — G. K. Rao.

Eastern Region — Calcutta

Castrol Limited, 14, India Exchange Place, Calcutta 700 001.

Regional Manager (East) — D. K. Guha.

Southern Region — Madras

Castrol Limited, 52, Rajaji Road, Madras 600 001.

Regional Manager (South) — V. S. Bellare.

Northern Region — Delhi

Castrol Limited, 104, Rohit House, 3, Tolstoy Marg, New Delhi 110 001.

Regional Manager (North) — P. D. Mahajan.

Depots at :

Ahmedabad, Bangalore, Cochin, Coimbatore, Gauhati, Jaipur, Lucknow, Mangalore, Nagpur, Ranchi, Secunderabad, Tezpur, Vijayawada, Visakhapatnam.

IDEAL MOTORS

Distributors for:

yezdi

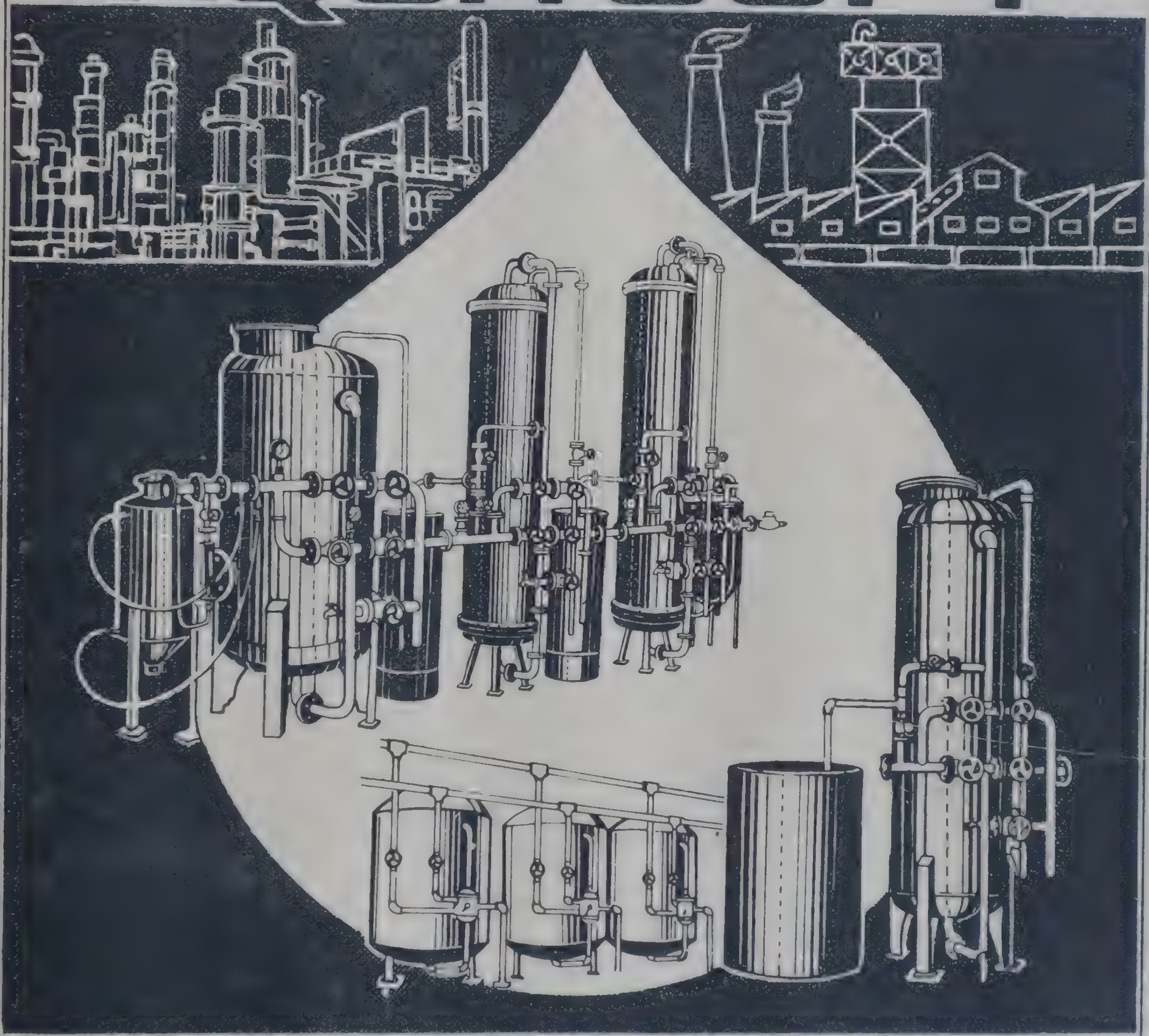
Motorcycles for Greater Bombay, Thana and Kolaba Districts

Office & Showroom:
Sitaram Building, Dr. D.N. Road, Bombay 400 001,
Phone: 344090-344068
Cable: IDEALMOTOR □ Telex: 011-2644

Servicing:
Bombay Mutual Annexe, Cawasji Patel Street,
Bombay 400 001. □ Phone: 262660.

SGS/IM/1/78

AQUA SOFT



WATER TREATMENT PLANTS

FOR DOMESTIC COMMERCIAL AND INDUSTRIAL USE

Whatever your water treatment problem for boilers, cooling system, process or washing, just leave it to us. Our Engineering division will solve your problem by designing and fabricating the most suitable and economical plant for you.

Our service department will install and commission the plant for trouble free operation.

Just leave your water treatment worries to us and relax.
We have the expertise to deal with water.

A 1 INDUSTRIES

M. Vasanji Road, J.B. Nagar, Andheri (East) Bombay-400 059.
Phone: 569932 Gram: 'AQUASOFT' Andheri

SMF

swan

MICRO FILTERS

SWAN MICRO FILTERS HIGH EFFICIENCY FILTER UNITS FOR REMOVAL OF PARTICULATE MATTERS IN RANGE OF 5, 4, 3, 2 & 1 MICRON, BACTERIA REMOVAL FILTERS IN RANGE OF 0·4, 0·3, 0·2 & 0·1 MICRON AND NO-POWER OSMOTIC FILTRATION SYSTEM FOR PYROGEN NEGATIVE ULTRA-PURE WATER OF I. P. QUALITY.

Marketed by :

amka

amk associates

SALES & SERVICE ENGINEERS

3/7, Indian Mercantile Insurance Building,
Ranade Road, Dadar, Bombay 400 028.
Phone : 452011.

ATUL GLASS INDUSTRIES PVT. LIMITED

3/9, Deshbandhu Gupta Road
New Delhi 110 055.

★

Manufacturers of :

Atul Mirrors, " SUNT-X " Brand Laminated Safety Glasses, " ATULTUF " Toughened Glasses, Automobile Glasses, F.R.P. Products, Safety Helmets, Bath Tubs, F.R.P. Framed Mirrors, Water and Chemical Storage Tanks, Atul Therm Double Glazed Insulating Glass

AND

For the first time in India

Atul Sol-X Heat Reflecting Glass—Both for Automobiles and Buildings.

Phones : 516351-52. Cable : " ATULGLAS ".
Telex : ND-4040.

Vaidyaratnam P. S. Varier's

ARYA VAIDYA SALA

KOTTAKKAL

Adapted

Science of Sages to Modern Ages

Ayurvedic system is centuries old
Propounded by sages of years old
A divine gift and was not known
Kottakkal made it well known.

Kottakkal Arya Vaidya Sala is a household name

Because :

(*i*) Its genuine Ayurvedic Medicines give relief to millions suffering from chronic diseases.

(*ii*) Its Nursing Home is well equipped with modern amenities and it undertakes Panchakarma treatments, Vasti, Dhara, Pizhichal etc. A house for homely treatments.

(*iii*) It runs a Research and Development Department for development of Ayurveda.

(*iv*) Its Herbal Garden maintains a large varieties of Ayurvedic Medicinal Plants

(*v*) It promotes Ayurvedic Education.

Contact :

ARYA VAIDYA SALA, KOTTAKKAL

Phone: H. O. PMBX - 16. Pin Code : 676 503.

Branches :

KOZHIKODE, PALGHAT, TIRUR, ERODE, ERNAKULAM, TRIVANDRUM, MADRAS, CANNANORE, COIMBATORE.

Complete Consultancy in

ACOUSTICS, NOISE CONTROL
&
AUDIO SYSTEM ELECTRONICS

by

Internationally Reputed Professionals
Portable Acoustic Measuring Equipments
Computerised Evaluations

Call or write to: **ACADEMIC ENTERPRISES,**
CONSULTANTS.

Visweswar Sadan, Ist Floor, Khare Town, Nagpur 440 010.
Phone: 23903.

FOR BIRLA OR I. C. C. MADE

BRASS

STRIPS/SHEETS/CIRCLES

OF VARIOUS GAUGES IN YOUR EXACTLY REQUIRED SIZES
AT MOST REASONABLE TERMS

Contact :

ARGO INDUSTRIES

132, THAKURDWAR ROAD, BOMBAY 400 002.
Phones: Off. **353771-350636** Resi. **681683-369795.**

Grams: "PREFERABLE"
Telex: 011-3990, ANUP-IN

Phones: 345672
325604

ANUPAM MARKETING PRIVATE LIMITED

J. K. Chambers, 77/83, Nagdevi Street, Bombay 400 003.

IMPORTERS, STOCKISTS & SUPPLIERS OF

SKF

BALL & ROLLER BEARINGS

Representatives in India for
MICHELL BEARINGS & THRUST PADS
For Industrial & Marine Applications.

Regd. Office: 27/2D, Strand Road, Calcutta 700 001.
Branches and Associates at: Delhi - Calcutta - Madras Gauhati.

The Aluminium Industries Limited

Manufacturers of :

Aluminium (E. C. Grade) rods ; Aluminium Conductors (ACSR and AAC) ; Aluminium Cables (PVC insulated cables for outdoor weather-proof and indoor wiring applications ; as well as underground power distribution) ; HTG Steelwire, PC wire, Earth wire, MS wire; High Voltage Circuit Breakers and Current Transformers; Static Relays for Power System

Wiredrawing machines; Wirestranding machines; Wire closing machines; Wire Straightening and Cutting machines ; Bunching & Spooling machines; Take-ups & Payoffs; Laying-up machines; Annealers ; Material Handling/Coal Beneficiation/Mineral Beneficiation Plants, Haulages, Conveyors, Crushers, Screens etc.

Also offer: **Consultancy and Engineering Services for Conductor Manufacturing units, Steel Wire Plants etc.**

ALIND

Regd. & Head Office: **1, Ceramic Factory Road, Kundara (Kerala). Phone : 201.**
Grams : ALUMINIUM. Telex : 0886-241.

Works: **Kundara (Kerala) ; Hirakud (Orissa) ; Hyderabad (Andhra Pradesh) ; Mannar (Kerala).**

ATUR RUBBER PRODUCTS

Manufacturers of Hose Pipe, Extruded and Moulded goods (Bridge Bearing Pads)

Regd. Office :
ATUR HOUSE, 87, Dr. ANNIE BESANT ROAD,
WORLI, BOMBAY 400 018.

FACTORY :
29/2, Kharadi, Nagar Road,
PUNE 411 016.

OFFICE : " Atur Foundation " House,
4, Dr. Ambedkar Road,
PUNE 411 001.

TELEPHONES :

BOMBAY
Office : 378561
378562
TELEX 011-5653

PUNE
Office : 23811
Factory : 27321
TELEX 0145-291

THE AHMEDABAD ELECTRICITY COMPANY LTD.

Bombay Office :
83, "Advent", General Bhonsle Marg,
Backbay Reclamation, Bombay 400 021.

★

Registered Office :
Jubilee House, Opposite Old Power House,
Shahpur, Ahmedabad 380 001.

★

Head Office :
Electricity House, Lal Darwaja, P.O. Box 37,
Ahmedabad 380 001.
Phone : 391442. Grams : " ELECTRIC ".
Telex : 012-363.

(Ref. Ahmedabad Section)

ASSOCIATED TRADERS & ENGINEERS LTD.

Estd. 1943.

Regd. Office: 20/1, Asaf Ali Road, New Delhi 110002.
Phone: 275011.

●

DAILY SERVICES TO BRANCHES, AGENCIES & ASSOCIATES ALL OVER INDIA

●

Booking Office : Nayabazar : 255786.
Booking Office : Rita Building : 227927.
Booking Office : Najafgarh Road : 535027.
Enquiries : 18-Asaf Ali Road : 275011.
Delivery : Morigate : 223252.
Transit : U.P. Border : 200146, 200047.
Telex : 3292. *Grams* : " ATEAL ".

Contact for all your Packaging Requirements with a leading manufacturer

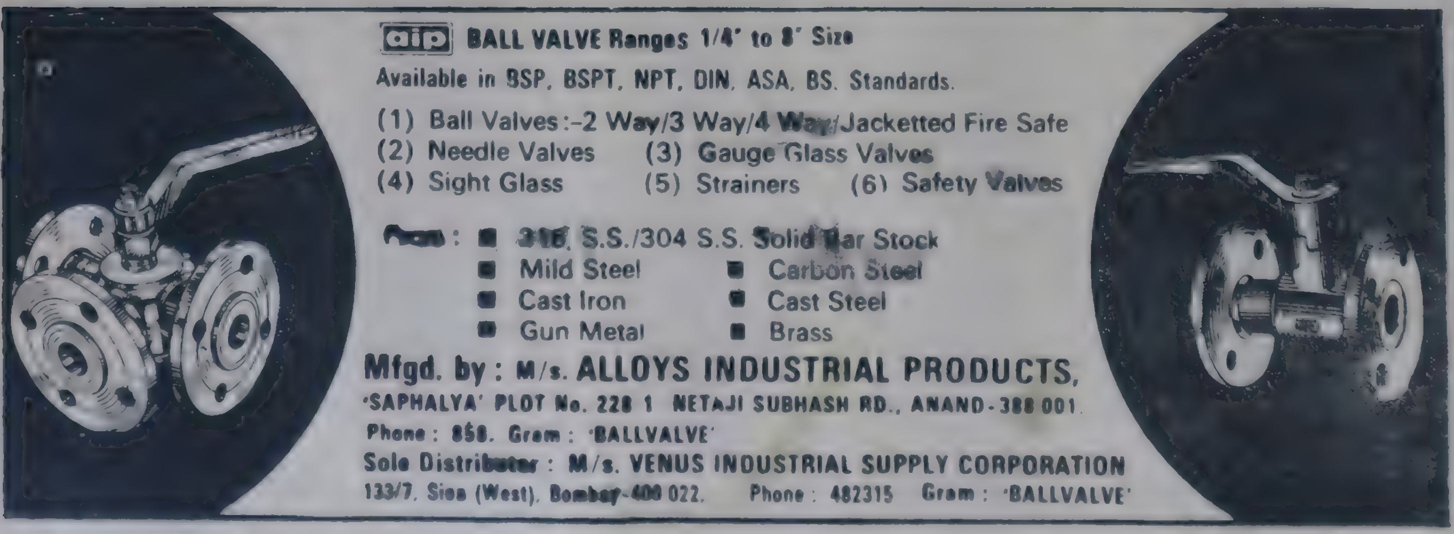
THE KING OF WATER PROOF PAPER

AGGARWAL MARKETING CO.
(Mfg. Unit)

SPECIALITY OF ITEMS

1. **Waterproof Paper Rolls (Bituminised)**
2. **Kraft Paper**
3. **Polythene Rolls**
4. **Hessian Cloth**
5. **Jute Twine**

945, Chhota Chhipiwara, Chawri Bazar, Delhi-110 006.
Phones : 270530, 264095. Grams : "TEXCONE".



aip BALL VALVE Ranges 1/4" to 8" Size
Available in BSP, BSPT, NPT, DIN, ASA, BS. Standards.

(1) Ball Valves:-2 Way/3 Way/4 Way/Jacketted Fire Safe
(2) Needle Valves (3) Gauge Glass Valves
(4) Sight Glass (5) Strainers (6) Safety Valves

From : ■ 316, S.S./304 S.S. Solid Bar Stock
■ Mild Steel ■ Carbon Steel
■ Cast Iron ■ Cast Steel
■ Gun Metal ■ Brass

Mfgd. by : M/s. ALLOYS INDUSTRIAL PRODUCTS,
'SAPHALYA' PLOT No. 228 1 NETAJI SUBHASH RD., ANAND-388 001.
Phone : 858. Gram : 'BALLVALVE'
Sole Distributor : M/s. VENUS INDUSTRIAL SUPPLY CORPORATION
133/7, Sion (West), Bombay-400 022. Phone : 482315 Gram : 'BALLVALVE'

'ADVANCE' CAPACITORS

manufactured in Technical Collaboration with Gould Advance Ltd., U.K.

- S.C.R. Commutation Capacitors.
- Metallised Polyester Capacitors for telecommunication, Instrumentation, etc.
- Metallised Polycarbonate Capacitors.
- Process Control, etc.
- A.C. Polypropylene Capacitors for Fans, Motors, Fluorescent Discharge Lights, Energy Storage, Filtering, etc.
- Snubber Capacitors.
- Capacitors for various special applications.

Manufactured by :

Advance Components And Instruments Private Ltd.

278, Gokulam, III Stage, Mysore-570 002.

Grams : "ADVANCE", Mysore. Phone : 23907.

INDIGENOUSLY MANUFACTURED BY EXPERIENCED ENGINEERS

- Rotary Positive Displacement Screw Pumps.
- Calendars, Extruders, Mixing Mills, etc. for rubber.
- Winches, Pile Foundation Equipments, Tower Cranes, Tower Hoists, Concrete Mixers, Slew Rings, Boring Machines, Grout Pumps, Concrete Pumps, etc., etc.
- 2 High, 4 High and 6 High Rolling Mills for manufacturing sheets.
- Precision, Medium and Heavy Duty Slitting Machines with Decoilers and Coilers.
- Spares for Cranes, Swivelling Bearings, Sugar, Cement, Paper, Mines, Power Houses, etc.
- Heavy Turning, Boring, Milling, Welding, Fabrication, Assembly, etc.

Contact:

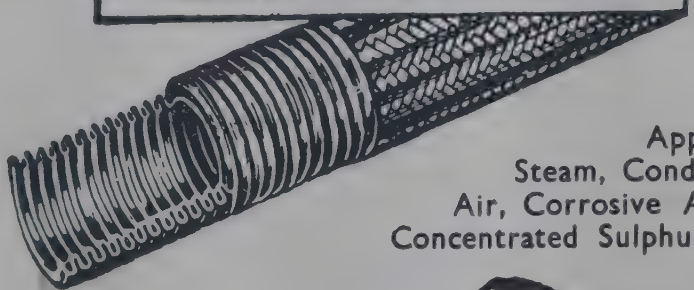
ANANT ENGINEERING WORKS PVT. LTD.

Post Box No. 16241,
Mazgaon, Bombay 400 010.

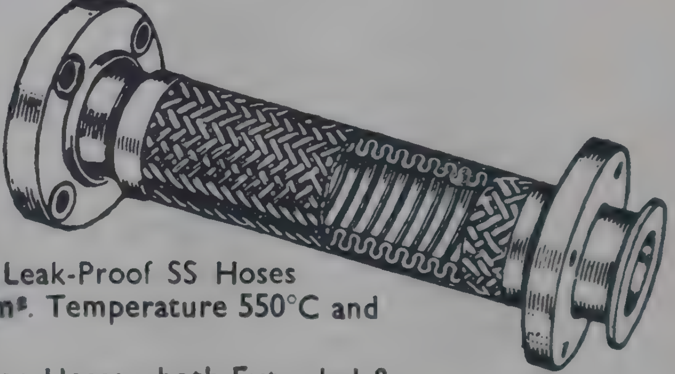
Telephones : 374186, 398369 & 898870. Grams : " RANROOFING ".

VIBRA-SORBER

FLEXIBLE PIPING CONNECTOR



Flexible Hoses & Flexible Pipes for all types of Industrial Applications viz. for HI-Temperature Steam, Condensate, Hot Water, Hot Oil, Hot Air, Corrosive Acids such as Fuming Nitric Acid, Concentrated Sulphuric Acid, Ammonia, Solvents etc.



We can supply

- Flexible Corrugated 100% Leak-Proof SS Hoses for Pressure upto 140 kg/cm². Temperature 550°C and sizes upto 200 mm I.D.
- Flexible Virgin P.T.F.E. Teflon Hoses—both Extruded & Corrugated upto 100 mm I.D.
- Flexible Special Quality Rubber Hose—Chemical Transfer Hose with P.V.C. Lining upto 75 mm I.D.
- Flexible High Pressure High Temperature Rubber Steam Hose for Saturated Steam upto 17·5 kg/cm² upto 50 mm I.D.
- General Purpose Multiply Rubber Hoses—with or without Embedded & Surface Wire—Armouring for Acids, Chemicals, Water, Vacuum, Oil etc. upto 300 mm I.D.

All Hoses & Hose Pipes supplied complete with End-Fittings/Flanges

Also Available

Stainless Steel Bellows—40 mm, 50 mm, 75 mm, 100 mm & 150 mm I.D., Vibration Asbsorbers—in Metal & Rubber Construction upto 300 mm I.D. Expansion Joints and all Metal Thermal Exchange Jacketed Hose Assemblies.

Enquiries Solicited with full details—I.D., Length, Media, Pressure, Temperature & Type of End-Fittings etc. with Drawing Sketch/Samples etc.

All assemblies are tailor-made.

Manufactured by

BENGAL INDUSTRIES

56 C-1/9, INDL. AREA, N.I.T., FARIDABAD 121 001.

Phone : 81-2377. Grams : "VIBRASORB", Faridabad 121 001

BOXAGE

Manufacturers of :

GREYBOARD
and
CORRUGATED BOXES

●

Regd. Office & Factory :

9, 10 & 13A, New Empire Industrial Estate,
Kondivita Lane, Andheri-Kurla Road,
J. B. Nagar, Bombay 400 059.

Phone : **564264**

BMSR

ANODES
for Plating Industries
with guaranteed supreme purity.

Available in all required sizes.

Tin ● Zinc ● Silver
Antimonial Lead

from the makers of

Solder
Corsin

Resin core Solder wires of Single & Multicore, Silver Solder wires, Solid Solder wires, Solder sticks, White metals, Type metals etc.

BHARTIYA METAL SMELTING & REFINING CORPORATION

189, Sydenhams Road, Apparao Garden,
Madras 600 007.
Phones : 36536, 38671. Grams : " COPPERBAR ".

BATLIBOI **Batliboi** & COMPANY LIMITED

Regd. Office :

" Apeejay House ", 6th Floor, V. B. Gandhi Marg,
Fort, Bombay 400 023.
Phone : 243823 (20 Lines). Grams : " BATLIBOICO ".
Telex : 011-2284, 011-4852.

International Division, Power Plant, Publicity

15, J. N. Heredia Marg (Graham Road), Ballard Estate,
Bombay 400 038.
Phones : 266488, 261808. Grams : " BATLIBOICO ".
Telex : 011-2284, 011-4852.

Manufacturing Division:

P.O. Baroda Rayon, Udhna 394 220 (Dist. Surat), Gujarat.

Branches : Ahmedabad, Calcutta, Coimbatore, Delhi, Ernakulam, Indore, Jaipur, Jamshedpur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada.

Resident Representatives : Baroda, Chandigarh, Gauhati, Gorakhpur, Lucknow, Pune.

Associate: Batliboi Private Ltd., 99/2, 99/3, N. R. Road, Bangalore 560 002.

Subsidiary : Hydraulic & General Engineers Ltd., 203, Arun, Chambers, 2nd Floor, J. Dadaji Road, Tardeo, Bombay 400 034.

Middle East Office : P. Box 221, Ataba, Cairo (Egypt).

Products :

Heavy, Medium & Light Machine Tools of all description, Special Purpose Machines, Pharmaceutical Machinery, Textile Machinery, Process Control Instruments, Wood Working Machinery, Pulverizers, Shearing Machines, Power Presses, Hammers, Sluice Valves, Circle Cutting, Air-compressors, Chucks, Boilers, Chain Pulley Blocks, Sheet-Metal Working Machines, Engineers' Steel Files, Diamond Dressers, Welding Electrodes, Electric Furnaces, Electrical Equipments, Diesel Engines, Centrifugal Pumps, Three phase & single phase Electric Motors, Electric Monoblocs, Turbine Pumps, Submersible Pumps, Horizontal Split Case Pumps, Starters, Transmission Beltings, Cranes, Water Heaters, Kettle Elements, Electric Hoists, Staples Variable Speed Drives, Complete Hydro Electric Thermal Power Station Equipment, High grade high alloyed Tool Steels & Stainless Steels, Cast Rolls for Steel and Non-ferrous Metal Industries, Aluminous Cement, Power Transformers, Hydraulic Jacks & Extractors, Alternators & Generating Sets, Road Rollers, Construction Machinery & Equipment, All types of Welding Machines, Coil Winding Machines, Machine Tools & Workshop Accessories, Wirerope Hoists, Belt Conveyors & Elevators, Pumping Stations for Water Supply, Lift Irrigation and Municipal Sewage, Treatment Plants for Domestic Sewage and Industrial Effluents, Airconditioning & Refrigeration Equipment, Ice Plants, Cold Storages, Humidification & Ventilation Plants, Hydraulics & Equipment for Engineering Workshops.

Also Manufacturers of :

Radial Drilling Machines, Milling Machines with Hydraulic copying attachment, Tapping Machine Universal Milling Machines suitable for Patterns, etc., Shaping Machines, Batliboi Automatic Spoolers & Warpers. Also manufacturers of entire range of Air Pollution Control and auxiliaries like Cyclones, Multiclones, Bag Filters, Scrubbers, Blowers, Pumps, Discharge Valves, Ducts e

Government Recognised Export House handling export of Machine Tools, Industrial Airconditioning and Humidification Equipment, Farm Equipment, Industrial Electrical items, Domestic Electric Appliances, Hardware, Consumer Durables, Chemicals, Textiles, Readymade Garments, Leather Products and Building Material etc. to countries all over the world.

WELDING MACHINES & EQUIPMENTS

PORTABLE & PROFILE GAS CUTTING MACHINES, ARGON ARC (TIG) WELDING SETS & ACCESSORIES, DIESEL MOTOR GENERATOR WELDING SETS, AC TRANSFORMER/DC RECTIFIER WELDING SETS, MINI-PORTABLE-BENCH-PEDESTAL-PNEUMATIC-SEAM-PROJECTION-SUSPENSION SPOT WELDERS, FINE-MICRO-UPSET-CABINET TYPE BUTT WELDERS, BANDSAW BRAZING/BUTT WELDING MACHINES.

WOOD WORKING MACHINERY

UNIVERSAL WOOD WORKING MACHINES, PLANER-JOINTER-SURFACING MACHINES, AUTOFEED THICKNESSING MACHINES 12", 24", 36", 42", 48"/48" 2 SIDE/4 SIDE AUTOFEED THICKNESSING MOULDING MACHINES, CIRCULAR SAW-BAND SAW MACHINES, RADIAL SAW-JIG SAW-LATHE MACHINES, SPINDLE MOULDING ROUNDING/MORTISING MACHINES, POLISHING/SANDING MACHINES, AUTOMATIC-BAND-CIRCULAR PLANER BLADE SHARPENER.

CONSTRUCTION MACHINERY

CONCRETE-MORTAR MIXERS-LIFTING HOISTS, WINCHES, VIBRATORS-SHOT BLASTING, BLOCK MAKING-TILES PLANTS-PUMPS, MARBLE CUTTING/POLISHING MACHINES.

SHEET METAL MACHINERY

HAND-FLY-PILLAR-HYDRAULIC-POWER PRESSES, SPINNING LATHES, HAND-POWER SHEARS-PIPE-SHEET-BENDERS-TIN PLANTS-CIRCLE CUTTERS-CAN-DRUM PLANTS.

ALSO

WORKSHOP MACHINERY-FOUNDRY-ELECTRICAL INDUSTRIAL MACHINERY

Gram : " BLUEARC ", Bombay 400 001. Phone : **271992.**

SOLE DISTRIBUTORS :

BLUE DIAMOND ENGINEERING CORPORATION

ROOM NO. 104, STOCK EXCHANGE STONE BUILDING, GROUND FLOOR, DALAL
STREET, G.P.O. BOX No. 681, BOMBAY 400 023.

1. **Turnkey projects** for Process Industry i.e. Chemicals, Pharmaceuticals, foods, and beverage etc.
2. **Project evaluation** & detailed Engineering including feasibility studies.
3. **Process Equipments Designing,** manufacturing to international standards like ASME, BS, IS, ISO, JIS and DIN etc.
4. **Site Contracts:** Includes civil, mechanical, electrical, instrumentation and erection.
5. **Piping:** Ferrous, Non-ferrous involving TIG, MIG welding, Boiler piping, etc.
6. **Filteration:** Liquids, solids & air Manually and mechanically operated, for TOXIC, Hazardous materials.

N. B.—Laboratory & pilot plant facilities available at our Thane complex.

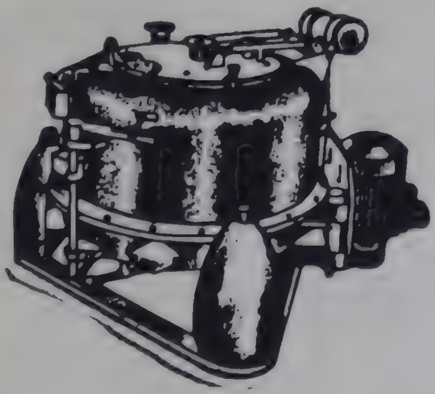
Basp Engineers & Consultants Pvt. Ltd.

Basp House, A-77, Wagle Industrial Estate, Thane 400 604.
Phones : 592917 & 594695. Grams : " BASPFILTER ".

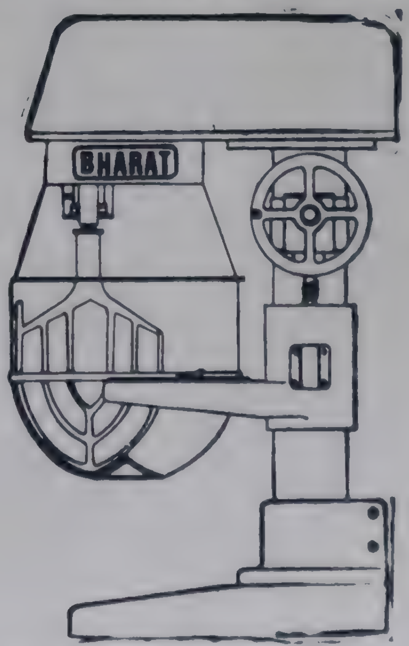
Directors : B. M. Patil (*Managing Director*).
K. C. Ramachandran (*Jt. Managing Director—Technical*).
S. D. Chougule (*Technical Director*).

QUALITY EQUIPMENT FOR SOLID-LIQUID SEPARATION

For Chemical, Fertilizer, Pharmaceutical, Dairy, Food-processing and other Industries, from K. S. Seetharamiah & Sons P. Ltd., Bangalore.



Also, PLANETARY MIXERS and other Equipment



★

Contact Selling Agents for Maharashtra, Gujarat, Madhya Pradesh, Rajasthan and Andhra Pradesh.

BHARAT ENGINEERING CORPORATION

Bharat Varnish Compound, L. B. S. Marg, Ghatkopar, Bombay 400086. Phones : 582551/52, 582274.

**Connections in high places.
They are vital in peace.
And in war.**

Border roads on high ranges, linking strategic defence outposts They are lifelines for our defence system. Providing the essential logistics.

Helping to lay these roads, under very arduous conditions, are a range of BEML earthmovers.

In this, as in many other vital sectors, BEML has been first in the field. Moving earth, making way for progress. With its range of earthmovers dozers, dumpers, scrapers, graders, shovels

BEML's involvement goes far beyond merely supplying the equipment for border road construction. Or for power projects. Or irrigation. Or mining.

It lies in the reservoir of technology in earthmoving that BEML has developed. Technology that is on call, to meet the challenges of tomorrow.

beml a great movement

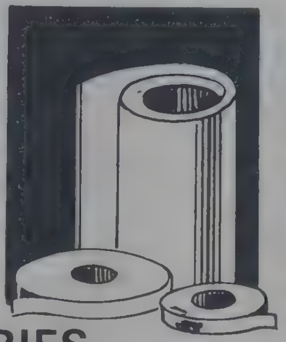
BHARAT
EARTH
MOVERS
LIMITED
Bangalore

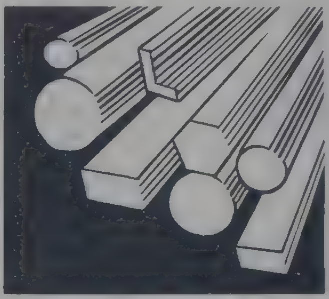
CAS-BEML-7794

QUALITY ALONE SELLS

We manufacture
COPPER Electrolytic/Commercial
BUS BARS 6 MM To 200 MM Width
STRIPS 1.5 To 5 MM Thick Width 75 MM in Coil
RODS 6 MM To 100 MM

Also other Commutator Segments & Section as per customer design.





B.B. METAL INDUSTRIES
Factory: 44, Nesbit Road,
Degamwalla Compound, Opp. Philips, Mazagaon
BOMBAY-400 010 Phone: 861601/863165
Retail Shop:
11/43, Parmanand Wadi, Thakurdwar Road,
Bombay 400 002 Phone: 252891

Delhi Branch
5894, Basti Harphool Singh, Plot No. 50,
Sadar Bazár, Delhi 6 – Phone: 512070

Calcutta Branch
175, Netaji Subhas Road,
Calcutta 1 Phone: 339242

Bharat Containers
PRIVATE LIMITED

Regd. Office : Cecil Court, Mahakavi Bhushan Marg (Lansdowne Road), Bombay 400039.
Telephones : 230021/233885. Grams : " PACKAGING ".

Factory : Old B.P.T. Road, Village Anik-Mahul, Chembur, Bombay 400074.
Telephones : 523414 and 523415.

★

Manufacturers of all types of :

ALUMINIUM EXTRUDED COLLAPSIBLE & RIGID TUBES/CANS, BOTTLES & AEROSOL CONTAINERS, ALSO INDUSTRIAL COMPONENTS.

Leading Name in Transport World

FOR SERVICE, SPEED & SAFETY TRANSPORTS

Bombay Andhra Transport Co.

113, BHANDARI STREET (CHAKLA), BOMBAY 400 003.

Phones : Booking : 322027-327444-322943
Delivery : 373292
Accounts, Complaints & Enquiry : 320169
Thane : 593148

Telex : Bombay : 3278
Hyderabad : 350

Grams :
" BATRANS "

Regular service from :

AHMEDABAD, BARODA, THANE, SURAT & KALOL TO ALL THE MAIN STATIONS IN ANDHRA PRADESH, KARNATAKA, MAHARASHTRA & TAMIL NADU

Regional Office :
Old Feel Khana, Hyderabad. Phones : **57601 & 57602.**

Zonal Office :
Padi Street, Islampet, Vijayawada. Phone : **4303.**

BRANCH OFFICES :

SECUNDERABAD, KARIMNAGAR, NIZAMABAD, WARANGAL, RAJAHMUNDRY, TUNI, TENALI, PALAKOT, KAVALI, NELLORE, VIZIANAGRAM, VISAKHAPATNAM, SRIKAKULAM, GUNTUR, CHIRALA, GULBARGA, SHAHABAD, MADRAS, BANGALORE, AHMEDABAD, BARODA, KALOL, SURAT, NAVSARI, RAJKOT, JETPUR, THANE, SHOLAPUR, LATUR AND CHINCHWAD.

Note : We have no Branch or Associate in any part of North India

BEWARE OF SIMILAR SHADOW NAME TO US

A tryst with destiny

CSC

Specialist in
TOOL AND
ALLOY
STEEL

years ago
was born

CONTINENTAL STEEL CORPN

It is only befitting that Continental Steel Corporation should identify itself with steel...the backbone of today's industrial activity. In the course of 19 years CONTINENTAL STEEL CORPORATION has been able to forge a name for itself as a company of integrity devoted to its customers.

Remember Continental Steel Corporation when you need:

• EN 8, 9, 19, 24, 36 STEELS • STAINLESS STEELS 410-420-304-316 • MILD STEELS, SHEETS, PLATES • BEAM, CHANNEL, ANGLES • ROUND BARS,TESTED • DIE STEELS • DIE BLOCKS • CBN STEELS • HCHC—OHNS • HOT DIE 5% Cr & 9% TUNGSTEN

CONTINENTAL STEEL CORPORATION

12-14, Ardeshir Dady Street, Bombay-400 004.
Phone: 356074-355046-353904-385253 Telex: 011-3059 AB Code CONT IN.

IND Advtg.

CAI CAI ®

A TRUSTED NAME
IN AUTO PARTS
THROUGHOUT THE WORLD

Guaranteed Automotive Replacement Parts for

- **Mercedes Benz**
- **Leyland 370, 350 ucc**
- **Perkins P6—P6. 354**
- **Bedford J4 & J6 and Land Rover**

Manufacturers & Exporters :

CHANDOK AUTOMOTIVE MFRS. PRIVATE LIMITED

431, Lamington Road, Bombay-400 004
Phones: 353233 & 351707 Grams: " Rajintrade "

THE ONLY PRECISION AUTO COMPONENTS MANUFACTURERS

THE COMMERCIAL CREDIT CORPORATION (1943) PRIVATE LTD.

Head Office : **Hughes Road, Bombay 400 007.**

Branches :

Hughes Road, Bombay 400 007. Phone : 358436.
Finance House, Puttalos Road, Mount Road, Madras 600 002. Phone: 86855.
St. Mark's Road, Bangalore. Phone: 51224.
New Buti Building, Mount Road, Nagpur. Phone: 32932.
Statue Junction, Trivandrum. Phone : 5016.

Factory :

12th Mile, Old Madras Road, Bangalore.
Phone : 58295.

Manufacturing Tierod ends etc. for Automobiles.

Managing Director :
V. R. Murdeshwar.

Directors :
U. Prabhakar Rao
R. Doraiswamy.

Provides Hire/Purchase Facilities for Motor Vehicles, Misc. Machinery, Radios, etc.

Phone : 358436. Grams : " CECECE ".

COLOUR-CHEM LIMITED

Ravindra Annexe, Dinshaw Vachha Road,
194, Churchgate Reclamation, Bombay 400 020.
Phone : 242161. Telex : 011-3365. Code : COLC IN.
Telegraphic Address : " PIGMENTDYE ", Bombay.

Directors :

Mr. B. M. Ghia (Chairman)
Dr. G. Mueller (Alternate : Mr. H. Lange)
Mr. G. C. Chaudhary
Mr. U. Weimann
Mr. R. Bink
Mr. F. S. Reporter
Mr. H. Hartmann (Alternate : Mr. K. B. Mathur)
Mr. N. R. Ruia
Mr. R. A. Shah
Mr. K. D. Khatau
Dr. D. Grassmann (Technical Director)
Mr. K. R. V. Subrahmanian (Managing Director)

Works' Address :

1. Balkum Village, Bombay-Agra Road, Thane 400 601
   Maharashtra.
   Tel. : 594171.
2. 113/114, M.I.D.C. Industrial Estate, A. V. Roha, Dhatav.
   Taluka Roha, District Raigad 402 116.
   Tel. : Dhatav 23

Products Manufactured :

Synthetic organic dyestuffs, pigment dyestuffs and their dispersions ; Synthetic resin binder materials and auxiliaries ; Intermediates (including catalysts) for dyes and pesticides ; Acetic Anhydride ; Acrylic Esters.

CIDCO

THE BUILDER OF WELL PLANNED NEW CITIES AND NEW TOWNSHIPS IN MAHARASHTRA!

New Town Development Projects in Progress :

(I) NEW BOMBAY
(II) NEW AURANGABAD
(III) NEW NASIK
(IV) NEW NANDED

Total houses built including those under construction for all income groups:

	No. of houses
NEW BOMBAY	28,000
NEW AURANGABAD	7,000
NEW NASIK	7,000
NEW NANDED	3,000
Total	45,000

FACILITIES AVAILABLE IN SELF-CONTAINED NEW TOWNS DEVELOPED BY CIDCO :

1. Houses on outright purchase and hire purchase basis.
2. Suitable developed residential and commercial plots.
3. Adequate water supply.
4. Social amenities like Shopping Centre, School, Hospital, Community Centre, etc. available at walking distance in the planned Township.
5. Ample open spaces, play-grounds.
6. Efficient transportation links with the old cities.

BE A CITIZEN OF TOWNSHIP DEVELOPED ACCORDING TO MODERN CONCEPTS IN TOWN PLANNING.

City & Industrial Development Corporation of Maharashtra Ltd.

'Nirmal', 2nd Floor, Nariman Point, Bombay 400 021.
Telephone : 232420.
New Administrative Bldg., At & Post : Vashi, New Bombay 400 703.
Phone STD. : 922 (8241 to 8248).

CHLORINATORS

Automatic vacuum and Pressure type Gaseous Chlorination Plants for water treatment & process industries-capacity 25 gm to 200 kg/hr.

Direct cylinder mounted gas Chlorinator most ideal for Swimming Pools & water plants – capacity 25 gm. to 10 kg/hr.

Electrolytic Chlorinator suitable for multiple application and even for domestic application.

Chlorine Evaporators capacity 50 kg to 200 kg/hr.

Automatic changeover panels – Hydro-operated automatic pr. reducing-cum-shut off valves – Chlorine residual monitoring system – Chlorine audio-visual leak detector — Emergency ton container kit.

Manufacturers

CHLORO CONTROL EQUIPMENT CO.

13/M-E, Laxmi Industrial Estate,
Off Veera Desai Road, Andheri (W),
BOMBAY-400 058.
Phone: 573699. Gram: ADVANCE

CREDIT INFORMATION AND STATUS REPORT

For a comprehensive report of any overseas and Indian Trading party — obtained confidentially. Report will include pertinent details including full financial operations and derogatory information.

★

DEBT COLLECTIONS (OVERSEAS)

Your outstanding dues from overseas debtors are collected — No collection, no fee basis.

★

Write to :

THE COMMERCIAL CENTER

G.P.O. Box No. 38, Calcutta 700 001 (India).
Phone: 46-6315.
Grams: 'COCENTER'.

Grams: METCHEME
Telephone: 39 34 40

COMMERCIAL COMBINES CO.

NO. 16, 14th FLOOR, 3 NAVJIVAN SOCIETY, LAMINGTON ROAD, BOMBAY-400008.

CARBORUNDUM UNIVERSAL'S
CUMI Brand Bonded Abrasives
AJAX Brand Coated Abrasives

ORIENT ABRASIVES
Aluminium Oxide Abrasives Grains

ELECTROTHERMICS
Silicon Carbide Abrasive Grains

Also other Abrasive Specialities & all Ferro Alloys

Sail Into
A Glorious
Future . . .

Renowned the world over as " Queen of the Arabian Sea ", Cochin is the most beautiful natural harbour with modern port and shipping facilities for all types of cargo to and from every important port of the world.

It was Sir Robert Bristow who designed and founded this Port. Cochin has since developed into a premier sea gate to the country's trade.

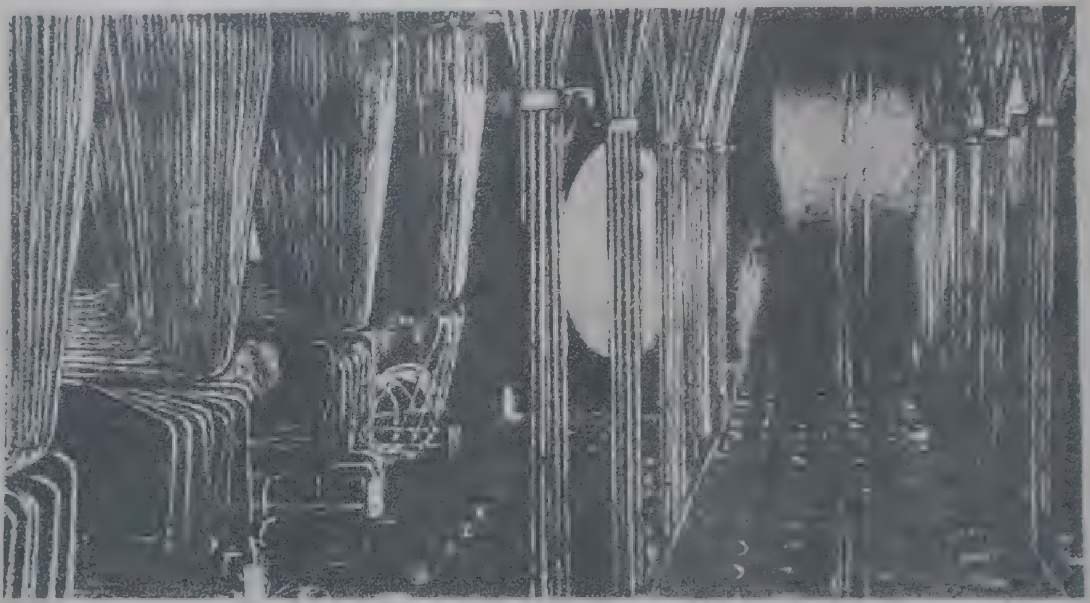
We don't stop with the present . . . We plan to usher in most modern port services of international standard by providing facilities for container ships, super tankers and bulk carriers.

Come . . . Ship with us . . . We promise to sail you to a glorious future.

COCHIN PORT ON THE PATH TO PROGRESS IN BRISTOW CENTENARY YEAR.

COCHIN PORT TRUST

COCHIN 682 003.



Carborundum Universal [illegible] high-performance steel pipes carrying nuclear gas samples.

Special assignment for nuclear fuel: to grind a lifeline of tubes to a critical flawless finish

Zirconia alloy steel tubes that carry precious nuclear fuel...high-cost tubes, demanding an exceptional finish. To create such a finish, Carborundum Universal created a special grinding tool

A special waterproof cloth belt.

It is capable not only of grinding to exacting levels, but of withstanding coolants...both features imperative for this critical application.

That's just one more case where Carborundum Universal's knowhow skilfully tackled a tricky grinding problem.

What sets Carborundum Universal apart

Not just making India's widest range of abrasives, super and electrocast refractories, but an awareness that they provide something more: essential services...

Not the wheel, but the precise dimension. Not the belt, but the finish Not the heating element, but the exact firing temperature...

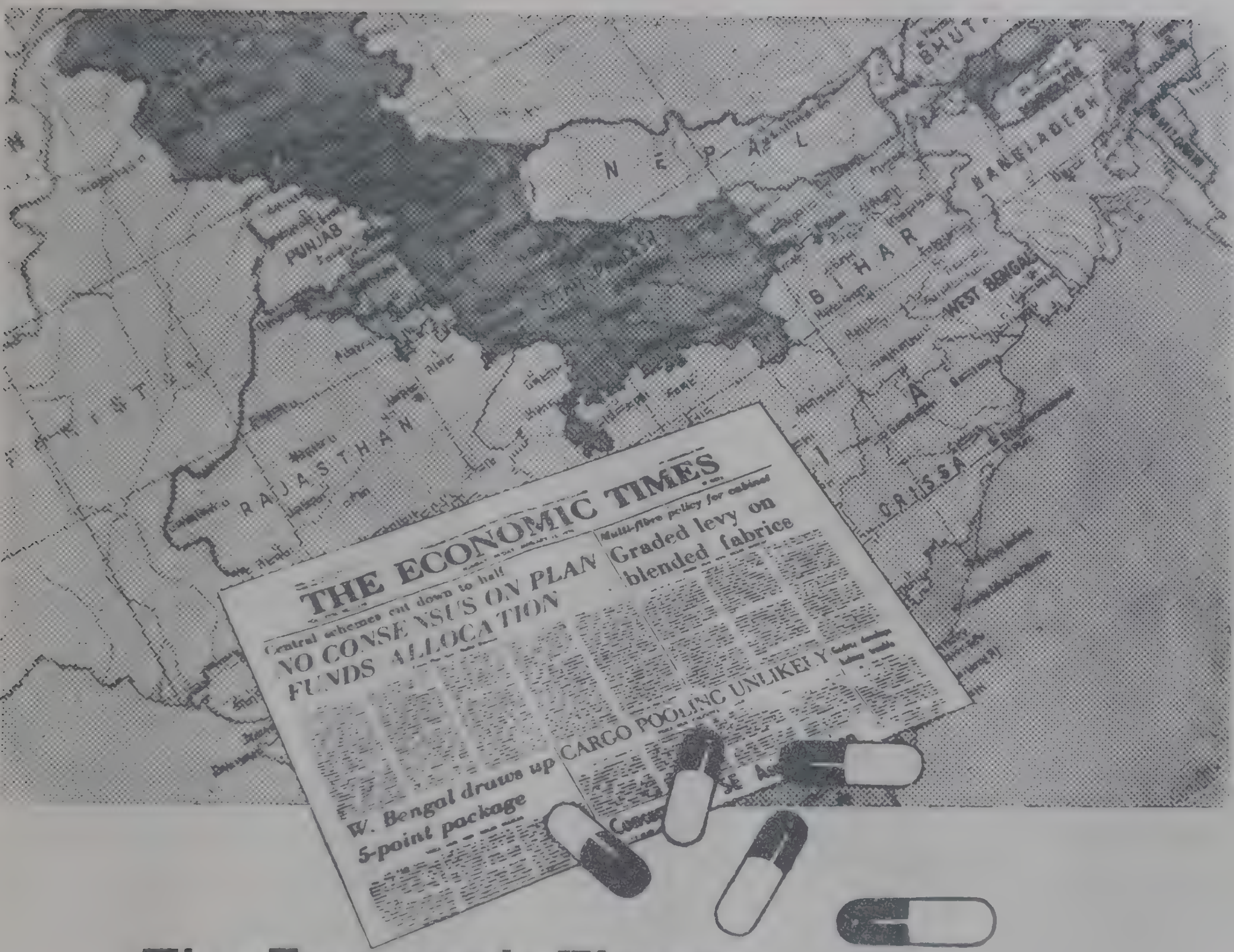
All this involves technology of the highest order. Creative technology. It's what Carborundum Universal is all about.

Carborundum Universal : a quarter-century of providing essential services for industry.

OBM 4497 1

CARBORUNDUM UNIVERSAL LTD.

[illegible] Madras-600 001.


NEPAL
BHUTAN
BANGLADESH
PUNJAB
BIHAR
WEST BENGAL
RAJASTHAN
ORISSA
THE ECONOMIC TIMES
Central schemes cut down to half
NO CONSENSUS ON PLAN FUNDS ALLOCATION
Multi-fibre policy for cabinet
Graded levy on blended fabrics
CARGO POOLING UNLIKELY
W. Bengal draws up 5-point package

The Economic Times is your Knowledge Capsule

For the past 19 years, the Economic Times has been the leader in the field of economic journalism. Today more businessmen, more industrialists, more technocrats and more intellectuals read the Economic Times than any other economic paper.

The Economic Times has a well organised Research Bureau and a pool of trained journalists. They collect, decipher and analyse the developments in the fields of agriculture, trade, commerce, industry, banking, finance, shipping, transport, exports, etc. It is their co-ordinated work that makes the Economic Times so meaningful and useful to its readers.

Every issue of the Economic Times contains at least two major articles and reviews of significance, and more than a dozen special economic reports by its special correspondents.

In just one year, you get over 750 incisive reports and analyses on every conceivable phase of the economy. The Economic times helps broaden your vision and opens to you great opportunities you can profit from.

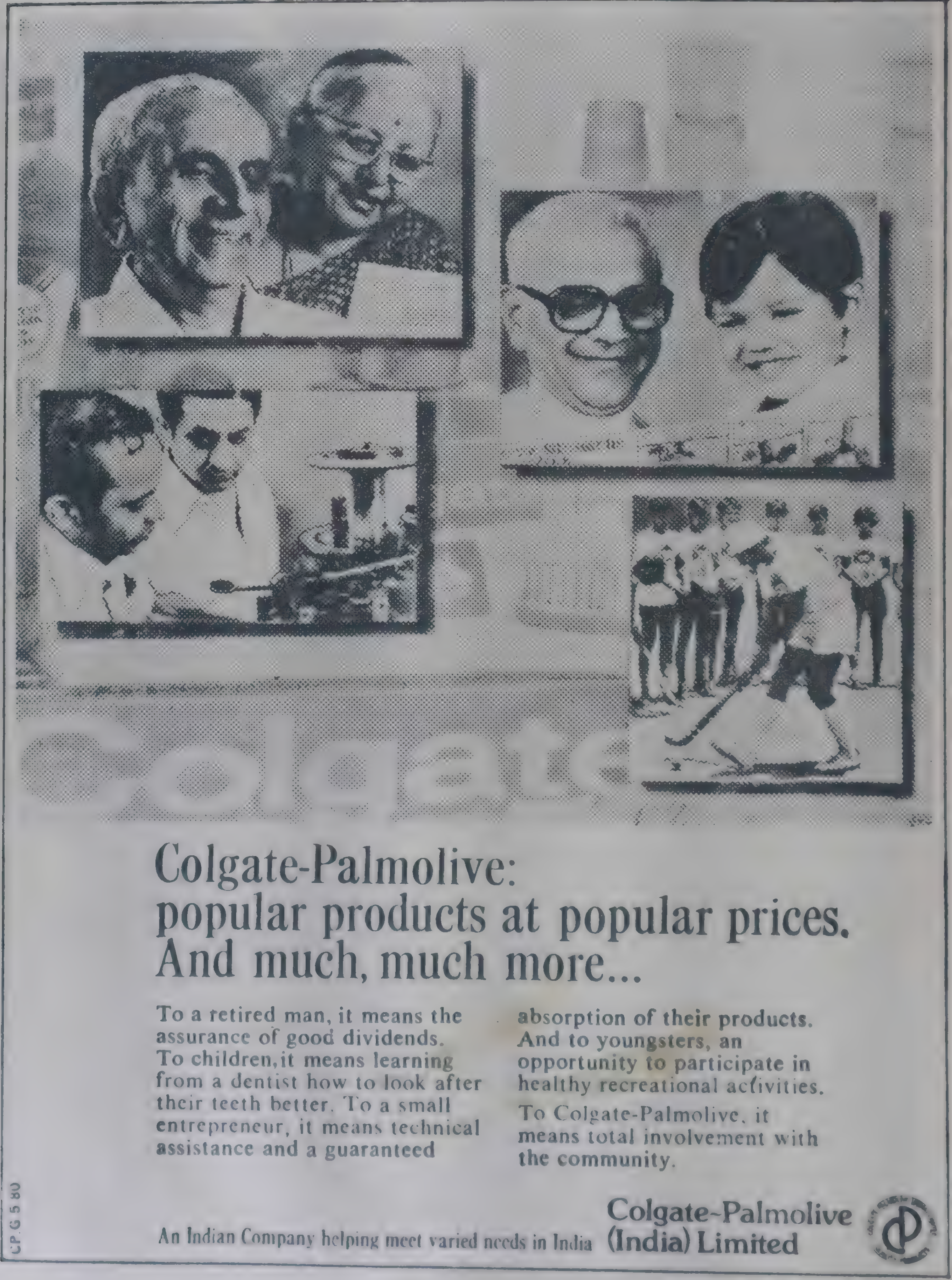
You cannot afford to miss the Economic Times. Subscribe to the Economic Times today.

THE ECONOMIC TIMES

India's largest ciruculated economic daily.

Simultaneously published from Bombay, Delhi, Calcutta.

ARMS-BC/ET-25-140-R



Colgate-Palmolive:
popular products at popular prices.
And much, much more...

To a retired man, it means the assurance of good dividends. To children, it means learning from a dentist how to look after their teeth better. To a small entrepreneur, it means technical assistance and a guaranteed absorption of their products. And to youngsters, an opportunity to participate in healthy recreational activities.

To Colgate-Palmolive, it means total involvement with the community.

An Indian Company helping meet varied needs in India

Colgate-Palmolive (India) Limited

CP G 5 80

WE REPRESENT ONLY TOP BRANDS IN INDUSTRY

Selenium ● Silicon Rectifiers ● High Voltage Cartridges ● Selemits ● Photocells ● SCRs Triacs ● UJTs ● Power Transistors Pulse Transformers ● Trigger Modules Surge Suppressors ● Heat Sinks Power Resistors ● Rheostats Potentiometers ● Power Switches Electrolytic Capacitors AC or DC Paper Capacitors Transformers ● Stabilisers Power Supplies ● Electronic Tubes Thyratrons ● Electromagnetic Relays Instruments ● Multimeters ● Panel Meters.

For Genuine Components at Fair Prices.
Ask for our comprehensive Price List.

DOMINION RADIOS

15, NEW QUEEN'S ROAD, OPERA HOUSE,
BOMBAY-400 004
PHONES: 35 07 47 • 38 29 68 • CABLE: "DOMIRA"

ISI—THE SYMBOL OF FLAWLESS QUALITY.

CHEMOLEUMS
HYDRAULIC OILS — IS : 3098 ISI
MACHINERY & SPINDLE OILS — IS : 493 ISI

ARE THE FIRST TO WIN ISI RECOGNITION IN INDIA.

- Other Lubricants marketed by Chemoleums carry the ISI mark.
- Engine and motor oils meet ISI specifications.

For guaranteed quality an ideal investment.

CHEMOLEUMS PRIVATE LIMITED
Tiruneermalai Road
Madras 600 044
Phone: 49606/49337/49395
Grams: "CHEMOLEUMS"

FDS CL 3101

CHASE BRIGHT STEEL LTD.

Meher Chambers, Nicol Road,
Ballard Estate, Bombay 400 001.
Phone : 268941 • Telex : 011-3472
Grams : " CHASESTEEL ".

Leading Manufacturers & Exporters of :

BRIGHT STEEL BARS & SHAFTINGS

of various sizes and specifications.

Board of Directors :

Shri S. L. Jajodia.
,, K. P. Khaitan.
,, S. K. Jajodia.
,, G. Lakshminarayanan.
,, Dilip S. Dahanukar.
,, A. K. Jajodia (*Mg. Director*).

Registered Office & Works :

Majiwada, Bombay-Agra Road, Thane.

DEVARSONS PVT. LTD.

Astodia Road,
Ahmedabad 380001.

★

Manufacturers of :

Oil soluble colours, Uranine, Eosine, Direct and Acid Dyes and Colours

for

Plastic, Soap, Pharmaceutical Products, Cosmetics and Food Colours

as per I.S.I. Specifications.

Jai Ambe

DEBHA GLUE PRODUCTS

★ *MANUFACTURERS OF :*

KAMAL, LAXMI & DGP
BRAND GLUE

and

★ *EXPORTERS OF :*

Crushed Bones

Bone Meal

Sinews and

Hoof Horns

■

POST BOX NO. 19
FALNA 306 116 W.R.
(Rajasthan)

Telegrams : **'INDOAGRICO'**
Telephones : **Office 67 — Residence 42**

Are you getting **'PUBLISHING IN INDIA'**

(*Annual Subscription Rs.* 20)

and B.E.P.I. —

A BIBLIOGRAPHY OF ENGLISH PUBLICATIONS IN INDIA

(*Annual Rs.* 150)

And other Indian Publications in
Humanities, Social Sciences,
Botany & Agriculture

If not,
Please Contact :—

D. K. PUBLISHERS' DISTRIBUTORS

(*LARGEST WHOLESALE HOUSE FOR INDIAN PUBLICATIONS*)

1, Ansari Road, Daryaganj, New Delhi 110 002.

Phone : 278368. Grams : "DEEKAYPUB".

Water treatment!
ask DRIPLEX

Our Specialisation :

- Water Supply Schemes (Public Health)
- Demineralisation
- Water Softening
- Pressure & Rapid Gravity Filtration
- Waste Treatment
- Chlorination
- Desalination (Reverse Osmosis)
- Swimming Pool Purification Plants
- Clarification System
- Boiler & Condenser Cleaning
- Chemical Dosing
- Industrial Filters

DRIPLEX WATER ENGINEERING (P) LTD.

Regd. Office : "DRIPLEX HOUSE", 1, Panchsheel Community Centre,
New Delhi 110 017

Phones : 652352, 650942 TELEX : 031-4604. Grams : WATERENGG

It is here

Doburg

House of Dongre

DOBURG LAGER BREWERIES PVT. LTD.

82 Nagindas Master Road, Fort, Bombay-400 023.

Brewery: Doburg Nagar, Satara-415 003.

dlb
COURAGE
1787

A REAL QUALITY JOB IN PHOTOGRAPHY
Portraiture Commercial-Industrial
By

Darly

PHOTOGRAPHERS & DEALERS

Lambert Market
Srinagar 190001.
Phone : 74847

Residency Road
Srinagar 190001
Phone : 73997

Oberoi Palace
Hotel
Srinagar 190001.

★

LARGEST PHOTOGRAPHIC STORE IN J & K

Publishers of Picture Post Cards and Tourist Literature

★

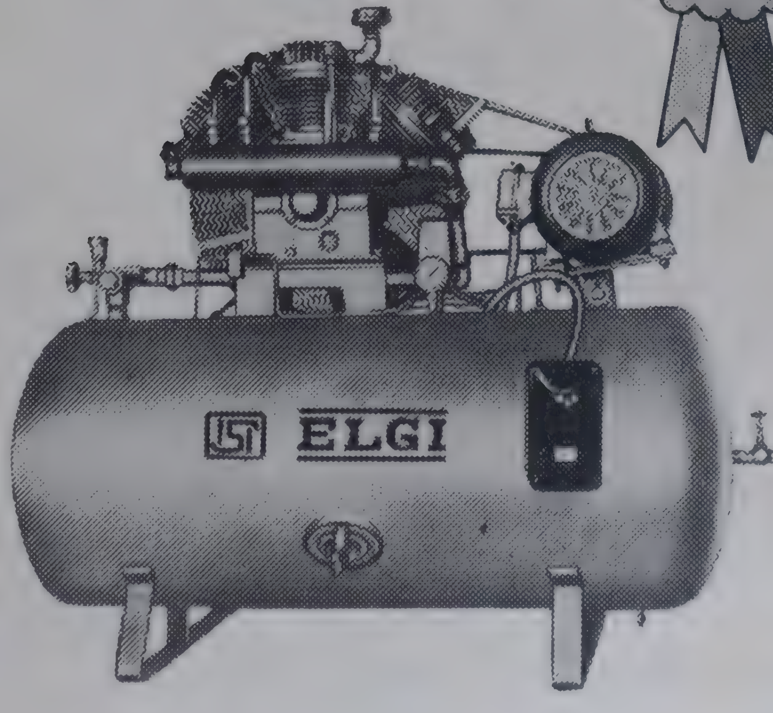
CAMERA REPAIRS UNDERTAKEN

ELGI air compressors
have the seal
of quality

The Indian Standards Institution has been set up by the Government of India to establish standards of quality which are accepted internationally. Hence, it is a matter of great pride that Elgi Air Compressors are the first Indian-made compressors to receive the ISI mark—the seal of quality.

ELGI

Elgi Equipments Limited
India House
Trichy Road
Coimbatore 641 018.



SAA/ELGI 564

ELECTRO MAGNET WINDING WIRES
CHOKE
ELECTRO

TRUSTED BY LEADING
ELECTRICAL MANUFACTURERS FOR

SUPER ENAMELLED
ALUMINIUM AND
COPPER WIRES AS PER
I S S -4800 V

ELECTRO
MAGNET
WINDING WIRES

MFRS. OF: SUPER ENAMELLED ALUMINIUM & COPPER WIRES.

SARVODAYA INDUSTRIAL ESTATE, MAHAKALI ROAD, UNIT No. 8,
ANDHERI (EAST), BOMBAY-400 093.

Now,
Engineering Components in
Fibreglass Reinforced Thermoplastics

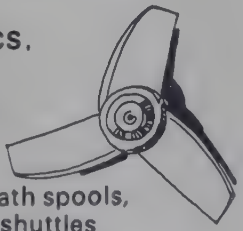
Now, Fibreglass reinforces all thermoplastics—Polystyrene, Polypropylene, Nylon, Polycarbonate, Polyethylene, ABS and others—to give you the latest engineering material, **Fibreglass Reinforced Thermoplastics** (FTP).

Special industrial plastics are expensive and, often, difficult to obtain. General-purpose unreinforced plastics are good enough only for consumer use. Now, FTPs enable moulding of engineering components not feasible in plastics so far.

Fibreglass Reinforced Thermoplastics, now manufactured in India
- are far stronger than other engineering plastics
- replace metal parts economically
- are as easy to process as other plastics.

How FTPs score over other materials:
- **Lower cost**—faster production and no finishing...less expensive than metals, volume-for-volume
- **Superior mechanical and creep properties**—thinner, lighter and stronger sections possible... shorter moulding cycles, speedier production...long, maintenance-free performance
- **Better thermal properties**—improved heat distortion temperature and lower coefficient of linear thermal expansion
- **Improved electrical properties**—higher arc resistance and good dielectric strength
- **Excellent resistance to** chemical as well as environmental corrosion
- **Lower shrinkage**—consistent quality
- **Greater flexibility** in design and production—one-piece moulding eliminates assembly

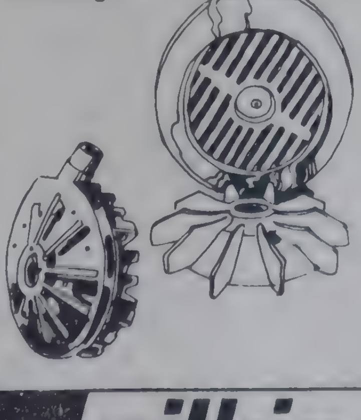
Some popular applications of FTPs:



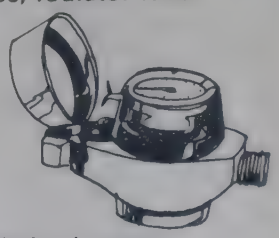
Textile: Dye bath spools, bobbins, pirns, shuttles

Chemical: Pump casing and impellers, valves, chemical drying trays, filter plates and frames, tower packing rings

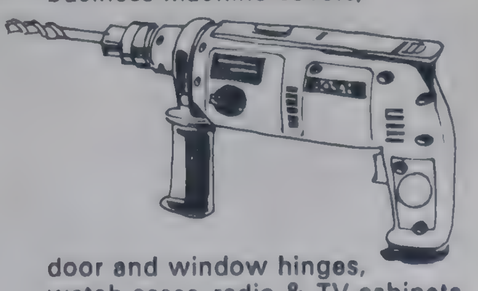
Electricals & Electronics: Switch boxes, coil forms, circuit breaker parts, motor cooling fans, airconditioner fans and blowers, motor end-covers, power tool housings



Automotive: Battery cases, radiator grilles, instrument panels, water pumps, radiator fans



General: Chairs, luggage, sports goods, rifle and pistol butts, business machine covers,



door and window hinges, watch cases, radio & TV cabinets, water meter housings, needle bearing cages

And thousands more...

For details, write to

fibreglass pilkington Ltd.

Regd. Office: 9 Wallace Street, Bombay 400 001. Phone: 269211
***Branches:** Ahmedabad • Bangalore • Bombay • Calcutta • Delhi • Madras*

PAPER?

PRINTING,
PACKAGING &
ONE TIME CARBON PAPER

■

FAIR DEAL

59, Green St., Bombay 400 054.
30-H, Bamanji Lane, Bombay 400 001.
Phones : 534520, 549394 & 260410.

5/3/4/5/20

F. E. HARDCASTLE & CO.
PRIVATE LTD.
10, Bank Street Cross Lane, Bombay 400 023.

Average Agents, Marine Surveyors & Assessors.

Directors:
N. D. Khandalavala, B.A., A.C.I.I., Av. Adj. (U.S.A.),
H. S. Dalal, B.E. (MECH.), M.S. (M.E.).
Phones: 256393 & 294586. *Telegrams:* "VERITAS".

Agents and Surveyors to
Registers of Shipping:
Registro Italiano Navale.

★

Agents to:

American Institute of Marine Underwriters. Comite Central des Assureurs Maritimes de France. Verein Hamburger Assecuradeure. Verein Bremer Seeversicherer. Vereeniging Van Transport Assuradeuren in Nederland. Osterreichischer Transport Versicherungs Verband. Assicurazioni General and group.

Tecalemit Maneklal

HIGH
PRESSURE
HOSES

FULL RANGE OF
SAE 100 R HOSES

Authorised Stockists :
fluidline
SYSTEMS

G-7, LAXMI WOOLLEN
MILLS ESTATE,
Dr E MOSES ROAD,
BOMBAY-400 011
☐ PHONE: 370965, 898602

Another step
towards import substitution...

**Gloster Cables introduce
66 KV XLPE Cables manufactured by
the Radiant Curing Process
for the first time in India**

**In technical collaboration with
Sumitomo Electric Industries Ltd., Japan**

Gloster Cables' 66 KV XLPE Cable is the only one of its kind in India. Produced at the only plant equipped with Inert Gas Curing — the most advanced XLPE Cable making process in the world. And saving valuable foreign exchange for the country. Which puts Gloster Cables in the forefront of the cable industry.

FGI

FORT GLOSTER INDUSTRIES LTD.
31 Chowringhee Road, Calcutta 700016
Phones : 24-8241 (5 lines)
Regd. Office : 21, Strand Road, Calcutta 700001

GLOSTER

GREAVES COTTON

Registered & Head Office :

Phone : **271524**

Board of Directors

L. M. Thapar, *Chairman*

G. Mathrani, *Managing Director & President*

N. M. Wagle

Surendr Lall

M. B. Bhaskare

H. C. Dass

B. M. Thapar

S. K. Mohile

Regional Offices

Bombay — Calcutta — New Delhi — Madras

Branch Offices

Ahmedabad — Bangalore — Bhopal — Bhubaneshwar — Chandigarh — Cochin — Coimbatore — Dhanbad — Gauhati — Goa — Hyderabad — Jaipur — Jamshedpur — Lucknow — Mangalore — Nagpur — Patna — Ranchi — Visakhapatnam

Foreign Offices

Manchester — London

Manufacturing Divisions : Greavestool Division, Bombay ; Greaves Light Engg. Division, Nasik ; Greaves Nasik Plant, Nasik.

Marketing Divisions : Aviation & Electronics ; Construction Equipment ; David Brown ; Engine ; Greavestool & Drilling ; Industrial Equipment ; Marine ; Metals ; Mining Equipmenc ; Oilfield ; Projects ; Textile.

Subsidiary & Associate Companies : Crompton Greaves Ltd., Bombay ; David Brown Greaves Ltd., Pune ; Drayton Greaves Ltd., Bombay ; Greaves Dronsfield Ltd., Bombay ; Greaves Foseco Ltd., Pune ; Greaves International Ltd., Bombay ; Greaves Lombardini Ltd., Aurangabad ; Ruston & Hornsby (India) Ltd., Pune.

TRADING ACTIVITIES

Engine Division : Markets diesel engines, base engines and gensets from 3·5 HP to 500 HP for a wide spectrum of applications in agriculture, marine, industry, construction and earthmoving, defence etc.

David Brown Division : Markets Radicon worm-reduction and helical gear boxes for cement, sugar, paper, chemicals, mining and material handling industries ; and marine and transmission gear boxes for marine engines, road rollers, winches etc.

Greavestool and Drilling Division : Markets a wide range of mining and drilling equipment, including diamond drill bits for mineral and oil exploration and foundation investigation ; drills, pumps and operating equipment ; industrial diamond tools

& COMPANY LIMITED

1, Dr. V. B. Gandhi Marg,
P.O. Box No. 91, Bombay 400 023.

Grams : **'GREAVES'** ★ *Telex :* **011-2517**

like wheels, dressers, shaped tools, circular saws, etc.

Industrial Equipment Division : Markets highly technical and sophisticated engineering equipment, both indigenous and foreign. This comprises thermal equipment like boilers, steam traps, temperature and process control instruments and also wide range of power transmission and material handling equipment and pumps of different types.

Construction Equipment Division : Markets earthmoving and construction equipment such as shovels, draglines, dump trucks, road rollers, concrete pumps, batching plants and accessories like mixers, control panels manufactured by a number of companies abroad.

Marine Division : Markets propulsion and auxiliary diesel turbines for warships, diesel turbines for merchant ships, outboard propulsion units, boat building equipment, marine main propulsion gearing, cargo ship handling/repairing communication systems, electronics automation and control equipment.

Aviation & Electronics Division : Markets aero-engines, hydraulic equipment, flight instruments, environmental equipment, avionics, flight simulators and radars, telecommunication equipment, computer, IFF equipment, navigation equipment, fire control systems, electronic warfare equipment.

Oilfield Division : Markets vital drilling and oil-exploration equipment such as drilling rigs, oilfield diamond bits, rolling cutter rock bits, winches, pumping equipment, fluid control equipment, geophysical instrumentation, oilfield diamond drilling bits and core bits, collars, stabilisers, reamers and tubulars.

Project Division : Handles turnkey projects involving sophisticated technology such as setting up a spiral welded pipe mill, annealing and pickling lines for silicon steel projects, and also other special purpose process plants in collaboration with well known overseas manufacturers.

Mining Equipment Division : Markets a wide range of equipment such as long wall mining equipment, tunnelling equipment, communication equipment for underground mines etc.

Metals Division : Markets primary metals and super-strength alloys for use in various industries, besides supplying electric furnace heating elements, combustion tubes and sheaths and other allied articles.

Textile Division : Markets a wide range of textile machinery manufactured by well known overseas manufacturers.

GU
LABI

G.A.Randerian Limited.

EXPORTERS & IMPORTERS

MANUFACTURERS & EXPORTERS OF WELL-KNOWN REGISTERED BRANDS :

GULABI BAROOTI • GULABI KALAMI • JAVID • STD. 16 • MUMTAZ • NEW ELEGANT GULABI • SHAKIR • ERFAN • ALTAHERIN • FIRDAOSI • RAHIMI • DOG Brand Tea & Others

(IN PACKETS AND VARIOUS BULK PACKINGS)

SAKIR • MOUNTAIN VIEW • TAHER & MUMTAZ
Darjeeling Tea in Caddies (Tins)

FROZEN FOODS & MARINE PRODUCTS :

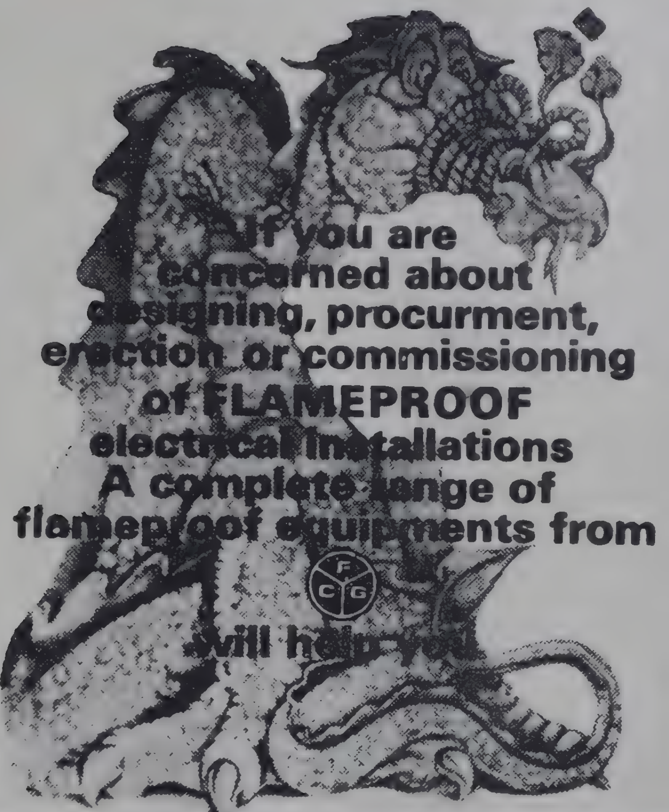
REGISTERED OFFICE:
"RANDERIAN BUILDING",
21, ZAKARIA STREET,
G.P.O. BOX NO. 2489.
CALCUTTA-700 001.

HEAD OFFICE:
"GULABI BLOCK",
'COMMERCE HOUSE', 3RD FLOOR,
2, GANESH CHANDRA AVENUE,
CALCUTTA-700 013.

PHONES : OFFICE : 231073 — 231074 • TELEX : 21 7012 GAR IN
CABLE : "ALTAHERIN" OR "CHAIGULABI" CALCUTTA.

BRANCH OFFICE
"GULABI HOUSE", 5TH FLOOR
111/115, KAZI SYED STREET,
P. O. BOX NO. 3062,
BOMBAY 400 003
PHONES : 323403 — 329664
TELEX : 11 3072 GAR IN
CABLE : "GULABICHAI" OR
"ALTAHERIN" BOMBAY

DUBAI OFFICE
G. A. RANDERIAN
P. O. BOX NO. 11030,
"ANSARI BUILDING", AL-RAS,
DEIRA DUBAI (U.A.E.),
PHONES :
224637 — 231246 — 231247
TELEX : 47189 ERFAN EM
CABLE : "IRFANCO"


If you are
concerned about
designing, procurment,
erection or commissioning
of FLAMEPROOF
electrical installations
A complete range of
flameproof equipments from
FCG
will help you.

DISTRIBUTORS :
gaurav agencies
[illegible]
TEL. 754905 755561 GRAMS: [illegible]
Flameproof
M S FLAMEPROOF
CONTROL GEARS, BOMBAY

Immediate Supply of :

**M. S. SEAMLESS &
HYDRAULIC PIPES**

**GREATER INDIA
TUBES CO.**

Dealers, Stockists & Importers in :

M. S. SEAMLESS PIPES, G. I. & BLACK PIPES, E.R.W., BOILER-TUBES, FORGED STEAM FITTINGS, S. S. PIPES & BARS

**201, 2nd floor, Nagdevi Street, BOMBAY 400 003.
Phones: 335710, Resi. : 893113 Grams : AMASPIPES**

For

**Stickers,
Labels**

Use

GRACE
SILICONE
PAPER

gi
grace
PAPER
INDUSTRIES
PVT. LTD.

5/7, Mill Officers Colony, Ashram Road,
Ahmedabad 380 009.

Phones : 78193 & 77964.

More than its Temples and Churches,

GOA

is now better known for its towering socio-economic monument built by our tenacious and hardworking people

- ★ Each year raises our peoples vision, hopes and faith in their strength and endeavours.
- ★ Goans have now multiple opportunities in agriculture, industry and social reform.
- ★ A rejuvenated village has set its objective to a continued economic growth.
- ★ Panchayats and cooperatives have given a fillip to rural economy.
- ★ A trained farmer freed from feudal clutches now adopts modern farm practices.
- ★ It is this solid edifice for which Goa receives eulogies from various sections of the community.

Issued by:

DEPARTMENT OF INFORMATION
GOVERNMENT OF GOA, DAMAN AND DIU
PANAJI — GOA

MAN IS KNOWN BY THE COMPANY HE KEEPS

WE ARE KNOWN BY THE CUSTOMERS WHO REPEAT

If you are in quest of

SUBSTATION ELECTRICAL EQUIPMENTS—DO NOT SPECULATE

SPECIFY : **"GUJFORMER"** **TRANSFORMERS TO BE PRECISE**

of every class for any Application upto 8,000 kVA at 66 kV, Oil/Air Break Switches upto 800 AMPS 33 kV/Drop-out Fuses & Lightning Arresters upto 33 kV. Guaranteed Repairs, Servicing & Filtration work undertaken at site.

Early/Ex-stock delivery offered

SALES REP : SUBSTATION ENGINEERS

GUJARAT TRANSFORMERS PVT. LIMITED

46, Sampatrao Colony, R. C. Dutt Road, Baroda 390 005

Telephones : Factory : 4422/4209/4110
Office : 64039/65886

Grams : "GUJFORMER",
BARODA

Phone: 44.
Cable: " MAYUR ".

Messrs. Garg Industrial Corporation

Sadabad (Mathura),
U.P. (India).

Specialist in

all kinds of C.I. Casting & manufacturers of export worthy Centrifugal Water Pumps, Valves, Bends, etc.

Member of Engineering Export Promotion Council of India.
Associate Member of Indian Standard Institute.

'ALWAYS INSIST ON " MAYUR " QUALITY PRODUCT'

Switch to Brighter possibilities with our decorative fluorescent fittings!
The vast range none can match
TIK
GLOLITE ELECTRICALS
P.O. Box 16221.
Mazagaon
Bombay-400 010
Tel: 377498
Telex: 011-5104

'Gulamally' The House of Qualities
'Black & Decker' Power Tools
'Wolf' Electrical Tools
'Tullu' Water Pumps & F.H.P. Motors
'Cinni' Fans
'Crompton' Electric Motors
'Rohit' Grinders & Polishers
'Gedore' Hand Tools, **'Warrior'** Taps & Dies
'IT' Twist Drills, **'JK'** Steel Files

Specialists in :

Centrifugal Blowers, Exhausters, Flexible Shafts & Shearing Machines.

GULAMALLY & BROS.

90, Lohar Chawl,
Bombay 400002.
Phone : 314104.

GREAVES FOSECO LTD.

Regd. Office : Jolly Bhavan No. 2, New Marine Lines,
Bombay 400 020.
Phones : 259439, 259276, 259446, 297749.
Telex : 011 4113 GFBY IN.

Board of Directors :

G. Mathrani
D. A. Mascarenhas
S. Datta
S. J. Singh
F. A. A. Jasdanwalla
D. P. Mehta (Alternate Director to R. Jordan)
D. V. Atterton (Resident in U.K.)
G. R. Anderson (Resident in U.K.)
R. Jordan (Resident in U.S.A.)

Regd. Head Office : BOMBAY

A. Sleight, General Manager.
K. Raman, Deputy General Manager.
G. V. Hiranandani, Materials Manager.
C. K. Srinivasan, Finance Manager.
G. L. Gera, Corporate Personnel Manager.
N. Ramanathan (at Pune), General Sales Manager.

Manufacturing Units :

(1) Greaves Foseco Limited,
Bombay-Pune Road,
Chinchwad, Pune 411 019.
D. R. Supanekar, Works Manager.

(2) Greaves Foseco Limited,
Taratalla Road, Opp. Brace Bridge Rly. Station,
Calcutta 700 053.
T. K. Sen, Works Manager.

(3) Greaves Foseco Limited.
Sundernagar, Tatanagar, Jamshedpur.
D. A. Braganza, Works Manager.

GOKAK PATEL VOLKART LIMITED

Manufacturers of :

YARN, INDUSTRIAL FABRICS & TYRE CORD

Yarn, Tyre Cord and Canvas and engaged in Shipping, Travel, Clearing and Forwarding and Air Cargo and represents several well known Shipping Companies in the leading ports.

Directors : A. B. Bilimoria, Chairman ; G. Khandwala, Vice-Chairman ; D. J. Madan, Managing Director ; Bhagvandas C. Mehta ; Pratap Bhogilal ; Balkrishna Harivallabhdas ; S. R. Vakil ; Jehangir P. Patel ; Shavak P. Patel ; V. Dixit ; Akbar Hydari ; P. Gregori ; G. N. Joshi (Alternate to P. Gregori).

Registered Office : Forbes Building, Charanjit Rai Marg,
Fort, Bombay 400 001

Bombay Office Phones : Gokak Mills Division 268081 (20 Lines),
Patvolk Division 261531 '37, 266751 '57

Bombay Office Telegraphic Address :
Gokak Mills Division YESTERMORN
Patvolk Division PATVOLK

Telex : Gokak Mills Division 011-2369 ABC STEAMER BY
Patvolk Division 011-2546 ABC PATVOLK BY
011-2274 ABC VOLKART BY

Mills at : Gokak Falls, Belgaum District, Karnataka State.
Mills Telegraphic Address : "TURBINES", Gokak Falls.
Mills Telephone No. : 4 (Gokak).

COPPER & BRASS TUBING

First choice for quality and performance

Refrigeration quality Copper Coils. Copper & Brass Tubes, Pipes, Sections & Profiles to ASTM, BSS & ISS Specifications and Lloyds certification.

Manufactured by

HINDUSTAN STEEL & METAL WORKS

Opp. ACME Industrial Estate,
Behind Digvijay Cement Co.
Sewree, Bombay-400 015.
Gram: BISLEX
Phone: 441856

Maud

HIRALAL & COMPANY

Specialists in:

DISHING, PRESSING, WELDING & MECHANICAL JOBS OF IRON & STEEL

FABRICATORS OF TANKS & PRESSURE VESSELS DISHED-END & FLANGES BY SPINNING MACHINE

■

Block No. T, Plot No. T-179, Pimpri
Industrial Area, Bhosari,
PUNE 411 026.
Telephone Nos.: 84416 & 84417.

GRAM: "STUDFIT"

PHONE: 322553

a reputed name
in the field of
manufacturing nuts,
bolts and screws

EYE BOLTS

MECH. ELECT. ENGINEERS

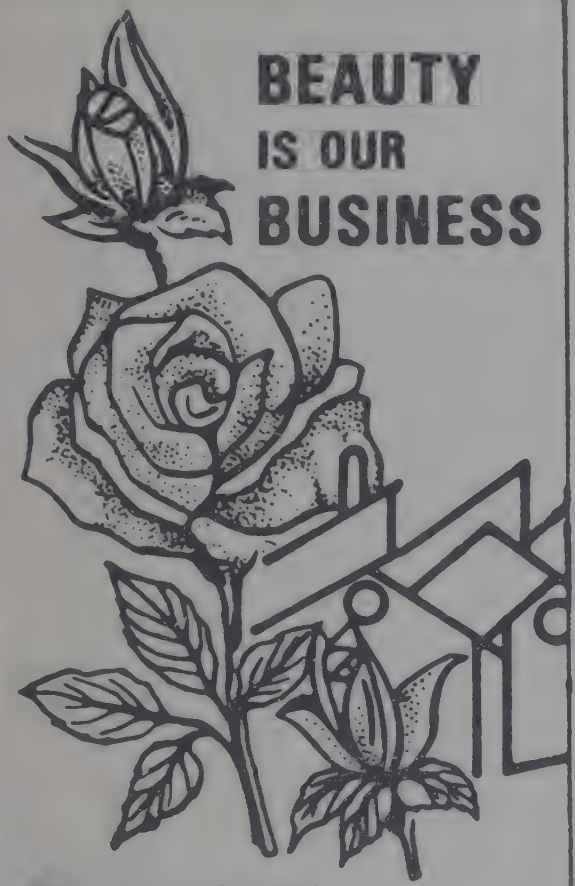
MFRS OF: ALL KINDS OF M.S. H.T. PRECISSION
COLD, FORGED, HEX BOLTS, NUTS, RIVETS.
MACHINES SCREWS, ALLEN CAP, STUDS
WITH BSS, DIN, I. S. I. STANDARD.

BESIDES THE ABOVE WE MANUFACTURE ALL KINDS OF BOLTS, NUTS,
SCREWS, WASHERS IN FERROUS & NON FERROUS METALS ACCORDING
TO YOUR SPECIFICATIONS AND BLUE PRINTS AT MOST MODERATE RATES

HARSHAD ENGINEERING WORKS

356 SAMUEL STREET, 1ST FLOOR, (VADGADI) BOMBAY-400 003

Serving Principal Leading Industries throughout India, Government &
Semi Government Depts. and defence divisions



- HORTICULTURAL -ENGINEERING & LANDSCAPING
- TREE SURGERY & RENOVATION OF GARDENS
- BUNGLOW & INDUSTRIAL GARDEN CONSULTANCY
- COMMERCIAL PLANTATION ADVISORY
- BEAUTIFICATION & COSMETIC MAINTENANCE OF HOTELS & OTHER ESTABLISHMENTS.

I*I HORTICO

8/B NAVYUG COLONY.
PADAMPURA,
AURANGABAD. 431 001

MINERALS

Largest Dealers in:

Minerals, such as Soapstone (Talc), Barytes, China Clay, Kaolin Whiting, Calcite, Calcium Carbonate Light, Calcium Silicate, Magnesium Carbonate Light, Colour Ochres and Oxides and Dolomite Plaster of Paris and other Industrial Minerals.

Export Enquiries Solicited

★

Contact:

Messrs. H. P.
KHARAWALA
(Estd. 1920)
293, Samuel Street, Vadgadi,
Bombay 400 003.
Phone: 321760.
Grams: "SOAPSTONE"

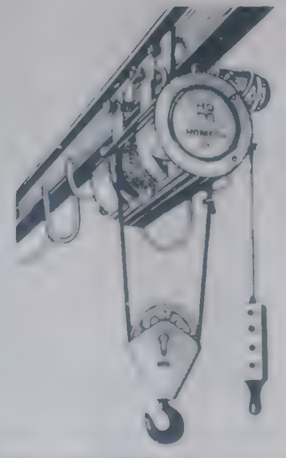
3 major assets to industries

Homech Electric Hoists

- Wide range of lift and operating speeds to select from
- Special Integral Electromechanical brake adjusting systems reduces downtime
- Trolley suitable for wide variations in I-beam sizes.
- Fixed Models adaptable for Winch duty applications
- Built-in safety limit switches control hook-positions
- Hoist motors designed for superior Class F type insulation
- Versatile Models adaptable to curved tracks and monorail systems

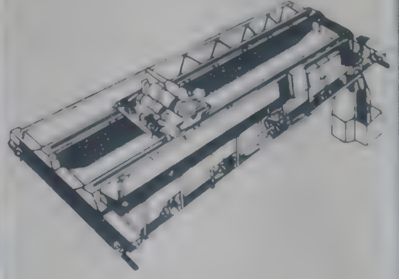
Manufactured in technical collaboration with

MUNCK INTERNATIONAL A/S of Norway



Homech Cranes

- A wide range to suit specific plant needs
- Electric Overhead & Underslung Cranes
- Gantry & Goliath Cranes
- Steel Mill Duty & Grabbing Cranes
- Power Winches
- Designed to Indian & International Standards
- Special design to incorporate customer's specific requirements.



- Efficient all-India Sales and service Centres
- Complete Turnkey Service for Materials Handling
- Export enquiries solicited

Manufactured and Marketed by

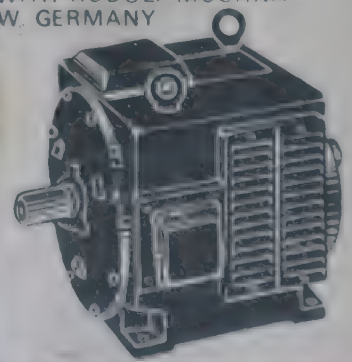
HOIST-O-MECH LIMITED

2nd Pokhran Road,
THANE 400 601
Phones: 592555, 501477 & 503524
Gram: HOISTOMECH THANE
Telex. 011-4466

Homech Inducta Speed Drive

- Wide range 0.25—180 hp
- Low cost in comparsion with other systems
- Works on eddy current principle
- Generally used with a standard sq. cage induction motor
- Stepless speed variations down to 10% rated speed for continuous duty.
- Excellent speed regulation within 2%
- Simple robust construction
- Extremely easy to operate
- Requires practically no maintenance
- Electronic control provides cushioned start, adjustable torque limit, a variety of feedback schemes for torque, speed, tension and even process parameters
- Wide applications—Extruders, Wire drawing, Rolling Mills, Pumps, Stenters, Paper Machines, Cane carriers, Kilns, Shear lines, Conveyors etc.

IN TECHNICAL COLLABORATION WITH RUDOLF MUCHNA W. GERMANY



CJA 676

TAKE **KERALA**
WHEREVER YOU GO
COME TO **KAIRALI**
CARRY WITH YOU
THE MAGNIFICENT
MOODS OF A GREAT
LAND

VISIT
KAIRALI AT

B-7, State Emporia Complex,
Baba Kharakhsingh Marg,
New Delhi-110001.
Phones : 343795 & 343326.

"NIRMAL", Nariman Point,
Bombay-400001.
Phone : 232817.

15/210, Mettupalayam Road,
Coimbatore.
Phone : 22253.

The Commercial Road,
Ootacamund.
Phone : 2911.

138, Mount Road, Madras.
Phone : 87830.

L.I.C. Building, Mount Road,
Madras.
Phone : 86964.

Statue Jn., Trivandrum.
Phone : 60127.

Mascot Hotel, Trivandrum.

M. G. Road, Ernakulam.
Phone : 34507.

Alakapuri Buildings, Calicut.
Phone : 76343.

S.M.S.M. Institute, The Central
Handicrafts Emporium,
Trivandrum.
Phone : 63298.

Near Taj Mahal, Agra.
Phone : 62893.

A UNIT OF

HANDICRAFTS DEVELOPMENT CORPORATION OF KERALA LTD.
P. B. No. 171, TRIVANDRUM-1.

Phones : 63358, 63359, 63055.
Telex : 884-210.

ELECTRICAL CONTACTS
(Solid, Bimetal & on Carrier)

Made of :
Silver, Gold, Palladium, Platinum &
Alloys thereof

Also Tungsten Tipped Contacts

HINDUSTAN PLATINUM
PRIVATE LIMITED
Shantinagar, Pipeline, Vakola,
Santacruz (E), Bombay 400055.

Phones :
Office : 379171, 370741 & 379796.
Factory : 544331-2-3-4.

Grams : "CRUCIBLE".

Telex : 011-2738 AB : RHPL IN
011-4865 AB : TMI IN

THE TIMES OF INDIA DIRECTORY & YEARBOOK
Including 'WHO'S WHO' in India

RATES FOR ADVERTISING

Covers :

Inside Front :	**Rs. 750/-**
Inside Back :	**Rs. 625/-**

Inside Pages :

Full page	**Rs. 500/-**
Half page	**Rs. 300/-**
Quarter page	**Rs. 225/-**
Trade Directory Panels (5 cm × 7 cm Wide)	**Rs. 100/-**

In addition to the rates quoted above, there will be added to the charges payable by the advertiser an amount equivalent to any tax which the Proprietors may for the time being be called upon to pay in respect of the advertisement.

Type area of Full Page 15 cm × 20 cm DEEP

Opens up India's far flung markets

THE KEY TO INDIAN INDUSTRY

HCC
TUNNELS AND POWER HOUSES
BRIDGES
HCC
DAMS AND BARRAGES
AQUEDUCTS
HCC
PUBLIC HEALTH ENGINEERING
MARINE STRUCTURES
HCC
CONSTRUCTION MANAGEMENT
INDUSTRIAL STRUCTURES

they speak Volumes...

WHAT ALL THE VOLUMES ARE ABOUT?

- Upto - date know how.
- Continuing attempt at updating and perfecting expertise in design and execution.
- Fusion of Quality and speed in execution.
- Professional Management with an all - facet coverage compass
- Civil Engineering Sectors: Dams, Barrages, Power Houses (Hydro, Thermal, Nuclear) Industrial structures, Marine structures, Piling environmental Engineering works:
- Excellent Plant and Equipment.
- With more than Rs. 1,500/- Million jobs, H.C.C. add volumes in the library-vast land of Indian sub continents and now spread overseas.
- For more Details – Please open the Volumes

SHASHIS/253

THE HINDUSTAN CONSTRUCTION COMPANY LIMITED
HCC
Construction House, Walchand Hirachand Marg, Ballard Estate,
Bombay 400 038. India. Tel: 268091. Telex: 011-2780 WALB - IN.

DISTILLED WATER

HOLMES LABORATORY

Ask for :

Holmes Aqua Pure (Distilled Water) for Purity, Accuracy and Reliability. It is tested, approved and recommended by Government.

Forjett Hill Road,
Bombay 400 036.

Phone : 374549.

INDO STEEL CORPORATION

A RELIABLE HOUSE
FOR PACKAGING AND STRAPPING
TOOLS & ACCESSORIES

BOX STRAPPING, PACKING ACCESSORIES,
V-BELTS, GRINDING WHEELS, CUTTING TOOLS &
GENERAL HARDWARE SUPPLIERS.

148, SARANG STREET, OPP. CRAWFORD MARKET, BOMBAY-400 003.
PHONE: 326609

HEATLY & GRESHAM (INDIA) LIMITED

ENGINEERS
(Bombay, Madras, New Delhi, Calcutta, Ahmedabad)

Registered Office & Bombay Sales Office :
43, Dr. V. B. Gandhi Marg (Forbes St.), Fort, Bombay 400 023.
Post Box 225. Telephones: 243967, 243982 & 243941.
Telex: 011-2724, Telegraphic Address: " BRAKE ".

Head Office:
28, Barakhamba Road, New Delhi 110 001.
Telephones: 42348, 42349 & 42340.

Madras Sales Office :
Indian Chamber Building Annexe, Esplanade, Madras 600 001
Post Box 228. Telephones: 29796-8.
Telex: 041-478. Telegraphic Address: " HEASHAM ".

New Delhi Sales Office :
28, Barakhamba Road, New Delhi 110 001.
Post Box 620. Telephones: 42348-9 & 42340.
Telex: 031-2621. Telegraphic Address: " BRAKE "

Calcutta Sales Office :
31, Chittaranjan Avenue, Calcutta 700 012.
Post Box 190. Telephones : 264871-2 & 264883.
Telegraphic Address: " BRAKE ".
Telex : 021-3154

Ahmedabad Office:
Block No. 1/A, 3rd Floor, P. R. & Sons Building, Mission Road, Bhadra, Ahmedabad 380 001.
Post Box 280. Telephones: 380833 & 388482.
Telegraphic Address: " HEASHAM (A) ".

Sahibabad Works:
Plot No. 39B, Site No. 4, Industrial Area, Sahibabad 201 001 (U.P.). Telephone: 201487.

Technical Representatives at:
Cochin, Bangalore, Hyderabad, Lucknow, Nagpur.

Chief Executive :
Mr. N. Kumar (Stationed in New Delhi).

Finance Manager:
Mr. M. D. Mehra (Stationed in New Delhi).

Area Managers:
Bombay: Cdr. Om Prakash
Madras: Mr. A. S. Niranjan
New Delhi: Mr. V. Gulati
Calcutta : Mr. B. K. Dutta (Acting)

Divisional Manager (Machine Tools): Mr. B. N. Sthalekar (Bombay).

Construction Equipment: Concrete Batching Plants, Vibrating Screens, Weighbatchers, Monorail, Dumpers, Vibrators, Concrete Floor Hardener and Water-proofer, "Stone Crushers", Aerial Ropeways

Machine Tools: Imported: Milling, Grinding, Drilling Die-Sinking and Broaching Machines, Surface and Slideway Grinders, Boring and Tapping Machines, Gear Generating Machines and Hobs, Lathes, Power Presses and Coinmaster Presses, Press Brakes and Shears, Minting Equipment, CNC Machining & Turning Centres, Wide Belt Grinding Machines, EDM Plate Bending Rolls

Railway Equipment : Hasler Speed Indicators and Recorders, Silentbloc Mountings

Thermal Equipment: Industrial Furnaces, Electric & Oil Fired Furnaces, Hot Air Generators, Vacuum Pumps, Exhaust Fans, Industrial Fans, Induction Heaters, Low Voltage Transformers, Heat Exchangers, all types of Electric Heating Elements, Gear Oil Pumps, Foundry Equipment, Electrically Heated Industrial Ovens and Dryers, Steam Boilers (both IBR & Non IBR), Hot Air Generators, Inert Gas Generators, Specialised Combustion Equipment

Manufacturers of: " HEASHAM " Steel Shuttering and Scaffolding (including Couplers), Floor Springs, "Ironite" Flooring Compound, " GRESHAM " Industrial Oil Burning Equipment, including Burners, Blowers, Pre-heaters, Filters Valves, also Boiler Feed Injectors

ION EXCHANGE (INDIA) LTD.

Contact us for :

Ion Exchange Resins
Chemical Dosing Equipment
Pressure Sand Filters
Upflow Filters & Multi-Directional Flow Filters
Activated Carbon Filters
Demineralising Plants
Water Softening Plants
Portable Deionisers
Thermal & Vacuum Deaerators
Radial Flow Clarifiers
Precipitator-Clarifiers
Hopper Bottom Sedimentation Tanks
Contact Stabilisation Plants
Clorocel
Reverse Osmosis Plants for Desalination
Design & Detailed Engineering for
Water Treatment, Effluent Treatment &
Reverse Osmosis Plants
Flat Bottom Clarifiers
Activated Carbons
Polyelectrolytes.

ION EXCHANGE (INDIA) LTD.

Tiecicon House,
Dr. E. Moses Road, Bombay 400 011.

Branches:

308, 309, Bhandari House, 91, Nehru Place,
New Delhi 110 019.

Ion House, No. 42, B. N. Reddy Road, T. Nagar,
Madras 600 017.

INDIAN OXYGEN LIMITED

Registered Office :
Oxygen House, P-34, Taratala Road,
Calcutta 700 088

Telegrams :
" OXYGEN "
CALCUTTA

Telephone :
771027.

Telex :
021-7415

Chairman : Russi Mody. Managing Director : S. D. Singh.

Manufacturers of

- **Industrial and medical oxygen, dissolved acetylene, nitrogen, argon, hydrogen, nitrous oxide and special gases and gas mixtures including IOLAR brand of special gases; welding electrodes; gas welding rods and fluxes ; gas and electric welding and cutting equipment ; gas cylinder valves ; small tools, cutting tools and precision measuring tools ; anaesthetic/analgesic apparatus, oxygen therapy equipment, medical pipeline accessories; gas plants and associated cryogenic equipment ; liquid oxygen explosives.**

Suppliers of

- **All the products mentioned above and liquefied petroleum gas (LPG), cyclopropane, submerged arc welding fluxes, welding accessories, etc.**

Services rendered

- **Air separation plant inspection, maintenance and operation, equipment repairs, medical equipment service and gas cylinder maintenance.**

Factories :

Gas factories at Ahmedabad, Asansol, Bangalore, Bombay, Calcutta, Gauhati, Hyderabad, Jamshedpur, Kanpur, Madras, New Delhi and Visakhapatnam. Electrode factories at Ambattur (Tamil Nadu) and Khardah (West Bengal). Equipment factory and gas plant manufacturing works at Calcutta. Loxite factory at Ranchi.

Gas Compressing Stations :

Amritsar, Bombay, Ghaziabad, Kanpur, Rishra (West Bengal), Shyamnagar (West Bengal) and Tiruchirapalli.

Sales Depots :

Ahmedabad, Ambattur, Baroda, Bermo, Bharuch, Bhopal, Bhurkunda, Bokaro, Bombay, Cochin, Coimbatore, Cuttack, Durgapur, Faridabad, Gauhati, Goregaon, Howrah, Hubli, Khardah, Kolhapur, Kopili, Lucknow, Madurai, Mathura, Nagpur, Nasik, Neyveli, Obra, Patna, Pimpri, Rajahmundry, Rajkot, Ranchi, Rourkela, Salem, Shyamnagar, Siliguri, Surat, Trombay and Vijayawada.

L. O. X. (Liquid Oxygen Explosives) Depots :

Balanda, Barsua, Bhurkunda, Chirkunda, Daitari, Gua, Karuppur (Salem), Kathara, Kiriburu, Lohardaga, Noamundi, Purnapani, Ramgarh and West Bokaro.

For bookings at any Taj Hotel in India...

The Taj Mahal Inter-Continental, Bombay
Hotel President, Bombay
The Taj Mahal Hotel, New Delhi
The Rambagh Palace, Jaipur
The Lake Palace, Udaipur
The Fort Aguada Beach Resort, Goa
The Taj Holiday Village, Goa
Taj Coromandel Hotel, Madras
The Fisherman's Cove, Madras
Hotel Taj Ganges, Benares, Varanasi
Pandyan Hotel, Madurai

Call us at:

BOMBAY
The Taj Mahal
Inter-Continental,
Apollo Bunder,
Bombay 400 039,
Telephone: 243366,
242524
Telex: 11 2442 TAJB IN,
11 3791 TAJB IN
Cable: TAJGROUP

DELHI
The Taj Group of
Hotels,
Chandralok,
Ground floor,
Janpath,
New Delhi 110 001.
Telephone: 322333,
322256
Telex: 031 2117 TAJ IN
Cable: TAJGROUP

CALCUTTA
The Taj Group of
Hotels,
C/o Pan Am,
42, Chowringhee Road,
Calcutta 700 071.
Telephone: 443795,
443721
Telex: 021 2185
TAJCA IN
Cable: C/o PANAIR

MADRAS
Taj Coromandel Hotel,
17, Nungambakkam
High Road,
Madras 600 034.
Telephone: 848888
Telex: 041 7194
TAJM IN
Cable: TAJGROUP

THE TAJ GROUP OF HOTELS

INDIAN CARDAMOM

We can be proud of it. Because we produce the best cardamom in the world. And we produce the maximum quantity. Also we are the biggest exporters of it.

For 50 centuries and more Indian Cardamom has been making fascinating associations in flavouring the food tastes of all continents alike.

Indian Cardamom is used to add flavour and taste to umpteen number of food preparations. It is an ingredient for medicines too.

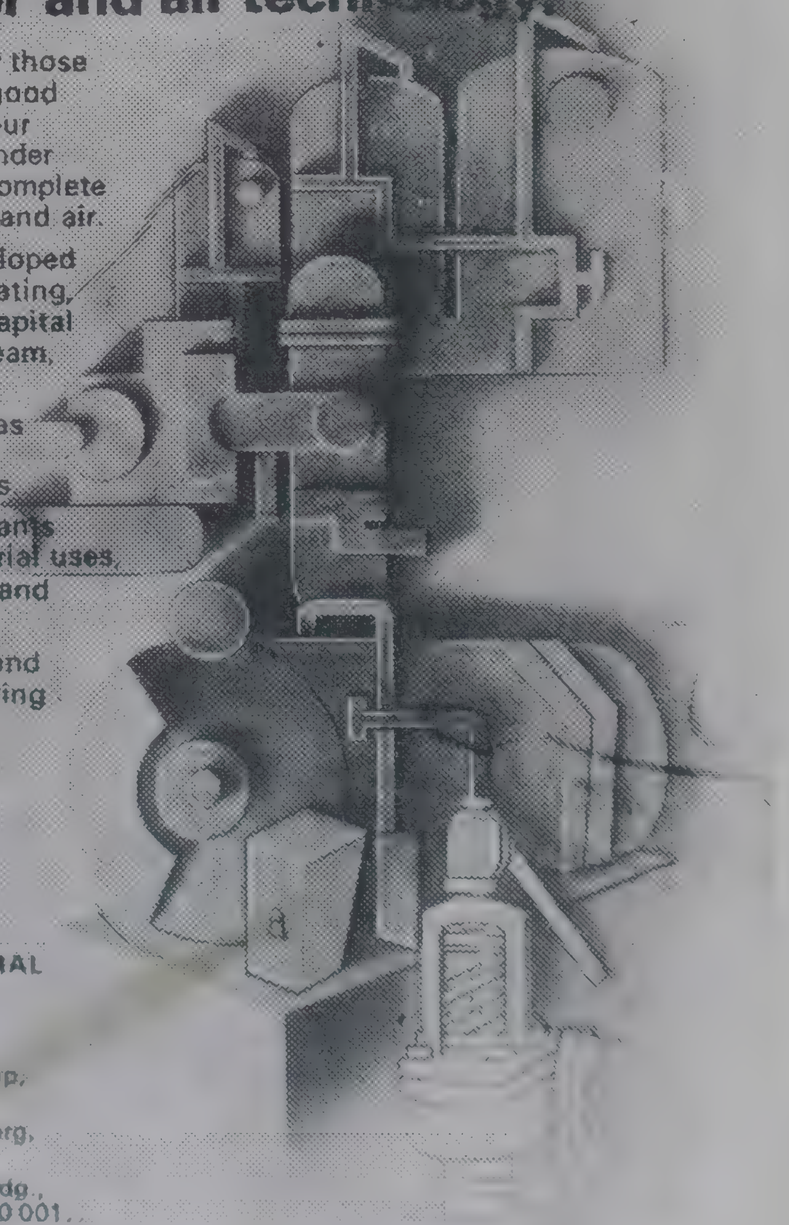
Try cardamom and get to know its taste.

■

For further information please contact :

CARDAMOM BOARD
BANERJI ROAD,
COCHIN 682 018.

Grams: "CARDAMOM". Telephone: 33837. Telex: 0885-480.



Under one roof Under one name

I.A.E.C.® for everything you need in steam, water and air technology.

A good place to work in, say those who have been with us. A good company to deal with, say our customers. **I.A.E.C.** houses under one roof, under one name, complete technology in steam, water and air.

We offer you expertise developed through fifty years in innovating, designing and fabricating capital equipment in the field of steam, water and air technology.

Steam: Boilers and oil or gas firing equipment and high discharge safety valves.

Water: Water Treatment Plants for treating water for industrial uses, effluents and for recycling and power station ancilliaries.

Air: Compressed air filters and service water filters – air drying plants and dust collection equipment.

I.A.E.C. *-Half a century of engineering services.*

I.A.E.C.®

INDUSTRIAL & AGRICULTURAL ENGINEERING COMPANY (BOMBAY) LIMITED

Regd. Office and Works:
196, L.B. Shashtri Marg, Bhandup,
Bombay-400 078.

Head Office: 43, V.B. Gandhi Marg,
Bombay-400 023.

Branch: 'K' Block, Chawdhary Bldg.,
Connaught Circus, New Delhi 110 001.

Representatives at: Bangalore • Calcutta
Hyderabad • Madras

Dattaram-IA-495

IJI

HEAT TREATMENT SALTS

for

- Hardening
- Tempering
- Martempering
- Austempering
- Nitriding
- Liquid Carburising

of

FERROUS AND NON-FERROUS
METAL PARTS

INDRAJIT INDUSTRIES

Post Box 9225, Bombay 400086
Phone : 671319
42-43, III Phase, Peenya,
Bangalore-560 058.
Phones : 38203, 38787.

**Testing of metals
just a telephone call away !**

- Chemical Analysis of ferrous and non-ferrous metals
- Mechanical Testing
- Dye Penetrant Testing
- Metallography
- Intergranular Corrosion Tests

IBR approved

Our clients include Government and Semi-Government Undertakings.

Industrial Testing Laboratories

Nasir Mansion, 167/173, Dimtimkar Marg,
Nagpada, Bombay 400 008.
Telephones: 379884 & 392558.

J. K. ORGANISATION

J. K. ORGANISATION is an association of industrial & commercial companies and charitable trusts. Its member companies, employing nearly 40,000 persons, are engaged in manufacture of a variety of products and in diverse fields of commerce.

Members—Central Board : Shri Hari Shankar Singhania (President), Dr. Gaur Hari Singhania (Vice-President), Shri Sohanlal, Shri Parshottamdas, Shri Hemantpat, Shri Govind Hari, Shri Bharat Hari, Shri Vijaypat, Shri Shripati, Shri Ajaypat, Shri Raghupati, Shri Sitaram, Shri Yadupati, Shri R. N. Gupta, Shri P. S. Navlakha, Shri B. K. Kedia.

Cotton Textiles : Juggilal Kamlapat Cotton Spinning & Weaving Mills Co. Ltd., Kanpur.

Man-Made Fibres : J. K. Rayon, Kanpur ; J. K. Synthetics Ltd., Kota (Raj.) ; J. K. Acrylics, Kota (Raj.) ; J. K. Tyre Cord, Kota (Raj.) ; J. K. Staple & Tows, Kota (Raj.).

Woollen Textiles : The Raymond Woollen Mills Ltd., Thane (Maharashtra); J. K. (Bombay) Ltd. (Clothing Division), Thane (Maharashtra).

Jute Textiles : Juggilal Kamlapat Jute Mills Co. Ltd., Kanpur ; The Ganges Manufacturing Co. Ltd., Bansbeirja (Hooghly).

Metal & Engineering : Juggilal Kamlapat Iron & Steel Co. Ltd., Kanpur; J. K. Steel (A Div. of J. K. Synthetics Ltd.), Rishra (Hooghly); J. K. Engineers' Files, Thane (Maharashtra); J. K. Business Machines Ltd., Calcutta; Fibretech Engineers & Manufacturers, Dadri (Ghaziabad); Syntex Tube Works (A Div. of J. K. Synthetics Ltd.), Kanpur.

Paper & Boards: Straw Products Ltd., Chola Road, Bhopal (M.P.); J. K. Paper Mills, Rayagada (Orissa).

Plastics : The Plastics Products Ltd., Kanpur.

Chemical: J. K. Chemicals Ltd., Thane (Maharashtra); J. K. Rayon Kanpur.

Tyre & Tube : J. K. Industries Ltd., Kankroli Distt., Udaipur (Raj.).

Cosmetics : J. K. Helene Curtis Ltd., Thane (Maharashtra).

Dry Cells : J. K. Batteries (A Div. of Straw Products Ltd.), Govindpura, Bhopal (M.P.).

Agricultural Machines : J. K. Satoh Agricultural Machines Ltd. Kanpur.

Paints : Hoyle's Paints Ltd., Konanagar (Hooghly).

Cement : J. K. Cement Works (A Div. of J. K. Synthetics Ltd.), Nimbahera (Rajasthan); The Raymond Cement Works (A Div. of Raymond Woollen Mills Ltd.), Gonadadih, Distt. Bilaspur (M.P.); Straw Products Ltd. (Cement Division), P.O. Sirohi Road, Distt. Sirohi, Rajasthan; Jodhpur Cement Works, Tehsil Bilara, Jodhpur (Rajasthan).

Sugar : Motilal Padampat Udyog Ltd., Kanpur; Branch Sugar Mills, Majhowlia (Distt. West Champaran), Bihar.

Shipping : Seven Seas Transportation Limited, Bombay.

Commerce, Finance, Export & Import : Juggilal Kamlapat Bankers, Kanpur; Hindustan Commercial Bank Ltd., Kanpur; J. K. Commercial Corporation Ltd., Kanpur; J. K. Traders Limited, Kanpur; Share-Dealers Corporation Ltd., Kanpur ; Impex (India) Ltd., Bombay ; J. K. Ltd., (Bombay), J. K. Investors (Bombay) Ltd., Bombay; Param Subham Ltd., Calcutta; (Formerly J. K. Alloys Ltd.) Bengal-Assam Investors Ltd., Calcutta; Nav Bharat Vanijya Ltd., Calcutta; Juggilal Kamlapat (Agency) P. Ltd., Calcutta; J. K. Agents Private Limited-Juggilal Kamlapat, Calcutta; Bhopal Udyog Limited, Bhopal

Overseas Operations : The Raymond Woollen Mills (Kenya) Ltd Eldoret (Kenya); Raymond (Mauritius) Limited, Mauritius; P.T. Jaykay Files, Indonesia; Africa Synthetics Fibres Ltd., Thika (Kenya); J. K (England) Ltd., London, WR1 5 AB, UK; Jaykaorg AG., Gartenstrasse 26300 ZUG Switzerland.

Administrative Offices :

Northern Zone : Kamla Tower, Kanpur 208001.
4, Bahadur Shah Zafar Marg, New Delhi 110002

Eastern Zone : 7-Council House Street, Calcutta 700001

Western Zone : J. K. Building, Ballard Estate, Bombay 400038

Exclusive Fashions and Service with Confidence

J. I. Harkin Crafts

(EXPORT HOUSE RECOGNISED BY GOVT. OF INDIA)

- **Manufacturers and Exporters of Ready made Garments, Handicrafts, Jute items & Scarves.**
- **Wide range available in CHILDREN GARMENTS.**

Phones :
611241, 616836

Cable :
HARKIN, New Delhi.

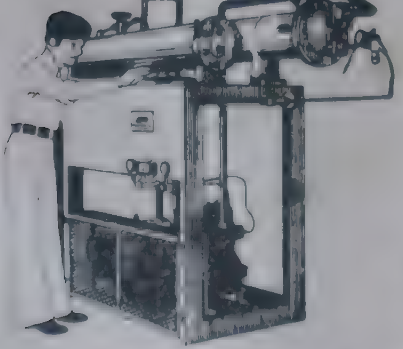
Telex :
31-4387 JIHK

Address :
C-33, NIZAMUDDIN
EAST, NEW DELHI
110013.

JAFKAY

WATER AND BRINE CHILLING PLANTS

eliminate the process heat in Chemical, Packaging, Pharmaceutical, Plastics and Engineering Industries.



Range:
1 tonne to
200 tonnes

Call Jafkay today.

JAFKAY

Jafkay Engineering Corporation
228, A1, Shah & Nahar Industrial Estate, Lower Parel,
BOMBAY 400 013. Call: 576036, 575655

AMOL BOSE ADVG. 81138

SOLDERS

- Resin Cored Solders
- Soft Solders
- Wiping Solders
- Plumbing Metal
- Liquid Flux — Entirely Non-Corrosive

Any grade, any quantity, available at most competitive prices.

JAYASREE INDUSTRIES

G-10, INDUSTRIAL ESTATE,

PUDUKOTTAI 622 004,

SOUTH INDIA.

Telephone : 2791

Grams : "SOLDER"

Phones :
591029-590986

Grams :
"JADUKERO"

JAGANNATH DUDADHAR

Agents & Dealers :

Bharat Petroleum Corporation Ltd.

13 KM, Rohtak Road, Shakurbasti,
New Delhi 110056

Distributors for :

Kerosene Oil, Light Diesel Oil, Aromex, Mineral Turpentine Oil, S B P Spirits, Solvents, Automotive & Industrial Oils & Greases, Transformer Oils, Paraffin Wax, Bitumen, Rubber Processing Oils, Glass Mould Oils, Wool Batching Oils & Wire Drawing Lubricants.

Arrangements for retail and Bulk Selling of :

Mineral Turpentine Oil, Solvent Oil, Aromex, Light Diesel Oil etc.

Through Metered Electrically Operated Pumps

Branch Office :

Shah Kamal Road, Aligarh 202001.
Phones: 3857, 3192, 3901. Grams: "JADU".

JAIRAMDASS KHUSHIRAM

305, Goradia House,
100 104, Kazi Sayed Street,
Bombay 400 003, INDIA.

Telephones : *Office* : 324578, 336528, 343510
Res. : 539613.
Grams : " MULETHI "

Importers, Exporters & Indenting Agents for : Crude Drugs, Medicinal Herbs, Vegetable and Medicinal Seeds, Spices, Gums, Industrial Chemicals, Essential Oil, Aromatic Chemicals, Sea Shells, Ambergris, Saffron, Cowbezoar, Coral, Pearls, Pulses, Oils, Dried Fruits, Dates and Allied Produce items.

Associate Office :

INTERNATIONAL TRADERS
7, Gopinath Building,
Gali Batashan, Khari Baoli,
Delhi 110 006. INDIA.

Telephones : *Shop* : 232004, *Office* : 233598.
Res. : 229727, 227884.
Grams : " PEACEFUL ".
Telex No. : 031-2172-HARI IN.

Estd. 1915 A.D.

JYOTISHI M. SHARMA

(Astrologer & Palmist)
Telephone No. 458015.

Internationally reputed and many many years experienced astrologer and palmist will Forecast your perfect future, and will guide to solve your problems regarding Business, Marriage, Love, Health, Issues (Children) etc. All astrological jobs are undertaken and executed promptly. For further information kindly contact:- Telephone no. 458015.

JYOTISHI M. SHARMA
(Astrologer & Palmist)
66, (TD), D.V. Pradhan Road, 1st Lane. Hindu Colony,
P.O. Box: 5507, Dadar, C Rly., Bombay-400 014. (INDIA).

"Client's satisfaction is our motto"

RPC 81

Insist on: Quality Metals,
to avoid disappointments.

The plus factors are

- **GUARANTEED QUALITY**
- **REASONABLE PRICE**
- **EARLY DELIVERY**

CONTACT :

J. B. METAL INDUSTRIES PVT. LTD.

Manufacturers of:

INDUSTRIAL QUALITY

COPPER **BRASS** **ALUMINIUM**

• Sheets, **• Strips,** **• Circles,**

STAINLESS STEEL

Sheets, Strips, Circles

Registered Office & Works :
Saki-Vihar Road,
Saki Naka,
Bombay 400 072.
Phones : **582464/65.**
Grams : " TAMBAROLL ", Bombay 400 072.

Sales Office :
7, Sarvodaya Nagar,
Panjrapole Road,
Bombay 400 004.
Phones : **361802 & 384736.**

Members:
Indian Standards Institution
Indian Institute of Metals

J. M. BAXI & CO.

Steamship Agents,
Stevedores &
Chartering Brokers.

21-A, Janpath, New Delhi 110 001.

Head Office :

16, Bank Street, Bombay 400 023.

Telex :

Bangalore	0845-761
Bhavnagar	0162-220
Bhubaneswar	067-247
Bombay	011-2549/3439/4172
Calcutta	021-2765/7589
Cochin	0885-372
Gandhidham	0105-210
Jamnagar	0161-225
Kakinada	0491-202
Madras	041-416/626
Mangalore	0842-271
New Delhi	031-2526/3026 3696
Paradip	025-243
Tuticorin	0444-203
Vasco da Gama	0191-223
Visakhapatnam	0495-232

Cables : " BAXICO " —all places.

Branches at all East & West Coast Ports of India.

KAMLA TYPE FOUNDRY

Administrative Office & Foundry:

1686, Sohan Ganj,
Subzi Mandi,
Delhi 110 007.

Phones: 223776, 228359 & 236482.

★

Sister Concern:

Ganga Sagar Type Foundry,
Mathura.

FIBREGLASS FLEXIBLE CABLES
(For Thermal Class 'F', 'H' & 'C')

MAFICON FLEXIBLE CABLES
(For Thermal Class 'B')

ASBESTOS COVERED CABLES
(Fire Resistant)

POLYWIN WINDING WIRES
(For Submersible Motors & other equipments)

REFRIGERANT RESISTANT —
LEAD CABLES, CORDS & SLEEVES
Suitable for Hermetically Sealed Compressor's Motors.

CORDS—FIBREGLASS, POLYGLASS, NYLON & TERYLENE.

'FIBREGLASS SLEEVINGS'
Varnished & Unvarnished for Thermal Class E, B, F, H & C.

Manufactured by:

KHANDELWAL ELECTRICALS
Post Box No. 35, H. M. Somani Marg,
VRINDABAN-281121 (U.P.), INDIA.
Phone : 194. Grams: " KHANDELWAL ".

POLYGLASS CABLES
(For Thermal Class 'E')

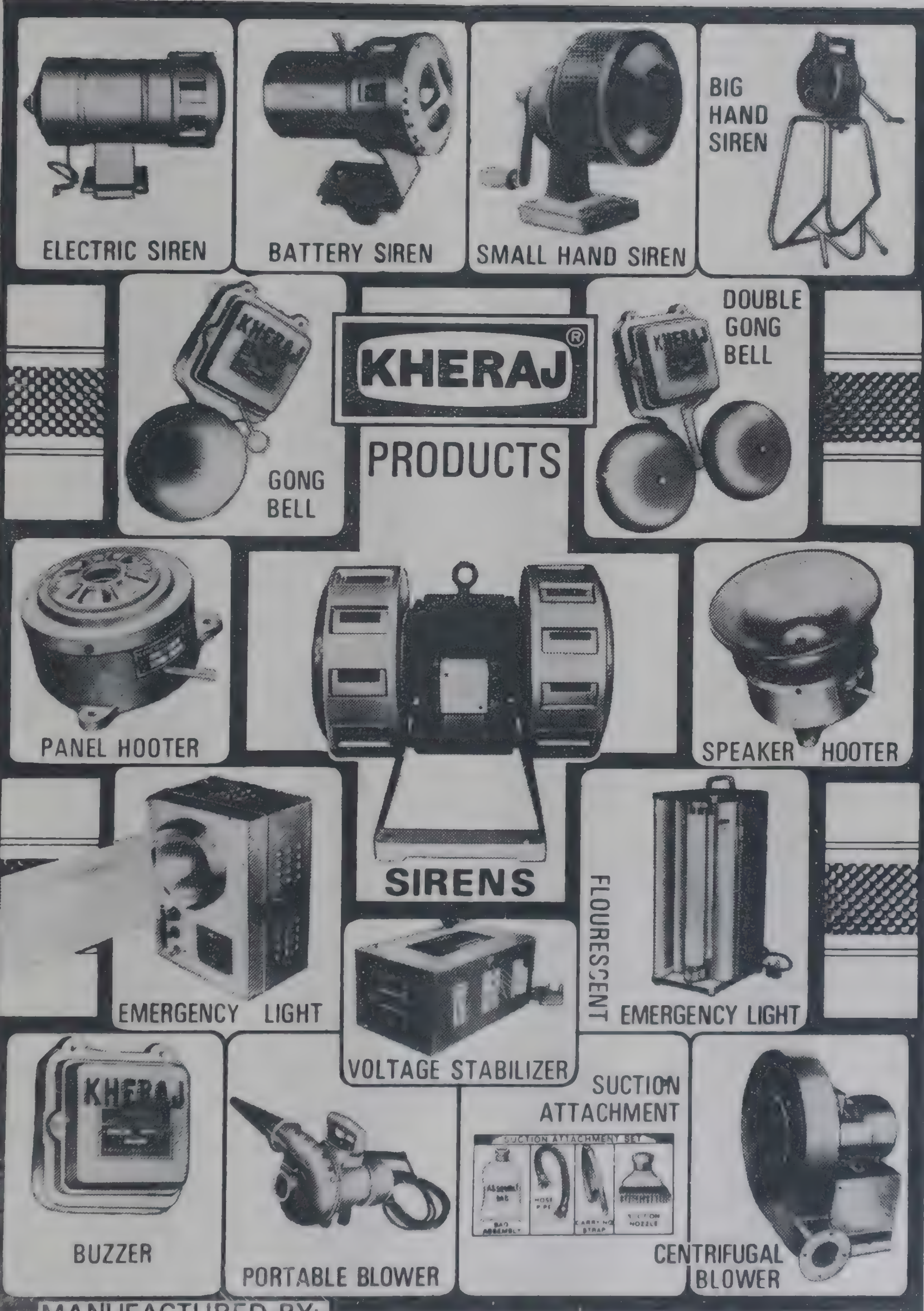
POLYWIN EQUIPMENT & HOOK-UP WIRES
(Miniaturised and withstand upto Thermal Class 'E')

REFRIGERANT RESISTANT PRODUCTS
LEAD CABLES, CORDS & SLEEVES
Suitable for Hermetically Sealed Compressor's Motors.

SLEEVINGS—FIBREGLASS & TERYLENE

Manufactured by:

Messrs. KHANDELWAL CABLES
Post Box No. 35, H. M. Somani Marg,
VRINDABAN-281121 (U.P.), INDIA.
Phone : 194. Grams : " KHANDELWAL".


ELECTRIC SIREN
BATTERY SIREN
SMALL HAND SIREN
BIG HAND SIREN
KHERAJ®
PRODUCTS
GONG BELL
DOUBLE GONG BELL
PANEL HOOTER
SIRENS
SPEAKER HOOTER
EMERGENCY LIGHT
FLOURESCENT EMERGENCY LIGHT
VOLTAGE STABILIZER
SUCTION ATTACHMENT
SUCTION ATTACHMENT SET
BUZZER
PORTABLE BLOWER
CENTRIFUGAL BLOWER

MANUFACTURED BY:-

KHERAJ ELECTRICAL INDUSTRIES,
Tavawala Bldg., 2nd Fl, 147, Lohar Chawl, Bombay-400 002.
Tele: OFFICE: 316863 312372 Works: 394270 890710 Gram: "KHRAJSIREN"

Are you worried about your Temperature Control?

PLEASE CONTACT

FOR EXCELLENT, ECONOMIC, PROMPT
AND
RELIABLE SERVICE

KUMAR INDUSTRIES

KANDAGHAT (H. P.)
PIN. 173215. Phone : 41.

Manufacturers of :

'V Brand'

Electric Contact Thermometer (JUMO TYPE).
Beckmann Differential Thermometer.
Inclusion Type Thermometer Range upto 600°C.
Immersion length (Lower Part) upto 2000 mms.
Exhaust And Sikka Type Thermometer Range upto 800°C.
Laboratory Thermometer, Div. upto 1/10 or 1/20°C.
Soil, Oven, Ground Glass, Wet & Dry, Maxi. — Mini. I.P. & A.S.T.M., Hygrometer, Pocket Type Thermometer, etc.

We can supply any type of mercury in glass thermometers on customer's Specifications or Drawing.

Our Special Items :
i) ELECTRIC CONTACT THERMOMETER (JUMO TYPE).
ii) BECKMANN DIFFERENTIAL THERMOMETER.

(Now Available in INDIA).

A Step forward to save foreign exchange.

Price List on request.

Our Rep. Office:—D-37, Tandan Road, Adrash Nagar, Delhi 110033.

Rural economy gets
a taste of electronics...
...as Keltron makes inroads where
tracks never were.

Stepping out of lengthy speeches the concept of rural industrialisation moves into the very heart of Kerala. Touching the lives of thousands of villagers. Skilled, semi-skilled and educated unemployed.

It calls for vision, courage and dynamism to take sophisticated electronics to economically backward areas. This is what Keltron has been doing. Thrusting modern factory roofs into the rural skyline. Transforming industrial wastelands. Initiating the beginnings of an industrial culture.

By setting up major factories—Keltron Component Complex, Keltron Power Devices and Keltron Controls—in the backward districts of Cannanore, Trichur and Alleppey, Keltron practises what others preach Bringing to the countryside a new hope. Arousing new expectations.

Keltron's commitment to larger societal goals and to self-reliance are reflected in several other of its pioneering programmes. For instance

The initiation of an all-women's co-operative movement that already covers over 20 co-operative societies assembling 62 lakhs worth of Keltron radios

The development of hundreds of ancillary industries within Kerala to supply material worth crores to Keltron's manufacturing units

A rehabilitation scheme for the physically handicapped and mentally retarded offering them work opportunities. To produce P.C Cards for Keltron radios and assemble wire trees for TV sets

Keltron The first name in State Electronics Corporations is also the last word in electronics capability With unmatched innovative ability And link-ups with the world's leading names in electronics technology like Sprague and Controle Bailey.

Keltron—above all a harbinger of opportunity for people no matter who they are

KELTRON
[illegible]

Kerala State Electronics Development Corporation Ltd

Bombay ● Delhi ● Calcutta
Madras ● Bangalore ● Trivandrum
Ahmedabad ● Hyderabad

FDS.KE.930-1

KERALA KAUMUDI

Head office :
P.B.No. 77, Pettah,
Trivandrum-24
Gram : 'KAUMUDI'
Telex : 0884-214
Phone : PABX : 62020

Branch Office :
Thondayad,
Nellicode P. O.
Calicut-16.
Gram : 'KAUMUDI'
Telex : 084-264 Phone : 62621 & 77228

If you have the ad, we have the readers

Kerala Kaumudi. Combines extensive coverage with maximum newsworthiness Bridging the communication gap. By reaching out to a wide canvass of readers in Kerala. With the launching of the Calicut edition, the Kaumudi extends its influence to North Kerala as well. The Calicut edition rolling off the high speed web offset rotary press-the latest in printing technology.

Kerala Kaumudi-engaged in widening its boundaries of readership. It pays to advertise in it.

The advertising rates in force are as follows:

DISPLAY
Casual Rate
Front Page = Rs. 90/-
Last Page = Rs. 70/-
Inner Page = Rs. 50/-
Contract Rate = Rs. 45/- and 40/- per col. cm (Inner Pages only)

Page Rates
Last Page
Full Page = Rs. 25,000/-
Half Page = Rs. 13,000/-
Inner Page
Full page = Rs. 16,000/-
Half Page = Rs. 8,000/-

EAR PANELS
Front Page = Casual Rs. 400/- per panel per insertion
= Contract Rs. 300/- per panel per insertion
Last Page = Casual Rs. 350/- ,,
= Contract Rs. 250/- ,,
(For each Panel, 12 insertions are to be made within one year if the contract rate is to apply)

CLASSIFIED = Rs. 10/- per line
EAR PANEL SIZE = Front - 4 cms x 7 cms
= Last - 4 cms x 8½ cms

BUSINESS REPRESENTATIVES

BANGALORE
Mrs MINI JAYAPRAKASH
Phone :
Office : 576808 Res : 55169

BOMBAY
Mrs. MRINALINI HEGDE
Phone : Office : 230313 Res : 214344

CALCUTTA
Mrs. ALOKA GUHA
Phone : Office : 456750 Res : 456750

COCHIN
Mrs. MANGALA NAYAK
Phone : Office : 37228 Res. : 37234

MADRAS
Mrs. NIRMALA MENON
Phone : Office : 86649 Res. : 81407

NEW DELHI
Mrs. DEEPAK DAWAR
Phone : Office : 385311 Res : 618000

If your aim is to say it to Kerala
Why don't you say it through
Kerala Kaumudi.

LET'S HOUSE THE NATION

YOUR PROJECTS NEED NOT BE DELAYED

FOR R.C.C. PIPES

MEET YOUR DEMANDS WITH OUR READY STOCK & MANUFACTURING AGAINST ORDERS, WE ALSO OFFER OUR JOB SERVICES AT YOUR PROJECT SITE ITSELF

SAVE TRANSPORTATION

ENSURE QUALITY & TIMELY SUPPLY

FOR COMPLETE DEPENDENCE OF R.C.C. PIPES OF ALL CLASSES

Please Contact :

KORBA CEMENT PRODUCTS

&

KORBA PIPE COMPANY

Manufacturers of :

R.C.C. spun pipes and allied products.

SALES OFFICE :

Main Road, Korba (M.P.), India.

Phones : 49 & 91.

Grams : " MAHALAXMI ".

Film Stars
RAJKUMAR & RADHIKA
PRESENT

Sabari TEA

MARKETED BY THE KERALA STATE CIVIL SUPPLIES CORPN., LTD.

Sold loose to
keep the price low

" It's a great feeling "

ZEBRA

The unbeatable combination for total liquid control...

KIRLOSKAR

PUMPS AND VALVES

Kirloskar

Consultation, Sales & Service

KIRLOSKAR BROTHERS LIMITED

Udyog Bhavan, Tilak Road, Pune 411 002

Regional Sales Offices:

Ahmedabad, Bangalore, Bhubaneswar
Calcutta, Indore, Jaipur, Madras, New Delhi
Pune & Secunderabad

® Registered Users: Kirloskar Brothers Ltd

This terrific team handles all types of liquids efficiently. Proven workers in Petro-Chemical, Chemical Complexes, Fertilizer Plants, Thermal Plants, Sugar and Paper Mills etc. Some recent orders executed are for IPCL, NFL, Bhilai Steel Plant etc.

Increasing in popularity, our dependable pumps and valves are the Process Industry's best buy. We build them to suit specific requirements. A variety to choose from. Made from the best materials. Thoroughly tested.

Total Liquid Control. That's what your industry wants. That's what our terrific team offers you.

Kirloskar Pumps & Valves work hand in hand

PRATIBHA 79-237

LARSEN & TOUBRO LIMITED

Registered Office and Head Office :

L&T House, Ballard Estate, P.O. Box 278, Bombay 400 038.

Phone : 268181. Grams : " LARSENBRO ". Telex : TLX 2246.

Works and Stores: Saki Vihar Road, P.O. Box 8901, Bombay 400072. Phone: 581401.

Regional Offices : P.O. Box 304, Bombay 400 001 ; P.O. Box 619, Calcutta 700 071 ; P.O. Box 6223, New Delhi 110 015 ; P.O. Box 5247, Madras 600 002.

Branch Offices and Liaison Offices: Ahmedabad, Bangalore, Baroda, Bhilai, Bhopal, Chandigarh, Hyderabad, Jaipur, Jamshedpur, Lucknow, Madurai, Panaji, Patna, Raipur, Rourkela, Trivandrum, Varanasi, Vijayawada, Visakhapatnam.

Manufacturers and representatives of over 200 overseas and Indian manufacturers and civil, mechanical, electrical engineers.

The L&T Group of companies including subsidiary and associate companies manufactures plant and equipment for full range of dairy operations; spray drying plants for milk powder, egg powder, chemicals and plastics, etc.; equipment for refrigeration and meat processing industries; garbage compost milling plants; grain handling equipment including pneumatic dischargers, conveyors, silos and bagging plants; cattle and poultry feed compounding plants; equipment for sugar, chemical, pharmaceutical, petrochemical, dyestuffs and fertiliser industries, distilleries and breweries; complete sulphuric acid, oleum, phosphoric acid, superphosphate, triple superphosphate, phthalic anhydride plants; plant and machinery for cement, pulp and paper, iron and steel and mining industries; heavy equipment for nuclear power plants; motor starters and contactors, switch and fuse units, HRC fuses, rotary switches, push buttons; low tension air circuit breakers; moulded case circuit breakers; rectifier plant; main switchboards and circuit breaker panels, distribution switchboards — cast iron and sheet steel types, control and relay panels, industrial process control equipment; solid state motor speed controls; valves; petrol dispensing and metering pumps; jigs and fixtures, pressure casting dies, press tools, plastics and bakelite moulds; low temperature welding alloys, electrodes, fluxes and Eutalloy microflo torches; cooling towers; sheepsfoot tamping and vibratory rollers; aluminium capsules, capsuling machines and crown corks; packaging machinery; rotary water well and diamond core drills and diamond bits and T.C. bits; undercarriage parts for crawler tractors ; tyre curing machinery; hydraulic excavators and hydraulic systems.

Representatives of manufacturers of track and wheel type tractors, bulldozers, rippers, scrapers, traxcavators and motor graders for agriculture, mining and earthmoving, diesel engines for heavy duty vehicles, marine and industrial applications and power generation; grain handling equipment such as pneumatic dischargers, conveyors and silos; material handling equipment including shovels, cranes, bucket wheel excavators, fork lift trucks, locos, prime movers and trailers; oil well, water well and core drilling, mining and processing equipment; turbine pumps and accessories; plant and equipment for dairy, food processing, chemical, petro-chemical, fertiliser and allied industries; plants for explosive, cotton seed preparation and solvent extraction; glass lined equipment, thin film evaporators and indirect heating units; safety fuses and detonators; plant and equipment for cement, pulp and paper and iron and steel industries; high tension and low tension switchgear, transformers, metering and protection equipment, capacitors, rectifiers, special motors and cables; refrigeration, spray drying and accelerated freeze drying plants, controls and accessories; food, confectionery and pharmaceutical packaging and bottling machines; nuclear handling equipment; electronic telemetering, communication, process control, measurement and data handling instruments and machines; seismic instruments; flow control and other special purpose valves; low temperature welding alloys, electrodes and fluxes; and other industrial appliances, equipment and instruments.

Subsidiaries : Engineering Construction Corporation Limited, Ewac Alloys Limited, L&T-McNeil Limited, Utkal Machinery Limited, General Machinery and Technical Services Limited, Larsen & Toubro (Singapore) Pte. Limited (For details refer Commercial Firms Section in Bombay).

Associate Companies : Audco India Limited, Tractor Engineers Limited (For details see listing under Commercial Firms in Bombay).

Directors : N. M. Desai (*Chairman & President*) ; K. S. S. Mani, U. V. Rao, D. L. Pradhan, B. G. N. Patel, S. R. R. Subramaniam, M. H. Pherwani (*Vice-Presidents*) ; H. Holck-Larsen, M. P. Pai, R. M. Mehta, S. Rangarajan, S. S. Mehta, J. N. Saxena, J. N. Guzdar, Y. H. Malegam.

Gee-flo®
DOCUMENTARY
BALL PEN REFILLS
MANUFACTURED BY
LION PENCILS PVT. LTD
Gee-flo
DOCUMENTARY
JOTTER REFILLS

The makers of India's most exclusive ballpoint refills, now offer an exclusive JOTTER.

You've heard of the famous Gee-flo ballpoint refills—of such superb quality, they took the entire market by storm. This technology now goes one step ahead with the exclusive new Gee-flo jotter.

Here are a few of the outstanding qualities of the new Gee-flo jotter:

• Non-smudging • Smooth-writing • Leak-proof .

Gee-flo

FOR SMOOTH 'N' EASY WRITING

Manufactured by:
LION PENCILS PVT. LTD.
95, Parijat Marine Drive
Bombay-400 002 Phone: 250926/230005.

JAISONS LP 279 R

Labour Laws & Personnel Services Private Limited

- Established in 1961, has been a pioneer Firm of Labour Advisers to many a reputed Industries in Bombay, Thane and Pune industrial belt and to many prominent State Corporations in Maharashtra.
- Besides handling the legal work in Labour Laws, the Firm specialises in advising Employers on the strategy to be adopted for expeditious settlement of industrial-relations and other related problems.
- The services of our experts in the field are available promptly by previous appointment.

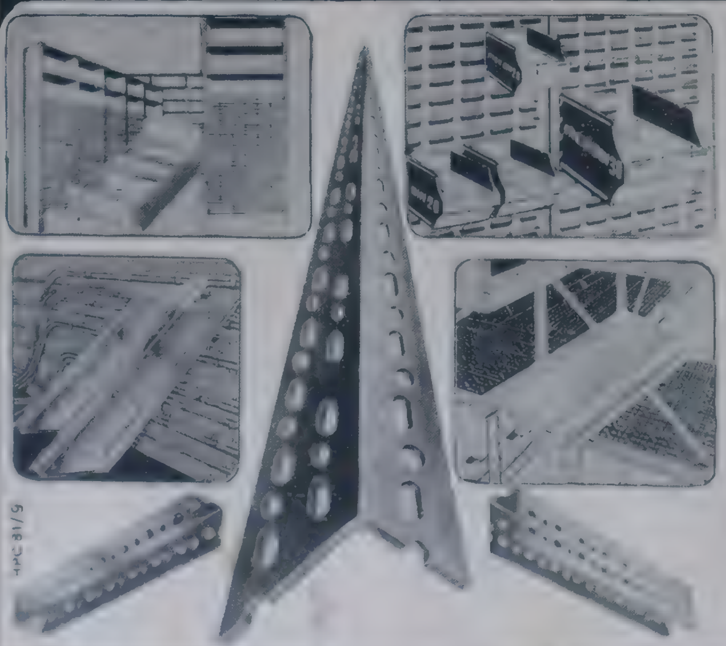
If you have a labour problem contact us at :

Maratha Mandir Building, 2nd Floor,
Maratha Mandir Marg,
Bombay 400 008.

Telephone Nos. 376736, 374831, 373326.

MEK Slotted Angles, Drawers, Bins, Cable Trays, Channels & Floor gratings.

ALL UNDER ONE ROOF



MEK ENGINEERING WORKS LTD.

"SATYAM" NAUPADA, M.G. ROAD,
THANE-400 602 (BOMBAY)
TELEPHONE: 506586, 506589, 506593
GRAM: MEKANGLE • TELEX: 011-2801 MEK IN

Regional Offices:
AHMEDABAD : Usha Kiran', Opp. Khanpur Gate, Khanpur
Ahmedabad 380 001. Phone: 391589
Gram: "MEKANGLE." Telex: 012-563 MEK IN
BANGALORE : 97 3, Residency Rd., Bangalore 560 025,
Phone: 51671-562398
Gram: "MEKANGLE." Telex: 0845-8013 MEK IN
CALCUTTA : 6 G, Ajanta Apartments Annexe,
10 Guru Saday Rd., Calcutta-700 019 Ph:433142
Gram: "MEKANGLE." Telex: 021-7528 MEK IN
NEW DELHI : 4844, Ansari Rd., 24, Darya Gunj,
New Delhi-110 002 Phone: 273943
Gram: "MEKANGLE." Telex: 031-4576 MEK IN
HYDERABAD : 5-9-164 "Qamar Mansion" Near Gun Foundry
Chapel Road, Hyderabad 500 001 Phone: 225242
Gram: "MEKANGLE," Telex: 0155-687 MEK IN

Go the **MEK** *way*

OPENING NEW
VISTAS IN THE
WORLD OF

**POLYTHENE/
POLYPROPYLENE**

- **BAGS**
- **ROLLS**
- **SHEETS**

PLAIN AND PRINTED

ALSO, CARRIER BAGS

WE ENSURE AND ASSURE:

★ Courteous Attention ★ Quality Materials
★ Prompt Delivery ★ Reasonable Rates

MANGALDAS VELJI & CO.

Yogeshwar, 135/139, Kazi Syed Street, Bombay 400 003.
Phones: 330174, 330175, 343199.
Telex: RPRL IN: 3686. Grams: "GUNNYBAGS".

Madura Coats

Manufacturers of Yarn, Sewing Threads, Cloth, Industrial Textiles and Dyesprings.

Mills at Madurai, Ambasamudram and Tuticorin in Tamil Nadu, Serampore in West Bengal, Cotton & Synthetic Threads Factory at Koratti in Kerala and Dyesprings Factory at Bangalore in Karnataka.

Ahmedabad : Chitrakoot Building, Ashram Road, Navrangpura, P.O. Box 4043, Ahmedabad 380 009.
Phones : 448056, 448169.
Cable : " SIXCORD ".

Bangalore : 46-D, Lalbagh Road, P.O. Box 2750, Bangalore 560 027. Phones : 75017, 75018.
Cable : " SIXCORD ".

Bombay : 81, Palton Road, P.O. Box 280, Bombay 400 001. Phones : 265591 (4 Lines).
Telex : 011-3380 and 4001.
Cable : " SIXCORD ".

Calcutta : Green View, 19, Circus Avenue, P.O. Box 2725, Calcutta 700 001. Phones : 447114, 446489, 446490, 449878. Telex : 021-3345.
Cable : " SIXCORD ".

Delhi : Shardhanand Marg, P.O. Box 1091, Delhi 110 006. Phones : 231022, 231273, 231277, 231283. Telex : 031-3342 & 2958.
Cable : " SIXCORD ".

Gauhati : Mahatma Gandhi Road, P.O. Box 40, Gauhati 781 001. Phone : 24683.
Cable : " SIXCORD ".

Goregaon : Sanghavi Sadan, Off Western Express Highway, P.O. Box 9100, Goregaon (East) 400 063.
Phone : 687505. Cable : " FOURCORD ".

Indore : 209-210, Sneh Nagar, P.O. Box 20, Indore 452 001. Phone : 7043.
Cable : " SIXCORD ".

Kanpur : 16/79, Civil Lines, P.O. Box 112, Kanpur 208 001. Phone : 60968.
Cable : " SIXCORD ".

Koratti : Sales Department, Koratti 680 308, Kerala.
Phone : Chalakudi 261 (5 Lines).
Telex : Cochin 591.
Cable : " SIXCORD ".

Ludhiana : B—XIX—86, Rakh Bagh, Civil Lines, P.O. Box 305, Ludhiana 141 001.
Phone : 30182. Cable : " SIXCORD ".

Madras : 425, Pantheon Road, Egmore, P.O. Box 796, Madras 600 008. Phones : 842620, 842648, 842736, 842986. Telex : 295.
Cable : " SIXCORD ".

Patna : Grover Bhawan, Fraser Road, Patna 800 001.
Phone : 25618. Cable : " SIXCORD ".

Secunderabad: 111/D, Sarojini Devi Road, P.O. Box 1690, Secunderabad 500 003. Phone : 74474.
Telex : 527. Cable : " SIXCORD ".

Tirupur : No. 1, Harvey Road, P.O. Box 304, Tirupur 638 602. Phone : 21730.
Cable : " SIXCORD ".

Regd. Office: New Jail Road, Madurai 625 001.
Phone : 26751 (10 Lines). Telex : MA 211.
Cable : " MILLWHEEL ".

Administrative Office : 10/4, Kasturba Road, P.O. Box 5145, Bangalore 560 001. Phone : 578121 (9 Lines).
Telex : 695. Cable : " MADURACOAT, SUPERSHEEN, COMEXPORT ".

MAHINDRA SPICER LIMITED

Manufacturers, Distributors, Engineers, Importers and Exporters

●

Registered Office :

Mahindra Spicer Building, 15, J. N. Heredia Marg,
Ballard Estate, Bombay 400 038.
Phone No. 262711.

Head Office & Factory :

Signal Hill Avenue, Bombay 400 033.

Phones : 393811/15.
Cable : "ENDEAVOUR."
Telex : 2282.

Offices :

Delhi, Calcutta, Madras and UJ Plant, Satpur, Nasik.

●

Chairman :

KESHUB MAHINDRA

Managing Director :

P. K. PALIT

●

Manufacture :

Thermal Power Station Equipments such as Ash Handling Plants, Travelling Water Screens, Trash Cleaning Machines, Mechanical Cleaning Rakes, etc. Super Centrifuges, Mineral Oil Purifiers, Vegetable Oil Refining Plants, etc. Automobile Clutch Assemblies, Propeller Shafts, Axle Shafts, U. J. Kits, etc.

Distribution :

Heavy & Light Machine Tools of all types, Tool Bits, Tool & Alloy Steel, Printing Machinery, Agricultural & Industrial Chemicals, Fork Lift Trucks, Shovels, Compressors.

Export & Import :

Cashew Kernels, Chemicals, Milk Powder.

MAFATLAL INDUSTRIES LTD. & ASSOCIATED COMPANIES

Mafatlal House, Backbay Reclamation,
Bombay 400 020.
Phone : 244944. Grams : "MAFLIN".
Telex No. 112460.

Mafatlal Centre, Nariman Point,
Bombay 400 021.
Phone : 232822. Telex No. 114240/4241.

New Shorrock Mills (Division of Mafatlal Industries Ltd.), Ahmedabad & Nadiad.
Sahyadri Dyestuffs & Chemicals (Division of Mafatlal Industries Ltd.), Pune & Dewas.
Mafatlal Fine Spg. & Mfg. Co. Ltd., Bombay & Navsari.
Navin Fluorine Industries (Division of Mafatlal Fine Spg. & Mfg. Co. Ltd.), Bhestan, Surat.
National Organic Chemical Industries Ltd., Bombay.
Polyolefins Industries Ltd., Bombay.
Mafatlal Services Ltd., Bombay.
M. G. Consultancy Services Ltd., Bombay.
Mafatlal Gagalbhai & Sons, Bombay.
Mafatlal Engineering Industries Ltd., Bombay & Ahmedabad.
Mafatlal Engineering Exports Ltd., Bombay.

MARTIN BURN LIMITED

Esplanade House, Waudby Road,
Bombay 400 001
Phone : 26-6115 Telex : 2333
Grams : "MARTINBURN"

Registered & Head Office :
12, Mission Row, Calcutta 700 001
Branch at : **New Delhi**

★

Building-Structural-Painting-Electrical-Mechanical and Refractory Engineers and Contractors

Manufacturers, Agents/Distributors :

Kelvin Hughes navigational aid equipments. High test steel chains. Turbines, electrical/gas generators. Siebe Gorman diving gear, safety breathing appliances. Apparatus for fire fighting, aeronautical and A.R.P. equipment.

Industrial pollution control equipment. Derrick cranes, monotower cranes, power winches. Miners' safety equipment. Rubber chemicals, carbon black, petroleum additives. Industrial ceramics. Underwater under-pressure cutting and tapping tools/appliances.

Agricultural threshers, power sprayers, hand-compression sprayers, electric and diesel pumping sets. Rectifiers, battery chargers, distribution boards. LP gas cookers and cylinders. Commercial injectors, moulded rubber products, rubber hose. Tipping wagons.

RAJAT ALLOYS

Low Temperature
"RAJAT"
SILVER BRAZING
RODS & FOILS

As per I.S. 2927
FLUX & GAS
WELDING RODS

★

Manufacturers :

MAHESHWARI INDUSTRIAL CORPORATION
Sarrafa, MEERUT CITY
Gram : "RAJATALLOY".
Phones : Factory : 74031; Resi. : 75728.

★

Local Representatives :

AJAY SALES
777, S. V. Road, Khar, Bombay 400 052.
Phone : 535837. Gram : "SALESAJAY".

ARVIND UDYOG
107 E, Block-F, New Alipore, Calcutta-700 053.
Phone : 452947.

TRANS TRADES
5, Pipe Line, 10th Cross, Malleswaram,
Bangalore 560 003.

Manufacturers of: **Copper & Copper Base Alloys, Bus Bars, Tubes, Pipes, Rods, Flats, Strips, Wires, Sections, Profiles etc.**

Fittings: **Seamless Carbon Steel, Stainless Steel & Non-Ferrous Metal Pipe Fittings:**
Elbows, Bends, Tees, Reducers, Stub Ends etc.

■

Trade Inquiries to:

METAL TUBE & ROLLING MILLS

Marol Maroshi Road, Marol Village Naka,
Andheri East, Bombay 400 059.

Telephone No. 583145. Telex: C/o 011-3188 RKC IN. Telegrams: "COPPERWORK".

MADAN SALES CORPORATION

AUTHORISED DISTRIBUTORS
OF

M/s Fenner (India) Limited,

for 'FENNER' V-Belts, Fan-Belts, Transmission Beltings, Pulleys, Couplings, Clutches & Variable Speed Drives.

Head Office:

502, Anant Deep Chambers,
273/77, Narsi Natha Street,
Bombay 400 009.
Phones: 329174 & 345661.

Sales Office:

97, Nagdevi Street, 3rd Floor,
Bombay-400 003.
Phone: 349632.

Phone: 518457

M. S. Decorators

BUILDERS
INTERIOR DECORATORS
& FURNISHERS

Specialists in:

Complete Interiors of Offices, Hotels, Banks, Exhibition, Residential Flats and other Public and Private Enterprises on TURNKEY BASIS

Manufacturers of:

High Class Steel & Wooden Furnitures for Office and Domestic Purpose.

Address:

X-V-7575, Ram Nagar,
New Delhi 110 055.

We invite
building contractors,
actual users
and
exporters
to meet their requirements
of

MARBLES

available in
different shades and sizes
in any quantity.

Processed by

**DIAMOND GANG
SAW MACHINES**

ENQUIRIES SOLICITED

**NEELAM MARBLES
& INDUSTRIES
PRIVATE LIMITED**

Regd. Office : 2439, Patwon ka Rasta, Bapu Bazar,
Jaipur 302 003, India. Phone: 61206
Factory : Industrial Area, Bidiyad, Makrana, India.

BHOOMICA

NEETA INDUSTRIES

MANUFACTURERS &
DEALERS OF :

- Socket Head cap screw & grub screw.
- High tensile Hex H D Bolts & Nuts.
- Stainless Steel Bolts & Nuts.
- NPT and BSPT plugs.
- Engineering Tools & Belting.
- Dowel Pins & Taper Pins.

2, SARASWATI BHUVAN, M. G. ROAD, GHATKOPAR (WEST).
BOMBAY 400 086.

NATIONAL FOUNDRY

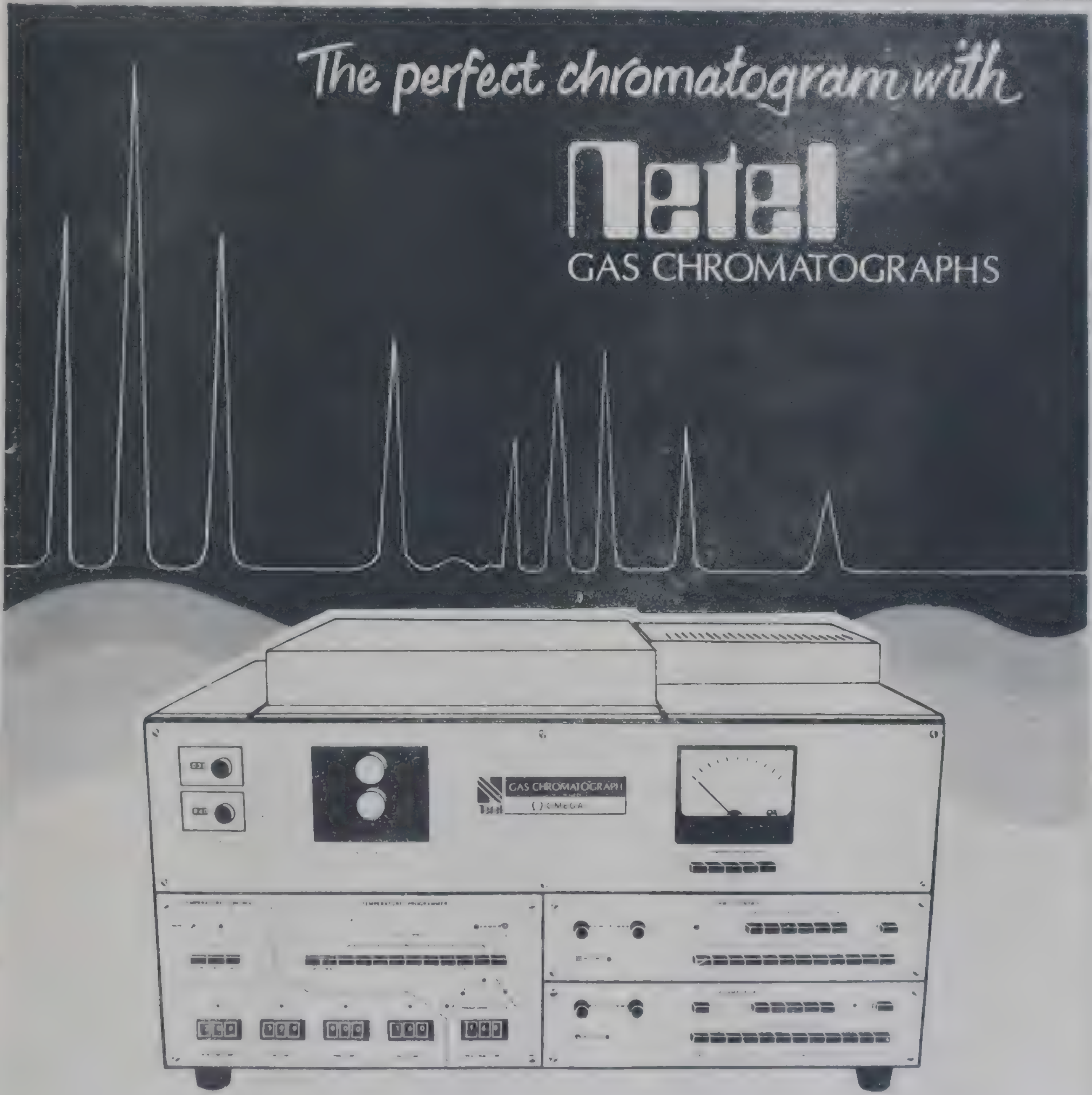
Sonawala Cross Road, Goregaon (East), Bombay 400 063.
Telephones : *Works* : 691239 & 693717 ; *Office* : 691261 & 682089.
Telegrams : " ALLOYCAST ".

FERROUS & NON-FERROUS CASTINGS & DIE CASTING OF NON-FERROUS METALS

Executives . Mr. S. M. Patel, **D.M.E.,** M.I.I.M., M.I.I.F., F.I. Mech. E. (I), M.I B.F. (England).
Rtn. R. S. Patel, **D.M.E., D.E.E., M.I.I.F.**
Dr D. S. Patel, **B.E. (Met.), M.S. (Met. U.S.A), Ph.D. (Met. U.S.A.),** M.S.D.C.E. (U.S.A.), M.A.F.S. (U.S.A.), M.A.S.M. (U.S.A.), M.T.S.M. (U.S.A.), M.I.I.M., M.I.I.F.
Mr. A. M. Divekar, **B. Tech. (Met. I.I.T.).**

Associated Concerns : Dr. Dinesh & Ramesh Engineers Private Limited
Deepak Die Castings
Dinesh Metal & Alloys

Works **Plot 301, G.I.D.C. Phase II, Vatva, Ahmedabad. Telephone : 876652**
Office **186, Jawahar Nagar, Bombay 400062. Telephones: 691261 & 682089.**



UNQUESTIONABLE RELIABILITY AND PERFORMANCE

For the first time in India, field tests have proven that the indigenously manufactured NETEL Gas Chromatograph, utilising the latest State of The Art Technology, is as versatile and comparable in performance, to any imported Gas Chromatograph "AT LESS THAN HALF THE PRICE".

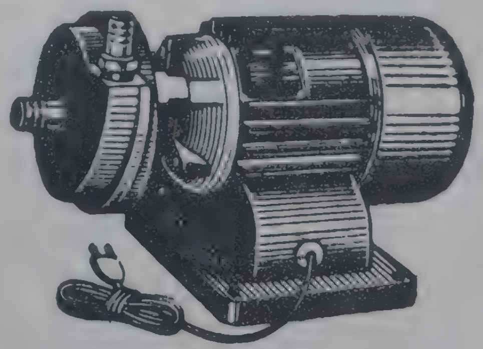
TOTAL CUSTOMER SERVICE

- Factory trained Service Engineers to install the Chromatographs and test them against specifications
- Full One Year Warranty.
- Application laboratory offering complete technical advice in solving analytical problems and programming parameters
- Special Service Contracts to maintain the Chromatographs at optimum performance level
- Chromatography supplies From the world famous SUPELCO Inc., Switzerland – available through our parent company Messrs Universal Ferro & Allied Chemicals Ltd

Netel

Netel Chromatographs

Liberty Building,
Sir Vithaldas Thackersey Marg.
Bombay-400 020.
DIVISION OF UNIVERSAL FERRO
& ALLIED CHEMICALS LTD.
Application Lab Phone 595099



"NIMCO" DOMESTIC MINIMONOBLOCK PUMP SETS

Pure A.C. (without Carbon Brush): Only 200 Watts power consumption : 35 Feet Total Head : 1000 L.P.H. Capacity : Fitted with ball bearing : 1/8 H.P. : Totally Enclosed Fan Cooled Type : Continuous Rating Motor : only 2800 R.P.M. : 1/2" Suction and 1/2" Delivery.

Contact :

NATIONAL INDUSTRIAL MACHINERY CO.

V. K. Estate, Colony Road,
Bhaktinagar, Rajkot 360 002.
Phones : Factory 88435, Office 31100, Res. 23917.
Grams : "NEMCO".

NOORMOHAMEDS

(Estd. 1885)

HOUSE OF FINE FURNITURE

Specialists in Interior Planning and Furniture for :

★ OFFICES ★ HOMES ★ SHOWROOMS ★ HOTELS ★ RESTAURANTS etc

Import & Export Division

NOORMOHAMEDS

(Exports Division)

Exporters of :

★ Traditional & Contemporary Furniture
★ Flush Doors ★ Carved & Designed Doors
★ Exclusive Designed Panels for Walls, Ceilings & Screens ★ Construction Materials ★ Tiles
★ Hardware ★ Wire Mesh ★ Barbed Wires
★ Canned Foods ★ Metal Scrap ★ Plywoods.

Address : 109, Mohamedali Road,
Bombay 400 003.
Phone : 327694.
Grams : "NOORDECOR"

NEW ENGINEERING ENTERPRISES

B-18, Industrial Estate
Roorkee 247 667 (U.P.).

●

Manufacturers of

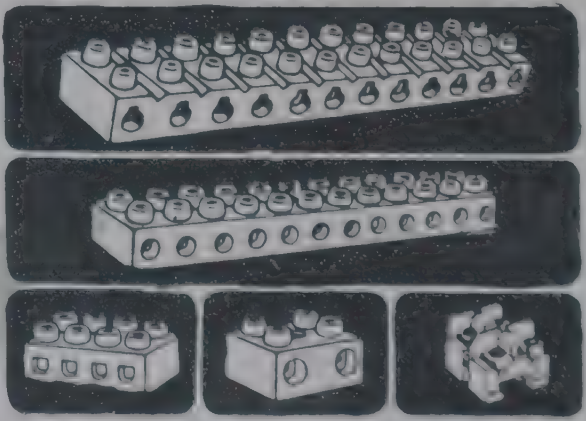
Amplifiers (DC, Carrier, Strain gauge), Data Loggers, Digital displacement indicators, Digital pressure indicators, Geophysical instruments, Geophones, Seismic timers, Inverters, Recorders (AC, DC, multichannel, oscillographic, potentiometric strip chart, XY), Recorders for measurement & recording of Current Voltage (AC or DC) frequency Active or Reactive power power factor, full range of Dam Instruments, Microearthquake recorders, Recording Accelerometers, equipment for Rock Mechanics and mining, Transducers (displacement, pressure, acceleration, load), and Servo Voltage Stabilizers

CONNECTORS

(CLOSED TYPES)

BAKELITE & PLASTICS

Suitable for any Industry
Range: 5 Amp. to 30 Amp.



MFRS: PHONE: 69 30 82

NP **NOVELTY PLASTICS**

Dayalal Compound (Nr Bank of India),
S V Road Malad (W) Bombay 400 064

AD-FAST

GET THE STRENGTH OF OUR CLAIMS SERVICE AROUND YOU.

NC

Do you have problems with any Insurance Co., —foreign or Indian?

—and do they cost you time and money you could use better elsewhere?

We provide a country-wide service and handle every type of claims recovery of commercial, industrial personal, hull, cargo losses and carrier's liability.

For details write to:

NATIONAL CONSULTANTS

P. O. Box 9913,
Bombay-400 005.
Phones: 216094, 211782

NARICHANIA CONSULTANCY AND AGENCY (P) LTD.

P.O. Box No. 646, 22, Sir Phirozshah Mehta Road,
Fort, Bombay (India).

★

Claims Recovery and Settling Agents.

★

Specialists in Recovery of claims from
Insurance Companies
Shipping Companies
and
Port Authorities/Customs

★

Phones : 299252 & 299227.
Grams : " SURVEYLOSS ".
Telex : 11-2928-VNCN-IN.
Branch : Madras — P.O. Box No. 1860.

A Symbol of Reliability

OMEX BUILDERS & CONTRACTORS

ECONOMIC HOUSING/QUALITY CONSTRUCTION/COMPETITIVE RATE. RESIDENTIAL APARTMENTS/GROUP HOUSING/INDUSTRIAL PREMISES AND SHOPPING COMPLEX, AND ALSO UNDERTAKE THE DEVELOPMENT OF PROPERTY ON ATTRACTIVE TERMS.

Consult for further details :

M/s. OMEX BUILDERS AND CONTRACTORS

Omex Apartments, 64, Sahar Road,
Andheri (East), Bombay 400 069.

Phones : **562673/564953.**

PLYKING

Main Showroom : 50, CHITTARANJAN AVENUE, CALCUTTA 700 012. Phone : 27-5414.
Branch Showroom : 129/D, MANOHARPUKUR ROAD, CALCUTTA 700 029. Phone : 41-0393.
Central Office : 44, CHITTARANJAN AVENUE, CALCUTTA 700 012. Phone : 27-8790.

Selling Agents of :

Leading Plywood Manufacturers for all kinds of PLYWOODS, FLUSH DOORS, BLOCK BOARDS & HARD BOARDS etc.

Distributors for "**SUPERDECOR**" Laminates
for EASTERN ZONE & RAJASTHAN

ASSOCIATES :

BEEKAY ENTERPRISERS
43/2, B. B. Ganguly Street,
Calcutta 700 012. Phone : 27-9407.

JAYEM ENTERPRISES
44, Chittaranjan Avenue,
Calcutta 700 012. Phone : 27-1307.

PLYKING (PATNA)
Pirmohani, Patna 800 003.
Phones : 53096 & 54489.

PLYKING (JAIPUR)
B/7, Atish Market, Jaipur 302 002.
Phones : 73995 & 74316.

Grams : "SACHISEWA".

PHOENIX (INDIA) RUBBER PRODUCTS

Manufacturers & Recoverers of All kinds of Printing, Tannery, Textile, Ebonite, Synthetic Rubber Rollers

Post Box No. 7, Udhna Udyognagar,
UDHNA
Phones : 88384, 88543 & 88858 Grams : "ROCKETROLL".

OFFICES AT:

BOMBAY : EBY Castle, 1st Floor, 64, Mohamedali Road, Bombay 400 003.
Phones : 320179 & 324532.

DELHI : Amra Palace, 1st Floor, 10184, Arya Samaj Road, New Delhi 110 005.
Phone : 565323.

MADRAS : 14, Errabalu Chetty Street, Madras 600 001.
Phone : 25461

Representatives at :

BANGALORE - AHMEDABAD - PUNE
Phone : 360464

Cement, Calcium Carbide and Special Steel Wires Mfrs.

PANYAM CEMENTS & MINERAL INDUSTRIES LTD.

Cementnagar-518206 (Kurnool Dt.,
Andhra Pradesh).

Manufacturers of :

- **Ordinary & Pozzolana Portland Cement.**
- **Calcium Carbide.**
- **Oil Tempered Wire, Spring Steel Wire, Tyre Bead Wire, Ball Bearing Wires, Fastener Wire, Umbrella Wire, P. C. Wire and ACSR Wire.**

REGISTERED OFFICE & CEMENT FACTORY :
Cementnagar-518206, Kurnool District,
Andhra Pradesh.
Phone : 26, 21, 23, 25 & 38.
Grams : "PYRAMID", Cementnagar.

CALCIUM CARBIDE FACTORY
Hagari R. S. 583138, Bellary District, Karnataka.
Phones : 2741, 2742, 2743 Bellary.
Grams : "PYRAMID", Bellary.

WIRE FACTORY
Post Bag No. 6901, Bommanahalli, Madivala P.O.
Bangalore 560068, Bangalore. Phone: 567297 (4 lines).
Grams : "PYRAMID", Bangalore. Telex : 0845-350.

GRANITE & MARBLE

GRANITE SLABS in 12 decorative colours
size & thickness as per requirements.

MARBLE SLABS & BLOCKS
in any colour, size & thickness as per requirements.

Also available
STONES –
Cuddapah, Kotah, Tandur Shahabad, Andhra Slate,
Haryana Slate, Agra Red Mandana, Dholpur—
and others.

Please contact for EXPORT of ABU Marble Blocks, Marble Slabs, Granite Slabs & Cuddapah Stones.

PRINCE MARBLE INDUSTRIES

Manufacturers, Suppliers & Decorators of
MARBLE, GRANITE & STONES.

Bharat Tiles Compound, Signal Hill Road,
Opp. ICI Godown, Reay Road Railway
Station, Bombay 400 033.
Phones : 374203, 895597.

Ravi Industries Compound, Agra Road,
Naupada, THANE.
Phones :
591339, 503228, 504072

STEEL WOOL

STEEL WOOL

PILOT GROUP offers you finest abrasive SUPREME steel wool of fine grades 000, 00, 0, 1, 2, 3 & 4 manufactured on their Asia's biggest plant.

Used by Dairies Shipyards, Railways, Hotels, Tyre industries, Glass industries, Steel furniture makers, Textile industries, Non-ferrous industries, Electronics & Auto parts industries, etc.

For further details contact :

PILOT PRODUCTS

331, R. R. Roy Marg,
Charni Road,
Bombay 400 004.

Grams : " PILOTTRADE ".

Phones : H.O. : 361212
363435
361673
Factory : 892656
898190
899961

PILOT
GROUP

How Do You Talk To The 750 Crore Rupee Poultry Industry... And Not Get Your Feet Dirty?

POULTRY TIMES

A WEEKLY OF
THE INDIAN
POULTRY INDUSTRY

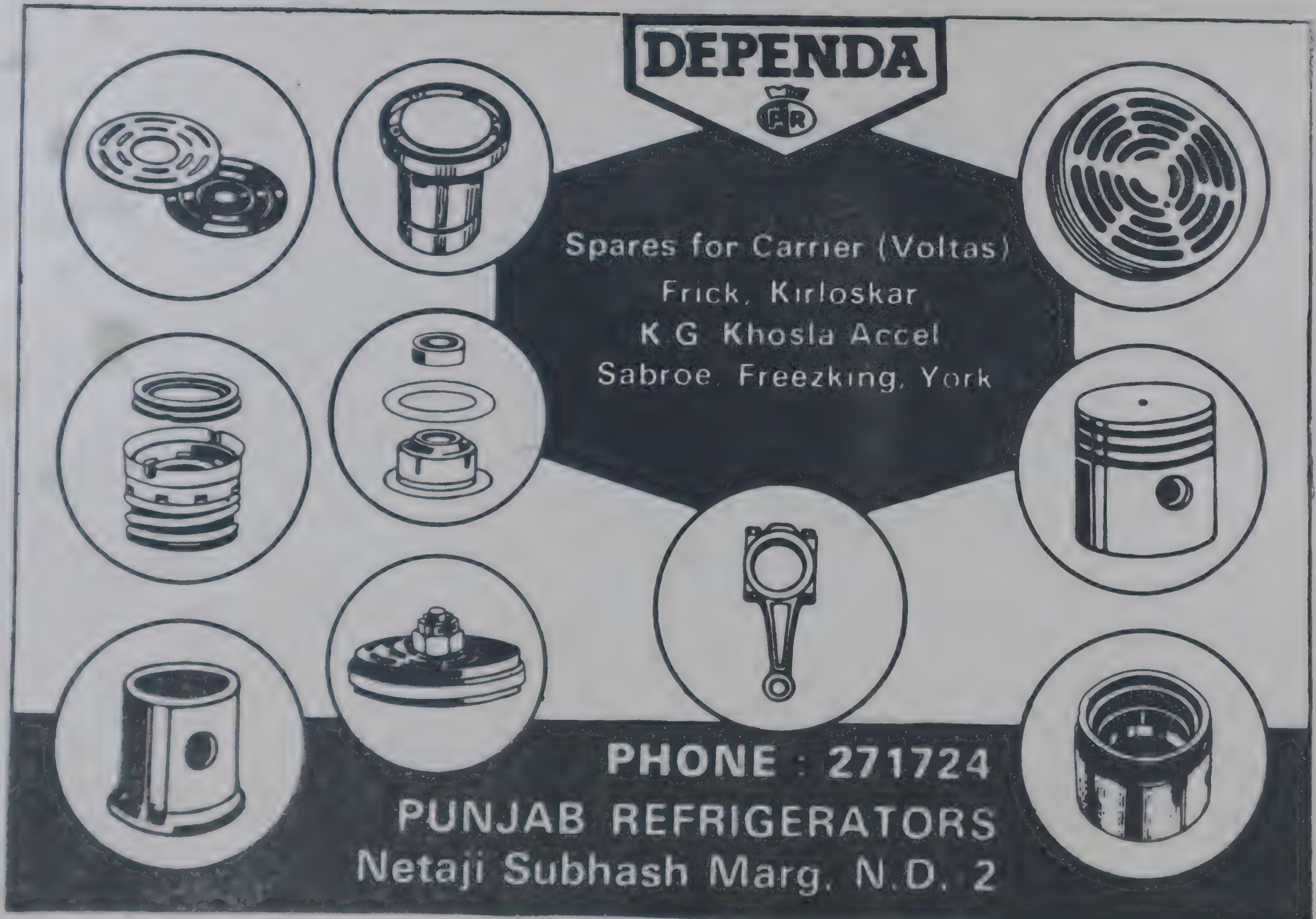
You can talk effectively to this dynamic industry in POULTRY TIMES . . . the national newsweekly covering all segments of the Egg, Broiler, Chick, Feed, Equipment and Animal Health industries. Reach them straight, without stepping out, to cover the vast Indian poultry and allied markets.

POULTRY TIMES is unique because the industry is unique. Picture a highly concentrated, competitive and sophisticated industry with hundreds of thousands of products ready for the market daily. Then picture POULTRY TIMES reaching all key buying influences each week with vital news, market information and editorial comment. POULTRY TIMES speaks to and for this industry at the same time and that means superb readership . . . especially when immediacy is so important. POULTRY TIMES is tailor-made to its own audience for effectiveness and impact.

Advertisers have the opportunity of blanketing the entire industry through one medium
POULTRY TIMES.

If the 750 Crore Rupee poultry industry represents a market for your products, POULTRY TIMES is ready to help you reap the most benefits from your advertising rupee. Call Ravi Chawla on Bombay 31 43 13 and get ready to talk to thousands of poultrymen.

POULTRY TIMES, Room 24, Mulji Jetha Bldg., 185-187, Princess St., Bombay 400002.



DEPENDA

Spares for Carrier (Voltas)
Frick, Kirloskar
K.G. Khosla Accel
Sabroe, Freezking, York

PHONE : 271724
PUNJAB REFRIGERATORS
Netaji Subhash Marg, N.D. 2

THE PRESSURE PILING CO.
(INDIA) PVT. LIMITED

Concrete Piles, Foundation and Cementation Specialists.

★

Registered Office :

Apeejay Chambers, West Wing, Wallace Street,
Fort, Bombay 400 001.

Phone : 269285, 280788 & 260772 ;
Post Box No. 874, Bombay 400 001.

Grams : " PRESURPILE ", Bombay.

Godown : 222, New Sewri Rc Cotton Green,
Bombay 400 033. Phone : 441485.

★

Managing Director : V C. Deshpande, B.Sc (Eng.), Hon. (Lond.).

: C. V. Deshpande, B.E., F.I. Struct. E., . Am. Soc. C.E., F.I.E. (Ind.); A. T. and Mrs. Neela S. Talcherkar.

REMINGTON RAND

Office Machines :

ENGLISH & INDIAN LANGUAGE STANDARD TYPEWRITERS, PORTABLE TYPEWRITERS, MANUAL & ELECTRIC STENCIL DUPLICATORS, ELECTRONIC CALCULATORS, IMPORTED ELECTROSTATIC COPIERS, IMPORTED ELECTRIC TYPEWRITERS.

Office Supplies :

TYPEWRITER & PENCIL CARBON PAPER, TYPEWRITER RIBBONS, STENCIL PAPER, DUPLICATING PAPER, TELEPRINTER PAPER ROLL, CARBON RIBBONS, CORRECTING FLUID.

Office Systems :

FIRE RESISTANT FILING CABINETS, ELECTRO-MECHANICAL FILING SYSTEMS, KARDEX VISIBLE RECORD SYSTEMS, KARDVEYER, GRAPHDEX WALL CHARTING & LINEDEX STRIP INDEXING SYSTEMS.

MEHTA MAHAL, 15, MATHEW ROAD,
BOMBAY 400 004.

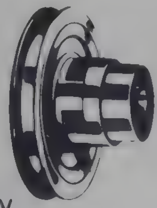
Phone : 361496. Telex : 0113566.
Telegrams : " REMINGTONS "

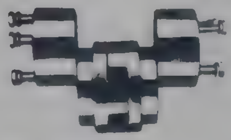
Only
LOVEJOY®
give you the widest choice
of quality couplings.
Over 150 models from
fractional to 7000 HP.

PATENT NOS. 108782, 131188

TYPE L
Standard Duty Coupling

TYPE C&H
Medium and Heavy Duty
Couplings

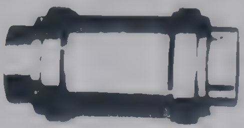

TYPE LV
Standard Coupling
with V Belt Pulley


TYPE RRL
Jaw type Spacer Coupling

TYPE LD
Brake Drum Coupling

TYPE LF
Standard Coupling
with Flange

TYPE SW
Snap-wrap Cushion
Coupling


TYPE RRS
Jaw type Spacer Coupling

Manufactured by
RATHI ENGINEERING WORKS
27, Shankarshet Road Poona 411 009 INDIA
with [illegible] know-how from LOVEJOY INC. CHICAGO U.S.A
World's largest producer of flexible Couplings

Sole Distributors
JOSEL CORPORATION
Rama Niwas, Laxmi Road
Poona 411 030 Phone: 444055

Distributor for Bombay & Gujarat
R.S.V. AGENCIES
103, Gundecha Chambers
1st Floor, 18, Nagindas
Master Road Bombay 400 023
Phone: 271588 Grams. FLEXIFLOW

BRIEF CASE LOCKS, ACCESSORIES & HANDLES.

Manufacturers of:

Suit Case & Brief Case Accessories Such as Plastic Handles, Locks, Stoppers, Hinges, Etc., Etc., Key Hooks, Diary Clips, and Novelties in Plastics and in Metal.

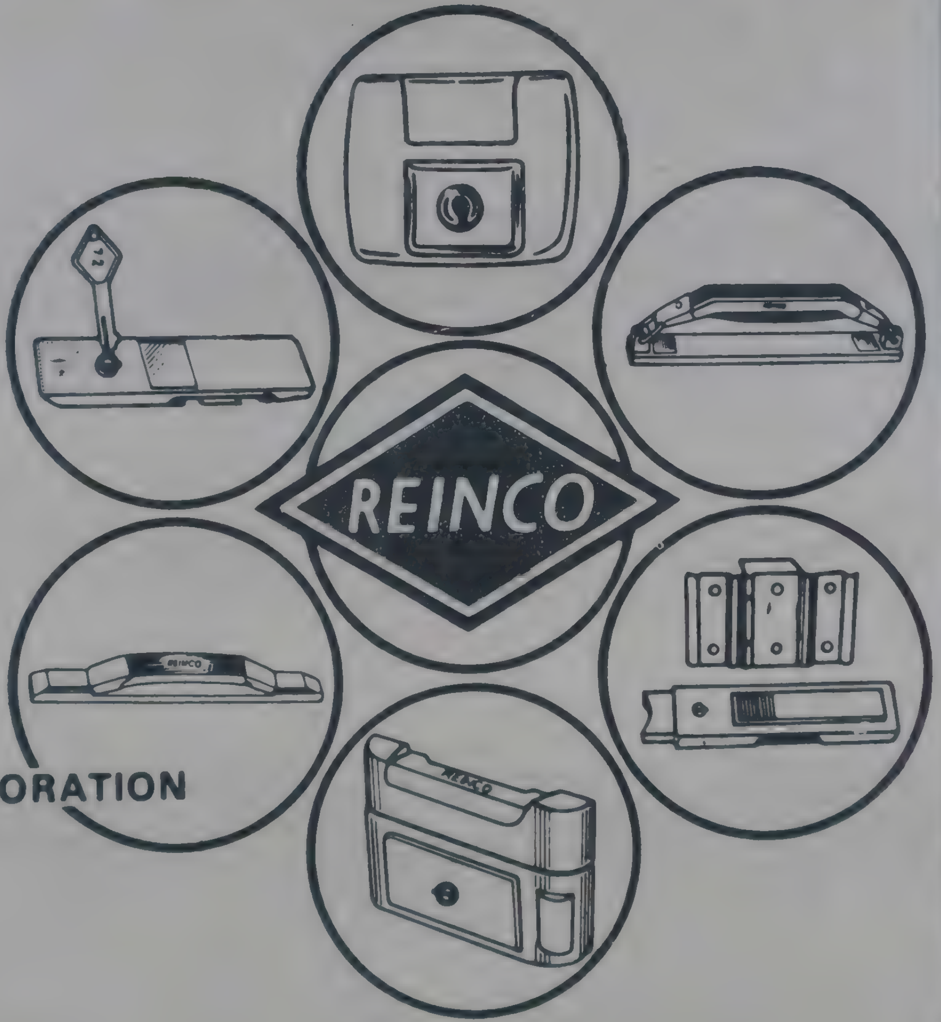
REINCO

TRADE MARK

REGD. NO. 268930
PRODUCTS OF
INDIA

REGAL INDUSTRIAL CORPORATION

OFFICE:
156-58 MOHIDEENMANZIL, 1st FLOOR.
EBRAHIM REHMATULLA ROAD
BOMBAY-3 (INDIA)
PHONE: 861036
GRAM: REGINDCOR



RALLIS INDIA LIMITED

Registered Head Office : 21, D. S. Marg, Bombay 400 001.
P. O. Box 166.

Phone : 26-8221 (20 lines). Grams : " RALLI ".
Telex : 2357, 4355.

Calcutta Office : 16, Hare Street, Calcutta 700 001. Phone : 234351 (8 lines). Grams : " RALLI ". Telex : 7201.

Madras Office : Ralli House, 164, Linghi Chetty Street, Madras 600 001. Phone : 29281 (4 lines). Grams : " RALLI ". Telex : 320.

New Delhi Office : United India Life Bldg., F-Block, Connaught Place, New Delhi 110 001. Phone : 45811 (3 lines). Grams : " RALLI ". Telex : 2201.

Directors : D. S. Seth (Chairman), A. D. Mango (Deputy Chairman), Sir George Burton (Alternate : J. S. Hewitt), J. S. Kerridge, F. A. Mehta, D. R. Peters (Alternate : A. S. Mathieson), V. J. Sheth, M. R. Shroff, H. J. Silverston, R. N. Tata.

Secretary : B. K. Laskari.

Subsidiaries : W. T. Suren & Co. Ltd., carries on trading activities ; Ralli Machines Ltd., for manufacture of wood working and metal cutting tools and ceiling fans ; Ralliwolf Ltd., for manufacture of ' Wolf ' Electric Tools.

Principal Bankers : State Bank of India.
Central Bank of India.

Solicitors : Crawford Bayley & Company.
Orr, Dignam & Company.

Auditors : Lovelock and Lewes.

Phones : { 343179 320051 Grams : "NARSITRANS".

RAJESH ROADWAYS

Leading Transport Contractors
& Fleet Owners

Daily & Regular Parcel Service
for Territory of Goa.

BRANCHES & ASSOCIATE OFFICES

Mapuca	Phone	388
Panjim	,,	2334
Ponda	,,	322
Sankhali	,,	28
Sanvordem	,,	101
Margao	,,	2002
Vasco	,,	3216
Thane	,,	594642 PP

Head Office :
10, Fancy Chambers, 1st Floor,
94, Surat Street, Bombay 400 009.

Bombay Booking Office :
360, Samuel Street, Vadgadi,
Bombay 400 003. Phone : 329615.

R. KHANNA & COMPANY

Specialist in :

BOLTING CLOTH AND TRACING PAPERS ETC.

SUPER BOLT

Works : J-8/8, Jal Mangal Deep Society,
1st Floor, Bangur Nagar, Goregaon (West),
Bombay 400 090. Tel. 687097.

Office : 481, Botawala Building, 3rd Floor,
Kalbadevi Road, Bombay 400 002.

Phone: 250608.

THE RUBBER PRODUCTS PRIVATE LIMITED

Registered Office & Works :
C-44, Road No. 28,
Wagle Industrial Estate,
Thane 400 604, Maharashtra.
Tel. : 592551-2-3 & 503377.
Cable : "RUBPRO". Telex : 011-5027·

★

Bangalore Factory :
Plot No. 38A, Phase II,
Peenya Industrial Area,
Bangalore 560 058, Karnataka.
Tel. : 38896.
Cable : "RUBPRO".

Manufacturers and Exporters of :

1. **RUBBER HOSES**—for Water, Oil, Acids, Chemicals, Pneumatic Tools, Sandblast, Vacuum, Shotblast, etc. as per Indian Standards, British Standards and Customers' Specifications.
2. **RUBBER LINING**—of Tanks, Vessels, Pipes, Bends, Tees, Valves etc. in natural and synthetic rubber as per Indian Standards and British Standards specifications for chemical industries.
3. **RUBBER SHEETS**—calendered and moulded in Natural, Neoprene and other Synthetic Rubber, Rubberised Cork Sheets, Electrical Insulation Mattings, etc. as per I.S., B.S. and Customers' Specifications.
4. **RUBBER MOULDED PARTS**—like 'O' Rings, diaphragms, bushings, washers, packings, bungs, teats, stoppers, cutless rubber segments, gaskets, metal to rubber bonded items etc. etc. for Chemical, Oil, Pharmaceutical and General industries.
5. **RUBBER EXTRUSIONS**—channels, beadings, streetlight packing, L.P.G. tubings, etc. etc.
6. **RUBBER COMPOUNDS**—in Natural and Synthetic Rubber.

RONUK

FOR
COMPLETE
SERVICE

DESIGN,
FABRICATION
& ERECTION
OF COMPLETE
MANUAL,
SEMI-AUTOMATIC
& FULLY
AUTOMATIC
PLANTS FOR
ELECTROPLATING
& ANODISING

POLISHING AND BUFFING COMPOSITIONS

METAL BRONZES COMPOUNDED
PLATING SALTS FOR
METALS AND NON-METALS
METAL CLEANERS, CHEM. & ELECTROCHEM.
POLISHERS, HEAT TREATMENT SALTS.

★

RONUK INDUSTRIES LTD.
11-A, WORLI SEA FACE, BOMBAY 400 018.

TELEPHONE
4226261-62

●

GRAMS :
"RONUKIND"

R. K. FURNACES

FURNACES

Design and Sales Office : Radha, Holy Cross Road, I. C. Colony, Borivli (West),
BOMBAY 400 092.

Phone : 663110.
Grams : " ARKEFURNAC ", BOMBAY 400 092.

Works/Office : S.A-5, Shed Industrial Estate, Sancoale, Zuarinagar, GOA.
Phone : 93, Zuarinagar.

We design/manufacture electrically heated and fuel fired FURNACES and PLANTS for Ferrous, Non-Ferrous, Automobile, Engineering, Glass, Ceramic, Electrical and Electronic Industries, and we also design and manufacture Hydraulic Presses, Power Pack Units, Injection Moulding Machines.

Manufacturing Range :

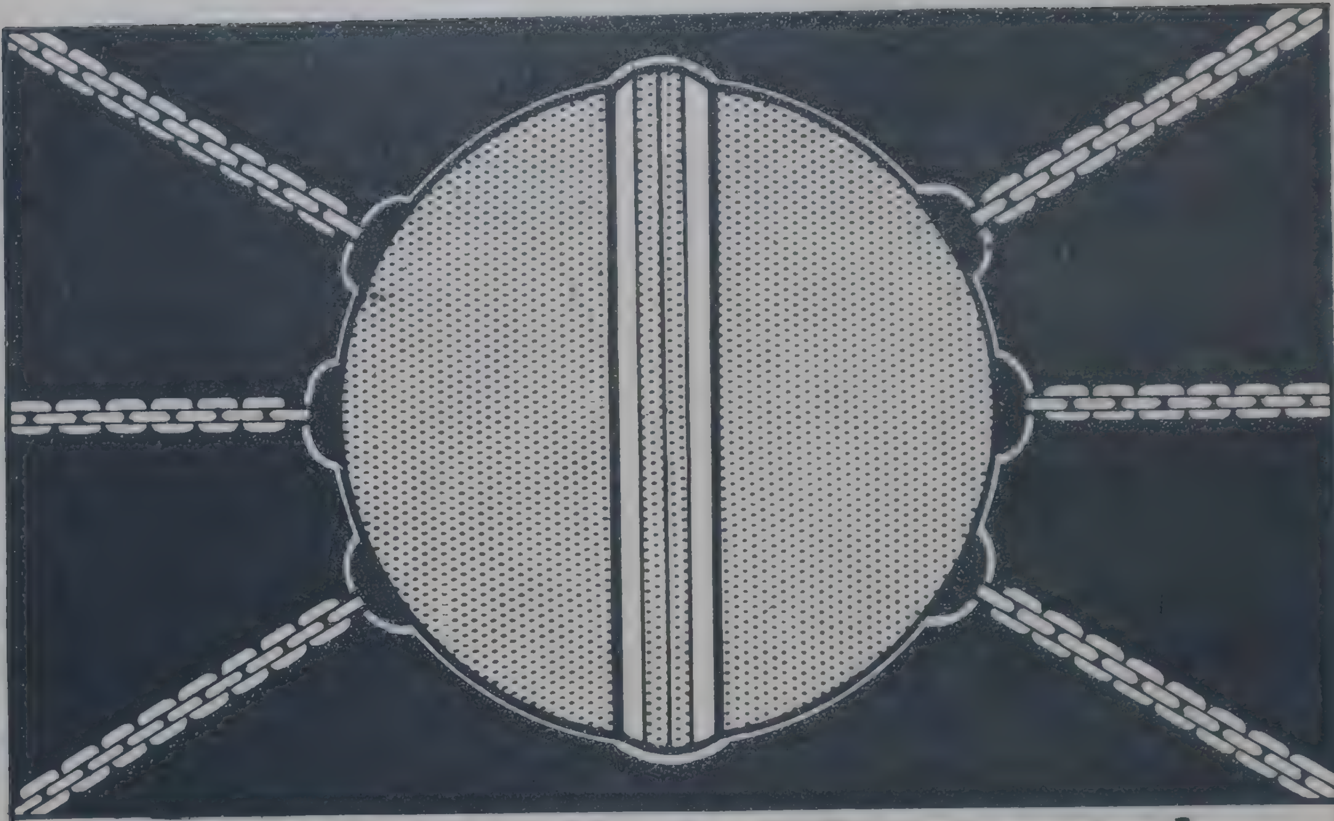
DRYING
ANNEALING
HARDENING
NORMALISING
TEMPERING
SALT BATH
OIL BATH
GALVANISING
TINNING
MELTING (NON-FERROUS)
DECORATING LEHR
GLASS BENDING
FIRE POLISHING
BOGIE TYPE
TABLE SALT PROJECT

ROTARY HEARTH
ROLLER HEARTH
PUSHER TYPE
CONVEYOR TYPE
REHEATING
FORGING
ENAMELLING
BRAZING
SINTERING

ANNEALING LEHR
BAKING OVEN
TUNNEL KILNS
PUSHER TYPE
WASHING LINE FOR UTENSILS

Table Salt Manufacturing equipment & machinery.

We invite your enquiries for Heat Treatment equipment and plants. With our all round longstanding experience as heat treatment specialists and furnace designers, our customers are assured of getting the correct equipment with efficient as well as economic designs for their job.



Multiplicity makes for strength.

Sugesans has at its disposal all the skills and services that will give your investment the strong support it requires. Our services range from advice on all aspects of export/import financing, export-imports, shipping, clearing, ware-housing transport, co-ordination of booking etc. Come to Sugesans and give your business the strong Security it needs.

Sugesans also accepts deposits from the public. To earn upto 18% interest per annum, the minimum deposit amount is Rs. 1000/- and multiples of Rs. 500/-

15%-18% P.A.	Interest payable *monthly, quarterly, half-yearly, annually. (* For deposits over Rs. 3000/- only)
23.19% (approx) P.A	Interest and deposit withdrawable at the end of 3-year period
66.67% (approx) P.A.	Returns on 3-Year Cash Certificates.

S-1175

SUGESAN FINANCE INVESTMENT
(COPYRIGHT REGISTERED)

78-A Nariman Bhavan,
227 Nariman Point,
BOMBAY 400 021.
GRAMS: SUGESANS
Phones 221438, 243761, 221519, 221749; Telex 011/4823

KC SHETH
GROUP

Head Office
38, RAJAJI ROAD, MADRAS – 600 001
PHONES : 36870, 22495 22466/67.
TELEX : 041 480 GRAMS : SUGESANS

Branches: AHMEDABAD BANGALORE, CALCUTTA,
COIMBATORE, Ernakulam COCHIN, HYDERABAD & RAJKOT

SHAW WALLACE & CO. LIMITED

Registered & Head Office :

4, Bankshall Street, Calcutta 700 001.

Grams : " SHAWLACE ". Telex : 021-7235

Phones : 23-9151, 23-5601

MANUFACTURERS :

Fertilisers and Fertiliser Mixtures, Agro-chemicals, Superphosphate, Sulphuric Acid, Sodium Silico Fluoride, Animal Feeds and Mineral Supplements, Glue, Gelatine, Ossein, Power and Hand Sprayers, Wines, Spirits and Liqueurs.

AGENTS :

Sandoz (India) Ltd., Hellenic Lines, Hapag Lloyd A.G., Ellerman & Bucknall Steamship Co. Ltd., London, Canadian City Lines, Montreal, Gulf Shipping Ltd., London and various Coastal Lines.

DISTRIBUTORS :

Complex Fertilisers and Urea for Madras Fertilisers Ltd., Agro Chemicals of BASF (India) Ltd., Sandoz (India) Ltd. and Agromore Ltd.

DISTILLERS :

Haywards and Golconda Products.

STOCKISTS :

Marketers of Beer, and exporters of Liqueurs.

BUSINESS OF THE SUBSIDIARIES :

Flour Milling, Tea Plantations, Manufacturers of Bakers, Dried and Compressed Yeast, Gelatine and Ossein.

COMPUTER SERVICES :

At MADRAS and BANGALORE.

SEWRI ENGINEERING CONSTRUCTION CO. PVT. LTD.

Civil Engineers, Designers & Constructional Engineers.

Office : Apeejay Chambers, West Wing, Wallace Street, Bombay 400 001.
Phone : 263941 (2 lines),
Post Box No. 319,
Bombay 400 001.
Grams : " TIROD ", Bombay.

Godown : 222, T. J. Road, Cotton Green,
Bombay 400 033.
Phone : 441485.

Chairman : C. V. Deshpande, B.E., F.I. Struct. E. (Lond.), F.Am. Soc. C.E., F.I.E. (Ind.), C. Eng.

Managing Director : S. C. Deshpande, B.Sc. (Eng.), (Lond.), M. Phil. (Lond.), C.P.G.E. (Cantab.), C. Eng., M.I.C.E.

Works Director : R. G. Vagholikar, B.E. (Civil).

Finance Director : S. V. Deshpande, B.Com.

Director : A. T. Kajiji, B.Com.

Guniting Division : S. S. Tilloo.

SPENCER & CO. LIMITED

Spencer's Building, Forjett Street,
Bombay 400 036.

Phones: 362861-2-3, 387466, 388923, 367539, 380295.
Grams : " PORTEDOS ". Telex : 2603.

(*Head Office :* 769, Anna Salai, Madras 600 002)
(Branches throughout India)

Manufacturers, Distributors, Wholesalers, Retailers, Hoteliers, Importers and Exporters and Tea Estate Owners.

Manufacturing : Large Engineering Unit at Faridabad near Delhi manufacturing Room Air Conditioners & Electronics Equipment. Collaboration with M/s. Niel Ferrograph of U.K. for professional grade tape recorders for 100% export through Associate Co.

The Engineering Unit at Madras manufacturing domestic electrical appliances.

The Pharmaceutical factories at Madras and Kanpur manufacture wide range of Pharmaceutical formulations.

The Company has facilities for bottling soft drinks and for making bakery and confectionery items.

The Company has a R & D group in Bangalore engaged in the fields of Electronics and solar energy.

Consumer Products :

Spencer's Tea, Cigars, Canned Products, Cold Storage Products, Soft Drinks, Bakeries, Confectionaries, Vijaya Products by Andhra Pradesh Dairy Development Corporation, Hyderabad, Mohan Meakin Breweries Limited, Uttar Pradesh.

Service :

Two five star Hotels at Madras " The Connemara " and at Bangalore " The West End " and a Hill Resort at Ootacamund in the Nilgiri ' The Savoy ". The Company represents Cii-Honeywell Bull of France for marketing and maintenance of their Computers in India.

Spencers are selling agents for KLM — Royal Dutch Airlines, Garuda Airlines and Cathay Pacific Airlines in South India.

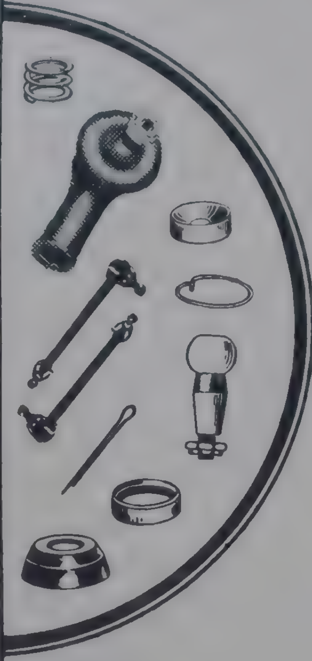
International Trade :

Export of Products like shrimps, Dairy products, Pharmaceuticals etc. Spencers are agents for a number of Foreign Liquor Companies like :

John Haig & Co. Ltd., London
J. & F. Martell & Co., France
Geo G. Sandeman & Son & Co. Ltd., London
J. Calvet & Cie, France
Lanson Pere & Fils, France

The Company has overseas association with KLM Airlines and Cathay Pacific Airlines, Niel Ferrograph, Cii-Honeywell Bull, Mitsui & Company, John Haig & Company etc.

Western Zone Manager : Mr. S. G. Nadkarni.



wider range of

Skew ®

STEERING LINKAGE

TIE ROD ENDS

FOR TATA, AMBASSADOR, FIAT

REPAIR KITS

TIE ROD & DRAG LINK
FOR TATA, LEYLAND

ASSEMBLIES

FOR ESCORT TRACTORS

Precision made from Special quality Alloy Steel. Forged and Induction Hardened to resist wear and provide longer life.

SIYARAM-KUMAR ENGINEERING WORKS PVT. LTD.
Manufacturers —AUTO AND TRACTOR PARTS to original Equipment Specification
41, DLF Industrial Area Kirti Nagar, New Delhi-110015
Phone 586822

Kab8

SKV BUSHES
(Self lubricating)

Save money on STEEL. Use SKV Bushes (Sintered self lubricating) made by powder metallurgy in Steel and bronze unlimited range of application. From Scooters to Computers. Send your requirements for any size to us for immediate action.

Standard range also available

SKV SINTER KINGS ®

Manufacturers :
Sinter Kings Virmani P. Ltd.,
C-56 Wazirpur Ind Estate,
Delhi-110 052
Tel : 713224/741505

SANJAY® ENGINEERING WORKS

For a wide range of top quality

TEXTILE WET PROCESSING MACHINES

- ★ Decatizing Machines
- ★ Float Driers
- ★ Steam Agers ★ Felt Calenders
- ★ Cloth Singeing Machines
- ★ S. S. Dyeing Winch Machines
- ★ Laboratory Machines.

Manufacturers:
SANJAY ENGINEERING WORKS
55/56 'A' Road, G.I.D.C. Vapi, Gujarat State.
For further details, please contact
Bombay Office:
"SANJAY", 23 Nadiadwala Colony No.1,
Malad (West), Bombay-400 064.
Phone: 691684/684555.
Telex: 011-6621 SKTI IN

Selling Agents:
COMMONWEALTH TEXTILES
512/514, Raheja Chambers, 5th Floor,
213, Nariman Point Bombay-400 021.
Telex: CTEX IN 011-4912.
Phones: 245018, 245068, 245148.
Grams: GOOLMACK
Also at Ahmedabad. Phone 78887.
& Delhi Phone: 670656

Manufacturers of :

Aluminium Round & Square
Rigid Containers for
Radio, Telephone, Lighting &
Electronics Industries.

SHAH METAL INDUSTRIES

C/42, C.I.D.C. INDUSTRIAL TOWNSHIP,
ODHAV, AHMEDABAD 382415.
PHONES : **881900, 887246, 887583, 887861** ; Resi. : **450694.**

Phones: 387142/388790/386466. Grams: " HARD-STRIPS "

STEEL CORPORATION

★

DEALERS IN :

SPRING STEEL STRIPS ANNEALED,
HARDENED AND TEMPERED.

★

SANT-SENA MAHARAJ MARG,
23/27, KUMBHARWADA 2ND LANE,
BOMBAY 400 004.

MEHTA.

All under one roof

ALLOY STEEL : EN Series — 8, 9, 16, 19, 24, 31, 36, 351, 353, SAE 8620, High speed, HCHC, OHNS, Carbon Steel, Silver Steel.

M. S. SECTIONS : Rods, Flats, Angles, Channels, Beams, Square, Sheets, Plates, CRCA Sheets Etc.

STAINLESS STEEL : Magnetic & Non-magnetic Rods, Sheets, Plates, Pipes, Tubes, Round, Square, Hexagonal, in AISI 304, 310, 316, 410, 420 Grades.

NON-FERROUS METALS: Aluminium, Brass, Copper, Phosphor Bronze, Rods-Sheets-Pipes.

SANGHVI TRADERS

44, C. P. Tank Road, BOMBAY 400 004.
Phones : **385139/363070**

THE KEY TO YOUR IMPORT/EXPORT BUSINESS

SUGESANS with expertise accumulated over 60 years has integrated handling systems which are flexible, versatile, profitable for safe handling of your ODC Packages and Heavy Merchandise. With unmatched stability for packages weighing between the range of 8 MT and 80 MT. Already the choice of major Public Sector Organizations for handling their imports. Now available for your use. To speed up loading/unloading to avoid damage/demurrage.

Over 60 years experience in

- SHIPPING
- CLEARING
- FORWARDING
- TRANSPORT
- WAREHOUSING

KC SHETH GROUP

SUGESAN AND CO PVT LTD.

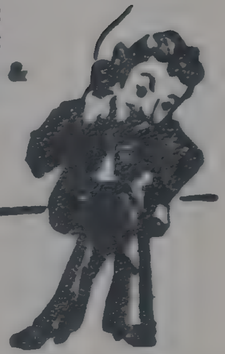
38. RAJAJI ROAD, MADRAS-600 001
Phones 26690/22466.
GRAMS. SUGESANS TELEX 041/480

S-1173

Branches: AHMEDABAD, BANGALORE, BOMBAY, CALCUTTA, COIMBATORE, Ernakulam-COCHIN, HYDERABAD & RAJKOT

Sadäna BROTHERS

Phone :
Office :
263253 &
269296

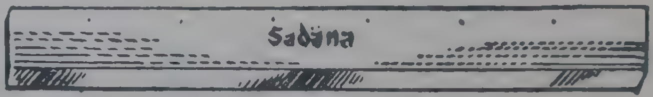


Machinery Manufacturers and Suppliers for Printers, Book-Binders, Box Manufacturers, File Manufacturers, Exercise Book Manufacturers and Paper Converters.

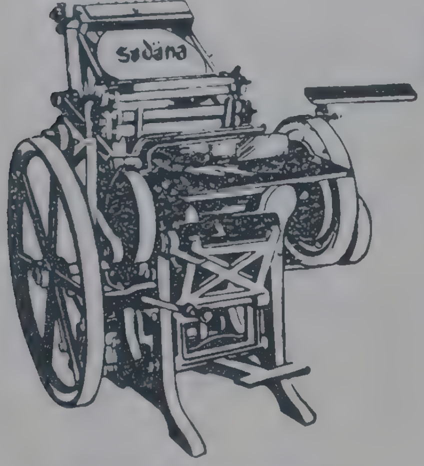
Knife Grinding Machines
Printing Machines & Types
Paper Cutting Machines
Paper Cutting Machine Knives
Gold Embossing Machines—Brass Types
Eyeletting Machines
Die Embossing Machines
Wire Stitching Machines
Disc Ruling Machines
Adjustable Punching and
Round Cornering Machines
Heavy Duty Carton Punching Machines
Box Stitching Machines
Powder Raising Machines

265, Frere Road, Near G.P.O., Goa Street Corner, Post Box No. 1738, Fort, Bombay 400 001

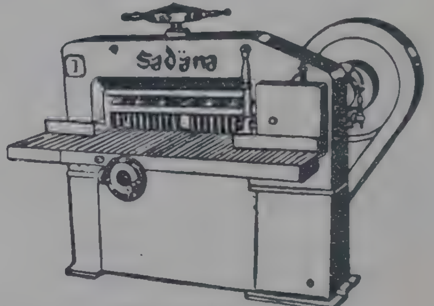
Show Room : 271, Frere Road, Bombay 400 001.



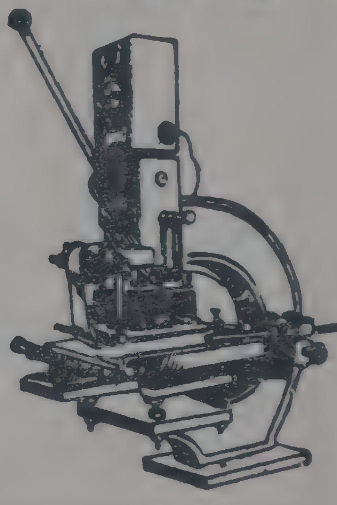
PAPER CUTTING KNIFE.



PRINTING MACHINE



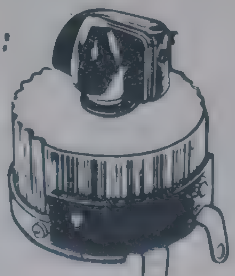
SEMI AUTOMATIC
PAPER CUTTING MACHINE

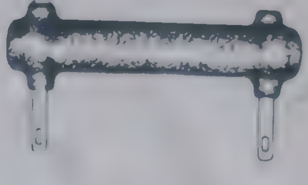


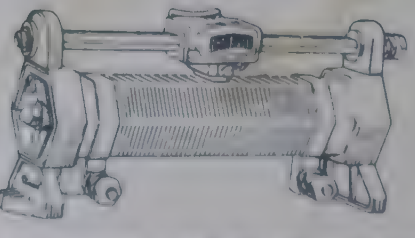
GOLD EMBOSSING MACHINE

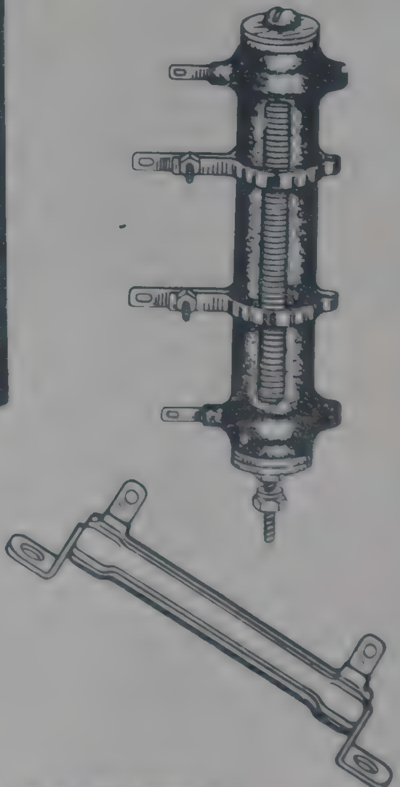
Stead®

WIRE WOUND
RESISTORS AND
POTENTIOMETERS
OF OUTSTANDING
QUALITY









STEAD ELECTRONIC INDUSTRIES

17, UA JAWAHAR NAGAR, DELHI-110007 PHONE : 228767 GRAM : RHEOSTAT

RAMTIRTH

BRAHMI OIL

Special No. 1 Registered

FOR HEALTHY HAIR...

Keep your hair healthy, glossy, lively and lovely through the regular use of Ramtirth Brahmi Oil. It is also a useful oil for body massage!

UMESH YOGA DARSHAN

(FIRST PART)

in four languages: English, Hindi, Gujarati and Marathi.

(Author: Shri Yogiraj Umeshchandraji)

Do Yoga in your home! Learn Yoga with the help of the informative, illustrative (108 real Yoga Asanas) book Umesh Yoga Darshan. Health is wealth! Take care of your health by carrying out a daily course of Yoga Asanas to check and control many digestive, nervous and respiratory ailments.

Price: Rs. 30/- plus postage Rs. 5/- extra.

ACHES AND PAINS TREATED NATURALLY

at our institution or expert Yoga instructions imparted at your residence on request. Naturopathic treatment offers simple and lasting relief from most aches and pains such as: backache, pain in the joints, strained shoulders, stiff neck, etc.

For more details, please contact

SHRI RAMTIRTH YOGASHRAM

DADAR (C. RLY.) BOMBAY-14, PHONE: 463209

TO MAKE SOUND AND PERFECT CASTINGS
IN MASS PRODUCTION

LATEST FOUNDRY TECHNOLOGY

IS

SHELL - MOULDING - PROCESS

WITH

RESIN - COATED - SAND

CONSULT

SHILPA

INDUSTRIES

MANUFACTURERS OF RESIN-COATED SAND

Sales Office :

19th Nanda Patkar Road,
Vile Parle East,
Bombay 400 057.
Tel. No. 562913

Factory :

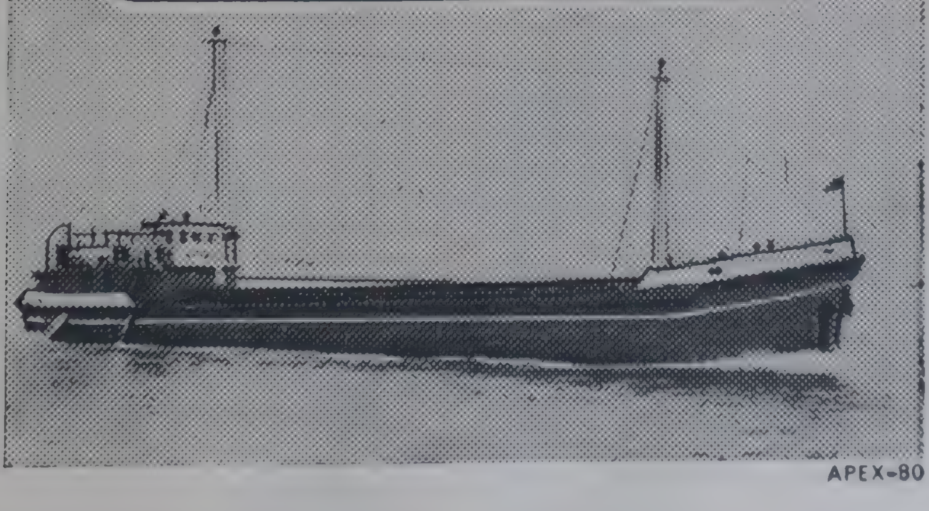
B/10, M.I.D.C.,
Kherdi,
P.O. CHIPLUN
(Maharashtra).
Tel. Nos. 222, 234

AVAILABLE FOR
SALE/HIRE
'Inland & Seagoing Ships'
300 to 750 DWT

of modern design; sturdy construction; efficient operation; with heavy duty twin propelling marine diesel engines; self operated with upto date maintenance eversince built, for carrying general or heavy or bulk cargo viz. iron ore, food grains, fertilizers, coal etc as well as liquid cargo viz. water, edible oils & other fluids.

FOR RIVER/HARBOUR/OFFSHORE/
COASTAL/HOME TRADE SERVICES.

**SHAPARIA DOCK & STEEL CO.,
PVT. LTD.,**
**Shipbuilders, Engineers & Marine
Transport Contractors**
Sewree Fort Road, BOMBAY 400015
Gram:"SHAPARIA" Telex: 011-4259 SHAP IN
Phones 448361/62



APEX-80

SRI KRISHNA TEMPLE : GURUVAYUR

The famous Sri Krishna Temple is situated in Guruvayur, Chavakkad Taluk, Trichur District, Kerala State. The nearest Railway Station is at Trichur 29 K.M. from Guruvayur. There are number of buses plying from Trichur to Guruvayur round the clock.

The shrine opens for its daily pujas from 3 A.M. every day and closes after 9 P.M. on ordinary days. On days of special pujas, the shrine will be kept open upto 1 A.M. There will be illumination (LAKSHA-DEEPAM) and the deity will be taken out in procession with all paraphernalia, on such days. Udayasthamana Pooja and Lakshadeepam are the important offerings among other items connected with temple. The temple counter will open at 4 A.M. and receipts for various Vazhivadus will be issued from there upto 12 Noon and 4-30 P.M. to 8 P.M. Advance booking of Vazhivadus can also be arranged on prior intimation to the Manager, Temple and Superintendent, Temple for duly fulfilling your vows. You can also utilise the service of the P.R.O. who is at your call in the Publication Division in the Sathram buildings, East Nada.

ACCOMMODATION

Guruvayur Devaswom is having lodging facilities to accommodate the worshipping Hindu public at moderate rates. There are different types of rooms, the rent for which ranges from Rs. 5 to Rs. 50 per day. Accommodation can be arranged in advance, subject to availability on payment of room rent and reservation charges. Besides, Devaswom is running a free Sathram for the benefit of financially weaker section among the Devotees.

CLOAK ROOM CUM COMFORT STATION

This building is situated on the Western side of the sacred temple tank. Those who do not get accommodation in Devaswom Sathram can meet their preliminary requirements at Comfort Station on payment of a nominal fee of 50 Paise. This will also work round the clock.

PUNNATHUR KOTTA

Guruvayur Devaswom is now having 39 Elephants of its own. There are Bull elephants — tuskers — Cow elephants, Calf elephants of various ages and sizes. These elephants are stationed at Punnathur Kotta which is 4 K.M. away from Guruvayur. Pilgrims are permitted to visit the place and see the elephants. Chances are remote to see such a herd of tamed elephants of various ages in a place at a time. Please visit the Punnathur Kotta, our elephant camp.

Members of Guruvayur Devaswom Managing Committee

1. Sri Zamorin Raja of Calicut (Maron Raja), *Chairman.*

Members :

2. Sri Mallisseri Manakkal Krishnan Nambudiripad, Guruvayur.
3. Sri Chennas Parameswaran Nambudiripad, Guruvayur.
4. Sri M. R. G. Panicker, Kottayam.
5. Sri P. M. Kunhiraman Nambiar, Cannanore.
6. Sri A. R. Sreenivasan, Trichur.
7. Sri M. Krishnankutty, Advocate, Wadakkanchery.
8. Sri K. Gopalan, Calicut.
9. Sri P. Ramakrishnan Nair, Guruvayur.
10. Sri P. Sankaran Kutty Nair, Administrator & Secretary, Guruvayur Devaswom, Guruvayur.

Telephone Numbers :

Temple : 6280 Sathram : 6365
Office : 6335 P.R.O. : 6347
Administrator (Residence): 6232
Devaswom Hospital : 6295
Punnathur Kotta : 7504

Administrator,
Guruvayur Devaswom.

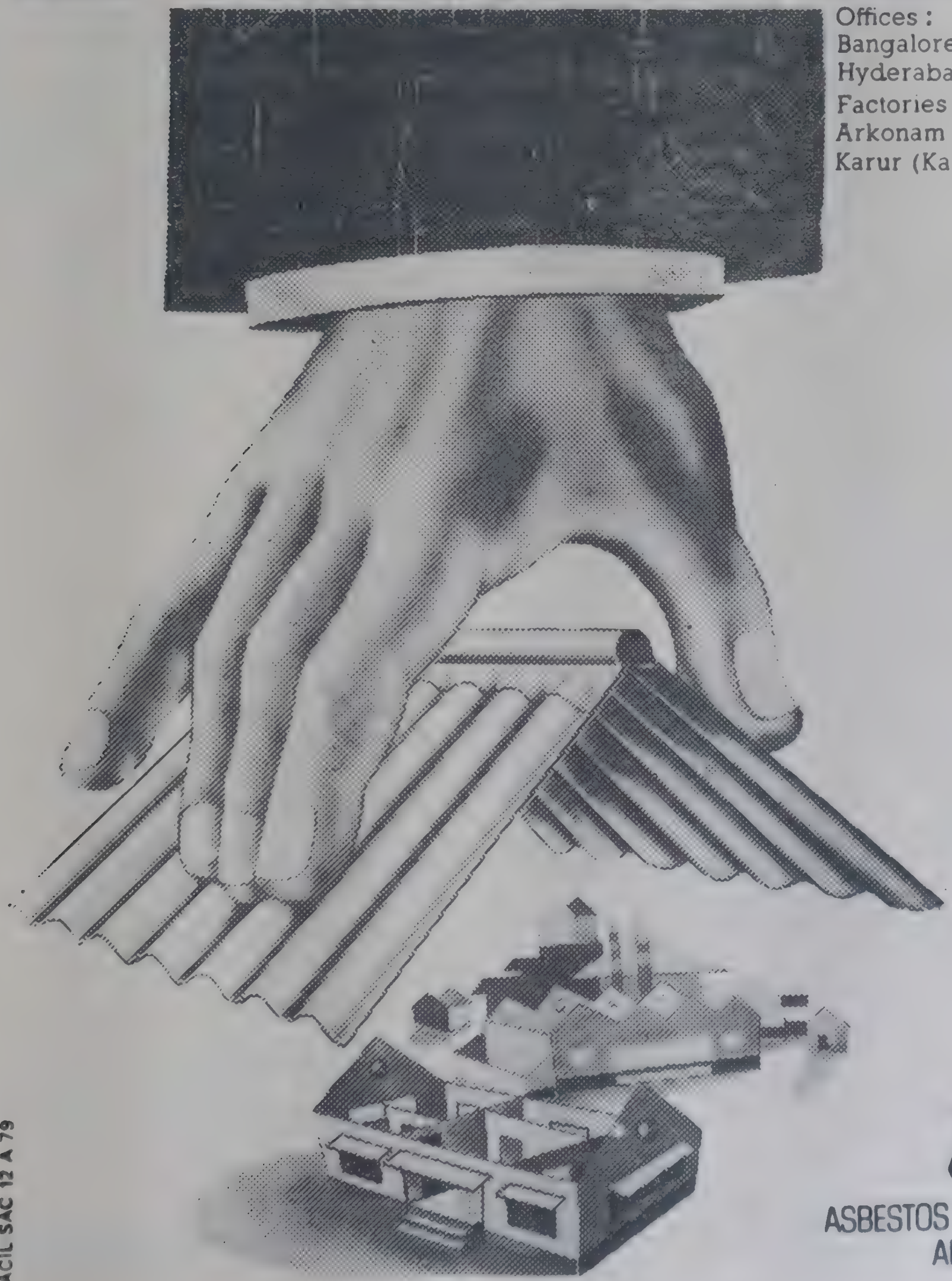
RAMCO'S RULE :

A ROOF IS JUST A ROOF, EXCEPT...

...when it is a Ramco roof. All asbestos cement roofs look alike. But Ramco asbestos cement sheets are the choice of leading architects and builders. And that sets them apart. Because these people are very demanding... About strength and durability. Fire and corrosion resistance. Weather proofing... In short, they look for permanent protection with minimum maintenance. Ramco gives them all that. Stringent quality control and modern plants ensure that Ramco performs best. A roof is a roof... But leading architects and builders know the exception – Ramco !

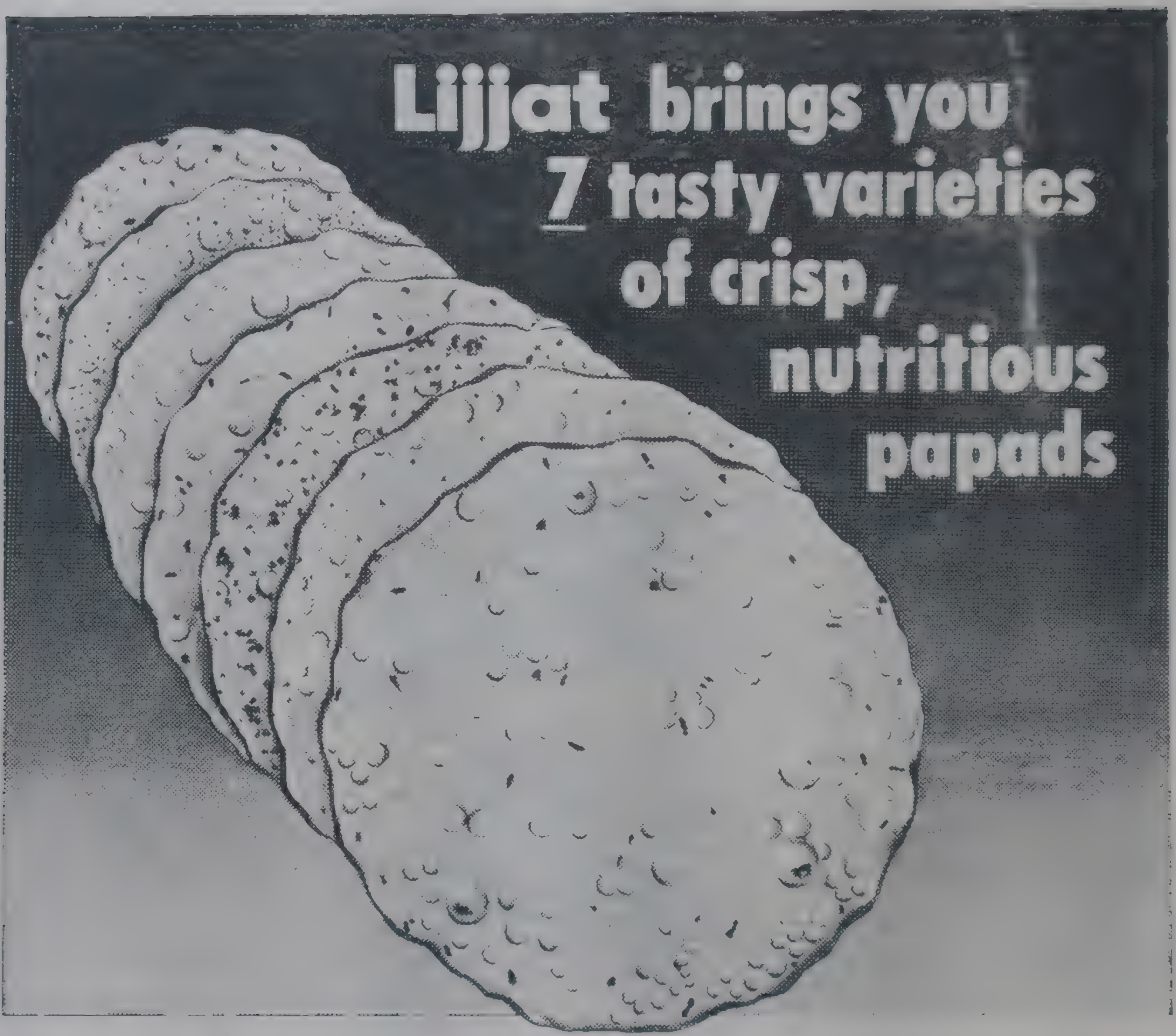
SOUTHERN ASBESTOS CEMENT LTD., 739 Anna Salai, Madras 600 002

Offices :
Bangalore • Vijayawada
Hyderabad • Cochin • Pune
Factories :
Arkonam (Tamilnadu),
Karur (Karnataka)



Ramco
ASBESTOS CEMENT SHEETS
AND ACCESSORIES

ACIL SAC 12 A 79


Lijjat brings you
7 tasty varieties
of crisp,
nutritious
papads

Based on pre-tested formulas for ascertaining consumers' taste

Most hygienically prepared and packed.
Rigorously tested for quality in
Lijjat's well equipped
laboratory

1. UDAD (BLACK PEPPER)
2. UDAD (GARLIC & GREEN CHILLIES)
3. UDAD (RED CHILLIES)
4. MOONG (50% MOONG DAL & 50% UDAD DAL)
5. MOONG (SPECIAL)
6. UDAD (SPECIAL)
7. PUNJABI MASALA SPECIAL

SYMBOL OF WOMAN'S STRENGTH

SHRI MAHILA GRIHA UDYOG LIJJAT PAPAD
MAKERS OF LIJJAT PAPAD · KHAKHRA · MASALA
AGARBATTI · COTTAGE MATCH · LEATHER ART GOODS

3 BROTHERS/LP-13780

TATA ENGINEERING AND LOCOMOTIVE CO., LTD.

Head Office : Bombay House, 24, Homi Mody Street, Bombay 400 023.

Sales Office : 148, Mahatma Gandhi Road, Bombay 400 023.

Export Department : Shivsagar Estate, Worli, Bombay 400 018.

Works: Jamshedpur (Bihar) and Pune (Maharashtra).

Spare Parts Division : Thane (Maharashtra).

Directors : S. Moolgaokar (Chairman & Managing Director), N. A. Palkhivala (Vice-Chairman), J. R. D. Tata, H. C. Hoppe, N. N. Wadia, N. H. Tata, S. R. Vakil, A. N. Mafatlal, G. S. Patel, S. Jagannathan, M. R. B. Punja, R. N. Tata, J. E. Talaulicar (Jt. Managing Director), S. Y. Jakatdar (Jt. Managing Director), S. J. Ghandy, S. Krishnamurthy, A. N. Maira and H. Westphal (Alternate Director to H. C. Hoppe).

Manufacturers of : Commercial Vehicles, Excavators and Crawler Cranes, Steel Castings, Press Tools & Dies, General Purpose Machine Tools and Special Purpose Machines, Diesel Engines for Marine and Industrial Applications, Industrial Electronics.

Subscribed Share Capital
(as on 31st March 1981)
Rs. 31,51,00,000 (£16,955,540 or $38,032,570)
Debentures
Rs. 23,64,00,000 (£12,720,690 or $28,533,480)
Total Annual Sales (1980-81)
Rs. 6,09,65,00,000 (£328,052,670 or $735,847,550)
Number of Employees : 39,090

Telegraphic Address :	Head Office :	" TATALOCO ", Bombay
	Sales Office :	" TELCOSALES ", Bombay
	Export Dept. :	" TELCOEXPO ", Bombay
	Works :	" TATALOCO ", Jamshedpur " TELCO ", Pune
	Spare Parts Division	" TELCOPARTS ", Thane

Phones : Head Office : 259131
Sales Office : 245020
Hire Purchase : 392820

Export : 395741, 394961

Works : Jamshedpur : 23141
Pimpri : 84261 to 84270
Chinchwad : 82913-14-15-16

Spare Parts Division: Thane 502578, 595754, 592395, 592654, 506793

Telex : Head Office : 011-2618/2731/4300
Sales Office : 011-3223
Poonam Chambers : 011-4082
Export Dept. : 011-2716/4258/5822
Works : Jamshedpur : 0626-212/232/242/270/272
Pimpri & Chinchwad : 0145-323/436
Thane : 011-2393

THE TATA IRON AND STEEL COMPANY LIMITED

Registered Office :
Bombay House, 24, Homi Mody Street, Fort,
Bombay 400 023.
Grams : " IRONCO ". Phone : 259131.

Jamshedpur Office :
Grams : " IRONCO ".

Steel Works :
Situated at Jamshedpur, Bihar
(Rly. Stn. : Tatanagar, South Eastern Railway)
Grams : " IRONCO ".

Head Sales Office :
43, Chowringhee Road, Calcutta 700 071.
Grams : " IRONCO ". Phone : 448301.

●

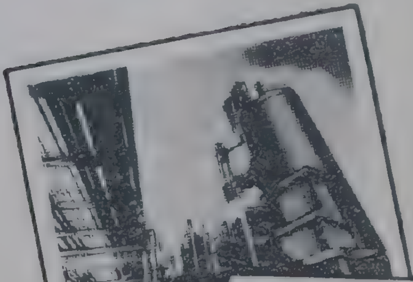
Directors :

Mr. J. R. D. Tata *(Chairman)*
Mr. N. A. Palkhivala *(Deputy Chairman)*
Mr. R. H. Mody *(Vice-Chairman and Managing Director)*
Mr. Keshub Mahindra
Mr. M. P. Wadhawan
Mr. Akbar Hydari
Mr. S. A. Sabavala
Mr. R. N. Tata
Mr. H. C. Sarin
Mr. Nusli N. Wadia
Mr. J. R. Joshi *(Financial Institutions' Nominee)*
Mr. Mantosh Sondhi *(Financial Institutions' Nominee)*
Mr. A. S. Gill *(Government Director)*
Mr. A. K. Bose *(Financial Director)*
Mr. S. R. Subbaraman *(Principal Executive Officer and Director)*
Dr. J. J. Irani *(Deputy Managing Director)*
Mr. K. C. Mehra *(Deputy Managing Director)*

●

Manufacturers of :

Coke, Pig Iron, Ferro Manganese, Steel Ingots, Blooms, Billets, Slabs, Sheet Bars, Tin Bars, Rails, Wheels, Tyres and Axles, Structural Shapes, Bars, Plates, Sheets (Black and Galvanised), Strip, Electrical Steel Sheets, Rolled Rings, Pick-axes, Powrahs, Beaters, Crow Bars, Hammers, Shovels, Ballast Rakes, Sulphuric Acid, Coal Tar, Sulphate of Ammonia, Benzol, Benzene, Toluene, Crude Naphthalene, Spent Oil, Bottom Sludge, Solvent Naphtha etc.



**Oil... to ammonia...
to fertilizers for growing
more foodgrains**

Chemical fertilizers have taken the nation several million tonnes ahead in foodgrain production. And, with the increasing emphasis on growing more food, additional fertilizer projects are also being planned—to ensure a steady supply of quality fertilizers. A process in which Taylor is fully involved. Taylor instruments are controlling the complex process of fertilizer manufacture in almost all the major plants in the country.

Today, the Taylor range of electronic and pneumatic instruments are serving to improve quality, cut costs and increase productivity in almost every major industry—from fertilizers, chemicals, paper and sugar to cement, steel and power. That's right ! Taylor India is very much a part of the growth of the nation, the process of progress.

In the process, Taylor is fully involved.

COMING ON STRONG
TAYLOR
INDIA
TAYLOR INSTRUMENT COMPANY (INDIA) LTD.
14 Mathura Road, Faridabad 121 003

BAA/TIL/1840 Rev.

TOP

offers a range of top precision scientific products

Microlitre Syringes from 1 µl to 500 µl and **Gas Tight Syringes** from 25 µl to 50 ml. **Jumbo Syringes** from 100 ml. to 1.5. litres.

KUEVETS

(Optical Precision Cells) 10 mm path length and other sizes to suit different makes of spectrophotometers, colorimeters, etc. Round and cylindrical also available.

Auto Dispensers for repetitive dispensing of pre-set volumes in 3 types from 1/4 ml to 20 ml. Also available for Microlitre syringes.

Spill Control Kits
provides a convenient, technically sound method for the control of common hazardous chemical spills.

ACIGARD SOLVIGARD CAUSTIGARD CLEAN O TOOLS

MUCAPS (Micro-Capillary Pipettes) Various capacities from 1 µl to 200 µl. Available in two varieties-end-to end and graduated.

TOP SYRINGE MANUFACTURING CO.
1, Lamington Chambers, 394 Dr. Bhadkamkar Marg, Bombay 400 004 Phone: 358033
B-9, Hans Bhavan, Bahadurshah Zafar Marg, New Delhi 110 002. Phone: 273439
Dinalaya, 9, Vaidyarama Iyer Street, T. Nagar, Madras 600 017

Unique Patented Filteration Systems also available

TOP SHANDILYA Tempo

LEADERS IN LABORATORY PRODUCTS

SHASHIS/344

Tempo LABORATORY & INDUSTRIAL HEATING EQUIPMENT

Unmatched quality & efficient service after sales make TEMPO your only choice

Vacuum Oven
Heating Mantle
Furnace
Water Still
Water Bath
Oven & Incubator

Also Mfg.: Heating Pads, Cords & Tapes, Paraffin Embedding Bath, Rotary Film Vacuum Evaporator, Hotplates, Humidity Oven, Drum Heaters, Melting Point Apparatus, Electrode Drying Oven, Magnets & Thermistors, Magnetic Stirrers etc.

Manufactured by: TEMPO INDUSTRIAL CORPORATION
PROPS. VIVIN INSTRUMENTS PVT. LTD.
Head Office: 1, Lamington Chambers, 394, Bhadkamkar Marg, Bombay 400 004. Branches at: New Delhi & Madras

For Safety of Your Cargo Shipments

WARE HOUSE YOUR PRECIOUS EXPORT IMPORT AND LOCAL CARGO:

IN OUR OPEN, COVERED GODOWNS, HUGE COVERED AND OPEN SPACE AVAILABLE VERY CLOSE TO DOCKLINE & RAILWAY GOODS YARDS WITH THE FACILITY OF LOADING, UNLOADING STACKING & TRANSPORTING.

ALL SERVICES UNDER ONE ROOF :—

a. We receive & deliver the goods even after working hours.
b. We can arrange Loading, Unloading, Stacking and transporting at your cost.
c. Insurance can be arranged by us at extra cost.
d. Payments are accepted and delivery is given on the spot.
e. Bags Stiching, Cases & Cartons Packing and weighting facility is also available on request.
f. 24 hours Security by trained guards.
g. Economical and reasonable charges.
h. No minimum time limit for storage or no limit on quantity.

AREA, LOCATION & SITUATION OF WAREHOUSING UNITS :—

a. Our Units are situated in the heart of Bombay City
b. Our units are at: Danabunder, Katha Bazar, Mazgaon, Reay Road, Sewri, Cotton Green, Byculla, Wadala, Parel, Chembur, Bhandup & Thana.
c. Our all units are complete in all respects, R.C.C. Construction. and Measuring total area approx 95,000 Sq. Feets.
d. Our all units are having separate parking facilities for lorries cranes and big traliors.
e. Our Units are having Watersupply, Electricity, & Telephone facilities
f. Our units are having the storage capacity of thousands tonnes at a time.

FOR STORAGE SPACE & OTHER PARTICULARS: PLEASE CONTACT

TWA

THAKKAR WAREHOUSING AGENCY

(STORING, WARE HOUSING AGENTS & TRANSPORT CONTRACTORS)
511, Sujata Chamber, 1/3, Mirchi Street, Near Abad Bank House
Narsi Natha Street, Katha Bazar, Bombay-400 009
Phone 337504 321222 Cable Waregoods Chinch Bunder, Bombay- 9

BOREWELLS

TUBE WELL CORPORATION OF INDIA

Leading Tube Well Boring Contractors for

Factories, Housing Societies, Industries and Farms also Diamond Drilling Test Bores: Executed Anywhere.

●

Tel. No. 445371.

Zaver Banoo Terrace, 2nd Building,
Opp. Bank of India Wadala Church Branch,
670, Parsi Colony, Dadar, Bombay 400 014.

THE TATA OIL MILLS COMPANY LIMITED

(Established in 1917)

Head Office :
Bombay House, 24, Homi Mody Street,
Fort, Bombay 400 023.

Phone : 259131. Grams : "TATOILS".

★

Works :
Bombay, Calcutta, Tatapuram (Kerala), Ghaziabad (U.P.), Madras & Calicut (Kerala), Gauhati, Jasidih (Bihar), Kandla (Gujarat).

★

Manufacturers of & Dealers in :
Laundry and Toilet Soaps, Synthetic Detergents, Glycerine, Oils and Oil-cakes, Edible Oils, Eau-de-Cologne, Hair Oils, Food Products, Sea Foods and Animal Feeds.

TATA INDUSTRIES
LIMITED

Bombay House, Homi Mody Street, Fort,
Bombay 400 023.

Directors :

J. R. D. Tata (*Chairman*)
N. H. Tata
N. R. Mody
D. S. Seth
A. B. Bilimoria
A. H. Tobaccowala
K. M. Chinnappa
F. A. Mehta
S. A. Sabavala
R. N. Tata
S. R. Vakil
A. B. Kerkar
M. H. Mody
F. K. Kavarana
B. Nehru
K. S. Hinge
F. C. Kohli
H. N. Vajifdar
J. E. Talaulicar
M. A. S. Dalal
N. A. Soonawala
H. D. Vakil (*Secretary*)

Corresponding Firms :

Tata Limited, 18 Grosvenor Place, London SWIX 7HS. Tel. Address : "TATALD".

Tata Incorporated, 425, Park Avenue, New York, N.Y. 10022. Tel. Address : "TATAINC".

Tata A. G. Gottardstrasse 3, CH-6300, Zug, Switzerland. Tel. Address : "TATAG" ZUG.

Telegraphic Address : "TATIND".
Phone No. 259131.

TATA SONS
LIMITED

Bombay House, Homi Mody Street, Fort,
Bombay 400 023.

Directors : J. R. D. Tata (*Chairman*)
N. H. Tata
S. Moolgaokar
N. A. Palkhivala
D. S. Seth
A. B. Bilimoria
J. J. Bhabha
F. A. Mehta
R. N. Tata
R. H. Mody
P. S. Mistry

Chief Executive Officer : M. H. Mody

Corresponding Firms :

★ Tata Limited, 18 Grosvenor Place, London, SWIX 7HS. Tel. Address : "TATALD".

★ Tata Incorporated, 425, Park Avenue, New York, N.Y. 10022. Tel. Address : "TATAINC".

★ Tata A. G., Gottardstrasse, 3, CH-6300, Zug, Switzerland. Tel. Address : "TATAG", ZUG.

Telegraphic Address : "TATASONS".
Phone No. 259131.

TULSI

IS PLEASED TO ANNOUNCE A TECHNICAL COLLABORATION WITH

PERMUTIT

COMPANY INC.

(A ZURN GROUP COMPANY)

E.49 MIDLAND AVENUE, PARAMUS
N.J. 07652, U.S.A.

Under this collaboration Tulsi will now be able to offer large capacity reverse osmosis plants, a comprehensive range of effluent treating equipment and also special and advanced techniques in ion exchange demineralising and industrial water treatment.

This collaboration is in addition to the existing collaboration Tulsi has with Ionac Chemical Company, a division of Sybron Corporation, Birmingham, New Jersey 08011, U.S.A. for Ion Exchange Resin Technology

TULSI

Tulsi Fine Chemical Industries Pvt. Ltd.

ASSOCIATE COMPANY : THERMAX PRIVATE LIMITED
1216/7 SHIVAJINAGAR FERGUSSON COLLEGE ROAD POONA 411 004
PHONE 51041 GRAM TULSION TELEX 0145 364

BRANCH OFFICES : BOMBAY • NEW DELHI • CALCUTTA • MADRAS
BANGALORE • AHMEDABAD • HYDERABAD

[illegible] Advertising

STANDARD GARAGE

Dealers in Automobile Parts and
Accessories.

Selling Concessionaires of:

Teksons Ltd.

- **RADIATORS and Heat Exchangers**
- **Fuel and Oil Flexible Hoses**
- **Low and High Pressure Hoses**
- **Brake Hoses**
- **Push-Pull Couplings**

*

Regd. Office :
Modi Chambers, Bombay 400 004.
Cable : " ACCESORIES ".
Phones : 359232/33 & 380676.

TRIDENT
(ISI)

We manufacture :

- Hot Dip Galvanized Iron Wire 6 to 18 Gauge.
- Flat and Round Galvanized Cable Armour Wire (all sizes) with IS 3975 mark.
- Shaped wire sections to customers specification in Ferrous and non-Ferrous Metals.

Contact :

**TRIDENT METAL PROFILES
P. LIMITED**

8, Bhagwan Mansion, Cinema Road,
Bombay 400 020.
Tel. Nos. 293771 & 293945.

TENGL

TRACTOR ENGINEERS LIMITED

(Larsen & Toubro Limited in collaboration with Caterpillar Overseas S.A., Geneva, a wholly owned subsidiary of Caterpillar Tractor Co., U.S.A.)

Registered Office :
L&T House, Ballard Estate, Bombay 400 038
Phone : 268181. Grams : " TENGELTRAK ".
Telex : 2246.
Factory : Saki-Vihar Road, Powai, P.O. Box 8913,
Bombay 400 072.
Phone : 581401. *Telex :* 3494.

Manufacturers :
Parts for track type tractors.
Parts for earth drilling machinery.

Directors :
N. M. Desai, D. L. Pradhan, B. G. N. Patel, K. S. S. Mani, M. W. Dargel, J. W. Busch, D. F. Coonan, K. G. Erickson.

Products Distributed by :
Tractor Engineers Limited,
P.O. Box 8913, Bombay 400 072.
Larsen & Toubro Limited,
P.O. Box 278, Bombay 400 038.
Tractors (India) Limited,
P.O. Box 323, Calcutta 700 001.

' EMAX ' Wax-Emulsion (Anionic)

A SMOOTH UNIFORM WHITE
EMULSION OF WAX
APPLICATIONS IN TEXTILE INDUSTRY
SOFTENING COTTON
WATER PROOFING
FINISHING RAYON
HEAVY WOOLLEN OVERCOATINGS
AFTER TREATMENT OF DYED YARNS
APPLICATION IN PAPER INDUSTRY
SURFACE COATING
SURFACE SIZING
WATER REPELLANT FINISHES

●

CHIRAG WAX-CANDLES
AVAILABLE AT COMPETITIVE PRICES

Manufactured by :

UNITED INDUSTRIES

Office : 364 370, Samuel Street, 2nd Floor,
Bombay-400 003.
Phone : 324714.

UNIT TRUST *offers 5 safe ways that make your savings grow.*

- **Unit Scheme 1964** — Steadily growing dividend. Ready encashability. Tax exemptions.
- **Unit Linked Insurance Plan** — A savings plan combining life insurance and accident insurance cover with high returns. Plus, you get tax rebate as in the case of Provident Fund and LIC premium.
- **Children's Gift Plan** — For a child you love. His very own investment to grow up with. And he can win a large prize too.
- **Reinvestment Plan** — Automatic reinvestment of dividend in more units. At the special offer price.
- **CRTS-81** — A scheme for Charitable and Religious Trusts and Registered Societies, providing an attractive rate of dividend — minimum 12%.

UNIT TRUST OF INDIA

For further information, please contact our nearest office :

- 13, Sir Vithaldas Thackersey Marg, Bombay 400 020.
- 4, Fairlie Place, Calcutta 700 001.
- Regina Mansion, 46, Second Line Beach, Madras 600 001.
- Gulab Bhawan (Rear Block), 2nd Floor 6, Bahadur Shah Zafar Marg, New Delhi 110 002.
- 455, The Mall, Ludhiana 141 001.
- 12/722, Thekkemadom Road, Trichur 680 001.

Gram : " RUBERSTIC ". Phones : 22-4654 and 23-7969.

UNIVERSE TRADE ENTERPRISES

1, Princep Street (3rd Floor), Calcutta-700 072.

MANUFACTURERS OF :

Chevron, Hydraulic, Pneumatic, Mechanical, Conveyor, Rubberised, Synthetic, Resin Bonded, Asbestos Graphited, Cloth Wire Inserted, Swivel, Lion, Twin Set Packings, Piston Cups, Wiper Seals, Rod Seals, U-V Cup Seals, Gland Packings for Oil, Water-Air-Acid-Steam strictly as per drawing and specification.

SPECIALISED IN :

Oil Seals, 'O' Rings, Buckets, Gaskets, Bushes, Diaphragms, Expansion Joints, Bellows, Rubber & Metal bonded items and other types of Neoprene, Nitrile, Synthetic, Natural rubber moulded and extruded components ; Teflon, Plastic, Nylon, Leather, Fibre, Asbestos, Felt, Carbon, Hylam, Glass-fibre items as per drawing and specification.

HIGHLY SPECIALISED IN :

VITON, SILICONE, FLUORO-SILICONE, EPDM, BUTYL, POLYACRYLATE, POLYSULPHIDE, POLYURETHANE (Vulkollan), HYPALON moulded components as per drawing, sample and specification.

United Phosphorus Pvt. Ltd.

Manufacturers of Best Quality

RED PHOSPHORUS

PHOSPHORUS PENTASULPHIDE AND OTHER PHOSPHORUS
CHEMICALS AND PESTICIDES.

Office :

READYMONEY TERRACE,
167, DR. ANNIE BESANT ROAD, WORLI,
BOMBAY 400 018.

PHONES : 370681, 375899, 370560.

NOW

EVEN
THE COMMON MAN
CAN ENJOY
**VIDEO SHOW
ON COLOUR TV**

You have heard so much about Video now you can see it, at your place, in the company of friends and family. Service available on first come first served basis.

ON HIRE

Asha Art

Contact immediately for details

VIDEO K LIBRARY

7 Marryland Corner, Sion, Bombay 400 022
Branch-7/42 Tardeo Air-Conditioned market, Bombay 400 034
PHONE: 483301 • 374139 • 897231

EX-IM BOOKS LIBRARY From Dr. Paul Singer, Ph.D. (Econ.) EXPORT-IMPORT CONSULTANT, CANADA

" EX-IM, YOUR ROAD TO WEALTH "

(How to establish and run an export-import business with almost no capital) (150 pages).

$ 30 by surface mail $ 39 by air mail.

Ask for a fully descriptive brochure.

" EXPORTING OVERSEAS "

(A Blueprint for Export-hungry Manufacturers) (335 pages).

$ 65 by surface mail $ 80 by air mail.

Ask for a fully descriptive brochure.

" A PRACTICAL & COMPLETE GUIDE TO PROFITABLE EX-IM MARKETING "

(200 pages).

(Contains nearly all Marketing and Buying possibilities)

$ 49 by surface mail $ 63 by air mail.

Ask for a fully descriptive brochure.

" INTERNATIONAL FREIGHT FORWARDING "

(A complete guide for Exporters, Importers, Freight Forwarders, Customs Brokers, etc.)

(385 pages).

$ 65 by surface mail $ 80 by air mail.

Ask for a fully descriptive brochure.

" THE IMPORTS & EXPORTS OF 212 WORLD MARKETS "

Second edition, enlarged and updated (145 pages).

(A new and unique reference work indispensable for acknowledgeable international trade)

$ 27.50 by surface mail $ 35 by air mail.

" THE IRRESISTIBLE SYSTEM OF DYNAMIC COSTING AND PRICING FOR EXPORT "

(Why lose an Export order on account of price ?)

(165 pages).

$ 42 by surface mail $ 60 by air mail.

Ask for a fully descriptive brochure.

" A BIRD'S EYE VIEW of THE EX-IM WORLD "

(150 Articles on many EX-IM countries and industries)

$ 20 by surface mail

$ 28 by air mail.

" THE INTERNATIONAL BUSINESS CORRESPONDENCE IN ENGLISH-FRENCH-SPANISH-GERMAN "

(If you know one of these four languages, this nearly 1200-page book will immediately enable you to correspond perfectly in any of the other three). This whole unique book photocopied, since there are technical difficulties about reprinting it.

$ 120 by surface mail $ 165 by air mail.

" THE MONTHLY EX-IM OPPORTUNITIES MAGAZINE FOR ALL TYPES OF MERCHANDISE IN 212 WORLD MARKETS "

Monthly Circulation of 2,50,000 Copies.

Annual Subscription Can $ 55.00 as Printed matter by Air Assist, and Can $ 70.00 by First Class Letter Air Mail.

Free Specimen Copy on Request.

Please contact :

Subscription Agents in India :—

M/s. VICTORY MERCANTILE AGENCIES

Phadke Building, 3rd Floor,
Ahilyabai Chowk, Kalyan 421 301,
Dist. Thane,
Maharashtra State.

VOLTAS LIMITED

Registered Office and Corporate Management : 19, J. N. Heredia Marg, Ballard Estate, Bombay 400 038. Tel. : 268131 (30 lines). Telex : 011-2239 & 011-3054.
Grams : " SATVOL ".

MANUFACTURING PLANTS

Main Works : 2nd Pokhran Road, Post Box No. 72, Thane 400 601. Tel. : 591951 (10 lines). Grams : " VOLTHANA ". Telex : 4465.

Switchgear Plant : Off 2nd Pokhran Road, Thane 400 601. Tel. : 593551. Grams : " TATAMERGER ".

Motor & Transformer Plant : Industrial Estate, Lalbaug, Bombay 400 012. Phone : 442591. Grams : " NATELIN ".

Transformer Plant : Nagar Road, Pune 411 014. Phone : 24265. Grams : " NATELIN ".

Research & Development Division : 2nd Pokhran Road, Thane.

Branches : Bombay, Calcutta, New Delhi, Madras, Bangalore, Lucknow, Jamshedpur, Ahmedabad, Secunderabad.

Resident Manager's Office : New Delhi.

Offices : Anand, Asansol, Baroda, Bhopal, Bhubaneswar, Chandigarh, Cochin, Coimbatore, Cuttack, Dhanbad, Gauhati, Indore, Jaipur, Kanpur, Margao, Nagpur, Patna, Pune, Trivandrum, Visakhapatnam.

Directors : A. Hydari (Chairman), A. H. Tobaccowala (Vice-Chairman & Managing Director), J. D. Choksi, B. Reinhart, R. J. Matthai, S. P. Mehta (Alternate Director for B. Reinhart), M. L. Apte, N. J. Jeejeebhoy (Executive Director), B. C. Randeria, Dr. K. S. Krishnaswamy.

Corporate Management : A. H. Tobaccowala (Vice-Chairman & Managing Director), R. C. Sarin (President), N. J. Jeejeebhoy (Executive Director), R. P. Radhakrishnan (Vice-President — Engineering), P. B. Daruvala (Vice-President — Personnel), G. A. R. Shaikh (Director of International Operations), M. S. Padmanabhan (Vice-President — Electrical), P. A. Kapadia (CGM — Textile Machinery), S. M. Bhandarkar (CGM—Finance & Accounts).

VOLTAS is India's major integrated engineering, distributing and manufacturing organisation. It has a turnover of Rs. 288 crores.

As a versatile marketing organisation, Voltas handles a wide variety of products. The product range includes mining machinery, air conditioning and refrigeration equipment, textile machinery, electrical switchgear, materials handling equipment, machine tools, equipment for control of pollution, modern farm equipment, pharmaceuticals, marine products and industrial chemicals.

Among the products manufactured by Voltas are : Central air conditioning and refrigeration equipment, packaged air conditioners, room air conditioners, water coolers, mining and drilling machinery, fork lift trucks, diamond core drills, haulages, mine fans, power capacitors, motors, switchgears and controlgears.

With the distribution and engineering expertise gained in India, Voltas has been progressively expanding its export operations. The Company also handles complete projects or systems on a turnkey basis in various fields in countries abroad. These include : water well drilling, water and farm management, power distribution and air conditioning and refrigeration

VOLTAS LIMITED

The Weekly Provokes

It challenges outmoded thought, refutes established ideas, confronts social mores and clarifies opinions on the vital issues of the day.

The Weekly presents conflicting points of view on matters of national significance — thus giving you the full story with all its ramifications.
It does so through highly readable articles by the foremost authorities in the field, week after week..
Provocation at its most challenging — that's the Weekly
There's just no substitute for The Illustrated Weekly of India.

The Illustrated Weekly of India

The Weekly family habit the nation enjoys.

ARMS-BC/IW-36-77

AT LAST... IT'S HERE!

'SAATBHAI CHAMPA'
BENGALI COLOUR
...and many many more!

ZOOM
VIDEO TAPES

BLANK PRE-RECORDED
Manufactured to world standard
for both VHS & BETAMAX

FOR DETAILS CONTACT

ZOOM FILMS Ltd
The Original VIDEO People
323, CHAMPAKLAL INDUSTRIAL ESTATE
PLOT NO 106, SION (EAST) BOMBAY 400 022
PHONE 484797 TELEX 11 6281 KLKS IN

DEALERS & DISTRIBUTORS WANTED
THROUGHOUT INDIA

SWITCHGEAR
PRODUCTS
BAJERIA

MANUFACTURERS OF ELECTRICAL SWITCHGEAR-TRACTION EQUIPMENTS. ELECTRICAL POWER TRANSMISSION LINE MATERIALS, OVERHEAD LINE FITTINGS. ALUMINIUM/COPPER BRAIDED FLEXIBLE STRIPS/CORDS, SHUNTS FLEXIBLE CONNECTOR. (Connecting cable for Transformer & Switchgear Industries)

FIXED CONTACT & MOVABLE CONTACT OF SHORT CIRCUIT SWITCH (CELL), SILVER CONTACT BRUSH HOLDERS FOR TRACTION MOTORS & GENERATORS. COMMUTATORS.

PANEL BASE FOR ARC FURNACE, ARC BOX FABRICATED FROM SINDANYO ASBESTOS, ARC-HEAT RESISTING BOARDS HIGH VOLTAGE HRC FUSE LINKS FOR TRACTION (RAILWAY) REWIRABLE FUSES, DROP OUT FUSES PRESSED AND PUNCHED METAL COMPONENTS

bajeria industries

103, MASCARENHAS ROAD, MAZGAON, BOMBAY-400 010
Phone Off. 373747, 861066
Works: BODHAK ROAD, KHAMBHAT • 388620 Phone: 2354

ABS CHROME PLATING

CEESHAM TRADERS

Seksaria Industrial Estate, 2nd Floor, Chincholi, S. V. Road,
Malad (West), Bombay 400064

Phone : 695527

Grams : "CEESHAM"

Moulding Tool Room & A B S Plating under one roof.

ABRASIVES

ALIROX ABRASIVES LIMITED

Registered Office:

4, Scindia House,
Connaught Circus,
New Delhi 110 001.
Phone : 44003. Telex : 31-3811.
Grams : "ALIROX".

Manufacturers of :

Coated Abrasives i.e. (Flint Paper, Emery Paper, Emery Cloth, Water Proof Paper), Emery Grains, Calcined Magnesite Powder & Flint Grains.

ABRASIVES

A full range for all your needs.

★ RESIN-BONDED WHEELS for snagging, fettling and cutting off wheels.

★ VITRIFIED, BONDED WHEELS & SEGMENTS for precision and off-hand grinding.

★ MAGNESITE-BONDED WHEELS for specialised applications.

ASSOCIATED ABRASIVES PVT. LTD.

H. O. : Chandra Nivas, Behind Police Lines, Post Box No. 8706,
Andheri (East), Bombay 400 069.
Phones : 88156/88157. Grams : "ABRESAI".
Works : 92, Satpur Indl. Area, Satpur, Nasik 7.
Phone : 8156. Telex : 752-281 AAPL-IN.

ABRASIVES

EMPEE CORPORATION PVT. LTD.

Authorised Dealers of:

"OAKEY BRAND" Waterproof, Resin Bond, and Glue Bond Paper and Cloth Abrasives, Discs, Belts, Rolls, Tapes etc.

44, Cawasji Patel Street,
Fort, Bombay-400 001.
Phone : 257782

ABRASIVES

orient

SHOTS & GRITS

Available Ex-stock

Contact :

PANKAJ & CO.

303-C, Steel Chambers,
Broach Street, Bombay 400 009
Phones : 326408 & 349737.

ABRASIVES

We Book Indents on Behalf of :

M/s. PUMEX S.P.A., ITALY.

For various grades of :

PUMICE STONES, GRANULES, PELLETS, POWDER, LUMPS, MOUSE-SHAPE PUMICE STONES.

Contact : **Mr. Surveyor,**

M/s. V. PECH & CO.

Aidun Building, 5th Floor, Dhobi Talao,
Bombay 400 002.
Phones : 315534/253918.
Telex : BYKM 011-4088.

ABRASIVES & GRINDING WHEELS

CHETAN TRADING COMPANY

65, Sarang Street, Bombay 400 003.

Sole Distributors for : Abrasive Wheel Dresser Cutter.

Authorised Stockists for : Coated Abrasives such as Sand Paper, Emery Paper/Cloth, Waterproof Paper, Belts, Rolls and Discs manufactured by Cutfast Abrasive Tools Pvt. Ltd. (Jawan Brand), Carborundum Universal Ltd., John Oakey & Mohan Ltd., Emery (India) Pvt. Ltd., "Lion" brand Emery Powder Grinding Wheels, General Abrasive Co. Pvt. Ltd., Bombay. Ask for Stainless Steel, Tubes, Rods, Tool & Alloy Steel.

Phones : Office : 322547, 339651; Res. : 476068.

ABRASIVE GRAINS & ALLIED PRODUCTS

EMERY (INDIA) PVT. LTD.

Bedeshwar, Jamnagar 361 002.
Phones : 5269 & 3214.
Telex : 161-219 EMERY IN.

Manufacturers :

LION BRAND Emery, Grains, Powder, Valve Grinding Paste, Luster Bars, Cleaning Compound & Magnesium Oxide.

ABRASIVES AND GRINDING WHEELS

GRINDWELL NORTON LTD.

Regd. Office : Army & Navy Building, 148, Mahatma Gandhi Road, Bombay 400 023. Phone : 244727. Telex : 011-2480.

Works : Grinding Wheel Division — Mora — NAD-KARANJA, Dist. Kolaba 400 704. Phone : 31.

Abrasive Materials Division : Devanahalli Road, Off Old Madras Road, Bangalore 560049. Phone : 58731. Telex : 0845-449.

Manufacturers of : Precision Grinding-Wheels, Segments, Stones, Sticks, and Depressed Centre Discs, Cut-off Wheels, Coated Discs, Refractories and Silicon Carbide Grains.

Branches & Representatives in : Ahmedabad, Asansol, Bangalore, Baroda, Bhopal, Bombay, Calcutta, Coimbatore, Hyderabad, Jamshedpur, Jullunder, Kolhapur, Kanpur, Madras, New Delhi, Poona, Ranchi and Jaipur.

Phone: 244727. Grams: "GRINDWELL". Telex: GNO 011-2840.

ABRASIVES & GRINDING WHEELS

M. DESAI & CO.

163, Narayan Dhuru Street, Bombay 400 003.

Authorised Dealers of : Bonded & Coated Abrasives by Carborundum Universal Ltd., Grinding Wheels of all types, Emery, Aloxite & Silicon Carbide Paper & Cloth in Sheets, Rolls, Belts & Discs etc.

Phones : 323248 Resi. : 381067.

Also at Ahmedabad, Baroda, Rajkot, Cambay.

ACCOUNT BOOKS, STATIONERY MFRS. & DATE DIARIES

CRYSTAL STATIONERY MART

146, Abdul Rehman Street,
Bombay 400 003

Manufacturers of: Account Books and other Stationery

Phone: 324461 Grams: "CRISMART"

ACCOUNT BOOKS

For all type of Exercise Books,
Account Books, Files,
Registers, and Stationery Articles
and Quality Printers.

MUKUND - ART - PRINTERS

Akot Stand, Akola 444 001.

Phone : 51

ACID & CHEMICALS MERCHANTS

THANA ACID & CHEMICAL CO.

ACID & CHEMICALS MERCHANTS

Head Office:
409, Sharda Chambers, 31, Keshavji Naik Road,
Bombay-400 009.
Phones: 339229-339684-344895 Telex: 011-5815 ACID.

Thane Office:
End of Express Highway, L.B. Shastri Marg,
Thane-400 601
Phones: 594692-591236 Resi: 574078-567026.

ADHESIVES

ANNAPURNA LABORATORIES

Manufacturers of:
'SYNESOL' Industrial Adhesives, Tailormade for wood furniture, Cigarettes, Radio cabinets, Textile, Leather, Pharmaceutical and other industries for use on highly automatic machines.

231, Godavari Mhatre Road,
Bombay 400 068.

Phone : 662828

SECURITY EQUIPMENT MFRS.

ADHESIVES MFRS.

CHEMISOL INDUSTRIES

Mfrs. of complete range of:
Industrial Adhesives for Rubber, Leather, Metal, Plastic, Wood, Fabric, Rubberized Water Proofing Coating, etc. and almost anything to anything.

41, Princess Street,
Bombay-400 002.

Phones : 319086, 312732, 299739.
Telex No. 011-6109-KC-MI.

ADVERTISING AGENTS & CONSULTANTS

ADVERTISING & SALES PROMOTION CO.

22, Vaswani Mansions, Dinshaw Vachha Road,
Bombay 400 020

Phones: 221112 & 221165 Grams: SALESAID

BANGALORE: 22, Brunton Road, Bangalore 560 025.
CALCUTTA: 15, India Exchange Place, Calcutta 700 001.
COCHIN: XXX/601, Mahatma Gandhi Road, Ernakulam, Cochin 682 016.
HYDERABAD: 6-3-883/A/1, Punjagutta, Hyderabad 500 004
NEW DELHI: Padma Towers, 11th Floor, 5, Rajendra Place New Delhi 110 008
MADRAS: 8, Halls Road, Egmore, Madras 600 008

ADHESIVE TAPES MFRS. IN INDIA

TAPEX

Offers :—

- **PVC SELF-ADHESIVE TAPES** (in different colours and sizes).
- **CLOTH ADHESIVE TAPES** (insulation and water-proof grades).
- **POLYETHYLENE SELF-ADHESIVE TAPES** (all purpose).
- **PAPER SELF-ADHESIVE TAPES.**
- **SPECIFIC CABLE WRAPPING TAPES.**

Manufactured by :

TAPEX CORPORATION
Belgaum (Karnataka).

ADVERTISING AGENTS & CONSULTANTS

HEROS' PUBLICITY SERVICE

4-B, Vulcan Insurance Bldg.,
Veer Nariman Road,
Bombay 400 020.

Phones : 220214-86. Grams : 'HEROSPUB'.

ADVERTISING AGENTS & CONSULTANTS

HINDUSTAN THOMPSON ASSOCIATES LIMITED

Lakshmi Bldg., Sir P. M. Road,
Bombay 400 001.

Offices at :

30, Bondel Road, Calcutta 700 019.
35, Rani Jhansi Road, New Delhi 110 055.
26, Commander-in-Chief Road, Madras 600 015.
131, Residency Road, Bangalore 560 025.

Phone : 250190. Grams : "THOMERTWAL".
Telex : 3555. P. O. Box 541.

ADVERTISING & PUBLICITY AGENTS

NEWFIELDS ADVERTISING PVT. LTD.

3/4-A, Asaf Ali Road, New Delhi 110 002.

Branches in Forty Countries abroad.

All Service Advertising Agents and Publicity Consultants

with connections all over the world; fully accredited by I.E.N.S., AIR, D. A. V. P. Member A.B.C., A.A.A.I. and International Markets Advertising.

ADVERTISING AGENTS & CONSULTANTS

PARAMOUNT PUBLICITIES

96-A, Mount Road, Teynampet, Madras 600 018.

Specialists in : Newspaper Publicity all over India and abroad ; Fully equipped to provide complete advertising services; Recognised by Newspapers all over India. Consult, for anything and everything in advertising.

Phone : 440209, Madras.

PIN CODE No. 600 018.

ADVERTISING PUBLICITY AGENTS & DESIGNERS

PIONEER PUBLICITY CORPORATION

227, CM-1, Jhandewalan, New Delhi 110 055.
Phones : 520214, 527880.
Amritsar Office : 179A, Ranika Bagh.

- ★ Comprehensive Outdoor Advertising.
- ★ Best Hoarding sites in N. India.
- ★ Approved Contractors, D.A.V.P., Min. of Information & Broadcasting, Govt. of India.
- ★ Recognised Agents of Railways.
- ★ KIOSK on Electric Poles, Delhi, Ludhiana, Amritsar.
- ★ Painting.

ADVERTISING AGENTS

BOOK YOUR ADVERTISEMENTS
FOR
ALL NEWSPAPERS • MAGAZINES
ETC.
•CALL FOR SERVICE•

RAJKISHORE AGENCY

1, Sapna Building, Opp. Marathe Udyog Bhavan,
New Prabhadevi Road, Worli,
Bombay 400025.
Phones:
Office: 4229019 & 4229968 Resi.: 531727

ADVERTISING AGENTS & CONSULTANTS

TOM & BAY (Advertising) PVT. LTD.

Registered Office :
Ashok Chambers, 658, J. M. Road,
Pune 411 004.

Phone : 54221 2. Grams : "ADLINK".

Chairman : G. V. Tambe.

Jt. Managing Directors : A. G. Tambe, R. G. Tambe.

Branch Office : 601, Niranjan, 6th Floor, 99, Marine Drive.
Bombay 400 002. Phone : 295307.

ADVERTISING AGENTS & CONSULTANTS

ULKA ADVERTISING PVT. LTD.

Nirmal, Nariman Point, Bombay 400 021.
Phones : 233884, 233921, 233962. Grams : " ULKADS "
Telex : 011-3560.

1/2, Lord Sinha Road, Calcutta 700 071.
Phones : 431847, 432287, 349625. Grams : " CALULKA ".
Telex : 021-7229.

811, Padma Tower I, 5, Rajendra Place, New Delhi 110 008.
Phones : 566716, 566718. Grams : " DELULKA ".
Telex : 031-3036.

Branches : Calcutta, New Delhi.
Chairman : Mr. Bal B. Mundkur.
Mg. Director : Mr. Bhasker B. Mundkur.

ADVERTISING GIFTS & GIVE-AWAYS

AMIT ADVERTISERS

High Class Stationers & Advertisers. Deals in :

All types of Advertising Gifts & Plastic Novelties, such as, Diaries, Purses & Pen Stands, Ballpens and Stationery Articles etc.

Our speciality in new range of Key Chains.

Regd. Office : 17-A, Kamla Nagar, Delhi 110 007.
Grams : " KEYRING ".

Admn. Office : 5305, Sindhi Galli, Gandhi Market, Sadar Bazar, Delhi 110 006.

ADVERTISING GIFTS & GIVE-AWAYS

GRANDWAY ADVERTISERS

2322, Teliwara, Sadar Bazaar,
Delhi 110 006.

Phone : 511898.

Grams : " GRANDWAY ".

Exporters, Manufacturers & Suppliers of :

CALENDARS, DIARIES, PURSES, PLASTIC NOVELTIES, KEY CHAINS, GREETING CARDS etc.

ADVERTISING GIFTS & NOVELTIES

NARENDRA BROTHERS

2E/22, Jhandewalan Extn., New Delhi 110055
Phones: OFFICE: 527852, 528521. WORKS: 521174.

Manufacturers of

ENBRO exclusive Gifts & Sales Promotion Novelties in Plastic, Sheet Metal like Telephone Index, Penstand, Ash Tray, Pencil Tray, Tumbler, Wall & Table Calendar, Motorised Roll Paper Dispenser, Motorised Telephone Index etc etc

---

AERATED WATER MACHINERY & REQUISITES

ESOOFALY MAHOMEDALY & CO.

(Estd. : 1845)

Dealers in :—Aerated Water Requisites.

Sole Selling Agents :

INDIAN CARBON DIOXIDE INDUSTRIES, MADRAS

CARBONIC INDIA, THANE, BOMBAY

for Dry Ice & Liquid CO_2 gas.

Head Office : 102/4, Sarang Street, Bombay 400 003.
Grams : "PURIFIED ". Phones : 326515 & 325633.

Branches : 12, Walltax Road, Madras 600 003.
Phone : 33400. Grams : " HARMLESS ".
13-11-233, Convent Street, Park Road, Vijayawada-1.
Phone : 71004. Grams : " PURIFIED ".
Also at : Shivaji Road, Kolhapur.

AIR-CONDITIONING & REFRIGERATION

AMERICAN REFRIGERATOR CO. LTD.

REFRIGERATION & AIR-CONDITIONING ENGINEERS

Manufacturers of : Famous ' ARCO ' Window type 1 ton & 1½ ton Air-Conditioners, Water Coolers, Refrigerators, Packaged Air-Conditioners, Bottle Coolers, Industrial Fans & Blowers, centrifugal, axial, material handling and Dust extraction type, ARCO Bush Coils, Condensers, Chillers, Heat Exchanger and Hydraulic Presses.

Sole Agents for : TRANE Air-Conditioning and Refrigeration Equipment, TRION Electronic Air Filters, Barber-Coleman Controls and Air-distribution equipment in India.

Contractors for: Air-conditioning, Ventilation, Cold Storage and Industrial Refrigeration plant.

HEAD OFFICE: 13/C, Russell Street, Calcutta 700 071.

Branches: Sadhana Rayon House, D. N. Road, Bombay 400 001
20-A, Shivaji Marg, New Delhi 110 015.
Ahad Mansion, 740, Anna Salai, Madras 600 002.

AGENTS & GENERAL MERCHANTS

DEKI & MANK

For complete technically balanced design, manufacturing & commissioning of soft gelatin cooking & melting plants, essential oils, turpentines & rosins, gels & resins manufacturing plants on turnkey basis, S. S. pilot plants, reactors, heat exchangers, vessels, etc. spray dryers, rotary dryers & continuous drying plants.

Contact :

DEKI & MANK

B/58, Giriraj Industrial Estate, Mahakali Caves Road, Andheri East, Bombay 400 093.

AGRICULTURAL IMPLEMENTS & SPARES

MODERN FARM AIDS

Manufacturers of :

Crocodile ' Brand Modern Agricultural Implements, Harrow discs and other Spares.

4-E/8, Jhandewalan Extn., New Delhi 110055.
Phones : 52-1007, 711085.

Works :

A-5/C, Modern Ind. Estate, Bahadurgarh 124507 (Haryana). Phone : 292.

AIR-COMPRESSORS & ACCESSORIES

P. RAI & COMPANY

121, Commerce House, 140, Nagindas Master Road,
P. B. No. 139-A, Bombay 400 001.
Phones : *Office* : 272419, 272853 ; *Resi.* : 573640.

Manufacturers of :

Air-Compressor Parts, Air Filters, Pressure Regulators, Lubricators, Solenoid Valves, Air Cylinders, Control Valves, Pressure Switches, Flow Control Valves, Non Return Valves, Quick Exhaust Valves, Dehumidifiers etc.

AIR-CONDITIONING & REFRIGERATION ENGINEERS

BOULTON TRADING CORPORATION

7, Lentin Chamber, Ground Floor, Dalal Street,
Fort, Bombay 400 023.
Phones : 273937 & 271918.

Refrigeration and Air-Conditioning Machines & Spares for Freon & Ammonia Plants, Freon Gases, Compressors, Copper Tubings, Expansion Valves, Driers, Relays, Overloads, Capacitors, Tools & Fittings.

AIR-CONDITIONING & REFRIGERATION

FRIGTOOLS REFRIGERATION & ENGG. CO.

1, Darya Ganj, New Delhi 110 002.
Phones : 274014, 260808.

Manufacturers of :

Refrigeration Tools, Valves, Fittings, Cylinders, Accessories, Gas charging and Evacuating equipments, Copper fittings, Leak detectors, Air-conditioning & Cold storage machinery and Food testing instruments.

AIR-CONDITIONING & REFRIGERATION
EQUIPMENTS & FITTINGS

GORAKHRAM HARIBUX

4, Ground Floor, Apeejay House,
130, Bombay Samachar Marg, Bombay 400 001.
Phones : 243643, 244393. **Telex : 11-4130 RUIA IN**

- EXPANSION VALVES • DRIERS
- THERMOSTAT • PRESSURE SWITCHES
- STARTING & RUNNING CAPACITORS
- REFRIGERANT GASES-11, 12, 13, 22, 113, 114, 502.
- SOLENOID & SHUT OFF VALVES
- CAR AIR-CONDITIONERS
- COPPER TUBING

AIR-CONDITIONING & REFRIGERATION
EQUIPMENTS & FITTINGS

INDUSTRIAL REFRIGERATION

4, Ground Floor, Apeejay House,
130, Bombay Samachar Marg, Bombay 400 001.
Phones : 243643, 244393. **Telex : 11-4130 RUIA IN**

- **CAR AIR-CONDITIONERS**
- EXPANSION VALVES • DRIERS
- THERMOSTAT • PRESSURE SWITCHES
- STARTING & RUNNING CAPACITORS
- REFRIGERANT GASES 11, 12, 13, 22, 113, 114, 502
- SOLENOID & SHUT OFF VALVES
- COPPER TUBING

AIR-CONDITIONING & REFRIGERATION

KUNDALIA REFRIGERATIONS

7, Netaji Subhash Marg, New Delhi 110 002.
Phones : 271810 & 279639. Grams : "KUNDALIA".

"Northern India Distrs. of 'AUE' COOL Home" FHP Motors, Cooler Pumps & Cooler Fans, "UNI-STAR" Capacitors, "ARVIND" Relays and Overloads, Authorised Distrs. of "SHRIRAM" Compressors, "DANFOSS" Refrigeration and Air-Condition, Controls, Distrs. for Copper Tubings, Freon Gases, Room/Desert Coolers.

AIR-CONDITIONING & REFRIGERATION ENGINEERS

THE POWERCRAFTERS

31, M. Karve Road, Bombay 400 004.
Phones : *Office* : 356003 ; *Works* : 380964.

Headquarters for Sales Service :

All types of Industrial, Marine, Domestic Refrigerators, Air Conditioners.

AIR-CONDITIONING & REFRIGERATION ENGINEERS

THE RADIOCRAFTERS

Opp. Charni Road Railway Station,
Queen's Road, Bombay 400 004.
Phones: Office : 354406, Works: 356003 & 380964.

Headquarters for Sales Service

All types of Industrial, Marine, Domestic Refrigerators, Air Conditioners.

AIR-CONDITIONING & REFRIGERATION

SNOWTEMP ENGINEERING COMPANY LIMITED

Registered Office & Works :
Mathura Road, Faridabad 121 003 (Haryana)
Phones : 825367, 825368 & 825384.

Manufacturers of :

Air-conditioning & Refrigeration Compressors, Equipment, Packaged Units, Heat Exchangers, Microvee & other Sophisticated Filters.

AIR-CONDITIONING & REFRIGERATION

VOLGA FREEZE

Spares & Machinery
for: Air-conditioning, Refrigeration & Instruments.

Authorised Dealers: Mafron Gas, Shriram Compressors, Brassomatic Fittings & Valves, AUE Motors & Fans, Danfoss Pressure & Thermostat Switches, Relay, Driers, Stabilizers, Geysers, Thermocole, Airfilters.

Mahajan Pole, Raopura, Baroda 390001.
Phone: 52780.

Ahmedabad Office:
19, Paras Kunj, Khanpur, Ahmedabad 380001.
Phone: 24515.

AIR FREIGHT, CLEARING, FORWARDING & WAREHOUSING AGENTS

JEENA & COMPANY

10, Veer Nariman Road, Bombay 400 023.
Post Box No. 849.
Phone : 312032 *Tel. Address :* "JUSTITIA"

Offices at :

New Delhi, Calcutta, Madras & Bangalore
with Correspondents at all major Sea and Airports.

AIRLINES

EGYPTAIR

Oriental House, 7, J. Tata Road, Churchgate,
Bombay 400 020.
Phones : 221415/221489/221562.

Exotic Jet Routes (Boeing 707/320C) from

Bombay to Cairo (non-stop) with Convenient Connections to main cities in Europe and Africa.

AIRLINES

QANTAS AIRWAYS LTD.

The Australian Airline to Frankfurt and Australia from Bombay three times each way weekly.

Offices at :

Oberoi Towers, Bombay. Phones : 230410 & 230297.
Hotel Hindustan International, Calcutta. Phone : 440718.
Hotel Connemara, Madras. Phones : 88680/88649.
Janpath Hotel, New Delhi. Phones : 351434/353174.

ALUMINIUM

ALLIED ALUMINIUM

Please contact for your requirements in Aluminium extruded sections, Sheets, Plates, Coils, Foils and Chequered plates etc.

46, Bhuleshwar Road, Bombay 400002.
Phones: 362980 & 369007

ALUMINIUM OR ALUMINIUM PRODUCTS

AJIT METAL CORPORATION

Wholesale & Retail in :

Alum. Sheets, Wire, Rods, Pipe Channels, Patti, Rivets & All Types of Extrusion. Available 'ALUCOIN', 'INDAL', 'HINDALCO' Products from ready stock.

Godown : 9, 3rd Fophal Wadi, Bombay 400 002.
Sales Dept. : 79, Kansara Chawl, Kalbadevi Road, Bombay 400 002.
Phones : *Office :* 321716 ; *Resi. :* 863819 & 386631.

ALUMINIUM ANODISING

BHARAT ELOXAL INDUSTRIES

For :
All types of Aluminium Anodising Job, Specialists for colour & Barrel Anodising works; quality works at very competitive rates.

Sudha Niwas, 134, Swami Vivekanand Road,
Jogeshwari West, Bombay 400 060
PHONES : 574848, 599979. Resi. 358132

ALUMINIUM CIRCLES, SHEETS, COILS, SECTIONS ETC.

B. M. VAKHARIA

Stockists of :

All kinds of Aluminium Circles Specialists: Deep drawing anodising quality, and aluminium sheets, coils, sections etc.

90, Kika Street (Gulalwadi), Bombay 400004

Phones : 367376, 380687.

ALUMINIUM ARCHITECTURAL FABRICATORS

ECIE (P) LTD.

Anodized Aluminium Architectural Specialities, Entrance Doors. Windows. Glazing. Curtain Walls, Partitions. Balustrades & Railings, Louvres, Sun Breakers, Tubular Furniture, Kitchen Cabinets, Ladders & ISI marked Builders Hardware i.e. Hinges, Tower Bolts, Handles etc.

ECIE (P) LTD., POST BOX No. 3, TUMKUR ROAD. BANGALORE 560 057 and INDUSTRIAL ESTATE, POST BOX No. 406, VISAKHAPATNAM - 4.

ALUMINIUM AND COPPER EXTRUSIONS AND SPRINKLER IRRIGATION EQUIPMENTS

JINDAL ALUMINIUM LTD.

16th K. M. Tumkur Road, Bangalore 560 073.

Phones :

Office & Works 38255 (4 lines) Irrigation Divn. 38697
Branch Offices New Delhi 271712 Bombay 383410

Manufacturers of :

Aluminium Extruded Sections such as Angles, Rods, Strips, Mouldings, Pipes, Irrigation and Refrigeration Tubes and Bus Bars, Various other Architectural and Structural Sections, etc., Copper and Copper Alloys, Pipes and Tubes and Sprinkler Irrigation Systems.

ALUMINIUM EXTRUSIONS

MAHARASHTRA ALUMINIUM EXTRUSIONS

Office: 63, Abdul Rehman Street, Bombay 400003.

Tel. No. 327709/342710

Factory: Plot No. R 49, T.T.C. Industrial Area, Thana-Belapur Road, Thane.

ALUMINIUM AND/OR ALUMINIUM PRODUCTS

R. KRISHNA & COMPANY

46-A-5, Motilal Mansion, Sadashiv Cross Lane,
Bombay 400 004

Phones : *Office* 365195, *Resi.* : 361053
Grams : " ARKRISCOIL ".

Wholesale & Retail Stockists in :

Aluminium Sheets, Coils, Rods, Channels, Pipes, Flatbars & all other types of Extruded Sections. and also other Non-Ferrous metals & General Order suppliers.

ALUMINIUM ALLOYS & PRODUCTS

SANJAY & COMPANY

Stockists & Selling Agents of :

Hindustan Aluminium Corporation Ltd. for their Aluminium Products, Plain Corrugated and Coil Sheets, Plates, Strips, Extruded Sections, Mouldings, Structurals. To cater for your large or small requirements.

503, Gali Krishna, Katra Neel,
Chandni Chowk, Delhi 110 006.

Phones : 250517 & 252064.

ALUMINIUM ARCHITECTURAL BUILDING PRODUCTS

AJIT INDIA PRIVATE LIMITED

(Now in Collaboration with 'Technal International' of France)

Doors, Windows, Partitions, Shop Fronts, Curtain Walling, Louvres, Octalinear & Circular Grilles, False Ceiling, Northlight Glazing, Display Shelving, Furniture and other architectural products incorporating latest techniques and designs.

Ramon House, 6th Floor,
169, Backbay Reclamation, Bombay 400020
Phone: 221714 Grams: "ALUGLAZE"
Telex: 011-2802 AIPL IN
Branches:
Calcutta, Madras, Hyderabad, Bangalore & Ahmedabad

ALUMINIUM LADDERS MFRS.

FAMOUS LADDERS MANUFACTURING CO.

128-130E, Victoria Road, Byculla,
Opp. : Masina Hospital, Bombay 400 027.
Phones: 376447, 372244. Grams: "SAFELADDERS".

Pioneers and Largest Manufacturers of :

All types of ALUMINIUM LADDERS such as Single & Folding Ladders, Wall Supporting & Self-Supporting Extension Ladders, Telescopic Wheeled Ladders, Jeep Mounted Tower Ladders & Fire Fighting Ladders.

ALUMINIUM PASTES

STAR PAINT & OIL INDUSTRIES

Crescent Chambers, 56, Tamarind Street,
Bombay 400 023.
Phones: 272243, 272289, 272904 & 273201.
Grams: "STARPAINT"

Manufacturers of:
All types of Aluminium Paints, Also Aluminium Pastes Standard Leafing, Non-Leafing, Fine Non-Leafing, Ink Grade etc. & Heat Resisting Aluminium Paint & Allied Products.

ALUMINIUM PRODUCTS

WELDON INDIA

Manufacturers of:
Well Slide Aluminium Windows, Doors, Partitions & Interiors—BRIGHT WELL INDIA. Pioneers: Anodisers, Electroplaters & Metal Processors EXCELLENT METAL INDUSTRIES.

Stockists: All kinds of Aluminium Extruded Sections.

C-1, Minerva Industrial Estate, Sewree East
Bombay 400 015.
Phones : 440036, 449197 & 545061.

ALUMINIUM UTENSILS MFRS. & EXPORTERS

SHAH DEVCHAND & CO.

Manufacturers & Exporters of: Aluminium & Stainless steel utensils.
Office: Guru Datta Mandir, Thakurdwar Road,
Bombay 400002.
Works: Devchand Nagar, Malad (East),
Bombay 400064.
Phones: Office: 356881, 367425
Factory: 691497
Telegrams: JELLYMOULD

ANALYSTS

URALAB

Consultants & Analysers for:
Chemicals, Drugs, Cosmetics, Foods, Minerals, Ores, Oils, Oil Cakes, etc.

Aman Chambers, 7th Floor, 113, New Queen's Road,
Bombay 400 004.
Phone : 355776.

Undertakes Research on Industrial Problems

ANALYSTS (ANALYTICAL CHEMISTS)

CHEM — MED ANALYTICAL LABORATORIES

Chemical & Microbiological and Biological Analysis & Sampling including Preshipment exports of Pharmaceuticals, including Infra Red, H.P.L.C., G.L.C., Pyrogens and Toxicity tests, Chemicals, Drugs, Oils, Ice Creams, Cosmetics, Foodstuffs, Minerals, Ores, Metal Alloys, Fertilisers, Insecticides and other consumer products.

5-6, Kakad Estate, Sea Face Road, Worli,
Bombay 400 018.
Phone : 377942.

ANALYTICAL & BIOMEDICAL INSTRUMENT MANUFACTURERS

ELICO PRIVATE LIMITED

Head Office & Factory:
Sanatnagar, I.E. Extn., Hyderabad 500 018.
Phone: 260134. Grams: ELICOPY. Telex: 0155-714 PHHD

Manufacturers of:
pH Meters, Colorimeters, Spectrophotometer, Flamephotometer, D.C. Recording Polarograph, Recorders, Conductivity Bridge, UV-VIS Spectrophotometer, Dissolved Oxygen Analyser, Hb Meter, Water Analysis kit, Earth Resistivity Meter, Chloride meter, Toggle Switches, etc.

Branches:
100/107, Sampige Road, Malleswaram, Bangalore 560 003
230/95, D.S. Phalke Road, Dadar, Bombay 400 014
B-90, Sanatnagar Indl. Estate Extn., Hyderabad 500 018
263, Khaleel Shirazi Estate, Egmore, Madras 600 008
2-E/6, Jhandewalan Extn., New Delhi 110 055

ANALYSTS & SURVEYORS SAMPLERS

ITALAB PRIVATE LIMITED

Cargo Supervisors & Weighers.

Head Office: **15, Cawasji Patel Street, Bombay 400 001.**
Phones : 253882, 253667 & 269703.
Grams : "ITALABO." Telex : 011-5801 ITALAB

Branch Laboratories at : **Madras : 19, Govindappa Naicken Street ; Calcutta : 10, Lall Bazar ; Visakhapatnam : 20/119, Beach Road ; Bellary : XIX/37, Ganesh Temple Street, Cowl Bazar, Bellary 2: Jamnagar : 84, Panchavati Society, Pandit Nehru Marg, Jamnagar 1.**

ANIMAL FEEDING STUFF EXPORTERS/DEALERS

SCHOKHI INDUSTRIALS PVT. LTD.

Manufacturers & Exporters of
Various Oilcake extractions, Brans, Fish Meal, Soyabean meal and other Meals and all Livestock/Poultry feeding stuffs/Ingredients.

143, Jolly Maker Chamber No. 2,
14th Floor, 225, Nariman Point,
Bombay 400021.
Phones:
Off: 231320 (3 Lines), 231397, 232364, 232208;
Resi: 241898, 241757 (Atten: Mr. NITIN GOEL)
Cables: "UTPADAN" Telex: (0) 11 3078 UTPA IN

ARTS & CRAFTS

KASHMIR ARTS & CRAFTS

Kashmir at your door steps.

Arts & Crafts, Honey, Saffron, Walnuts, Almonds, viz.—everything of Kashmir origin.,

Please write to:

A. N. KAUL & CO.
36, Chalpan Kocha,
S.R. Gunj, Srinagar, Kashmir 190002.

ARCHITECTS & CIVIL ENGINEERS

K. R. IRANI & CO.

Consulting Civil Engineers, Architects, Specialists in Industrial Projects & Valuation Experts.

Office: 24/26, Dalal Street, Fort, Bombay 400 001.

Partners: J. G. Bodhe, R. K. Irani.

Phones : 271976, 271965, 270344 & 271086.

AROMATIC CHEMICALS

Grams : "SUPRALUX". Phone : 250748.

CALCUTTA ESSENCE SUPPLY CO.

Dealers in :
Essential Oils, Aromatic Chemicals & Perfumery Compounds.

Mulchand Mansion, Shamaldas Gandhi Marg,
BOMBAY 400 002.

Associates : Hemani Aromatics, Bombay 400 015.
Phone : 443406. Grams : "SOPRALUX".

AROMATIC CHEMICALS

GOLDENSUN MANUFACTURING COMPANY

Distillers & Manufacturers of :

Fine, Basic & Aromatic Chemicals.

Sales Office : Ranvir Bldg., 70, Princess Street,
Bombay 400 002.

Phones : 318054, 252745.

Telex : 011-5463.

AROMATIC CHEMICALS & ESSENTIAL OILS

M. C. DAVAR & CO.

143, Princess Street, Bombay 400 002.
Phone : 315752. Grams : "EMCIDAVAR".

Stockists of :

AROMATIC CHEMICALS, ESSENTIAL OILS & PERFUMERY MATERIALS.

Agents for :

FIRMENICH — Geneva (Switzerland).

AROMATIC CHEMICALS & ESSENTIAL OILS

N. R. SHAH & CO.

421, Parekh Market,
Paper Mill Compound,
Girgaum, off Kennedy Bridge,
Bombay 400 004.

Phones : 252745, 318054. Grams : "WALFLOWER"

Dealers in :

Perfumes & Perfumery Raw materials, Aromatic Chemicals, Essential oils and all other chemicals.

ASBESTOS & ASBESTOS PRODUCTS

NEELA ASBESTOS IND. PVT. LTD.
MANUFACTURERS OF

ASBOLITE

ASBESTOS MILL BOARD
301, India Ptg. House
42, GD Ambekar Marg
Wadala, Bombay-400 031.
Tel: 449428, 443252

Swastika

ASBESTOS CEMENT SHEETS

HARSHAD KHARA & CO.

Authorised Stockists
CHARMINAR brand
ASBESTOS CEMENT SHEETS & ASBESTOS MILL BOARDS
2nd Floor, Maskati Mahal,
119, K. M. Sharma Marg,
Bombay 400002.

Phones : 257426 - 313063.

ASBESTOS PACKINGS AND JOINTINGS

Contact :

HIRALAL GOKALDAS DALAL & CO.

(Estd. 1910)

45, Nagdevi Cross Lane, Bombay 400 003.
Phone : 321594. Grams : " HIRAGOCUL ".

Importers & Dealers of Mill Gin Stores, Engineering Hardware, Tools etc.

ASBESTOS PRODUCTS

J. DILIP KUMAR & CO.

Mfg. of :
'Everite' Brand Asbestos Mill Board, Asbestos Yarn, Asbestos Listing Tape, Asbestos Rope Packing, Asbestos and Cotton Grease Graphited Packing, Hamp Flex Grease Packing, Asbestos Hand Gloves, Cloth and Gasket etc.

30, Strand Road, Calcutta 700001.
Phones : 22-2260, 22-6962. Gram : "ASBJOINT"

ASBESTOS

SWATI TRADING CO.

Wholesale Dealers for:
Asbestos Packing Ropes, Yarn, Cloth, Jointing Sheets, Lagging Mill Board, Asbestos Magnesia, Hard-Setting, Glasswool, Insulation Materials and Heat Cold Insulation Contractor.

Noble Chambers, 28/A, Parsi Bazar Street,
Fort, Bombay 400023.
Phones : 252027, 311279.

ASPHALT DEALER OF H.P.

ABBASBHAI KAMRUDDIN & SONS

Dealers of :
HINDUSTAN PETROLEUM CORPORATION LTD.— Water-Proofing work Undertakers, Stockists of : All Water-Proofing & Insulations Products, Coalpitch, Coaltar, Asphalt, Bitumen, Damar, Cloth, Tarfelt Roll, Expansion joint Sheets, M.S Sheets, G. P. Sheets & Iron Merchants

250, Maulana Azad Road, Opp. Bombay Mercantile
Co-operative Bank Ltd., Bombay 400008
Phones : Off. : 893834, Resi. : 825667
Residence 816434

ASTROLOGER & PALMIST

DR. D. D. MEHTA, M.A., LL.B., Ph.D. (Astrology)

14/13, East Patel Nagar, New Delhi 110008.
Phone : 584254.

Member, American Federation of Astrologers, Palmist and Numerologist of international repute, visited America, Europe for Lectures & Consultations. **Precise Predictions and Remedies on all human problems.**
Consultation Fee Rs. 100.

AUTO AIRCONDITIONERS

INDUS

Repairing, Servicing and Installation of all types of Automotive Air Conditioners. Suppliers of Bus Air Conditioners, Refrigeration System for Vans & Trucks and Air Conditioners for Ambulances.

371, Cadell Road, Prabhadevi,
Bombay-400 028

Phones: 4223737, 4223729, 4229270

AUCTIONEERS

S. M. G. BEATY PRIVATE LIMITED

Government Auctioneers
since 1931.

**D-9, CONNAUGHT PLACE,
NEW DELHI-110 001.**

Phones : 353294 & 353696.

ALUMINIUM/HANDICRAFTS

SURENDRA TRADERS

Manufacturers of:
All kinds of Handicrafts, Wooden Work, Painting & Stone Work.

We specialise in:
Aluminium, Brass, Cast Models, Handicrafts, Mementoes and Souvenirs.

Rawat Singh Building, Chopasni Road,
Jodhpur 342001.
Phone : 23125

AUTOMOBILE PARTS & ACCESSORIES

BAKSHI GHURA & CO.

For E. R. W. Pipes, Conduit, Furniture Pipes. Mfrs. of Conduit Pipes, Bakelite Electrical Accessories, Motor Parts, Cycle Frames, Locks & FR Tubes etc.

285, Thakurdwar Rd., Bombay-400 002.

Grams: "BEGEELOCS"

Phones (Office): 319570, 319794, (Resi.): 571701.

AUTOMOBILES, MANFG. AND ACCESSORIES

BONAFIDE AUTO STORES

Dealers in SPARES for :

SCOOTERS, MOTOR CYCLES & MOPEDS.

8 9, Kiln Lane, Lamington Road,
Bombay 400 007.

FOR AUTOMATIC ELECTRIC MAKE

Ampere, Volt, Power Factor, Watt, KVAR and Frequency Meters, Dimmerstats, Voltage Stabilizers, Battery Chargers, H.V. Test Sets, Synchronous Motors, Phase Sequence Indicators, Current & Potential Transformers, Float Chargers, etc. and also other reputed makes of Oil Test Sets, Meggers, Tong Testers, Earth Testers, Miniature Circuit Breakers, Distribution Boards, Multimeters etc.

Please Contact:

FRANK SUDHACHAND & CO.

P.B. No. 6825, 59, Nehru Road,
Santacruz (East), Bombay 400055.
Phone: 543829, Telegram: "FRANKSUDHA", Bombay 400055.
Telex: 011-5247.

AUTOMOBILE

HITODI SPORTSTAR
MINI MOTORCYCLE

The Only Moped With

* ENGINE COOLING FAN
* DUAL SEAT
* 12 VOLT MAGNETO

Manufacturers :

INDIA AUTOMOTIVES LTD.
Hitodi Nagar, Adityapur, TATANAGAR.

AUTOMOBILES, SPARE PARTS DISTRIBUTORS

CENTRAL AUTOMOBILES PVT. LTD.

Regd. Office
Laxmi Bhuvan, 466, Sardar Vallabhbhai Patel Road,
Bombay 400 004.
Show Room : Central Automobiles Pvt. Ltd.
Mani Mahal, 7, Mathew Road,
Bombay 400 004.
Delhi Branch : 2855, Bara Bazar, Kashmere Gate, Delhi 110 006. Ahmedabad Branch : Amar House, Kadia Kui Relief Rd., Ahmedabad 380. Indore Branch : 11, Kibe Compound, Indore 452 001.

AUTO AIRCONDITIONERS

KEETA & COMPANY

Repairers, Installers of:
Car Air Conditioners for all Cars.
Suppliers of:
Car Air Conditioning Equipments, Spares, etc.
Also:
Bus Air Conditioning Refrigerated Vans. Special Maintenance Contracts for servicing Original Factory Installed Car & Bus Air Conditioners.

135, Dr. Annie Besant Road,
Sudam Kalu Ahire Marg, Bombay 400018.
Gram: AIRCONCAR. Phones: 395034, 371820.

AUTOMOBILE ACCESSORIES

MOTOR INDUSTRIES CO. LTD

Hosur Road, Adugodi, Bangalore-560030.

Phones: 55701 (10 lines), 579781 (10 lines).
Grams: "MICODIESEL" Telex: 0845-203 0845-797.

Manufacturers of:
A wide range of fuel injection equipment for diesel engines and spark plugs for petrol engines, under licence of Bosch, West Germany.

Sales Houses:
(1) Bombay: 79, Dr. Annie Besant Road, Worli. Phone: 392071. (2) Madras: 22, C-in-C Road, Egmore. Phone: 83581. (3) Calcutta: 91-A, Park Street. Phone: 24-0121. (4) N. Delhi: E2/21, Jhandewalan Extension.
Phone: 520122

AUTOMOBILES, AUTOMOBILE PARTS & ACCESSORIES

M/s. NARCINVA DAMODAR NAIK

V. N. Naik Road, Margao-Goa.
Phones : 3141 (4 lines).
Grams : "SWASTIK" MARGAO, GOA.
Telex : 0196-216.

Main Dealers for Goa:

M/s. TATA ENGINEERING & LOCOMOTIVE CO. LTD.

Automobile Division, Jamshedpur.
Importers of: Genuine Mercedes-Benz Parts.

AUTOMOBILE PARTS & ACCESSORIES

U.M.C. AUTO INDUSTRIES PRIVATE LTD.

(Successors to Union Manufacturing Co.)
U.M.C. Estate, Chakala Road, Andheri East,
Bombay 400 093.
Phones : 571732, 573569, 577219 & 561481.
Telex : 011 3518 UMC IN.
Grams : " YOUEMCEE ", Andheri, Bombay.
RECOGNISED EXPORT HOUSE

Manufacturers and Exporters of :

UMC Brand Automobile Laminated Springs & Leaves. U Bolts & Nuts and Axle Studs for all Cars, Trucks, Trailers and as per Customers' specification.

AUTOMOBILE PARTS MFRS.

NEW HAVEN ENGINEERING COMPANY PRIVATE LTD.

Manufacturers of: Automobile Parts, Machinery Spares, Bright Polished Bolts & Nuts, Socket Head Cap Screws, Precision Turned Automatic Parts, Steel Balls etc.

Office:
Nanjee Building, 17-B, Horniman Circle,
Bombay 400 023.
Phone: 250302.

Factory: Parsi Panchayat Road, Andheri (East),
Bombay 400 069.
Phones : 576489, 576480.

AUTOMOBILE PARTS

RANDEEP AUTOMOBILES

48, K. K. Building, 1st Floor, Benham Hall Lane,
Bombay 400 004.

Phones : 354146 & 384324. Grams : " JECIPIPE "

Manufacturers of :

Flexible Fuel & Oil liner, Fuel injection pipes, Lubricating pipes, Brake pipes for Diesel Trucks, Tractors, Cars & Diesel Stationary Engines etc.

Bankers : BANK OF BARODA, Khetwadi Branch,
Bombay 400 004.

AUTOMOBILE PARTS MANUFACTURERS

SIYARAM-KUMAR ENGINEERING WORKS PVT. LTD.

41, D.L.F. Kirti Nagar, New Delhi 110015
Phones 530131, 530755, 530756

Manufacturers of

KEW & SKEW Automobiles, Tractors, Machinery Parts & Hydraulic Equipment

Managing Director: R. R. Gupta
Tech. Director: M. Kumar

AUTOMOBILES

TRUFIT

The Mark of Quality & Precision Engineered Components for Automobiles and Oil Engine Spare parts.

SUPREME AUTOS

Railway Road,
Phagwara 144401 (India)
Phones: Off: 2297 Resi: 2734
Grams: "TRUFIT"

AUTOMOBILES—ACCESSORIES & SPARES—ALL REQUIREMENTS

UNION TRADING COMPANY

EXPORTERS

UNITCO ' Automobile Parts & Accessories.
Bolt Nuts — Hand Tools.

13, Vijay Chambers, Tribhuvan Road,
Bombay 400 004.
Phones : 351671 & 351350.
Cable : " SUCCESSFULL ".

BALL & ROLLER BEARINGS

AGARWAL BEARING TRADERS

STOCKISTS
WBC, SKF, RHP, FAG, TIMKEN, KOXO & all type of indigenous & Foreign makes.

14/2, Maharani Road
INDORE
Tel. 33073 p.p.

BALL & ROLLER BEARINGS

ANIL BEARING STORES

163, Narayan Dhuru Street, Bombay 400 003.

Authorised Distributors :
SKF, NBC BEARINGS

Grams : " CHEAPSTORE ". Phones : 323552, 328226

Indenting Division

ANIL BEARING AGENCIES

163, Narayan Dhuru Street, Bombay 400 003.
Phone : 323552.

Authorised Indenting Agents: SKF Bearings (Manufactured by SKF Overseas Factories).

BALL, ROLLER & TAPER ROLLER BEARINGS

CONWEST BEARING CORPN.

Importers and Stockists of Ball, Roller, Taper, Thrust & Needle Bearings of Repute & Various Make.

110, Narayan Dhuru Street, Bombay-400 003.
Gram: YASHMUKH
Office:-338767, 328708
Residence: 819124, 819404

BALL & ROLLER BEARINGS

DHIRAJLAL & CO.

15, M. P. Marg (Opera House),
Bombay 400 004.

Phones : 354412-352058.

Telex No. 011-3561.

Grams : " RICEMILL ".

Sole Agents :

The Torrington.

BALL & ROLLER BEARINGS

H. M. DOYAL & COMPANY

Hauz Khazi and 55, G. B. Road,
Delhi 110 006.

Phones : 264724, 271134, 524415, 523620.

Specialists :

All types of bearings (ball, roller, thrust & taper roller) and machine tools of all kinds, Wolf Electric Tools, Dunlop Industrial Products.

Agents & Stockists :

SKF, NBC, R&M, Hoffmann, Fafnir & Timken Bearings.

BALL & ROLLER BEARINGS

KHANDELWAL BALL BEARING CENTRE

Stockists
In all types of bearings in SKF, FAG, RHP, INA, NBC, Norma, Koyo, Timken and all the other types of bearings.
Govt. Roadways & Rly. approved Supplier
95, Shastri Market, Indore
Phones : 34340, Resi. 5870
49, Siyaganj, Indore
Phone : 31782

BALL & ROLLER BEARINGS

MACHINE TOOLS & IMPLEMENTS

(on D.G.S.D. & RLY.'s list since 1948)
93/95, Narayan Dhuru Street,
Bombay 400 003.

Phones : 322268, 322269. Grams : " MACHTOOLS "

Importers & Stockists of :

Ball, Roller & Taper Roller Bearings of every make

BALL & ROLLER BEARINGS

MASRANI MILLGIN STORES

46, Nagdevi Cross Lane, Bombay 400 003.

Direct Importers & Stockists of : Ball, Roller & Taper Roller Bearings. Specialists in **STEEL BALLS.**

Phones : 321646, 347962 (Office) ; 456149 (Res.).

Grams : " BEARINGS " (Mandvi).

BALL & ROLLER BEARINGS

PRECISION BEARINGS INDIA LIMITED

Registered Office: Nariman Bhavan, 8th Floor, 227, Backbay Reclamation, Bombay 400 021. Phones: 232362/232166/232144. Telex: 011-3391. Cable: Prebearind.
Head Office & Factory: Maneja, Baroda 390013, Gujarat State, Phones: 4651 to 4653. Telex: 0175-280, Cable: Prebearind:
Manufacturers of: NORMA Ball, Cylindrical and Spherical Roller Bearings and Railway Roller Bearing Axle Boxes.
Collaborators: Messrs. G.u.j. Jaeger GmbH, West Germany (FAG Group).
Branch Offices: 2nd Floor, Milap Niketan, Near Express Building, 8A, Bahadur Shah Zafar Marg, New Delhi 110 002. Phones: 272411/272562. Telex: 031-2165. Cable: Prebearing.
No. 7, 3rd Street, Thirumurthy Nagar, Nungambakkam, Madras 600 034. Phone 811712. Telex 041-576. Cable: Prebearing.
Block No. 12, 6th Floor, East Anglia House, 3C, Camac Street, Calcutta 700 016, Phones: 244635/213932. Telex 021-3237. Cable: Prebearing.
Sub-Office: Flat No. K-47, Sarabha Nagar, Ludhiana 141 011, Phone: 30125. Cable: Prebearing.

BALL & ROLLER BEARINGS

RAJNIKANT & CO.

Stockists of everything in :

Ball, Roller, Thrust Bearings, Steel Balls and Pedestals.

Authorised Stockists of : SBL Bearings.

Distributors : IBC Bearings.

19, Bibijan Street, Bombay 400 003.
Phones : *Office :* 329219 *Resi. :* 674324, 676264

Branch : 10, Satya Apartments, Gokhale Road, Naupada, Thane 400 602. Phone : 592780

BALL BEARINGS

SAROJ ENTERPRISE

All types of

Ball Bearings of SKF, FAG, RHP, R & M STEYR, SEALMASTER, FAFNIR, NBC, NORMA, KOYO, ABC etc. Also V-Belts and Hose Pipes

15 Mandvi Chambers, 184, Samuel Street, Bombay-400009.
Phones: 325525 & 331652 Resi. 678185.
Grams: C/o "MAHUVAWALA"

BATTERIES (STORAGE)

Silvex BATTERIES

P. G. Solanki Path, Bhadkamkar Marg,
Near Minerva Talkies, Bombay 400 007.
Phones: 396289, 377917. Grams : " STARTAHEAD "

Leading Manufacturers of :

All types of Batteries for all purposes. Speciality Cars, Buses, Trucks, Tractors etc. Serving Government, Railways, Municipal Corpn., Bombay Port Trust, Public and Private Fleet Owners.

BATTERIES (STORAGE)

VIRENDRA TRADERS

Leading Manufacturers of :

All types of Batteries for all purposes, speciality cars, buses, trucks, tractors etc.

Office :

229, Ragunath Chamber, Sion (East)
Bombay 400 022
Phone : 484981

BEARINGS & TOOLS

A Trusted Name in
BEARINGS & TOOLS

SUPER TOOLS & BEARING STORES

Importers & Stockists of:
Ball, Roller, Thrust Bearings & Engg. tools.
126-128, Nagdevi Street, Bombay 400003.
Phones: Office: 330813 Resi.: 674945.

BELTINGS & V-BELTS

HILTON RUBBERS PVT. LTD.

Renowned Manufacturers and Exporters of ISI marked Conveyor Belts & Transmission Belting. Also Manufacturers & Exporters of strong, durable HILTON V-belts & Fan Belts in all sections and sizes.

Regd. Office:
Hilton House, S-23, Green Park Extension,
New Delhi 110016
Phones: 663057, 668836, 660843, 651209
Telex: 031-3582 Grams: HILTONBELT
Works: Rai, Sonepat (Haryana) Phone: 2296
Regional Offices at:
CALCUTTA, SECUNDERABAD, LUCKNOW,
BOMBAY, RAJKOT and JAIPUR

BELTINGS

INDUSTRIAL EQUIPMENT SYNDICATE

(Estd. : 1959)

RUBBER CANVAS :—CONVEYOR BELTS, ELEVATOR BELTS, TRANSMISSION BELTS, FLAT ENDLESS BELTS, TRACTOR PULLER BELTS AND RUBBER PRODUCTS.

15, Nand Deep, Kondivitta Road, Andheri,
P.B. 7402, Bombay 400 059.
Phones : Office: 575398.
Resi.: 693898.

BIDYUT PUMPS

Type Rotary Gear, Centrifugal Dosing Pumps ideal for pumping Chemical, Pharmaceutical Acid, Breweries, Paper, Textile, Dairy, Food, Oil, Rubber and other industrial liquids. Also Water Pumps of various capacities. Stockists of Flameproof electric Motors & Switch-gears.

For 'BIDYUT PUMPS' Contact:

PLANT AND MACHINERY

3, Mangoe Lane, 1st Floor, Calcutta 700001.
Phones: 233265, 237620. Gram: "FREQUENCY"

BINS MFRS.

METREX PVT. LTD.

Sunder Estate, Near Kamani Works, Shastri Marg,
Kurla, Bombay 400 070.
Phones : 674446 & 671512.
Grams : " METREUNIT ", Kurla, Bombay.
Telex : C/o 011-4884.

Manufacturers of :

" METREX " Self-Stacking Bins & Tote Boxes in various sizes.

BLOCK MAKERS

COMART LITHOGRAPHERS PVT. LTD.

Suppliers of :

Colour corrected screened positives with progressive proofs from Coloured Art Works and Transparencies for the Offset Printing Industry. Maximum enlargements upto 75 cms × 100 cms (30″ × 40″) with the use of electronic scanning and all modern conventional equipment and facilities.

386, Veer Savarkar Marg, Prabhadevi,
Bombay 400 025.
Phones : 4228541-42.

BLOCK MAKERS

SUN PROCESS WORKS

Specialists in :

Advanced Techniques of Photo Engraving. For Blocks in Line, Halftone & Colours—Stereos and Matrices.

8, Swadeshi Mills Compound,
Tata Road, off New Queen's Road, Bombay 400 004.
Phones : 351620 & 356935.

BOBBINS, SHUTTLES & CHEMICALS

DEAN & WEBBER MILL STORES CO.

Manufacturers of : Quality Bobbins, Plastics, Metallic & Wooden ; Wooden Spools, Beam Flanges & Shuttles, Chemicals, Sizing Material, Sodium Silicate, Meta Silicate, Bobbins of all sorts, Plastics and Metallic a Speciality. Injection Moulding Machines & Injection Moulding Parts.

Factories : Spanto Chemicals & Spanto Textiles

5-A, Advani Chambers, Sir P. M. Road, Fort,
P. Box No. 1461, Bombay 400 001.
Phones: *Office :* 259537 & 259746. *Factory :* 691260.

BOILER QUALITY PLATE

NARENDRA SHANTILAL & CO.

Leading Stockists & Suppliers of:

Boiler Quality plate in I.S., A.S.T.M., B.S. & D.I.N., Specification & other Tested Plates available.

14/1, Moti Mansion, Khetwadi, 5th Lane,
Bombay 400 004.

Phones : 344810 & 343368.

BOILER TUBES & PIPES

NEMAT ENGINEERING WORKS

Dealers in

Boiler Tubes. ERW & Seamless Pipes, Hydraulic Pipes, Square & Rectangular Tubes & Pipe Fittings.

145, Nagdevi Street,
Bombay 400003.
Phones: 326833/345804

Specialists in

Barrel Nipples in BSP & NPT Threads

BOILER DE-SCALING COMPOUND
SAVE FUEL

Use :—

'ACME' De-scaling Compound for Boiler etc.

'ACME' Compound removes and prevents scale in Boiler, Economiser etc.

N. E. PUNEGAR & CO.

(Estd. 1889)

Union Bank Bldg., Dalal Street, Fort,
Bombay 400 023.
Phone : 274960. Grams : "ACMECOMPO"

BOILER LAGGING COMPOSITION & INSULATION PLASTICS

COMMONWEALTH INSULATION CHEMICALS & FERTILISERS PVT. LTD.

Ismail Bldg., D. N. Road, Bombay 400 001.
Phone : 253550

Sun & Cross Brand 85 per cent Magnesia-Asbestos, Hard setting Compound, Binding Cement for Floors, Stucco & Emery Rice Mill Stones, Bonding Mortar & Refractory Cement, & Chemicals.

BOILER FITTINGS

THERMAX PRIVATE LIMITED

Manufacturers of:

Fully Automatic Coal/Oil/Gas Fired Boilers, Thermic Fluid Heaters, Hot Water Generators, Hot Air Generators, Incinerators, Paint Booths, Electrostatic Paint Guns and Systems, Post Harvest Processing Systems, Air Pollution Control and Effluent Treatment Systems

Associate Company:

Tulsi Fine Chemicals Private Limited

Manufacturers of Water Treatment Systems and Resins

BOILERS MFRS. & REPAIRERS

TUBE-WELD ENGINEERING WORKS PVT. LTD.

Office : 118, P. D'Mello Road (Frere Road),
Carnac Bridge, Bombay 400 009.
Phone : 322114 (4 Lines).

Fabricators of :

Super Heater, Economiser & Heat Exchanger Tube Coils, Tube Coils bent to shape, Expansion bends, High Pressure Steam Pipes & Fittings.

Works : Acme Industrial Estate, Sector C-5, Sewri (East), Bombay 400 015. Phone : 440650.
Grams : " TUBEWELD ", Bombay.
Telex : TUBES 011-3358.

BOILER TUBES & FITTINGS MFRS. & DEALERS

TUBE TOOLS & HARDWARE MART

P.O. No. 3252, 94, Nagdevi Street,
Bombay 400 003.

Phones : 322131, 320191-2. Telex : 011-4189.

Importers & Stockists of :

Seamless Tubes and Boiler & Hydraulic Tubes
G. M. & Galvanised Fittings.

BOLTING CLOTH

Manufacturer of

"DURABOLT" R Bolting Cloth in different Numbers, also available "Flitrofiltrafab" R Fitter Cloth in different Qualities.

Contact:

M/S. DADIA TEXTILES

514, Cotton Exchange Building,
Kalbadevi Road, Bombay 400002
Phone: 294945/293842/258733

BOLTS, NUTS, SCREWS MFRS.

Stockists of

SCREWS IS: 6094/1971

- Mfred. Completely on latest automatic American Machinery
- Prices extremely Competitive

Manufacturers
VORA FASTENERS
93, Narayan Dhuru Street
Bombay 400 003
Gram. 'JAYCIVORA
Phone 322507/320084

AUTOMOTIVE HARDWARE CORPORATION

93, Narayan
Dhuru Street
Bombay 400 003.

BOLTS, NUTS, RIVETS MFRS.

AVDEL (INDIA) PRIVATE LIMITED

Road No. 27, Plot No. A-165, Waghle Industrial
Estate, Thane 400 604.

Manufacturers & Suppliers of:

AVEX blind Rivets & Riveting Equipment, " CHOBERT " blind Rivets & Riveting Equipment, " NUTSERT " blind Anchor Nut & Placing Equipment, AVDEL Riveting clamps, AVLUG Terminal Lug, ' AVDEL ' Aircraft Rivets.

Phone : 593404. Grams: " AVDELIND " Thane.

BOLTS, NUTS AND SCREWS

C. N. SHAH & CO.

263-A, Nagdevi Street, Bombay 400003

Reputed Stockists & Dealers in

GKW-TATA Bolts, Nuts, Screws, Rivets in BSW/MM THREADS. BBBB Spring Washers, Plain Washers, Machine Screws, Wood Screws, Allen & Grub Screws, Stud Circlips, Dowel Pins, Star Washers, Wire Nails. Also convertible fastners in high tensile steel & stainless steel etc.

Phones: 346370/341404/342476
Gram: "SRIGIRIRAJ"

BOLTS, NUTS & SCREWS

MAHARASHTRA HARDWARE STORES

Stockists for : G.K.W. Products, Bolts, Nuts, Screws, Washers, Rivets, Sheet Metal Screws, Rose Nails, Wire Nails, Coach Screws, etc.

94, Sarang Street, Bombay 400 003.

Phones : 327991, 342829 ; *Res.:* 357710
Grams : " BOLTARAM."

BOLTS, NUTS & SCREWS

MOHANLAL & CO.

Stockists & Distributors of
Guest, Keen, Williams, Ltd.
for Bolts, Nuts, Rivets and Fastenings.

144, Diamond Bldg., Lohar Street, Bombay 400 002.
Phone : 311916. Grams : " HARDSTOCK "

Branch at : 1092-B, Lambeshwar Naka, Relief Road, Ahmedabad.
Phone: 36943.

BOLTS & NUTS

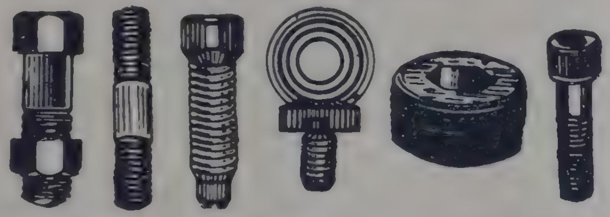
OCEANIC ENGINEERING COMPANY

Cold Forged 'ECO' Brand M.S. Bolts. Full Thread, Coach Bolts and Rivets in ¼", 5/16", ⅜", ½", ⅝", and ¾" size in BSW, BSF, UNF, UNC and MM Threads.

Factory:
Plot No. 507, Bangalore-Mysore Highway,
Kengeri P.O., Bangalore 560060.
Phone: 27
Office:
16/31, Bull Temple Road,
Basavanagudi, Bangalore 560004.
Phone: 605920.

BOLT — NUT — STUD & ALLEN SC

HTS — HRC 22 to 38 or S. S. 304 & 316
3 mm to 48 mm Dia.



PRECISION INDUSTRIAL COMPONENTS

15, Elchiwala Bldg., 2nd Floor,
11, Keshavji Naik Road, Bombay 400 009.

BOLTS & NUTS MFRS.

RAJ ENTERPRISES

22, Sanyogitaganj, Indore, M.P.

A TRUSTED NAME

for Bolts & Nuts

Galvanized & Ungalvanized.

Telephone : 38130.

Grams : " PANDYACO "

BOLTS & NUTS

RAJEN ENGINEERING STORES

Stockists and Suppliers of:
M.S., S.S., H.T. Brass and Alloy Steel Bolts, Nuts, Studs & Rivets as per BS.S.I.S.S.

29, Kosla Street, 1st Floor,
Bombay 400 003.

Phones: Office: 338608 Res.: 678178

BOLTS, NUTS & SCREWS

S. MOHANLAL & CO.

Manufacturers & Suppliers of : All kinds of bolts, nuts & screws made from Brass & Steel.

Distributors for :
Socket Head Cap Screws & Set Screws.

Unbrako

Tawawala Building, 34, Pathakwadi, Bombay 400 002.
Phones : 311240 & 310915. Grams: "SOCKETREWS".
Telex : 011-4859 SMCO IN.

BOOKS

For Books in

HINDI . URDU . SANSKRIT . PUNJABI
AND ENGLISH

Order to

STAR PUBLICATIONS (P) LIMITED

4/5B, Asaf Ali Road,
New Delhi 110 002.

Phones : 273335, 274874 & 265135.

BOOKSELLERS, PRINTERS & PUBLISHERS:

ASIAN TRADING CORPORATION

310, The Mirabelle, Lotus House, 33A, Marine Lines,
P.O. Box No. 11029, Bombay 400 020.

Publishers, Publishers' Representatives, Importers, Exporters of Religious Books, College Books, School Books & Children's Books and subscription agents of Religious & Educational Periodicals both Foreign & Indian. Publishers of 'INDIAN MISSIOLOGICAL REVIEW' and sole agents for 'NEW COVENANT'—the Charismatic Magazine.

Phones: Office : 29-2672
Res.: 89-5869
Grams: "AJPIPAS"

BOOKSELLERS, PRINTERS & PUBLISHERS

BHARATIYA VIDYA BHAVAN

Kulapati K. M. Munshi Marg, Chowpatty, Bombay 400 007

Publishers of elegantly got-up, yet low-priced, books of lasting cultural value and interest, through the widely acclaimed "Book University" Series. Also the monumental Series of the History and Culture of the Indian People in 11 volumes, besides a variety of other instructive and inspiring books. Also available at Bharatiya Vidya Bhavan, Mehta Sadan, Kasturba Gandhi Marg, New Delhi 110 001; 38-39, East Mada Street, Mylapore, Madras 600 004; 1/1, Meredith St., Calcutta 700 072; Race Course Rd., Bangalore 560 001; 259, Dewan Bahadur Rd., Coimbatore-2; 5-9-1105, Hyderguda, Hyderabad-500001; Gulab Bhavan, Jammu; 173, Kulapati K. M. Munshi Road, Guntur 4; Central Indian Flour Mills Road, Bhopal (M.P.); 25, Panchsheel Bldg., Wardha Road, Nagpur 1; Vidyagauri Nikant Road, Ahmedabad 380 001; T.D. Road, Ernakulam, Cochin 682 011; Light House Hill, Mangalore 1; and 4A, C, Castletown Road, London W 14 9 HQ (England).

Phones: 351461, 351482 (Bombay). Grams: "BHAVIDYA"

And from Sole Distributors

M/s. India Book House, Mahalaxmi Chambers, 22, Bhulabhai Desai Road, Bombay 400 026, and their branches

BOOKSELLERS etc.

BOOK-HUNTER'S HAUNT

The New & Secondhand Bookshop

526, Kalbadevi Road, Bombay 400002

☎ : 313314

BOOKSELLERS etc.

D. B. TARAPOREVALA SONS & CO. PVT. LTD.

(Original Firm Established 1864).

Publishers & Booksellers, Treasure House of Books

Taj Bldg., 210, Dr. Dadabhai Naoroji Road, Fort,
Bombay 400 001.

Phone : 261433-34.

BOOKSELLERS & PUBLISHERS

FRANK BROS. & CO. (PUBLISHERS) PVT. LTD.

Known for attractive and new method textbooks for Nursery and upward classes.

Chairman : K. L. Govil
Mg. Director : S. C. Govil
Director : R. C. Govil
Director : R. K. Govil
Phone : 263393.

Show Room :
IV/85, Chandni Chowk, Delhi 110 006.
Phones : 276791 & 268884.

Registered Office : 4675-A, Ansari Road,
21, Daryaganj, New Delhi 110 002.
Phones : 260796, 263393, 279936.

BOOKSELLERS & PUBLISHERS

HINDI BOOK CENTRE

Most Modern Showroom for Hindi Books published from all over India.

Also Suppliers of
Urdu & Punjabi publications.

Associated Concerns :
Star Publications (P) Ltd., 4 5-B, Asaf Ali Road
(Near Delite), New Delhi 110 002.
Phones : 274874, 273335.

Star Book Centre
1641, Dariba Kalan, Delhi 110 006.
Phone : 261696.

Largest exporters of Indian Publications.

BOOKSELLERS, PRINTERS & PUBLISHERS

INTERNATIONAL BOOK HOUSE PRIVATE LTD.

Indian Mercantile Mansions (Extn.), Madame Cama Road,
Bombay 400 039.

Phones : Head Office : 231634 & 231795 Bookshop : 254859

Chief Distributors of :

Reader's Digest Books Butterworth Legal Publications. Stockists of Scientific, Technical & General Books. Leading Subscription Agents for Foreign & Indian Magazines

BOOKSELLERS & PUBLISHERS

J. M. JAINA & BROS.

Authorised Dealers : Govt. Publications,
Law Booksellers and Publishers.
Distributors : Akalank Publications.

Proprietors :
Jaini Mall
Narendar Kumar Jain

P.O. Box 1020, Mori Gate, Delhi 110 006.
Phones : 225064 & 254707.
Telex : 031 4458 JMJ IN Gram : "ACTRULES".

BOOKSELLERS & PUBLISHERS

JAICO PUBLISHING HOUSE

Publishers of Jaico Books JAICOS'

Importers and Distributors of : Management Technical, Scientific and Educational Books.

125, M. G. Road,

Bombay 400 023

Phones : 270621, 273787, 270746, 270760

BOOKSELLERS & PUBLISHERS

JAIN BOOK AGENCY

C-9, Connaught Place, New Delhi 110 001.

Phones. *Show-room* : 350806, 351663
Office : 4-0451.
Residence : 56-4931.

Telex : ND-4127.
Grams : "GOVT. BOOKS"

Authorised Dealers : GOVT. PUBLICATIONS.

Partners :
S.P. Jain, Vimal Vahan Jain & Nabhi Kumar Jain.

BOOKSELLERS, IMPORTERS & SUBSCRIPTION AGENT

MARY MARTIN BOOKSELLERS

14/42-B, 3rd Street, Tatabad,
COIMBATORE 641 012, India.

For
Books on all subjects.

Agents for : Government of India and State Government Publications.

Special Attention given for Government books.

Send your orders.

POST FREE on Government Publications.

BOOKSELLERS & PUBLISHERS

NATRAJ PUBLISHERS

17, Rajpur Road, DEHRA DUN 248001.
Phones : 3382, 5221. Grams : " Natraj Publishers "

Authorised Agents :

F. R. I. Publications & Survey of India Maps

Specialists in :

FORESTRY, WILDLIFE & MILITARY SCIENCE

Suppliers to Libraries all over India

BOOKSELLERS & PUBLISHERS

PROGRESSIVE CORPORATION PVT. LTD.

Booksellers & Publishers.
Estd. 1932

Specialists in :

Books on Management, Accountancy, Commerce, Economics and Banking. Importers of Technical Books/Directories.

Jehangir Wadia Bldg., 3rd Floor,
51, M. G. Road, Flora Fountain, Bombay 400 023.
Phones : 254813, 251634.

BOOKSELLERS & PUBLISHERS

RAJPAL & SONS

Leading Publishers and Booksellers and largest Stockists of Hindi Books.

Showroom :

Kashmere Gate, Delhi 110 006.
Phone : 226201.

Office :

Kashmere Gate, Delhi 110 006.
Phones : 223904, 229174.

BOOKSELLERS & PUBLISHERS

S. CHAND & CO. LTD.

Publishers of Educational & General Books, Importers & Exporters of all kinds of Books.

Regd. Office :

Ram Nagar, New Delhi 110 055.
Phone : 517531.

Showroom :

16B/4, Asaf Ali Road, New Delhi 110 002.
Phone : 264428.

Branches :

Bangalore, Bombay, Calcutta, Cochin, Hyderabad, Jullundur, Lucknow, Madras, Nagpur, Patna.

BOOKSELLERS & PUBLISHERS

SASTA SAHITYA MANDAL

N-77, Connaught Circus,
New Delhi 110001.
Phone: 40505.

Leading Hindi Publishers of:
Gandhian & Allied healthy and nation-building literature.

And Hindi Monthly JEEWAN SAHITYA

Res.: Jain Yashpal, Secretary. Tel.: 273326
Branch: 126, Zero Road, Allahabad. Tel.: 50034

BOOKSELLERS & PUBLISHERS

SHANKAR'S BOOK AGENCY

(For Latest Scientific & Tech. Books).

Showroom : 133, Lenin Sarani, Calcutta 700 013.

Phones : 27-8993 & 26-0719.

Office Sub-Depot :

1/1, Meredith St., Calcutta 700 072.

Phone : 23-7578.

Grams : " BOOXERVICE ", Calcutta.

Subject catalogues on request.

BOOKSELLERS, IMPORTERS & EXPORTERS

UNIVERSAL BOOK CORPORATION

546, JER MAHAL, DHOBI TALAO
BOMBAY-400 002, PHONE: 290629

BOOKS FOR ADVOCATES, STUDENTS, DOCTORS, PHARMACY, NURSING, MARINE ENGINEERS, ENGINEERS, MERCHANTS, BANKERS, TEXTILES & OTHERS.

BORING

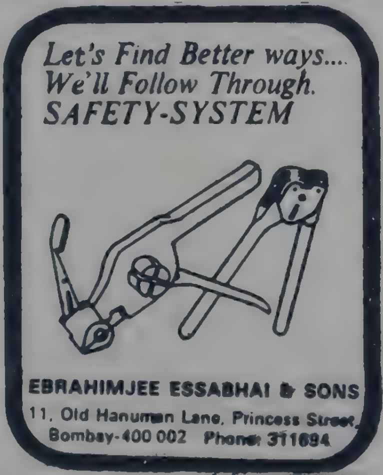
TUBE WELL CORPORATION OF INDIA

TUBE WELL BORING CONTRACTORS.

Tube Wells for Water Schemes, Factories, Farms, Housing Society, Test Bores for Minerals, Foundations of Dams & Bridges.

Partner : J. D. MOTIVALA
670, Parsi Colony, Dadar, Bombay 400 014.
Phone : 445371.

BOX-STRAPPING MACHINES MFGRS.



Let's Find Better ways....
We'll Follow Through.
SAFETY-SYSTEM

EBRAHIMJEE ESSABHAI & SONS
11, Old Hanuman Lane, Princess Street,
Bombay-400 002 Phone: 311694

BOX STRAPPING

OCHHAVLAL CHHOTALAL & CO.

207/209, Nagdevi Street, Bombay 400 003.
Phones : Office : 324944 ; Resi. : 816926.
Grams : " KACHERIA ", Chinch Bunder, Bombay.

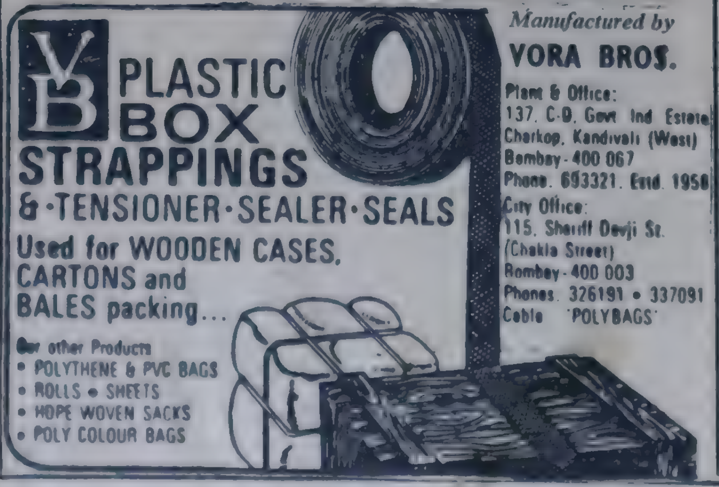
Stockists of :

Rayon, Plastic & Iron Box Strapping, Sealers, Tensioners, Seals, Sealing Wire, Lead Seals and Spare Parts for Sealer & Tensioner, Rubber Insertives, Asbestos Goods & Teflon Products.

Dealers : CARISTRAP box strapping.

Manufacturers of :

Ropes, Twines, Tapes, Newars & Webbings.



VB PLASTIC BOX STRAPPINGS
& ·TENSIONER·SEALER·SEALS
Used for WOODEN CASES, CARTONS and BALES packing...

Our other Products
- POLYTHENE & PVC BAGS
- ROLLS • SHEETS
- HDPE WOVEN SACKS
- POLY COLOUR BAGS

Manufactured by
VORA BROS.
Plant & Office:
137, C-D, Govt. Ind. Estate
Charkop, Kandivali (West)
Bombay-400 067
Phone. 693321. Estd. 1958
City Office:
115, Sheriff Devji St.
(Chakla Street)
Bombay-400 003
Phones. 326191 • 337091
Cable "POLYBAGS"

BRAKE & CLUTCH LINING

THE CHAMPION INDIA

Manufacturers of : Brake & Clutch Linings, Brake Blocks, of any type and shape, CHAMPION " B.A." Roll Lining Brake Washer Diaphragm O Ring & any sort of Moulded (Synthetic & Natural) Rubber Goods

48, Sambhu Nath Pandit Street,
Calcutta 700 025.

Phones : 432846 & 443397.

BRASS PARTS

K. SWASTIK PRODUCTS

Manufacturers :

All kinds of brass & turning parts & sheet parts as per customer's specification & blueprints.

Specialists :

1. All kinds of Fuse Units.
2. Electricals & Electronics parts.
3. All kinds of meter parts.
4. All kinds of machine screws.

Hasmukh Kunj, 50, Digvijay Plot,
Jamnagar 361 005.

BRASSIERES MANUFACTURER

NEWLOOK BRASSIERE CO.

Manufacturers and Distributors of :

No-Complaint Newlook Brassieres. More than 30 Favourite Styles. All Sizes. For Trade inquiries and free illustrated literature

Write to :

NEWLOOK BRASSIERE CO.
204, J. Shankarseth Rd., Near Gaiwadi, Bombay 400 004.
Phones : 356583, 383804 Grams : " NEWLOOKBRA ".

BRIGHT BAR

ALLAHABAD MERCHANDISE CO. PVT. LIMITED

310, Jessore Road, CALCUTTA 700 089.
Phones : 57-3963, 57-5080 (Cal.).
Grams : " ALMECOCAL ".

Manufacturers of :

Bright Steel Sections to B. S. S. and I. S. S. Specifications. Specialised in Flat Sections.

BRIGHT BARS & SHAFTING MFRS.

BRIGHT BAR MANUFACTURING CO.

Manufacturers & Exporters of :

Bright Steel Bars and Shaftings of all sizes, shapes—Specifications including EN-1A, EN-8, EN-9 and others.

Mahatma Gandhi Road, P.B. No. 9,
Bharuch (Gujarat) 392 001

BRIGHT STEEL BARS MFRS.

FRIENDS ENGINEERING CORPORATION

Manufacturers & Stockists of:

FREE CUTTING & M. S. BRIGHT BARS IN
Rounds, Squares, Hexagonals & Flats in various sizes.

Office: 210, Sant Tukaram Road, Iron Market,
BOMBAY-400 009.
Factory: Motibaug, Opp. R. K. Studio,
Chembur, BOMBAY-400 071.
Phones: (Off.) 329242, (Fac.) 521276

BROKERS (INTERNATIONAL)

L. D. BROKERAGE CO.

512/16, Rewa Chambers, 5th floor,
31, New Marine Lines,
Bombay 400020.
Phones:
Office: 291037, 291167, 291324
Resi.: 810866.

International Brokers for all kinds of Oilcakes, Extractions, Veg. Oils, Oil Seeds and Produce items, Direct Representatives of Actual Mfrs. & Exporters of Oilcakes, Extractions & Veg. Oils. Enquiries Solicited.

BRUSH MANUFACTURERS

DEY BROTHERS

Post Box No. 2113,
23, Biplabi Rash Behari Bose Road,
Calcutta 700 001.
Phone : 224412. Grams : " DECOBRUSH ".

" DECO " Brand Mfgs. Round Wheel & Boiler Tube Brushes, Foundry & Welding Brushes, Nylon & Flat Paint Brushes, Artist Brushes and also Industrial Brushes etc.

BUCKETS, DRUMS & HOLLOWARE MFRS.

TAYABI BUCKET FACTORY

Manufacturers of :

Buckets, Drums, Containers and other Household Articles.

Office :
174, Janjikar Street, Bombay 400 003.
Phones : 323474 & 326545. Cable: ' HORSEBRAND '.
Factory :
Rippon Road Cross Lane, Bombay 400 008.
Phones : 378808 & 375653.
Telex : 11-4822 TBF IN

BUILDING PROTECTION & DECORATION MATERIALS

HINDUSTAN COLOUR & CHEMICAL INDUSTRIES

Mfrs. of
Silvocem Waterproof cement paint, Bestonate Concrete Hardner, etc. Superseal Water-proofing compound, Marsonic Rapid Hardening Cement, Kwikset Liquid Rapid Hardner.

76, C. P. Tank Road, Bombay 400004.
Phones : 361627, 363296, 388896, Gram : "MOSAIC"

BUILDERS & CONTRACTORS

LEVKA PRIVATE LIMITED

Civil Engineers, Builders & Contractors

Office:
Sleater Road, Bombay 400 007
Phones : 377431 & 377432.

BUILDING MATERIALS

N. S. DOSHI & CO.

"SUPER SNOWCEM" CEMENT PAINT "IMPERMO" Cement Waterproofing Compound, 'AMAR' Paint Brushes, 'HARDCRETE' 'CEMPROVER' 'SANDTEX' 'SNOWFILLA' 'SANKAR' Cement and WHITE CEMENT and PAINTS.

91, Walltax Road, Madras 600003.
Phone: 34679

BUILDERS & CONTRACTORS

NATIONAL ASPHALT PRODUCTS & CONSTN. CO.

BUILDERS AND CONTRACTORS

CONTRACTORS TO GOVERNMENTS AND INDUSTRIES

Specialists in :

DAMS, EARTH WORK, ROCK CUTTING, ASPHALT AND CONCRETE ROADS, REINFORCED CONCRETE WORKS.

OFFICES

Bombay
Hill View,
Mahul Road, Chembur,
Bombay 400 074.
Phones: 523768 & 523769

Madras
2, Venus Road,
Alwarpet,
Madras 600 018.
Phones: 447585 & 447966

Nasik
Trimbak Road,
Nasik.
Phone : 4381.

BUILDERS & CONTRACTORS

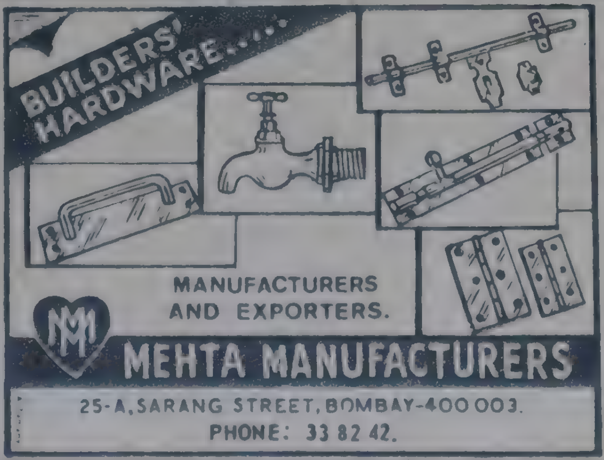
SHAH CONSTRUCTION COMPANY LTD.

Engineers & Contractors

" Shah House ", Dr. Annie Besant Road, Worli,
Bombay 400 018.

Phone : 375442. Grams : " SUPERTRADE ", Bombay.
Telex : 2634, SHAH IN.

One of the leaders in engineering and contracting and has impressive record of construction ability.
We are at home anywhere on construction projects of Highrise Structures, Public Health, Intake Wells, Dams, Canals, Bridges, Roads, Steel Structures, Industrial Plants and Electrical Installations.



BUILDERS' HARDWARE......

MANUFACTURERS AND EXPORTERS.

MEHTA MANUFACTURERS

25-A, SARANG STREET, BOMBAY-400 003.
PHONE: 33 82 42.

BUILDERS' HARDWARE

NASIK INDUSTRIAL ENGINEERING CORPORATION

Ram Nivas, Panchavati, Nasik 3.

Manufacturers & Exporters of:—NIECO Products, Horse Brand Gate Hooks & Eyes, Screw Hooks, B Eyes, Nickel Plated Cup Hooks, Electro-galvanised Hook Bolts with Nuts, J & L Type Roofing Bolts. Products are available in bright polished, Galvanised, Copper Oxidised and Black-Japan varieties.

Phones : 2998. *Resi.* : 2694. Grams : " INDUSTRY ".

BUILDING MATERIALS

SUPERTEX INDUSTRIAL CORPN.

Manufacturers of:

"SUPERTEX" Ready Mixed Decorative Coating (Madrasi Dana).

91, Wall Tax Road, Madras 600003.
Phone: 553609.

BUYING—SELLING

CARS • SCOOTERS • MOTORCYCLES

Always Contact :

JAMNADAS & SONS

247, Rajkamal, Station Road,
Wadala, Bombay 400 031.

Phone : 443062.

CABLES, WIRES & ACCESSORIES

KEYAL ENGINEERING CO.

29, Strand Road (2nd Floor),
Calcutta 700 001.

Phones : 224166, 229308, 221421.
Grams : " KEYALBANDU "

Please Contact for :

P.V.C. Power and Control Cables (copper & aluminium), PILCDSTA, XLPE, Welding, Trailing, Thermocouple & Heatproof and other special type of cables.

CABLES & WIRES, WELDING CABLES

SHYAM CABLE INDUSTRIES

Leading Mfrs. of:
Welding Cables (Copper & Alu.) of all sizes, T.R.S., Flexible Cables, Trailing Cables, PVC Cables, Underground Cables as per ISI.

Regd. Office: 73/1, Cotton Street,
Calcutta 700 007
Phones: 339601, 346 175.
Works: 198, Patpadganj, Delhi 110 092
Phones: 213585, 270303

CABLE MACHINERY

SARAN ENGINEERING WORKS

Wire drawing/cable manufacturing machinery such as bunching stranding-armouring decoilers extruders & vacuum annealing furnaces, galvanising, enamelling, copper coating, tinning plants & accessories.

A-147, Ghatkopar Industrial Estate, Bombay 400086
Phone : 582201

CABLE TRAYS

LADDER & PERFORATED TYPE
As per International Standards
Available in Aluminium & M.S. Hot dip galvanising quality.

STEELITE ENGINEERING CORPORATION

8, Nanabhai Lane, Bombay 400 001.
Phones: 258806, 293403.
Grams: "CABLETRAY".
Telex : 11-5689 SECO-IN.

CALCULATORS, OFFICE EQUIPMENT & STATIONERY

Authorised Dealers of
India's leading brands of electronic calculators. For Purchase, Sale, Repairs or Hire of NELCO (A TATA product). D.C.M., BLUE STAR (SOLUTRON), MECOM, WESTON, NIPPO, etc., calculators, SHARP Intercoms, please write immediately to BISCONS.
We also provide efficient and prompt DIRECT MAILING SERVICES for sales promotion purposes.
Business Improvement Systems & Consultancy Services.

BISCONS

29/A, Sethna Bldg., 2nd floor, Naoroji Seth Street, opp. Queen's Road, Thakurdwar, Bombay 400002.
Phone: 821780.

CALCULATORS

DYTEL ELECTRONICS PVT. LTD.

Electronic Pocket & Desk Calculators, Printing Calculators, Scientific/Engineering Calculators, Programmable Calculators, Invoicing/Accounting Machines, Office Computers, Paper Rolls & Accessories, Sales & Service.

Sales Office:
49, 2nd Floor, Tardeo Airconditioned Market,
Bombay 400 034.
PHONE: 376669
Service Centre:
2nd floor, 41, Nagindas Master Road,
Bombay 400 023.
PHONE: 271038.

CALCULATORS MFRS.

MULTIPLEX ELECTRONICS

Manufacturers of:
MULTIPLEX RANGE OF ELECTRONIC CALCULATORS

69-71, Ghoga Street, Fort,
BOMBAY 400 001
PHONE : 311143

CALENDARS

BOMBAY CALENDAR CO.

Makers of:
Quality Calendars and Advertisement Novelties, Photo Offset & Colour Printers. Specialist in Office Calendars, Cardboard Fans, Labels, Posters & Pictures Sole Agents.

44, Cawasji Patel Street, Fort,
Bombay 400023.
Phone *(Office)* : 257869.

CALENDAR AND DIARY MANUFACTURERS

TIKU & TIKU

Kitab Mahal, 192, D. Naoroji Road,
Bombay 400 001.
Phones : 262505 & 214942.
Grams : "VALLEY".

Makers of :
Quality Calendars & Advertisement Novelties, Photo Offset and Colour Printers. Our speciality Exclusive Calendars, Posters, Colour Labels and Picture Publishing. **Exporters of Calendars, Gift articles & Indian Poster Art.**

CALENDAR MFRS.

- CALENDARS
- FANS
- SHOW CARDS
- POSTERS
- LABELS
- BOXES etc.

Manufacturers :

VINAY CALENDAR CO.

Litho, Offset & Colour Printers.
104, Ardeshir Dadi Street, Vithalbhai Patel Roa
Bombay 400 004.
Phone No. 352293.

CAMEC NOISE CONTROL DEVICE

Are you worried about noise problem of diesel gensets & engines?—act quickly and install
CAMEC NOISE CONTROL DEVICE

1. Suitable for Kirloskar Cummins, Ashok Leyland, KOEL, RUSTON & other make Engines.
2. Tested product from I.I.T., Bombay.
3. Reduces Noise to background level i.e. 65 D.B.

For further details contact manufacturers

M/s. CAMEC ENGINEERS

B-2/52, Technocrat, off V.S. Marg (West), Prabhadevi, Bombay 400 025.
Phone: 4223131.

Note: Also ask for services on Diesel Genset & other products.

CAPACITORS

ASIA ELECTRIC CO.

Katara Mansion,
132A, Dr. A. Besant
Rd., Worli Naka,
Bombay 400 018.

Phones: 379544, 898186
Telex : 011-4217.
Grams : "FARADS".

Representatives at :

Calcutta, Delhi, Madras, Bangalore, Hyderabad, Baroda, Ahmedabad, Cochin, Pune, Coimbatore, Nasik, Goa.

CONCAP CAPACITORS for Fans, Motors and other applications in the range of 0.5 to 10 mfd. ; KVAR CAPACITORS for Power Factor Improvement; Stabilla VOLTAGE CORRECTORS to safeguard Refrigerators, T.V., Airconditioners and other applications.

CAPACITORS

Power A.C. Capacitors (KVAR), Electrolytic, Motor starting & running capacitors, Polyester, Polypropylene paper variable, TCC, Ramco, Daly, Keletron, Ducati, RIC, etc., Ceramics and any kind against specific requirement.

Contact:

JAY TRADING CORPORATION

G.P.O. Box No. 10061
Bombay-400 001.
Phones: Off. 273842; Res. 585668

CAPACITORS

KEYAL ENGINEERING CO.

29, Strand Road (2nd Floor),
Calcutta 700 001.
Phones : 224166, 229308, 221421.
Grams : "KEYALBANDU"

Largest Dealers & Stockists of :
H.T. & L.T. Power Capacitors
and
Manufacturers of :
POWER FACTOR IMPROVEMENT
AUTOMATIC CONTROL PANELS.

CAR AIRCONDITIONERS

INDUS

371, Cadel Road, Prabhadevi,
Bombay 400 028.
Phones: 4223737, 4223729, 4229270.

Repairing, Servicing and Installation of all types of Automotive Air Conditioners, Suppliers of Bus Air Conditioners, Refrigeration System for Vans & Trucks and Air Conditioners for Ambulances.

CAR HIRERS

RAJU HIRES (INTERNATIONAL)

LUXURY TOURIST TAXIES

Available Round the Clock.

10, Madhu Industrial Estate,
Pandurang Budhkar Marg, Worli,
Bombay 400 013.

Phones : 395176, 891636, 392189 ; Res. 578314.

CAR & COACH HIRERS

TRAVEL CARS

G-14A, Prasad Chambers (Basement), Opera House, Bombay-400 004.

Telephone: Office - 365083 Resi. - 825977.

CARBON BRUSHES

DIKSON & COMPANY

8, Bharat House, 104, Bombay Samachar Marg
(Apollo Street), Bombay 400 023.
Phones : 271721/258916. Grams : "MEMPHIS"

All types of Carbon Brushes as per sample or drawing.

Our Specialities
Automobile Carbon Brushes.

CARBON BRUSHES

ALLIANZ ELECTRIC & RADIO CO.

[illegible] Bhagirath Place, .P. B. No. 1104,
Delhi 110 006.

Phones : *Office* : 236370, *Res.* : 274603.
Grams : " VASANT "

Manufacturers of :

Carbon brushes for electric motors, generators, dynamos, electrical machines—trolley current collectors—cranes. Suppliers of sliprings, carbon brush holders and other spare parts.

CARBON DIOXIDE AND DRY ICE MFRS.

BOMBAY CARBON DIOXIDE GAS CORPORATION

Suppliers to all major beverage and industrial consumers in Maharashtra, Gujarat, Mysore and Goa.

		Phone :
Bombay Office :	1st Floor, Jehangir Villa, 107, Wodehouse Road, Colaba 400 005.	213961
Thane Works :	Wagle Industrial Estate, Road No. 9, Thane 4.	591698
Chembur Works :	Next to FCI Ltd., Maravali, Chembur 74.	525883 529387
Panvel Works :	Next to HOC, Rasayani, Panvel.	Tel. No. 29

CARDBOARD BOX MFRS.

KAJARIA CHEMIPAPER PVT. LTD.

28, Amratolla Street, P. B. No. 2071,
Calcutta 700 001.

Manufacturers of : TRISUL-brand Corrugated Paper Rolls (E.J. Kraft, Water Proof etc.), Corrugated Sheet of every description, Varnished, Printed and Unprinted Heavy duty Containers, Corrugated and other Board Boxes, Cardboard Discs of every Specificagion, Cartons (All Sorts of Punching) and all other Wrapping and Packaging Materials.

Exporters, Govt. & Semi-Govt. Contractors.

Phone : 345817.

CARDBOARD & CORRUGATED PAPER BOXES

M/s. PACKERS PRODUCTS

Experienced & Progressive Manufacturers of Corrugated Paper Boards, Boxes, Rolls for Local and Export Packing of all kinds of goods. For Protective, Presentable & Shock-absorbing Packaging.

Please Contact : 10/58, Kirti Nagar Industrial Area,
New Delhi 110 015.
Phone : 537143.

A-37, Phase II, Naraina Industrial Area,
New Delhi 110 028.
Phones : 583733, 589224.

CARPET CLEANERS

ASIAN CARPET CLEANER, DYER

Your Costly Carpet can be maintained at a very low price by our Carpet Cleaning Service done at your home and office on yearly contract and piece meal basis.

Contact

ASIAN CARPET CLEANER
Shop No. 66-67
Tardeo Airconditioned Market, Tardeo
Bombay 400 034.

PHONES : Office 894993, 894946 Resi. 540176

CARPET MANUFACTURERS

ASIAN CARPET MANUFACTURERS

Whenever you think of buying Carpet, Visit "ASIAN CARPET" Show Room and see Exclusive Designs of Fine Woollen Carpets. We are also specialists in Wall to Wall Carpeting in Hand Woven and Rubberised backing plain carpets.

Visit: Show Room at:
66-67, Tardeo Airconditioned Market,
Bombay 400 034.
PHONES: Office 894993, 894946 Resi. 540176

CARPETS & RUGS

BHARAT INDUSTRIES CORPORATION

G.P.O. Box 288 Opp. Red Gate Bombay -400 001.
Phones : 264905-260074. Grams : 'ALAKHDHAM'
Telex : 11-6571 ALAK IN

Govt. Recognised Export House

CARPETS

Agra-Jaipur-Kashmir-Mirzapur-Persian

WALL TO WALL CARPETING

CARPETS & FLOOR COVERINGS

VENJARA E. SALEMOHAMED & SON

81-D, Lehri House, Mohamedali Road,
Bombay 400 003.

Phones : 321459, 343858 & 342067.
Grams : " STRAWMAT ".
Telex : 011-6976 VESC.

Dealers, Agents & Exporters of :

Woollen & Cotton Carpets, Druggets & Handloom Shetranjis, Coir & Jute products, Grass mats, Mattings, Linoleums, Strawmats.

Manufacturers : P.O. Box 254,
BEACH, ALLEPPEY (S. INDIA)

CASEIN

LACTIC CASEIN

RAJ

ANAND DAIRY PRODUCTS

Opp. Polson Dairy,
Polson Road,
Anand 388001.
Phones : 459, 1555. Grams : "DEEPAK"

RAMESH KAPASI

3/5/8, Navajivan Society,
Bombay 400008.
Phones : PP. 890053 Resi. : 485209.

CASEIN AND DAIRY EQUIPMENTS

DOSHI BROTHERS

Polson Road, Anand 388001
(Gujarat).

●

Products :

Lactic Casein, Dairy Equipments

CASEIN & CASEINATES

S. P. JAGDISH & CO.

Manufacturers and suppliers of different qualities of CASEIN and CASEINATES in all grades. Sole Selling Agents for BPMC CASEIN products in India.

135, Stock Exchange Bldg., Apollo Street,
Bombay 400023.
Phones: 271212, 271414
After office hours: 475638
Grams: "CASINMAKER"

CASTORS & TROLLEY WHEELS

BOMBAY STAR ENGINEERING

Manufacturers of :

STAR CASTOR WHEELS and TROLLEY WHEELS for Apparatus, Furniture, Hospital, Light Portable Equipments and Trolleys.

7, Mulchand Mansion, 30, Princess Street,
Bombay 400 002.
Phones : 317667, 313476, 693766.

CASTINGS SPECIALISTS

CASTINGS

For oil, water and Steel Castings as per your patterns.

Spare Capacity daily 3 tons.

Please Contact :

GUJARAT IRON WORKS

Gheekanta Road, Ahmedabad 380 001.
Phones : 22316 & 22528.

CAST IRON PIPES MFRS.

THE CAST IRON MATERIALS MANUFACTURING AND TRADING COMPANY PRIVATE LIMITED

Registered Office : Chhani Road, Baroda 390 002.
(Phone No. 8730).

Factory at Bholav, Dist. Broach (W. Rly.).
(Phone No. 1064).

Manufacturers of :

C. I. Double Flanged Pipes & S/S Pipes & Fittings for Water Supply & also for Sulphuric Acid Plants & Heavy Duty C.I. Sluice Valves as per IS Specification.

CASTINGS "FERROUS & NON-FERROUS"

SHRI VISHNU METAL FOUNDRY

Manufacturers :

Sugarcane Crushers, Fly "Hand" Presses, Sanitary Goods & Fittings, Spiral Stair Cases, Specialists in Graded Ferrous, "C.I." & Non-Ferrous Castings. Iron & Steel Fabricators & General Order Suppliers.

4789, Phatak Namak, Hauz Qazi,
Delhi 110 006.
Phone : 521854. Grams : "METFOUND".

CASTINGS—CAST IRON PIPES & FITTINGS

SUPRA ENTERPRISE

32-33, Nehru Place, New Delhi 110 024.
Phones : 683143 & 682766 ; *Resi.* : 63-2568.
Grams : "HOLLYMEN".
Telex : 031-4407.

Manufacturers & Exporters of :

Cast Iron pressure water main pipes, fittings, all types of valves, cast iron soil pipes, fittings & man-hole covers.

CHAINS

ALL INDIA CHAIN ASSOCIATION

C/o SANATAN IRON & STEEL CHAIN
MFG. CO., (P.) LTD.
29B (CHAIN HOUSE), Bentinck Street
Calcutta 700 001.
Phone : 239856.

(Secy., RAGUNATH NUNDY)

For Prosperity and Dev. of Chain Industry in India and helping all Industries.

CHAINS

ASHOK STEEL CHAIN MFG. CO.

Mfrs. of : Quality Link Chains for Pulley Blocks, Cranes, Hoists, Bucket Elevators & Electrically Butt Welded Round Link Chains for Kilns of Cement factories, Sugar Cane Chain Slings for Sugar Factories & Non-Skid & Snow Chains for Tyres, also chain slings as per DIN. FEDERAL, BS & IS Specifications.

Plot No. 6, Sewree Cross Road, Sewree, Bombay 400 015.
Phones : 443955, 442981.

Works & Office :

S. No. 159 (O), C. S. Track Road, Kalina, Santacruz (East),
Bombay 400 029.
Grams : " LOADCHAIN ", Santacruz, Bombay 400 055.
Phones : 533206 and 532352.

CHAIN PULLEY & BLOCKS

C. BOLE & CO.

61-Narayan Dhuru Street,
BOMBAY 400 003
PHONES: 324350 TELEX: 011-4250 BOLE
329641
WORKS: 583400 GRAM: CIBOLECO

PUMPS: All types: also test pumps. Blowers-industrial fans, Burners, hydraulic equipments, Power Packs, Concrete Mixers, Hand & Power driven, chain Pulley Block & Jacks of all types.

CHAIN MFRS.

THE INDIAN LINK CHAIN MFRS. LIMITED

L. B. Shastri Marg, Bhandup, Bombay 400 078.

Manufacturers of : Hercules brand electrically Resistance Butt Welded mild, Higher Tensile and alloy Steel Chains, Chains manufactured strictly according to Indian, British and German standards ; also manufacturers of precision Calibrated Chains for Chain Pulley Blocks, Hoists and Conveyors, all types of Slings, other lifting equipment and Cast Steel and link anchor Chains with all fittings.

Phone : 592311. Grams : " INLINCH ", Bhandup.

CHAIN PULLEY BLOCKS & MATERIAL HANDLING EQUIPMENTS

MANGLA ENGINEERING CORPORATION

Distributors for :

INDEF Chain Pulley Blocks, Trollies, Electric Hoists, etc. TIRFOR Pulling & Lifting Machines, Gantries, Drum Carriers, Cranes, Wire Ropes, Slings, Winches & other material Handling Equipments and VANKOS Hydraulic Jacks, Pipe Bending Machines, Pullers, Link & DIAMOND Roller Chains, Machine Tools etc.

229, Ajmeri Gate, Delhi 110006
Phones : 263737, 633656 & 269798.
Grams : "MANGLABROS".

CHAIN PULLEY BLOCKS (RATCHET HOIST)

MECH-EL

PULL-LIFT

(Ratchet Hoist)

Capacity: 800 Kg. to 6000 Kg.

Manufactured & Serviced by:

MECH-ELECTRICALS

16, Kapadia Ind. Estate, No.3,
122-124, M. Vasanji Road, Bombay 400093.

CHAINS

STANDARD MATERIALS AGENCIES

Precision Roller Chains as per ISS, BS, ANSI, JIS, DIN specifications, Conveyor Chains, Bush and Solid Pin type Conveyor Chains, Elevator Chains, Inverted Tooth Chains and PIV Gear Chains.

P. O. Box 1660, 45/46, Podar Chambers,
S. A. Brelvi Road, Bombay 400 023.
Phones : 253202/253262. Cable : " STANSIZE ".
Telex : 011 3281 SMA IN.

Regional Offices : Ahmedabad, Madras, Calcutta.
Representatives at : New Delhi, Pune.

CHARTERED ENGINEER & VALUER

(Approved by E.E.P.C., SICOM, BANKS, etc.).

For Valuation of Plant and Machinery, Certification of Advance Licence, E.E.P.C. jobs, Steel Quota, Cement, etc.

M. C. PUNJWANI

B-8, Sitaram Society, Lala Devidayal Road,
Mulund (W), Bombay 400 080.
Phone : 595559.

CHEMICALS

AMRUTLAL BHURABHAI & COMPANY

Chemicals, Intermediates, Minerals,
Drugs & Solvents.
Anand Bhuvan, Princess Street,
P.O. Box No. 2379,
Bombay 400 002.
Phones : 311023, 311024, 311025, 319187 & 295235.
Grams: "CHEMDRUGS", Bombay, Kalbadevi 400 002.

R.C. Advt.

CHEMICALS

ASHISH ENTERPRISE

25, Swallow Lane (3rd Floor),
Calcutta 700 001.

Phones : 223834/229896.

Authorised stockists of SD's Fine Chemicals. Dealers of Industrial/Electroplating Chemicals & Cyanides.

CHEMICALS

MENTHOL BP/IP

Manufactured by :

BHAVANA CHEMICALS LIMITED

64-65, Laxmi Insurance Bldg., Sir Phirozshah Mehta Road, Bombay 400 001.
Phones : 266680, 257789.
Telex : 011-2527 Grams : " MENCOOL ".

★

S. 623, Padra Road, Atladra, Baroda 391 410.
Phones : 66838, 66418 & 66428.
Telex : 0175-238 Grams : " MENTHOL ".

CHEMICALS

BHUTA INTERNATIONAL

Stockists of GODREJ Chemicals such as GLYCERIN, STEARIC ACID, OLEIC ACID & FATTY ACID
Also available Sorbitol, Toluene etc.
Riddhi House,
88, Yusuf Meherali Road,
Bombay 400 009
Gram: BHUTA, Tele: 326219/339188
Telex : 011-5185 BUTA IN

CHEMICALS

CHEMICAL INTERNATIONAL

3, Princess Street, Bombay 400 002.
P. O: Box No. 2493.

Dealers & Importers of :

HEAVY & FINE CHEMICALS, SOLVENTS, PHARMACEUTICALS, DRUGS, LABORATORY CHEMICALS & All sorts of Textile Requisites.

Phones : { Office: 313694, 310540 ; Resi. 471240
Grams : "CHEMINTER".

CHEMICALS

CONTINENTAL CHEMICALS

Manufacturers of:

*"CHEMISOL", "ENCLEASOL" & "DEGREASOL"—Ideal for degreasing and cleaning of all types of engines, spares & carburettors—substitutes for Tri Chloro Ethylene as well as Carbon Tetra Chloride.

* "RUSTESOL" (Rust Remover) * "PEELOF" (Paint Remover) * "CLEANASOL" (Multi-purpose cleanser) * "PERFUMED LIQUID SOAP".

P. O. Box No. 112, Pune-411 001.
Phones: Office: 26850; Res.: 28155.

CHEMICALS

CONTINENTAL COMMERCIAL CORPORATION

Dealers in

Soda Ash, Soda Bicarb, Hydrose, Bleaching Powder, Caustic Soda Flakes, Caustic Soda Solid, Paraffin Wax, Trisodium Phosphate, Sodium Bisulphite, Mutton tallow, Acid Slurry, Detergent chemicals and Colours, Sodium Sulphite, Sodium Sulphate, Acids, Tanning chemicals etc.,

324, Mint Street, Madras 600003.
Phone: 36918

CHEMICALS

LABORATORY CHEMICALS
FOR
EDUCATION, RESEARCH & INDUSTRY
BIOCHEMICALS
MICROSCOPIC STAINS
AMINO ACIDS
INDICATORS etc.

D. K. LAB CHEMICALS

98, Princess Street, Bombay 400 002.
Phone : 318179. Grams : " LABDEEKAY ".
Kalbadevi

CHEMICALS

DEVKA CHEMICAL WORKS

Manufacturers of :

KLI-NOL Concentrated White Perfumed Cleaner, Amazo Superfoaming Cleaning Powder, Foamwel Liquid Soap, Flcrex Floor Cleaner, Liquid Detergents for Domestic & Industrial use. Also available Phenyle & Cleaning aids like Dusters, Brushes, Brooms.

322-27, New Mill Road, Kurla West,
Bombay 400 070.
Phone : 671127.

CHEMICALS

HALOGEN ENTERPRISES

2343, A Ward, Kolhapur

Manufacturers of:-

1. Chlorine Tablets for disinfection of Drinking Water.
2. Liquid Chlorine for disinfection of Drinking Water.

For Sugar Industry:-

3. WHITALL—Permanent Bleaching agent & Deviscosiser.
4. ALDOL—A PH. Stabilizer for Boiler Feed Water.
5. Settlal—Settling Agent for Refractory Juices.
6. SUSHIRA—Bagasse Pol Reducer.
7. VISCONIL—Surfactant for Viscosity Reduction.
8. E.C. TABLETS—For Mill Sanitation.
9. CHLOROSCOPE—For Residual Chlorine Determination.
10. O—TOLIDINE—For Chlorine Determination.

CHEMICALS

HARIBHAI JEEBHAI & CO.

Solvents, Industrial Laboratory & Photographic Chemicals in bulk & small packings.

Trade Inquiries solicited

22, Princess Street (Shamaldas Gandhi Marg)
Bombay 400002.
Phones:
Office: 312116, 313677, 254950
Godown: 692543, 682013
Resi: H.H. Joshi, 571834, 578472, 565332
Grams: "SUKHNATH"

R. C. Advt.

CHEMICALS

HIGH PURITY CHEMICALS & PHARMACEUTICALS

Manufacturers of

Fine organic, inorganic chemicals and drug intermediates like acids, hydroxy acids, acid chlorides, aliphatic & aromatic halides, amides, esters etc. etc. including metallic salts. For Education, Research, Pharmaceuticals and other industries.

Works: 8/34, Industrial Area, Kirti Nagar,
New Delhi 110 015 (India)

Phones: 531255, 531513 Gram: 'SALOOJABRO'

CHEMICALS

MANISH INDUSTRIES

2A-9, Vivina, M.A. Road, Andheri West, Bombay 400058
Phones: 579042 & 564979
Factory: MIDC, Dombivli, Dist. Thane, Maharashtra.
Phone: 86-399 (DOMBIVLI)

Products:

Copper sulphate AR/CP/Iron free grades (available in crystals, granules and powder), copper carbonate 4850 per cent, 50-52 per cent (sulphate, nitrate and iron-free grades), cupric oxide 78-80 per cent, zinc sulphate, zinc chloride, zinc carbonate and calcium sulphate.

CHEMICALS

For your requirements of Industrial Chemicals, Intermediates and Solvents.

Please Contact :

MULTICHEM

505, Nain Krupa, 118/122, Kazi Syed Street.
Bombay 400 003.
Phones : 349429 & 333013.
Grams : " MULTICHEM ", Chinchbunder.

CHEMICALS

PERCYNIC CHEMICALS

M. T. K. Bldg., Industrial Estate,
Lalbaug, Bombay 400 012.
Phones : 447473 & 442655. Grams : " SALEBOM ".

Manufacturers of :

Catechol, Tert Butyl Catechol, Tert Butyl Phenol, Guaiacol Glyceryl Ether, Tert Butyl Chloride, Tert Butyl Benzoic Acid, N-Butyl Bromide.

CHEMICALS

THE PIONEER TRADING CO.

(Estd. 1944)

Dealers in :

Light & Heavy Industrial Chemicals & Auxiliaries.

210, Samuel Street, Vadgadi,
Bombay 400003.
Phones : *Office :* 324607; *Res. :* 473913.
Grams : " CHEMITRADE ".

CHEMICALS

RAM—NATH & CO.

123, Angappa Naicken Street,
Madras 600001.
Phones: 22035/30623 Telex: 041-7399.

Distributors & Mfrs. Rep. for:

Trichloroethylene, Hydrofluoric Acid, Phosphoric Acid, Fluorine Chemicals, Fluorides, Metallic Stearates, Hexamine, Chlorinated Solvents, Acetone, Diacetone, Teepol B-300, Sodium Sulphide, Benzoic Acid & Sodium Benzoate.

Branches:

Secunderabad: Phone: 74857 Telex: 015-535
Vijavawada. Adoni & Bangalore.

CHEMICALS

(Fine & Laboratory Chemicals)

s. d. fine-chem pvt. ltd.

Office : 315/317, T. V. Industrial Estate, 248, Worli Road,
P. Box No. 19160, Bombay 400 025.

Manufacturers of :

LABORATORY & FINE CHEMICALS, STAINS,
INDICATORS AND CULTURE-MEDIA.

(Biggest plant in Asia)

Factory : E27/E28, MIDC, Tarapur Industrial Area, Boisar 401 501 (Maharashtra).

Phones : Office : 4227480, 4226114, 4226196, 4226516
Factory : 471, 472, 473 (Boisar).

Telex : 5604 SDIN. Grams : "LABKEMICAL", Bombay 400 025.

CHEMICALS

THE SCIENTIFIC & CHEMICAL PRODUCTS PVT. LTD.

(Manufacturers of Heavy & Fine Chemicals)

Mfrs. of Sulphuric, Hydrochloric, Nitric Acid & Lqr. Ammonia of all grades, Sulphate, Nitrate & Carbonate Salts of Aluminium, Magnesium, Calcium, Sodium, Cadmium & Bismuth, Cal. Chloride.

Regd. Office & Factory: 226, Bagmari Road, Calcutta 700 054. Cable: "SCIENTICO". Phone: 356146.

CHEMICALS

SHRIJI SULPHAMATE NICKEL

ATTENTION:- ELECTROFORMERS.

For your quality formed products—Always insist on SHRIJI NICKEL SULPHAMATE SOLN. of best quality alongwith free WORKING MANUAL. Available in 2 concentrations, viz. 50% and 90% soln. at most competitive prices.

Also contact for related quality chemicals used for electroforming processes e g E P Sulphamic Acid, E P Boric Acid, releasing agent chemical, Additive 81, Silvering process chemicals and stopping off lacquers.

Contact:

SHRIJI CHEMICALS

3, Krishna Kunj, Dahanu Road, Dist Thane

CHEMICALS

SYNTHAD CHEMICALS PVT. LTD.

Vallabh Vidyanagar

Phones : 64 & 216. Grams: "SYNTHAD".

Manufacturers of :

Various types of Synthetic Resins — such as Alkyds Phenolics, Malcics etc. for Paint Industries and Foundries — Varnishes and Extruded & Moulded Rubber Articles as per clients specifications.

CHEMICALS

SUPRAJA

Ayurveda Nilaya

Tallarevu 533 463.
East Godavary Distt.

Manufacturers of Genuine Ayurvedic Medicines. Free Medical Advice will be available at all times.

CHEMICALS

SUPERTEX INDUSTRIAL CORPN.

Manufacturers of:

ANHYDROUS CALCIUM CHLORIDE Best Quality I.S. Grade.

91, Wall Tax Road, Madras 600003.
Phone: 553609.

CHEMICALS

THOMAS BAKER (CHEMICALS) PVT. LTD.

Reg. Office:	Sales Office:
4/86, Marine Drive Bombay 400002.	404, Green House Green Street Bombay 400023.

Telephone - 293089 Telex - 011-3839
Telegram—Thomas Baker

CHEMICAL AUXILIARIES

AHURA CHEMICAL PRODUCTS PRIVATE LTD.

Manufacturers of :—All Textile Auxiliaries, Surface Active Agents, Turkey Red Oil, Synthetic Anionic Detergents and Wetting Agents, Non-ionic Emulsifiers for various Industries, Cationic Germicides and Softeners, Cosmetic Raw Materials, Cross Linking Agents and Other General Chemical Products.

Address : 84, Sion Road, Bombay 400 022.
Telephone Nos. 473351 55.
Telegrams : "AHURACHEM" Telex : 011-3917.
Managing Director : S. M. Mistry.

CHEMISTS AND DRUGGISTS

CHUNILAL MAYACHAND MEHTA

(CHASMAWALA)

Pharmaceutical Distributors & Opticians

3059, Three Gates, Ahmedabad 380001.
Grams : "EYEDROPS". Phone : 364661.

Wholesale Depot : Near La Gajjar Chambers, Ashram Road, Ahmedabad 380009.

Phones : 78371, 78372 ; Res. 383193.

CHEMICALS, DRUGS, SOLVENTS, INTERMEDIATES

PRAKASH CHEMICAL CO.

Imptrs. & Stkts. of

Heavy Chemicals, Solvents for Paints, Rubber, Plastic, Textile & Sugar Inds. Viz. Methynol Acetone, Sodium Nitrite, Benzene, Toluene etc.

4, Sutar Chawl, Bombay 400002
Phones: (Office) 329830. (Resi.) 673548
Grams : "PROMINENT"

CHEMICALS MFGRS.

AMRUT INDUSTRIAL PRODUCTS

Manufacturers of

CHEMICALS for Industries, CHEMICALS for Laboratories, CHEMICALS for Photography.

Factory: Chemical House, L.B. Shastri Marg,
P. B. No. 46, Thane 400601.
Telephone : 592334.

Adm. Office : Anand Bhuvan, Shamaldas Gandhi Marg,
(Princess Street), Bombay 400002.

Telephones: C/o. 311023, 311024, 311025, 319187 & 295235.

Grams: "KLOROKLIN" Bombay, Kalbadevi 400002.

CHEMICALS MFRS.

B & M CHEMICALS PRIVATE LTD.

Manufacturers of

Sodium Bichromate, Potassium Dichromate, Basic Chrome Sulphate, Chromic Acid, Sodium Sulphate (Yellow), Chrome Oxide Green etc.

3, Wood Street, Calcutta 700016.

Phones: 435714, 433176, 434467, 44-4515, 44-7631
Telex No. 021-2347. Gram: MOTORMALIK

CHEMICALS MANUFACTURERS

GOLDEN CHEMICALS PRIVATE LTD.

Registered Office & Factory:

"Chromium House", P.O. Box 8204, S. V. Road,
Dahisar, Bombay 400 068.

Manufacturers of :

Bichromates, Chromic Acid, Flakes, Basic Chromium Sulphate, Sodium Sulphate Anhydrous, Chrome Oxide Green and Barium Salts.

Phones : 662441-2, 662666, 662686
Telex : 011-6497.
Grams : "GOLDKEM"
Dahisar-West, Bombay 400 068

CHEMICALS & MINERALS

JYOTI TRADING COMPANY

Barar House, 239/243, Abdul Rehman Street,
Bombay 400 003.

Phones: 476194 & 326727. Grams: "DOLOMITE"

Dealers in :

Hypo, Blanc Fixe, Formaldehyde, Sodium Sulphide, Barium Carbonate & Dyes Intermediates, etc.

R. C. Advt

CHEMICALS MFRS.

PHOENIX CHEMICAL WORKS PRIVATE LTD.

Manufacturers of :

Sodium Silicate, Potassium Silicate, Sodium Metasilicate, Basic Electroplating Chemicals, Pigments & Fine Chemicals.

Regd. Office :

4, Rajan House, Opp. Century Bazar, Prabhadevi,
Bombay 400025.
Phone : 4228200. Grams : "WATERGLASS".
Factory : 13, Thane-Belapur Road, Thane (H.O.).

CHEMICAL IMPORTERS & DEALERS

CHEMICALS de CENTRE

3 15, Asaf Ali Marg,
New Delhi 110 002.
Phones : *Office* : 266274, 277447 ; *Resi.* : 650443.

Sole Distributors :

G. S. Chemical Testing Lab. & Allied Industries, Bombay.

Importer & Dealers:

Chemicals of all types for use in Industries, Research Laboratories, Educational Institutions & Agriculture.

CHEMICALS (IMPORTERS & EXPORTERS)

AMRITLAL CHEMAUX LTD.

Rang Udyan, Sitladevi Temple Road, Mahim, Bombay 400 016

SALES OFFICE ADDRESS :

AMRITLAL CHEMAUX LTD.

11, Sprott Road, Ballard Estate, Bombay 400 038.

Dealers in Dyes and Chemicals, Selling Agents for Sojuzchimexport, U.S.S.R. for Dyes, Intermediates and Chemicals & General Indentors with business contacts all over the world

ALSO

A Recognised Eligible Export House exporting Dyes, Chemicals, Engineering Goods, Processed Foods etc. all over the world.

Phone : *H. O.* : 453251 *Sales Off.* : 269501.
Telex : 011-6714 Grams : " RASIK " Telex : 011-3254.

CHEMICALS & PHARMACEUTICALS

INDUSTRIAL SOLVENTS & CHEMICALS PVT. LTD.

Manufacturers of:

DIMETHYL ANILINE
DIMETHYL SULPHATE
n-DIBUTYL ETHER
ETHER ANAESTHETIC I.P.
and
ETHER SOLVENT I.P.

101, Atlanta, 209, Nariman Point, Bombay 400021.
Phone: 241180 Grams: "SOLVENTS"

CHEMICAL PLANT EQUIPMENT

CONSOLIDATED CHEMEQUIP (MFR.) CORPORATION

Office : I, Sequeira Villa, Vidyanagari Marg.
Opp. : University Campus, Kalina, Bombay 400 098.
Phones : 532367, 544054 & 546951.

Stainless steel, mild steel, aluminium, pressure vessels, heat exchangers, storage tanks, chimneys, specialists in homogenous & lead sheets lining, epoxy lining & acid-alkali resisting floorings of chemical plants, breweries, steel plants, etc.

Factory :
Plot No. 8, Phase I, MIDC, Dombivli, Dist. Thane.
Phone : 279 (Dombivli).

CHEMICAL PLANTS & EQUIPMENT

MARS DESIGN PRIVATE LIMITED

P-142, Lake Road, Calcutta 700 029.

Telex: 021-2264. Phones : 42-4032, 46-8100.

Design, Engineering & Fabrication of :

Chemical Plants & Equipment as Heat Exchangers, Agitators, Crystallisers, Dryers, Distillation Columns etc. in M.S., S.S., Al., Pb., as per International Code and Turn Key Chemical Projects.

CHEMICAL PLANT EQUIPMENT

MIRCH-MIREX LIMITED

Designers and Suppliers of:
Packaged air/gas drying plants, pressure leaf filters, rotary vacuum filters, molten sulphur pumps and chemical plants.

Please write to :—

MIRCH-MIREX LIMITED

S. Patkar Road (Hughes Road), Bombay 400036.
Phones: 827301-04-05. Cable: "MIRCHEX".
Telex : MIRX-011-2119.

CHEMICALS, SOLVENTS ACIDS

ASHOK ORGANIC INDUSTRIES LIMITED

406, Sharda Chambers, 33, New Marine Lines, Bombay 40[illegible]
Phones: 252236–56, 317511 Grams: 'ASHOKBROS' BOMBAY
Telex: 011-3853 AOIL IN
Factory: 41-A, G.I.D.C. Industrial Estate, Nandesari, Dist. Baroda
Phones: 271/272 Grams: 'ASHOK' NANDESARI
Telex: 0175 397 AOIL IN

Manufacturers of:
Monochloro acetic acid, Sodium salt of monochloro acetic acid, Ethylene diamine tetra acetic acid and its salts, Nitrilo tri acetic acid and its salts, Sodium acetate, Acetic anhydride, Carboxy methyl Cellulose, Hydrochloric Acid.

Products Marketed:
Butanol, Butyl Acetate, Ethyl Acetate, Paraldehyde, Acetaldehyde, Acetic Anhydride, Glacial Acetic Acid.

Branches:
Kanpur, Bangalore, Varanasi, Delhi

CHEMICALS & SOLVENTS

ATUL CHEMICALS

283, Samuel Street, Vadgadi, Bombay 400003.
Phones: Office: 337199 Sales: 316366 & 392517
Res.: 827125

Re-packers of Industrial Solvents & Chemicals in required Packing in 450 ML, 5 & 25 Kg LTRS. or as required Packings; Specialised in Acetone, Benzene, Xylene, Toluene, Formaldehyde, Glycerine, Ether, Petroleum of all range, Butyl & Methyl Acetates. Also dealers in Heavy & Fine Chemicals

Sales Office:
79, Princess Street, Bombay 400002

CHEMICALS, DRUGS, SOLVENTS, INTERMEDIATES

CHUDGOR & CO. (PVT.) LTD.

Dealers of
Chemicals, Drugs, Minerals & Solvents.

Anand Bhavan, Shamaldas Gandhi Marg (Princess Street),
Bombay 400002
PHONES :

C/o Office: 311023, 311024, 311025, 319187 & 295235

Grams : "CHUDGORECO", Bombay, Kalbadevi 400002

CHEMICALS & SOLVENTS

Either for Sale or Purchase of :
CHEMICALS, SOLVENTS & INTERMEDIATES.

Please Contact :

D. JAMNADAS & CO.

207, Samuel Street, Vadgadi, Bombay 400 003.
Phones : 325181, 327919.
Grams : "VANDAN", Bombay, Mandvi.

Distributors for :
ACETIC ACID, ACETIC ACID GLACIAL

CHEMICALS, SOLVENTS & DYES INTERMEDIATES

IMPEX CHEMICAL CORPN.

Dealers & Exporters of :
Pharmaceutical Raw Material, Laboratory Chemicals, Water Treatment Chemicals etc. etc.

7, Devkaran Mansion, 24, Vithaldas Road
Princess Street, Bombay 400 002.
Phones : 314864 & 253834
Export Division : 290573 ; *Resi.* : 816649.
Grams : "IMPEXCHEM", Kalbadevi, Bombay.
Telex: 11-6778 VORA IN.

CHEMICALS & SOLVENTS

J.G. TRADING COMPANY

Stockists and Suppliers of
all kinds of Solvents and Chemicals.

Gopinath Market, Gali Batashan, Khari Baoli,
Delhi-110 006.

Tel: (Office)238910-232076-238510; (Resi.) 222737-222109;
227953 (Delhi).

Gram: "KEMIKALWAL"

CHEMICALS, DYES, SOLVENTS & DYES INTERMEDIATES

JAYANT DYE-CHEM CORPORATION

Interchem Agencies.
8, Sherif Devji Street, Bombay 400 003.
Phones : 321563, 326494, 324616.
Cable : "SHEPCHEM", Chinchbunder, Bombay 400009.

Direct Importers, Exporters and Dealers of :
Heavy Industrial and Pharmaceutical Chemicals, Solvents, Alpha Naphthyl Acetic Acid (PLANT HORMONE), Ziram, 2-4 D Ester Rubber Accelerator TMTD, ZDC Algaecide for Cooling tower & Corrosion Inhibitor for pickling bath, etc.

Agents for: **Messrs. Atul Products Ltd.**
Atul — for Chemicals, Dyes Intermediates etc.

CHEMICALS & SOLVENTS RAW MATERIALS

Please Contact :

PRAKASH CHEMICAL COMPANY

Importers and Stockists of :
Heavy Chemicals, Solvents, viz.
METHYNOL, ACETONE, SODIUM NITRITE,
BENZENE, TOLUENE, etc.
For Paint, Rubber, Plastic, Textile, Sugar and other Industries.
Available from Ready Stock and from incoming consignments.
4, Sutar Chawl, Bombay 400 002.
Phones : 329830. *Resi.* 673548.
Grams : "PROMINENT"

CHEMICALS & SIZING MATERIALS

KIRTIKUMAR & CO.

(Established 1943)

80, Bhandari Street, Mandvi,
Bombay 400 003.

Direct Importers & Stockists of :

Industrial Chemicals, Waxes and Auxiliaries.

Phones : 321583; Res. 812033.

CHIKKI SWEET MEAT MFRS.

When in Lonavla
Must Visit for Best Varieties in GLUCOSE CHIKKI,
FUDGES, FARSHAN & SWEETS

CHITRALEKHA CHIKKI

On the way to luxury hotel Ingleside Inn

Bombay-Pune Road
Lonavla, Dist. Pune.
Phone: 2816.

CINEMA & STUDIO EQUIPMENT

PHOTOPHONE LIMITED

PHOTOPHONE 70 mm, 35 mm and 16 mm Sound & Projection Equipments, Overhead Projectors, Slide Projectors, etc.

Registered Office:

7, Saki Vihar Road, Bombay-400 072. Tel: 582493. Telex: 011 6615.

Factories:

7, Saki Vihar Road, Bombay 400 072. Tel: 582493.

SEEPZ, Bombay-400 096. Tel: 565239.

Mapusa Industrial Estate, Phase II, Caraswada, Mapusa, Goa. Tel: 621.

Telex: 0194-273

Sales Offices:

Bombay, Calcutta, Madras, New Delhi, Ahmedabad, Bangalore, Secunderabad, Cochin, Coimbatore, Hubli, Jaipur, Jullunder, Lucknow, Madurai, Nagpur, Patna, Vijaywada, Cuttack, Visakhapatnam.

CINEMA AND STUDIO EQUIPMENT

ITEC PRIVATE LTD.

Phone : 356651 - Bombay

Manufacturers of

ITEC 35 MM System Bauer Cinema Equipment, ITEC 35/70 MM Cinema Equipment, ITEC-KLANGFILM Sound Systems, AUDIO-VISUAL Accessories

Sold and Serviced by

INTERNATIONAL TALKIE EQUIPMENT CO. PVT. LTD.

4, Tata Road No. 1, Swadeshi Mills Compound, Bombay 400004
Tel.: 352481.

who are also Agents for KLANGFILM Studio Equipment, CONRADTY Cinema Carbons, OMNITON Hearing Aids.

Branches: Madras, Calcutta, Calicut, Hyderabad, Cuttack, Rajkot.

CLEARING, FORWARDING, SHIPPING & INSURANCE AGENTS

AIRPORT HANDLING SERVICES

Annexe I/14, East Patel Nagar,
New Delhi 110008.

Licensed Customs Clearing Agents, Packing, Shipping, Clearing & Forwarding by Air & Rail—Stevedoring Contractors at Airport—Guaranteed efficient service.

Phone : 58-7946.
Cable Code : "AIRHANDS" 110008.
Proprietor : S. Ranganathan, B.Sc.

CLEARING & FORWARDING AGENTS

BHAGAT & COMPANY

Approved Custom House Clearing & Forwarding Agents, Clearance & Shipment of Pharmaceutical Cargo a Speciality.

19, Nazir Bldg., Calicut St., Bombay-400 038.
Phones: (Off.) 261497, 265462, (Res.) 454881.

CLEARING & FORWARDING AGENTS

CHHOTALAL KESHAVJEE SHAH & SON

Licensed Clearing, Forwarding, Shipping, Warehousing & Claim Recovery Agents.

Nazir Building, 6/12, Calicut Street,
Ballard Estate, Bombay 400038.

Phones: 262193, 269206. Telegram: "SHIPSOON".
Telex : CKSN-11-5434

CLEARING, FORWARDING, SHIPPING & INSURANCE AGENTS

CONTINENTAL CARRIERS

Head Office: 37H, Connaught Circus, New Delhi 110001
Phones : 320032, 320052, 321035. Telex : ND 2793

Customs Licensed and IATA approved air cargo Agents.

Approved cargo agents of Indian airlines

Bombay Office :

26 30, Rex Chambers, Walchand Hirachand Marg, Bombay 400001.
Phone : 266274. Telex : 5699.

CLEARING, FORWARDING & WAREHOUSING AGENTS

DHANRAJ MILLS PRIVATE LIMITED

Warehousing of:

All types of cargo in closed godowns, Bank approved and reliable and secured efficient services.

Sitaram Jadhav Marg,
Lower Parel, Bombay 400013.
Phone: Office & Godown: 394249.
Gram : 'GOODSECURE'. Telex: RUIA-2420.

CLEARING & FORWARDING AGENTS

EXCEL TRANSPORT PRIVATE LIMITED

Clearing & Forwarding Agents.

Address :

324-326, Vyapar Bhavan, Carnac Bunder,
Bombay 400 009.

Phones : 328872, 328873, 328874.

Grams : "FORWARD", 400 601.

Telex : 11-6936 XICS IN.

CLEARING & FORWARDING AGENTS

THE EASTERN BUNKERERS LTD.

Stevedores, Dubashes, Landing, Victualling, Chipping & Painting Contractors. Clearing, Forwarding, Insurance & Shipping Agents.

Scindia House, Narottam Morarjee Marg,
Ballard Estate, Bombay 400 038.

Phone : 262461. Telex : 011-2205, 011-3519.

CLEARING & FORWARDING AGENTS

FREIGHT CARRIERS PRIVATE LTD.

Clearing, Forwarding and Travel Agents

43, Tamarind Lane, Fort,
Bombay 400 023.

Phones : 274783, 271814 & 272239.

Grams: " QUICKFREIT ".

CLEARING & FORWARDING AGENTS

LILADHAR PASOO & CO.

Mulji House, Plot No. 57, Devji Ratansey Marg,
Dana Bunder, Bombay-400 009.

Shipping, Clearing, Forwarding, Insurance Agents, Banks' Muccadams.

Phones: 343735; 343764, 343823, 343871.
Gram: LETUSSERVE Telex: 011-4633 PASU IN

CLEARING & FORWARDING AGENTS

ODHARAM BULCHAND & CO.

19, Bank Street, Fort,
Bombay 400 023.

Phones : *Office* : 253705 ; *Resi.* : 259871.

Licensed Clearing, Shipping & Travel Agents to the Govt. of India and several Charitable Institutions and leading Commercial Firms.

CLEARING, SHIPPING, FORWARDING & WAREHOUSING AGENTS

MANILAL MOHANLAL KARACHIWALLA

(Estd. : Since 85 years)

Bank's Authorised Clearing, Forwarding, Shipping & Warehousing Agents.

Leheri House, 81/N, Mahommedali Road,
Bombay 400 003.
Phones : 323139 & 344216 (*Office*) ; 220218 (*Res.*).
Grams : " OWNER ". Telex : 011-6527 MMK IN.

CLEARING & FORWARDING AGENTS

QUICK CLEARING AGENCY

(Custom House Agents)

Trusted for efficient and personalised services in Clearing, Forwarding and Shipping Import & Export Cargo.

281, Shahid Bhagat Singh Road,
Bombay 400 038.
Phone : 260434. Grams : " QUICKAGENT "

CLEARING, FORWARDING AGENTS & INTRANSIT CONTRACTORS

SRP

Gram :
"SLEEPSOUND"
Phone : 261419,
267454, 267864
Resi : 214987

S. Ramdas Pragji & Sons

Clearing, Forwarding Agents & Intransit Contractors

(BY AIR - SEA - RAILWAY) C. H. A. No. 11/137

Arun Chambers, 4th Floor, 37, Shahid Bhagat Singh Road,
Bombay 400 038.

CLEARING, FORWARDING, SHIPPING & W.H./ INSURANCE AGENTS

TRAVELS & SHIPPING PRIVATE LTD.

Licensed Custom House Clearing, Forwarding, Shipping, Baggage, Insurance/Warehousing Agents.

Darabshaw House,
Narottam Morarjee Marg,
P.O. Box 1314, Ballard Estate,
Bombay 400038
Phones: 266108, 268413

CLUTCHES & CLUTCH PARTS

Clutches, Clutch Parts suitable for Machine Tools, Marine, Earthmoving Applications.

Contact :

DEE KAY CLUTCHES PVT. LTD.

Lake Road, Bhandup,
Bombay 400 078.

Phones : 582034 & 581225.

CLUTCH MANUFACTURERS

**IMPORT SUBSTITUTION
FOR ANY TYPE OF
ELECTROMAGNETIC CLUTCHES,
ALL TYPES OF CLUTCH PLATES
AND TELESCOPIC BRUSHES FOR
INDIGENOUS AND IMPORTED
MACHINE TOOLS**

Please Contact:

ENGINEERING HINDUSTAN

Readymoney Terrace, 4th Floor, Room No.4,
Dr. Annie Besant Road, Worli,
Bombay 400018
Phone: Res: 449352
Office: 896656. 890503

CLUTCHES, CLUTCH DISCS

POWER TAKE OFF UNITS, CLUTCH LININGS, FRICTION GEAR DISCS, BRAKE BLOCKS, FRICTION PADS.

MADE TO CUSTOMER'S SPECIFIC REQUIREMENTS

for EARTHMOVING, INDUSTRIAL & CONSTRUCTION MACHINERY

•

Contact manufacturers

STANDARD CLUTCHES & SPARES

Lake Road, Bhandup, Bombay 400078.
Phone: 582034. Grams: "CLUTCHES"

COLD STORAGE

BOMBAY COLD STORAGE

Office :

Nilam Mansion, Lamington Road, Bombay 400 004.
Phones : 592409, 593204, 386534, 353489 & 352195.

Available Cold Storage Space in Independent Chambers of various sizes. Temperature Range Between —20 Fahrenheit to +50 Fahrenheit. Ideally suitable for custom bonded goods.

Factory :

B-36, Wagle Industrial Estate, Thane.

COMMERCIAL AND FINE ART PRINTERS

POLYDRUCK ASSOCIATES

To win sales today, the excellence of your product should be matched with top quality printing. Quality printing — all at an economical price ! Colourful, bright, eye-catching and excellent printed material is our speciality. We have built our reputation on reproducing the design faithfully in all the colours of the spectrum for a perfect product image. We have one single aim, to give you the best possible printing with consistent quality from design-to-delivery.

Enquiries solicited :

10, Seeta Mahal, B. Petit Road, Bombay 400 036.
Telephone : 022 367134.

COMMERCIAL FIRM/DEALERS

TASHI COMMERCIAL CORPORATION

PHUNTSHOLING
BHUTAN

COMPENSATING CABLE

UDEYRAJ & SONS

Specialists in single and multicore armoured and unarmoured Compensating Cable.

P. O. Box No. 6562, Worli,
Bombay 400 018.

Phone : 392447.

COMPOSITE CONTAINERS

FIBRE FOILS PVT. LTD.

Mfrs. of Composite Containers of any size and specification. Also Dry Cell caps and closurers.

Contact: A-6, MIDC Industrial Area, Chakala MIDC P.O.,
Andheri (East), Bombay 400 093.
Phones: 566672, 573228, 568619.

COOLING TOWERS

DHANLAXMI COOLING TOWERS

Manufacturers of all type of Cooling Towers, Natural & Induced Drafts. Also suppliers of Chir Wood Ascu Treated Wooden Components for Cooling Towers. Repairs & Maintenance jobs also undertaken.

Office: 158, Reay Road, Opp. Rly. Stn., Bombay 400 010.
Tel. Nos. 812151-893080. Res: 575789.
Gram: 'TIMBERLAND'

CONCRETE MIXERS EQUIPMENT

M. K. ELECTRIC WORKS

Mfrs. of specialised machines for P.C. Poles, Railway Slippers, Bridges & Dam Construction Equipment viz. High/Low Frequency Internal & External Vibrators ranging from 50 to 250 cycles, or above High Frequency & Voltage Convertor, H.T. Wire Cutter.

1580, Nai Sarak, Delhi-110 006 ....**261110**

CONCRETE MIXERS & VIBRATORS

UNIVERSAL ENGG. CORPN.

Manufacturers & Exporters of :

Universal Concrete Vibrators, All Types Concrete Mixers 5/3, 7/5, 10/7, 14/10 cft. & 42/28 cft., Hand Mixer, Hotmix and Cold Mix Asphalt Plant, Roller Pan Mixer, Vibratory Rollers, Tower Hoists, Tar Boilers, etc.

E2/27, Jhandewalan Extn.,
New Delhi 110 055.
Phones : 528141 & 528142.

CONDIMENTS, PICKLES MFGRS.

K. T. KUBAL & CO., PRIVATE LTD.

(Estd. 1926)

40, R. S. Nimbkar Marg, Bombay 400 008.

Manufacturers & Exporters of :

" KUBAL " brand Pickles, Massala, Curry Powder etc.

Also Mfgrs. of :

Electrically welded steel Drums, Containers, Kegs etc.

Phone : 373219.

CONDIMENT MANUFACTURERS

M. M. POONJIAJI & CO.

42, Anandilal Podar Marg (1st Marine Street),
Bombay 400 002.

Manufacturers & Exporters of :

" SHIP BRAND " GREEN LABEL Indian Condiments, Mango Chutneys, Pickles, Madras Curry Powder, Curry Paste & Sugar-cane Vinegar.

Grams : " PRESERVE ". Phones : 312412
Res. : 255475

CONDIMENTS & PICKLES

V. P. BEDEKAR & SONS PVT. LTD.

Gharpure Path, Bombay 400 004.

Manufacturers & Exporters of : Mango, Lemon, Chilly & Mixed Pickles in Oil, Curry Powder, Ground Spices and Indian Condiments.

Phone : 356673. Grams : " BEDEMASALA ",
Bombay 400 004.

CONSTRUCTION MACHINERY

ASHOK ENGINEERING & CONSTRUCTION CO.

Vibromachines (India) Private Ltd.

Manufacturers of 'ASHOK' Immersion Concrete Vibrators Mechanical/Pneumatic/Electrical, Screed, Shutter & Table Vibrators, ★ 'ASHOK' Concrete Mixers, Pneumatic Guniting/Shot creting Machine, Grouting Pumps, ★ Vibro Earth Rammers, Building Hoist, Pneumatic Concrete Placers, etc.

14, Ganesh Chandra Avenue, Calcutta 700013.
Phones: 236814, 237063, 235218 & 235173
Gram: CASH

CONSTRUCTION MACHINERY DEALERS

INTERNATIONAL ENGINEERING & CONSTRUCTION CO.

16, Biplabi R. Basu Road,
Calcutta 700 001.

Manufacturers of :

'MAXIMIX', Concrete Vibrators, Rammers, Concrete Mixers, Vibratory Road Rollers and other accessories.

Phones : 223595, 221915, 224212.
Telex : — NARN 3151.

CONSTRUCTION MACHINES

MACHINEX V3

Dealers, Manufacturers & Sole Selling Agents for Machines to Manufacture Ghamellas, Utensils, Milk Cans, Stoves, Wire Nails, But Bolts, Drums, Barrels, Cycle Rim, Gas Cylinder, Ammunition Box, Miniature Lamps, Window Grills, Tractors/Automobile Parts, Sheet Rolling Mills, Presses Deep Drawing/Hydraulic/Mechanical Ovens, Furnaces, Glass Bottles/Sheet/Tumblers Rubber, Bakelite & Construction Machines, Shearing Machines, Lathes.

508, Neelkanth, 98, Marine Drive, Bombay 400002.
Phones: 297068 & 258621.

CONSTRUCTION MACHINERIES

MILLARS CONSTRUCTION MACHINERY DIVISION

(A Divn. of the ACME Manufacturing Co. Ltd.)

Victoria House, Victoria Road, Byculla, BOMBAY—400 027.
Phones: 372103/04/05 Telex: 0114237

Leading Manufacturer of Construction Machineries like Concrete Mixers, Roller Pan Mixers, Tower Hoists, Asphalt Mixers, Concrete Batching and Mixing Plants and Central Asphalt Plants. Millars also Manufacture High Speed Pan Mixers under Licence from TEKA BAUMASCHINEN GMBH OF WEST GERMANY

CONSTRUCTION & MATERIAL HANDLING EQUIPMENT

RMT INTERNATIONAL

Post Box 52,
RANCHI 834 001.
Telex : 625-232. Cable: "SAHYOG"

Agents for foreign manufacturers of Ferro Alloys, Steelcord Conveyor Belts, Crushing and Screening machinery, Construction and Material Handling equipments, Farm machinery, Seamless Pipes and Tubes, Chemicals etc.

CONSULTATION/REPRESENTATION

BIKA BROTHERS & SISTERS

108, C-2/C-2, Pocket 2, Janakpuri, Pankha Road, New Delhi 110 058

Phone: 551495 Cable: BIKASIS

Consultation/Representation :
Export Import Films, Finance, Tours, Travel etc
Interpretation/Translation :
Chinese, French, German, Italian, Japanese, Portuguese, Spanish etc.

CONSULTANTS

SMPS CONSULTANTS

Leading Consultants, Architects and Engineers for Civil, Structural, Electrical, Airconditioning etc. Experts in Factory and Industrial Designs.

918, Tulsiani Chambers, Nariman Point, Bombay 400021.
Phones: 235382, 224243.

CONVEYOR BELTS MFRS.

Manufacturers of :

Eureka

Steel Processing Conveyor Belts.

R. D. ASHAR Engineering Division

10, Homi Mody Street, Bombay 400 023.
Phone : 317704. Telex : 5199.

CORRUGATED BOXES MANUFACTURERS

M/S JAYANT FIBRE CONTAINERS PVT. LTD.

Largest Manufacturers of Heavy Duty Corrugated Export Containers, Printed Cartons, Corrugated Boxes in various plies corrugated paper Rolls, Boards.

205, Kakad Chambers, 132, Dr. Annie Besant Road, Worli, Bombay 400018.
Phones: *Office:* 375870, 376457
Factory: 583713, 583009

CORRUGATED PAPER BOX MFRS.

KRISHNA BOX FACTORY

Folding Cartons of all types, multicolour printed, decorative & plain duplex, corrugated & grey board boxes for pharmaceuticals, cosmetics, food products, electrical accessories, motor parts and other industries. Also shipping cartons and textile labels.

37 (II) MIDC Central Road,
Andheri (E), Bombay 400 093.
Phones: 579174, 579175
Cables: "CORRUGATED"

CORRUGATED PAPER & BOXES MFRS.

PREFECT PACKAGING

Manufacturers of:
Corrugated & Grey Board Boxes
Plot No. "A2", Caves Road, Tahira Industries Comp., Jogeshwari (East), Bombay 400 060.

Phones: 574116, 576730

CORRUGATED PAPER BOX MFRS.

SUBANDHU CORRUGATING INDUSTRIES

Leading Mfrs. of Corrugated Paper & Boxes
123, Bhimpura, Dongri St.,
Bombay 400 009
Office Phones: 863758, 865851, 865711

Factory: Plot No. A-306, Road No. 32,
Wagle Industrial Estate, Thane.
Factory Phones: 593224, 503680

COSMETICS

BHAVNAGAR OIL & CHEMICAL INDUSTRIES PRIVATE LIMITED

Manufacturers of:

Medicinal Castor Oil. Refined Groundnut Oil. Salad Oil. "CASTAROMA" Hair Oil. Perfumed Castor Oil. Blown Castor Oil. Hydraulic Brake Fluid. etc.

Sales & Registered Office:

1411. Dalamal Tower. Nariman Point. Bombay 400021.
Phones: 221718 & 221740. Grams: "BOCIL".
Managing Director: D. M. Merchant

COTTAGE INDUSTRIES

THE CENTRAL COTTAGE INDUSTRIES EMPORIUM

(A Govt. of India Undertaking)

Janpath, New Delhi.
Branches at: 34, Chhatrapati Shivaji Marg, Bombay; 7, Jawaharlal Nehru Marg, Chowringhee, Calcutta; Mirza Ismail Road, Jaipur.

COTTON DEALERS

BREUL & CO.

Cotton Merchants, Brokers, Exporters & Commission Agents.

Taj Building, 210, Dr. Dadabhai Naoroji Road, Fort, Bombay.

Proprietor : J. K. S. Nicholson.

Phones : 265411-2-3-4-5. Grams : "BREUL."
Press Telegrams Address : "BREULPORT"
Telex No. BRULTELEX-BY : 011-2567. G.P.O. Box 27, Bombay 400 001.

COTTON FILTER CLOTH MFRS.

DAISY TRADING CORPORATION

Manufacturers and Stockists of
Cotton Filter Cloth for Oil, Paints, Dyes, Chemicals, Potteries, Sugar, Food and Pharmaceutical Industries.

402, Navjiwan, 125/127, Kazi Sayed Street, P. B. 3185, Bombay 400003.
Phones: Off.: 327007, 320415. Resi.: 661127, 451345.
Gram: 'PROOFTALP'.

COTTON WASTE

CHUNILAL & COMPANY

Mangrol Mansion, 204/224, Bora Bazar Street, Bombay 400 001.

Phones: *Office:* 266071, 265067. *Godown:* 443743. *Resi.:* 543343. Grams: "COTONWASTE".

Dealers in:

Cotton & Cotton wastes, Merchants & Exporters, Hard Waste for Machine Cleaning & Soft Waste for Spinning Plant & Paper Mills, also Synthetic Waste.

COUPLINGS

STANDARD MATERIALS AGENCIES

Close Grain Cast Iron Flexible and Rigid Couplings, Standard Tyre type Flexible Couplings, Roller Chain Flexible Couplings, Flexible Gear Couplings and Disc Couplings.

P. O. Box 1660, 45/46, Podar Chambers,
S. A. Brelvi Road, Bombay 400 023.
Phones: 253202/253262. Cable: "STANSIZE".
Telex: 011 3281 SMA IN.
Regional Offices: Ahmedabad, Madras, Calcutta.
Representatives at: New Delhi, Pune.

CRANE CONTROL GEAR

INDIAN TRADE AGENCY

Contact us for quality products of crane control gears & other material handling equipments. A.C. & D.C. Brakes, drum controllers, wire & grid type resistance boxes, limit switches, master controllers, A.C. & D.C. contactors, starters, relays, crane control panels & Brake Drum couplings etc.

29, Strand Road, Calcutta 700 001.

Phones : 224166, 229308, 221421.

Grams : " KEYAL BANDU ".

CRANE/LADDER/TROLLEYS ETC

EAGLE ENGINEERING COMPANY

Trolleys/Elevating Trucks/Pallet Trucks/Wheel Barrows/Trolley Wheels/Floor Cranes/Ladder Trolleys etc.

35, Chittaranjan Avenue, Calcutta 700012.
Phone: 26-2077

CRANE MANUFACTURERS

Manufacturers of :

E.O.T. Cranes, Material Handling and Foundry Equipment.

FEDERAL ENGINEERS

A-81, Wagle Industrial Estate,
Road R, Off Road No. 16, Thane, Maharashtra.

Phones: 592661, 506769. Grams: "FEDERAL", Thane.

CRANES & MATERIAL HANDLING

" RIGO " — made in Italy.

MOBILE-CRANES, SELF-PROPELLED YARD CRANES, HYDRAULIC TELESCOPIC CRANES, TRUCK-CRANES, ALL-TERRAIN & ROUGH-TERRAIN CRANES having different capacities.

Sole Agents for India :

JASHVANT C. SHAH & CO.

Bharati Nivas, Block No. 6, Ist Floor, Besant Road,
Santa Cruz (West), Bombay 400 054.

Phones : 359710 & C o 317587.

Grams : " OTCASNART "

CRUCIBLE & GRAPHITE

KHANDELWAL CRUCIBLE & MINERAL INDUSTRIES

Manufacturers of:

'INDIA SUPER' Brand Graphite Crucibles, all shapes & sizes up to 1500 sizes in 'A', 'B' & T.P. Shapes, full accessories manufacturing from Imported Graphite & Chemicals.

2/40/25, Laxmi Vilas, Olcott Gardens, Rajahmundry,
(A.P.).....5129
Grams: KHANDELWAL

CULTURE-MEDIA

s.d. fine-chem pvt. ltd.

Office : 315/317, T. V. Industrial Estate, 248, Worli Road,
P. Box No. 19160, Bombay 400 025.

Manufacturers of :

LABORATORY & FINE CHEMICALS, STAINS, INDICATORS AND CULTURE-MEDIA.

(Biggest plant in Asia)

Factory : E27/E28, MIDC, Tarapur Industrial Area, Boisar 401 501
(Maharashtra).

Phones : Office : 4227480, 4226114, 4226196, 4226516
Factory : 471, 472, 473 (Boisar).

Telex : 5604 SDIN. Grams: " LABKEMICAL", Bombay 400 025.

CUTTING TOOLS MFGRS.

MACMAN ENGINEERS (INDIA)

MACUT/SONICUT Diamond Abrasive Cutting m/c upto automatic stage to cut anything, Glass/Stone drilling & Cutting, Special m/cs & Automation of manual equipment.

Elar Bldg., 524, S. Bapat Marg, Bombay 400028
Phones: 4222286/4271307

CYCLE ACCESSORIES & SPARES

B.S.C. CYCLE
The Perfect Cycle of the Day

BICYCLE MANUFACTURING CORPORATION

12-R, Industrial Area "B", Ludhiana 141003

CYCLE ACCESSORIES & SPARES

SUPER CYCLE & ALLIED INDUSTRIES

Manufacturers-Exporters of :

Super & Chetak Brand bicycles and parts.

Gill Road, Ludhiana 141 003 (P.B.).
India.

Phones : *Office* : 24638, 23941 Cable : " CYCLES ".
Resi. : 23776, 35571 Telex : 0386-211.

DIAL THERMOMETERS

KALIDAS HARJIVAN

(Estd. 1920)

Mercury-in-Steel, Vapour Pressure, Bi-metallic & Industrial Glass Thermometers, Pyrometers, Temperature Recorders, Pressure/Diaphragm/Receiver Gauges & Monometers.

195, Samuel Street,Bombay 400009
Phones: 325525, 321882
Resi: 810548
Grams: "MAHUVAWALA"

DAIRY COMPANIES

PARSI DAIRY FARM

H.O. 261-63, Princess Street,
Bombay 400 002.

Branches :
Lal Baug, Poibavdi, Dadar.

Dealers :
Milk, Dairy Products and Indian Sweetmeat Mfrs.
Phones : 313633-34.

DIARY MANUFACTURERS

JANATA BOOK MFG. DEPOT

219, Abdul Rehman Street,
Bombay 400 003.

Manufacturers of :

Famous 'SCHOLAR' New Year Diary,
Exercise Books, Spiral Stationery,
Account Books, Duplicate Books,
Calendar Refills,
Writing Pads and Office Stationery.

Phones: 325890, 334793

DEPARTMENT STORES

Akbarallys

THE NAME GUARANTEES

45, Veer Nariman Road, Fountain, Bombay 400023
Sai Darshan Aps., S.V. Road, Santacruz (W), Bombay 400054
12, Sir Phirozshah Mehta Road, Fort, Bombay 400001
Phones: Fountain: 253921-253965; Santacruz: 531076; Fort: 263716
Gram: 'AKBARALLYS' Telex: AKBR 011-2045

Drugs, Provisions, Ready-to-wear, Cosmetics, Toiletries, Travel Goods, Household needs, Crockery, Presentations, Monginl's Confectionery, Sweetmeats, Home appliances, Tailoring, Bangles, Watches, Ladies wear, Kiddies wear, Toys & Sports, Costume & Silver Jewellery, Silver coins, Refrigerators, Stainless Steel Kitchenware, Fresh fruits, Dry fruits, Mail order service, Canteen equipments, Bed sheets & Towels, Greeting cards, Shirtings, Suitings, Sarees, Akbarallys gift vouchers, Wigs & Wiglets, Ladies bags, Home Decoration, Electronics & Repair service, Gifts-n-Crafts, Ice creams, Monsoon wear, Goodwill offers, Snack bar, Florist, Photography.

DESIGNING — DRAWING — TRACING

ON CONTRACT BASIS

Designing of special purpose machines — production toolings — copying of any type of machines — drawings of mechanical — fabrication — electrical — civil items — any type of tracings in pencil or ink with stencil lettering.

For Clean — Neat — Accurate Work.

Write to :—

K. PARAMESWARAN

Post Box 7706, St. Francis Hostel Compound,
Borivli (West), Bombay 400 092.

DESIGNERS & MFRS. OF HEAT EXCHANGERS

RELIANCE HEAT TRANSFER PVT. LTD.

Designers & Mfrs. of Heat Exchangers, Aftercoolers, Oil Coolers, Condensers, Chillers, Pre-Heaters to TEMA & IS Specification and also Electrical Fuel Oil Heaters, Fuel Oil Pumping & Heating Units and Rotoclean Self Cleaning Filters.

46, Veer Nariman Road, Bombay-400 023.

Phones: 257004, 257025, 257045.

TELEX: 011-3801.

DETECTIVES

EXPERT SERVICES BUREAU PVT. LTD.

Cecil Court, Mahakavi Bhushan Mrg, Bombay 400 039.
Phones : 230464 & 231130.

All types of Criminal, Civil, Industrial & Private Investigations & Screening undertaken. Also Industrial Security, Watch & Ward. Have representatives in big cities in India & Associates abroad. Chairman, Mr. N. M. Kamte, I. P. (Rtd.), M.B.E., Retired Inspector General of Police, Bombay. Member, World Association of Detectives, Inc., U.S.A. Also a Member of Association of British Investigators Limited and Associate Member of Industrial Police and Security Association (U.K.).

DIAMONDS

BAPALAL & CO.

29, Rattan Bazar, Madras 600003.
Phones: 32396 & 39573

Cut & Polished Diamonds — Diamond Jewellery Exporters & Importers

Estd. 1910.

DIAMOND INDUSTRIAL TOOLS

DIABRASIVE TOOLS PVT. LTD.

Manufacturers of
Diamond Impregnated Wheels and Hones, Gear and Thread Grinding Diamond Chisels, Indentors, Glass Drills, Diamond Machining Tools, Lapping Compound etc.

103, Perambur Barracks Road, Madras 600007
Phone: 662814/662304.

DIAMONDS, PRECIOUS STONES & PEARLS

MOTILAL VIJBHUKHANDAS

185, Sheikh Memon Street, Bombay 400 002.

Dealers : Gold, Silver.

Importers & Exporters : Chemicals, Precious & Semi-Precious Stones, Handicrafts.

Indentors & Agents, General Merchants.

Phones : 326537 & 326856. Telex : 011-2326.
Grams : " AMIABILITY ", Bombay.

DIAMOND TOOLS

INDUSTRIAL DIAMONDS & TOOLS CO.

7-B, Sagar Vihar, 45, Kulpati K. M. Munshi Marg,
Bombay 400 007.
Phone : 357479.

Manufacturers of :

Diamond—Dressing, Boring & Turning Tools, Diamond Chisels, Diamond Indenters, Diamond Wheels, Diamond Hand Laps, Diamond Honing Sticks, Special Diamond Tools, Diamond Powder, Diamond Lapping Compound, etc. Suppliers of Industrial Diamonds, Boarts, etc.

DIAMOND TOOLS

For Quality Diamond Dressers

STAR DIAMOND TOOLS

Office: Great Social Building, Fifth Floor, 60, P.M. Road, Bombay 400 001. Phones: 253301 - 253201
Factory: Mac Laboratories Compound, Vidya Vihar, Bombay 400 086. Phones: 581747 - 583291

Manufacturers & Exporters of
Single Point Diamond Dressers, Grit Tools, Multipoint Indexable Crowns, Multi Layer Blade Type Dressers to your specification

Authorised dealers
HEMANT TOOLS TRADING CO. Phone: 321174

DIARIES

ANGEL'S PUBLISHING CORPN.

19, British Indian St.,
Calcutta-700069.
Phone: 239357 Gram: "ANGELDIARY"

Publishers & Mfrs. of

Angel's Diaries, Specialised "EXECUTIVE" "HOUSEHOLD" & SUCCESS INDUSTRIAL & TAILOR MAKE DIARIES

DIESEL ENGINE SPARES

SPARES FOR

Perkins: P-6, P-4, P-3, P-6/354, 305, L-4 etc. Leyland: 680-Hippo etc. Meadows: 4DJ 330 etc. Filter for any application.
Available At:

C. K. SYNDICATE

7, Prafulla Sarkar St., Calcutta-700 072.
Phones: 235046/8504
Grams: PERKSPARE.

DIESEL ENGINES & PUMPING SETS AND COMPLETE RANGE OF SPARE PARTS AND ACCESSORIES

ELVE CORPORATION

Admn. Office: Elve Chambers, Green St.,
Fort, Bombay 400 023.
Phones: 298788, 298742, 298698
Grams: "ELBUSCON" Telex: ELVE-011-3856

Export Processing & Shipping Division:
Warehouse No. 1 & 2, Agarwal Indl. Estate,
Kolshet Road, Thane 400 607 (M.S.)
Phone: 595056

Exports:
Merchant Exporters of Diesel Engines, Spare parts, Diesel Pumping Sets, Hand Tools etc

12, RUSTOM SIDHWA MARG,
BOMBAY-400 001
PHONE : 261691

WORKS : 8/166, JEONI MANDI
AGRA 282004
PHONE : 73001

EEC

Everest

ALUMINIUM ALLOY DIE CAST PISTONS
EVEREST ENGINEERING CORPORATION
MANUFACTURERS OF :
'EEC' BRAND ALUMINIUM ALLOY DIECAST PISTONS FOR DIESEL & AUTOMOBILE ENGINES AND SUPPLIERS OF DIESEL ENGINE SPARES & FUEL INJECTION EQUIPMENT.

DIESEL ENGINES & PUMPING SETS

GECO TRADING CORPORATION

Manufacturers & Exporters of: ISI marked GTC Brand 5 & 6.5 HP Diesel Engines, Water Centrifugal Pumps, Sprayers, Agricultural Implements, Footvalves, Hose Couplings etc.

Enquiries to:

GECO TRADING CORPORATION
5 K K Mansion, 289 Nagdevi Street, Bombay 400 003.
Phones: 329847, 320587. Grams: BILKHAIR CHINCHBUNDER.
Telex No. 011-5305 GECO IN.

Factory at:
B-8, M.I.D.C. Industrial Estate, Shiroli, Kolhapur 416122.
Phone. 7544. Grams: BILKHAIR KOLHAPUR.

DIESEL ENGINES

GREAVES LOMBARDINI LTD.

Regd. Office & Works :
Plot J-2, M.I.D.C. CIDCO Colony — P.O.
Aurangabad 431 003.
Phones : 8464 to 8469. Telex : 0745-236.
Grams : " LOMGREAVES ".

Manufacturers of :

Vertical, lightweight, compact diesel engines in collaboration with Lombardini Motori, Italy, in the range 3.5 to 16 HP. Engines suitable for variety of industrial and automotive applications such as pumpsets, platform trucks, concrete vibrators, mixers, marine motorbikes, 3 and 4 wheelers etc. Generating sets from 1.5 kva. to 6 kva single phase and 3 phase. Inboard and outboard marine engines in the range 3.5 to 11 bhp.

DIESEL ENGINES & THIN WALLED BEARINGS

KIRLOSKAR OIL ENGINES LTD.

Regd. Office & Factory :
13, Laxmanrao Kirloskar Road,
Khadki, Pune 411 003.
Phone : 55341. Grams : " KOEL ", Pune
Telex : 0145-245.

Manufacturers of :

High Speed Diesel Engines from 3 HP to 550 HP & Thinwalled Bearings.

DIESEL ENGINES, PUMPS, PUMPSETS & GENERATING SETS MFRS.

PRABHAT

Water & aircooled vertical diesel engine—5 to 16 BHP, High & Slow speed, pumpsets & Generating sets Mfrs

RAJASTHAN ENGINE & PUMP IND.

6/321, Belanganj, Agra, 282004 (INDIA)
Phone: 67078 Cable: "KRISHI"

DIESEL ENGINES

RUSTON & HORNSBY (INDIA) LIMITED

Regd. Office: 1, Dr. V. B. Gandhi Marg, Bombay-400 023. Phone: 271524, **Telex:** 011-2517, Gram: "GREAVES" Bombay.
Works: Chinchwad, Pune-411 019. Phone: 83564, **Telex:** 0145-303, Gram: "RUSTONIND". Chinchwad.

Manufacturers of:

1. RUSTON range in single and multicylinder high speed engines in aircooled, water cooled and turbocharged version from 6 to 182 hp.
2. MWM D232 range in 'V' configuration in watercooled, turbocharged and turbocharged after-cooled versions from 100 to 500 hp.
3. Generating Sets. Automatic Mains Failure Sets.
4. Marine Engines.
5. Pump Sets.

Engines also being used for Welding Sets, Compressors, Road Rollers, Tractors, Construction Equipments, Earthmoving Equipments by various OEMs.

DOMESTIC ELECTRIC-GAS APPLIANCES REPAIRERS

ESCEE
SERVICE

Shreenivas House, 98, Dattaram Lad Marg,
Kalachowki, Bombay 400 033 (India).
Phone : 446393. Cable : " REPAIRKING ".

We specialise in repairs of all imported Electric-Gas Cooking Ranges, Ovens, Built-in-Ranges, Domino Ranges.

DOMESTIC ELECTRIC KITCHEN APPLIANCES

ESCEE
KITCHENAID

Shreenivas House, 98, Dattaram Lad Marg,
Kala Chowki, Bombay 400 033 (India).
Phone : 446393. Cable : " KITCHENTOP "

Manufacturers of : HI-SPEED
COOKING RANGES, OVENS, ELECTRIC STOVES, HOT CASES AND DRYING OVENS.

DRILLING & MINING ACCESSORIES

WIDIA (INDIA) LIMITED

Mfrs. of Tungsten Carbide Tips, Throwaway Inserts for turning and milling, Widadur TG Coated inserts, Pellets, Toolholders, Widax Endmills, Dies, Solid Carbide Reamers, Lugged Reamers, Tungsten Copper Contacts, Hardfacing Welding Rods, Button Bits for Down the Hole Drills, Coal Auger Drills.

8/9th Mile, Tumkur Road, Post Bag 7300, Bangalore
560 073.
Phone: 38321 Grams: "WIDIA" Telex: 0845/224

DRUMS AND CONTAINERS

M. L. DAY & CO. PVT. LTD.

Makers of drums & containers since 1899 as per I.S. & Defence Specification.

Phone: 27-5709 Telex: 021-2276 Gram: DAYDRUM

DAYS AUTO-MECH INDUSTRIES

Makers of Printed & Unprinted Tin Containers & Automobile Ancillaries.

Gram: DAYMECHATO. Phone: 26-1753

DAY BARREL INDUSTRIES

Makers of M.S. & G.I. Heavy Duty Drums.

36, Ganesh Chandra Avenue, Calcutta-700 013.
Gram: DAYBARRELS. Phone: 27-5709

DRUGS & SOLVENTS

AMRUTLAL BHURABHAI & CO.

Dealers of:
CHEMICALS, DRUGS, MINERALS & SOLVENTS

Anand Bhuvan, Shamaldas Gandhi Marg
(Princess Street) P.B. No. 2379
Bombay 400002
Phones: 311023, 311024, 311025, 319187 & 295235
Grams: "CHEMDRUGS"
Bombay Kalbadevi 400002.

DRUMS MANUFACTURERS

K. T. KUBAL & CO., PRIVATE LTD.

(Estd. 1926)

Manufacturers of :

Electrical Welded Steel DRUMS, Containers and Kegs used in Oil, Chemicals, Paints, Industries. etc. Also manufacturers of famous "KUBAL" brand Pickles, Massala, Curry Powder etc.

DRUMS & KEGS

RAINBOW INDUSTRIES

B/2, Industrial Estate,
Kota 324 007.
Phone : 3369.

On approved list of DGS & D

Manufacture & Supply of :
STEEL DRUMS & KEGS

DYES & CHEMICALS

HOOSEINBHOY A. LALLJEE SONS & COMPANY

Importers of :
Dyestuffs (Sumikaron disperse, Sulphur Blue etc.), Chemicals, Textile Auxiliaries, etc.

Exporters of :
Vegetable Oils, Oil Seeds, Oil cakes and miscellaneous

Navsari Bldg., D. Naoroji Road, Bombay 400 001.
Phones : 262052. 264849. Grams : "FLOWERMEAD".

DYES & CHEMICALS

MADHAVDAS MANILAL & CO.

(Estd. 1923)

Sussex Road, Bombay 400 027.
Phone : 375008.

Branches and Agencies all over India

Stockists for : DEVARSONS PRIVATE LTD.

Manufacturers of : OIL SOLUBLE COLOURS for Soap, Varnish, Ink, Plastic, etc. COLOUR for Cosmetics as per Schedule 'Q' of the drugs & cosmetics act and FOOD COLOUR with ISI marking.

DYES & CHEMICALS

D. P. DYE-CHEM INDUSTRIES

Manufacturers of :

DYES : FAST COLOUR SALTS, RAPID FAST COLOURS.
RUBBER : TEXTILE RUBBER PARTS.

Ramkrishna Bhuvan, Station Road,
Near Vartej Gate,
Bhavnagar 364 001.

Phones : 23873 Factory : 26741 Resi. : 23702, 24770

DYES & CHEMICALS

NATIONAL CHEMICALS & COLOUR CO.

Colours for Plastic Industries, Ultramarine Blue, Optical Whitening Agent, Gold Bronze Powder, Titanium, Lithopone, Dyes & Chemicals

264, Samuel Street, Vadgadi,
Bombay-400 003.
Gram: 'SPRINGTAX'
Phones: 320631, 320632

DYES MFRS. & EXPORTERS

RAINBOW INDUSTRIES PRIVATE LTD.

Pratapnagar Road, Vadodara 390 004.
Phones : 56569 52094. Grams : " RAINBOW "
Telex : 0175-278

Manufacturers of :

• ARTEXSOLS
(Solubilised Vat)
• ARTEXGENS
(Stabilised Azoics)
• ARTEX VATS
(Vat Dyes)
ARTEX VAT PASTES
(Suprafix Pastes)
ARTEX FASTS
(Stabilised Azoics)
ARTEZOLS
(Reactive Dyes)

• Registered Trade Mark

DYESTUFFS

AMAR DYE CHEM LIMITED

Manufacturers of:
Dyestuffs & Chemicals,
Rang Udyan, Sitladevi Temple Road, Post Box No. 6471,
Mahim, Bombay-400 016.

Our production covers a wide range of dyestuffs required by the Textile, Paper, Plastic, Paint, Leather, Coir and Printing Ink Industries etc. and include Amarthols, Fast Colour Bases, Basic and Acid Dyes of the Triphenyl Methane Series, Pigment Printing Emulsions, Dry Pigments, Hot and Cold Brands of Reactive Dyestuffs manufactured for the first time in India under the brand name of Amaryls, Vinyl Sulphone Reactive Dyes, Super Exhaust, Reactive Dyes, Orlamar (Modified Basic) Dyes for Acrylics, Vat Dyes for Cellulosics, Disperse Dyes for Polyester, a series of Optical Brightening Agents, Organic Peroxides for the plastic industry, Rubber Chemicals and also intermediates required by the Dyestuffs, Pharmaceutical and other Chemical Industries.

Phone: 451334, Telex: 011-2524
Kalyan Factory Phone: 331. Grams: AMARCHEM

DYESTUFFS MFRS.

ASIAN DYESTUFF INDUSTRIES

Office: Ascodia Road, Ahmedabad-380 001
Phones : 369988 ; 363568. Resi. : 440772 440168
Grams : " KHANNADYES ".

Manufacturers of :
Reactive Dyes, Stable Azoics & Azo Dyes.

Factory : S-14, Municipal Ind. Estate, Bapunagar,
Ahmedabad-380 023.
Phones : 372075; 370025.

DYESTUFFS

ASSOCIATED DYESTUFF INDUSTRIES

Manufacturers & Exporters of :
COALTAR DYES.

Industrial Estate, Bapunagar,
Ahmedabad 380 024.

Phones : 371070 & 77201. Grams : " DYESTRADE "

DYESTUFFS

DYECHEM CORPORATION

Dealers for Supra Quality Dyestuffs

Bhavani Chambers, Ashram Road,
Ahmedabad 380 009.

Phones : 76273, 77201, 441463.

Grams : " DYESTRADE ".

DYESTUFFS

HINDUSTAN INTERMEDIATES

Manufacturers & Exporters :

DYES & DYE INTERMEDIATES.

G.I.D.C. Industrial Estate, Behrampura,
Ahmedabad 380 022.

Phones : 392346, 391645.

EARTHMOVING CLUTCHES & SPARES

Clutches, Clutch Plates, Transmission Discs, Brake Blocks, Sintered Metal Discs, Sintered Metal Blocks Suitable for earthmoving construction & machine tool applications - Contact

STANDARD CLUTCHES & SPARES PVT. LTD.

Lake Road, Bhandup, Bombay 400078
Phones : 582034 & 581225

ELECTRICAL APPLIANCES

LALLUBHAI AMICHAND LTD.

(Props: The Dun Aluminium Factory)

Leading Mfrs. of
All types of Electrical Shades for Domestic, Industrial, Photographic, Laboratory & Other Uses.

Factory:
The Dun Aluminium Factory,
Plot No. 150, Mankhurd,
Agarwadi Road,
Bombay-400043
Phone: 524661-2-3-4
Regd. Office:
48/50, Kansara Chawl, Bombay 400002
Phone: 362328-29

ELECTRICAL CABLES, WIRES, ACCESSORIES & SPARES

ALLIED AGENCIES

(Allied Cables & Industries)

(*a*) 9, Okhla Industrial Estate, New Delhi 110 020.
(*b*) 1399, Pahari Imli, Jama Masjid, Delhi 110 006.
Phones : 631279 & 261775.

Manufacturers of : Hytone Aerials and Indoor-Net Aerials, Feeldons and Alcai PVC Wires and Cables, TV Feeder Cables, Fix-o-Fix, Solder Wires, Sealing Wires and Fuse Wires and T.V. Antennas.

P.V.C. Cable making Plants on turn key basis.

ELECTRIC CABLES & WIRES

BOMBAY INSULATED CABLES & WIRES CO.

Stockists of :—Super Enamelled Wires & Other Accessories for Winding purposes, P.V.C. CTS wires, Jointing material for Underground cables and its accessories. PILC/PVC underground cable.

74, Podar Chambers, 3rd Floor,
Sayed Abdulla Brelvi Road, Fort,
Bombay 400 001.

Phones: 254892-295773. Grams: " BOMINWIRES ".

ELECTRICAL CABLES, WIRES, ACCESSORIES & SPARES

GWALIOR ELECTRIC & GENERAL STORES

Manufacturers of : ' GWALEC ' Wires & Cables.

Authorised Dealers for : CROMPTON/ECKO/GRANDSLY/BAJAJ/NATIONAL ICC FREXTON BPI & GLOSTER HTP UNIVERSAL STEEL GRIPS.

Distributors & Stockists of : All kinds of underground cables, motor starters, O.C.B. insulating materials, lamps and tubes, fittings, conduit wiring accessories & measuring instruments etc. etc.

1832, Bhagirath Palace, Chandni Chowk, Delhi 110 006.

Phones 237373 & 232031. Res. : 212074
Grams : " GWALEC "

ELECTRICAL CABLES & WIRES

JAI BHARAT INDUSTRIES

Manufacturers of: 'TRUTRANS' Wires & Cables—Armoured & unarmoured Domestic, Industrial, Telephone, Microphone, screened, coaxial, Field Service, Battery, Trailing, Auto Shot Firing, Submersible, Aircraft, Glass Fibre & Asbestos covered, with PVC / HR PVC / LDPE / Propylene / Nylon / Teflon / VIR / TRS / Butyl Rubber / Neoprene / Pcp Insulations, 'TRUTEMP' Compensating Cables. Twin Core & Multicore & all other Special application Cables.

94, B.K. Pal Ave, Calcutta 700005.
Phones : 558143/2174.

B-3/64, S.J. Enclave, New Delhi 110016.
Phone : 668327.

ELECTRICAL CABLES SPECIALISED

UDEYRAJ & SONS

Manufacturers of :

Compensating Cables, Thermocouple Extension Wires, Pneumatic Instrumentation Tubing, Railway Signalling Cables, Silicon Rubber Insulated Cables, Multicore Shielded Wires & Cables, etc.

P.O. Box No. 6562, Worli,
Bombay 400 018.
Phone : 392447.

ELECTRIC CONTROL PANEL

Electric control panel, as per requirement A.C & D.C Drives with & without Electric motors & components of control panel, switchgear, OCB, ACB, starter, Siemens MEI, NGEF, Essan, L&T make.

Contact:

JAY TRADING CORPORATION

G.P.O. Post Box No. 10061
Bombay-400 001.
Phone: Off. 273842; Res. 585668

ELECTRICAL DEALERS

ASHOK COMBINES

Suppliers & Dealers in

All kinds of electrical goods & appliances voltage stabilizers, fans, exhaust fans, cables, fluorescent fixtures, air-conditioners, refrigerators, aircoolers, etc.

Available on DGSED rate. Contract: Fans, Air Conditioners & Voltage Stabilizers.

95, Hospital Road, Near Menaka Theatre, Bangalore 560053.
Phones : Off. : 76659, Res. : 35223

ELECTRIC FANS MFRS.

KHAITAN FANS PVT. LTD.

"Everest", 18th Floor, 46C, J. L. Nehru Road,
Calcutta-700 071.
Phones: 43-1441/43-1109. Grams: "FANKHAITAN"

Branches & Distributors at:
Bombay 290065; Bangalore 564086; Calcutta 264776/77; Chandigarh 31352; Cochin 38108; Cuttack 23927; Delhi 310354; Faridabad 4614; Hyderabad 58240; Indore 4055; Jaipur 76963; Kanpur 69009, 53514; Madras 21798, 26572; Patna 22370.

ELECTRIC FLAME & EX-PROOF FITTING AND SWITCH GEAR

Flame proof & Ex-proof Electric motor, Motor starter, Push Button street light & tubelight fittings, OCB, etc.

Contact:

NAYAN TRADE CORPORATION
G.P.O. Post Box No. 10061
Bombay-400 001.
Phones: Off. 273842; Res. 585668.

ELECTRIC & GAS WELDING

JAYPRAKASH & BROS.

Electric and Gas Welding Rods, Flux Equipments, Welding Cables, Holder, Hand Screen Helmet, Cast Iron Machinable Electrodes, Hand Gloves and Aprons and everything in Welding Safety Wears.

Specialist : **TUNGSTEN RODS, SILVER BRAZING RODS AND FOILS.**

57, Sutar Chawl, 2nd Floor,
Bombay 400002.

Phones: 325859/343698.

ELECTRIC GEARED MOTORS & VARIABLE MOTORS

Geared Motor, DC & AC variable motors from 0.5 to 415 RPM, Rectifier D.C. & A.C. Drives, Gear Boxes synchronous small motors, Electric control panel, etc.

Contact:

NAYAN TRADE CORPORATION

G.P.O. Post Box No. 10061
Bombay-400 001.

Phones: Off. 273842; Res. 585668

ELECTRICAL CONTRACTORS

G. S. ELECTRIC CO.

ELECTRICAL ENGINEERS & CONTRACTORS

Specialists in : Office Electrifications, Installations and Order Suppliers.

Dealers in : Everything Electrical, Fans, Coolers, Transformers, Accessories and Appliances. FANS & COOLERS also provided on HIRE.

Stall 13, Shanker Market, Connaught Circus,
New Delhi 110 001.
Phone : 44015.

ELECTRICAL CONTRACTORS

W.R.T. SALES AND SERVICES PVT. LTD.

74, Sharif House, Shahid Bhagatsingh Road, Fort,
Bombay-400 023.
Phones: 250057 & 290506 Grams: "DABLUARTI"

Electrical Contractors
Manufactured by M/s. La Telemecanique, France.

ELECTRICALS

EAST (INDIA) COMPANY

Manufacturers of :
" SEAMEN ", " EICO ", " TA-TA BYE ", "DCM", Wires & Cables, Instruments Electric Appliances.

Office: 1536-B. Bhagirath Palace, Post Box No. 1947,
Delhi 110 006 (INDIA).

Works : W2-257, Shakurpur, Delhi 110 034.

Phone : 232348 (Delhi). S.T.D. 011-232348.

ELECTRICALS

MACNEILL & MAGOR LIMITED

Office :
28, Kasturba Gandhi Marg, New Delhi 110001.
Phones : 43511 (7 lines) and 42357 (3 lines).

Airbreak, Oil immersed, Stator-rotor and Flameproof starters, Control Panels, Contactors and Accs.

ELECTRICALS

NATIONAL ELEC. CORPN. (CAL)

MFG. & STOCKISTS OF: "OSAKA" MAKE G.L.S. BULBS, ODD VOLTAGE LAMPS, FILAMENT & NEON INDICATING LAMPS, TUBE LIGHT CHOKE & MERCURY VAPOUR BALLAST OF ALL WATTAGE.

18, Ezra Street, Calcutta 700001.
Phone: 27-6088. Gram: 'LIGHTRISE'.

ELECTRICALS

Cable, Exhaust fan, Capacitors, Thermostats, Presplan paper, Class E insulation, Heater, Power, Capacitors.

Contact:

NAYAN TRADE CORPORATION

G.P.O. Post Box No. 10061
Bombay-400 001.

Phone: Off. 273842; Res. 585668

ELECTRICALS

NEW INDIA ELECTRICAL WORK

Electrical Contractors:

We undertake jobs for House Wiring and H. P. Motor Winding, Pumps Repairing & Supplying. Mfrs. of Plastic Neon Sign Board. We are the regular contractors to the Banks, Govt. & Semi-Govt. Concerns. Solicit your enquiries.

64/4B/8, Beliaghata Main Road,
Calcutta 700 010.
Phone: 357841.

ELECTRICAL ENGINEERS & LICENSED CONTRACTORS

BALAJI ELECTRICALS

Consult :

Elect. Engrs./Licensed Contractors, HT/LT cable lying instin of Transformers, Switchgear, Motors, Grounding & Lighting systems control Panels Repairs, Rewinders of motor, etc.

4/101, Navjivan, Lamington Road,
Bombay 400 008.

Phones : *Office* : 379875 ; *Factory* : 895865.

ELECTRICAL ENGINEERS & CONTRACTORS

HARSHAD & CO.

Electrical Engineers & Contractors.

Pavri House, 20, R. Sidhva Marg, Bombay 400 001.

For Lighting, Domestic and Industrial HT & LT Installations and Festival Lighting (Illuminations).

Phones : 260498, 267867.

ELECTRICAL ENGINEERS & LICENSED CONTRACTORS

KIRTI TRADING CO.

Electrical Engineers & Licensed Contractors
381, Dr. D.N. Road, Bombay 400 023.
Phones: 254905, 256581, 821462, 828653.

Contact for:

Lighting & Power Installations for Factories/Buildings, Sub-station works, HT/LT transmission, underground cabling, power factor corrections.

ELECTRICAL ENGINEERS AND LICENSED CONTRACTORS

SHAH ELECTRIC CO.

Engineers, Dealers & Licensed Contractors

Lighting-Power for Residential, Commercial Factories, Temporary Illumination for Exhibitions—Social Functions.

Fans on Hire: Pedestal/Table, Air Circulators.

71-73, Shah Bhavan, Dhirubhai Parikh Marg,
Kalbadevi Road, Bombay 400 002.

Phones : *Office* : 313915, 251900.
Resi. : 310175, 255814.

ELECTRICAL ENGINEERS & CONTRACTORS

WESTERN INDIA ENGINEERING CORPN. PVT. LTD.

Manufacturers' Representatives, Electrical Engineers and Contractors.

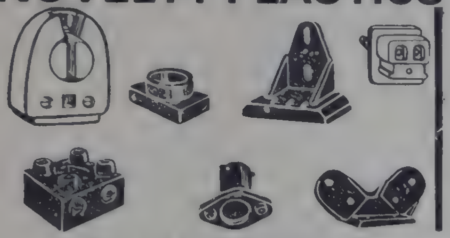
Regd. Office:
68-A, Alli Chambers, Tamarind Lane, Bombay-400 023.

Directors:
D. N. Purandare, J. L. Desai, M. D. Purandare, R. J. Desai, D. D. Purandare and Mrs. S. J. Desai.

Phones: 272144 & 271898.
Grams: 'WIECOL', Bombay.

ELECTRICAL FLUORESCENT FIXTURES
ACCESSORIES

NOVELTY PLASTICS



DAYALAL COMPOUND
NEAR BANK OF INDIA
SWAMI VIVEKANAND ROAD, MALAD (WEST),
BOMBAY - 400064 PHONE-693082

ELECTRIC GOODS

SENTINEL
SWITCH AND FUSE GEAR

CONDUITS & TUBES PRIVATE LIMITED
CTL
CONDUITS

Specialists in Pipes, Fittings, Wires & Switchgears.
Stockists of LUMINA LAMPS
Distributors for :
" C.T.L." Conduit Pipes, Dahisar.

CHANDRODAYA ELECTRIC CO.

Bhangwadi, Kalbadevi Road, Bombay 400 002.
Phones : 312579. Resi. : 811503.
Grams : " TRICYCLE "

ELECTRICAL GOODS

AHMED & COMPANY

Estd. 1917

Direct Importers, Manufacturers & Dealers in :
ELECTRICAL GOODS.

Distributors for :
"ACO" Fans and G.E.C. Switchgear & Exhaust Fans,

69-71, Kantilal Sharma Marg
(Lohar Chawl), Bombay 400 002.
Phones: 313388 & 311410. Grams: " CALLBELL "

ELECTRICAL GOODS

ASIATIC ELECTRIC CORPORATION

Specialists for Flame and Explosion proof fittings, switchgears, cable glands, bottle type and NH fuses and its accessories. Time switches.

Sole Agents for India : HEIM Electric, Berlin (GDR).

Messrs. DHOOT BROS.

Listed dealers for Philips, Osram, Bajaj, Bengal, etc. available in all types, voltage & wattage.

Beaumon Chambers, Gr. Floor, 27 33, Nagindas Master Road,
Bombay 400 023.
Phones : 270885 & 273604. Grams : " DHOOTBIJE ".

ELECTRICAL GOODS

ATLAS ELECTRICALS

Stockists of :
Gang Operated Air-Break Switches — Drop-out Fuses, Lightning Arrestors.
11 KV — 22 KV — 33 KV.

25, Mangaldas Road,
Bombay 400 002.
Phones : 250804
315662
Grams :
" ATARKEXCEL "

ELECTRICAL GOODS

ELECTROLIGHT & EQUIPMENTS DISTRIBUTOR

Stockists & Suppliers of

English Electric, Siemens, L & T, Crompton, Cutler Hammer make Elect. Goods & Instruments etc.

32, Ezra St. (Shop No. 8), Calcutta 700001
Phone : 260056

ELECTRICAL GOODS

EXPRESS TRADING CO.

Stockists:

"USHA", "BAJAJ", "EMCO", "KHATAU JUNKER", "KAPSALES", and "ASIAN" POWER CAPACITORS and CAPACITORS for fans, fittings and motor starting; WIRES of every type of "CAPI" with I.S.I. MARK, "ORIENT", "USHA" and "DAWSON" make; "JAIPUR" K.W.H. METERS and all other electrical goods.

Address: Sai Bhuvan, 141, (Princess Street) S. Gandhi Marg, Bombay-400 002.

Phones: 317638, 297818. Grams: "EXTREME".

ELECTRICAL GOODS MFRS.

KHERAJ ELECTRICAL INDUSTRIES

KHERAJ SIRENS: (1) Electrically Operated 0.80 to 16.10 Kms (2) Battery operated 0.80 to 1.61 Kms (3) Hand Operated 0.80 to 1.61 Kms. Also Portable Blower, Vacuum Cleaner, Gong Bells, Hooters & Emergency Light.
Tavawala Bldg., 147, Lohar Chawl,
Bombay-400 002.
Phones: (Office) 316863, 312372,
(Works) 394270, 890710, (Res.) 869629
Grams: KHRAJSIREN.

ELECTRIC GOODS

LAXMI ELECTRIC TRADING CO.

Stockists of : Everything Electrical including Air Circulators & Fans

MARLEX

Marlex Pressure Cookers, Emergency Lights, Air Circulators, Domestic and Industrial Type Electric Appliances.

21-23, Lohar Chawl, P.O. Box No. 2494,
Bombay 400 002.
Phone : 315438 Grams : " LEXELEC ".

ELECTRICAL GOODS

NATIONAL SALES CORPORATION OF INDIA

J-4/1A, Rajouri Garden, New Delhi 110027
Phone : 503458

We sell & repair Electrical/Electronic/Optical/Mechanical Instruments. Gauges. Gadgets. Appliances & Equipment. Specialists in repairing AVO meters. Meggers. Temperature Controllers. Digital Electronic Instruments. Recorders. Tacho-meters. KWH/Power Factor/Frequency/Vibration/Lux meters. Power Supplies. Inverters. Automatic Voltage Stabilizers. Signal Generators. Lie Detectors etc., etc.

Please contact us before condemning any Indian/Imported Instrument.

ELECTRICAL GOODS

R. K. TRADING COMPANY

" B " Block, Room No. 24, 2nd Floor, Bhangwadi,
Kalbadevi Road, Bombay 400 002.
Phones: *Office* : 256306. *Resi.* : 565315.

Specialists in :

Copper and Aluminium underground Cables, PVC & Rubber, Copper and Aluminium Flexible cables, AAC & ACSR Conductors, Copper and Aluminium Enamelled Wires, Fibre Glass Tapes, Railway Signalling Lamps, and Auto Lamps.

ELECTRICAL GOODS

S. K. & COMPANY

Gopal Nivas, 133, Princess Street,
Bombay 400 002

Dealers in :

Electrical Goods for Industrial Uses
Also
L T — L K make Switchgears and Starters.

Phones : 318146 & 318240.

ELECTRIC GOODS

SOPHER & COMPANY

Direct Importers & Stockists of :
Electrical Accessories.

Buona Casa, Sir P. M. Road, Bombay 400 001.

Branch :
11, Bank Street, Bombay 400 001.

Manufacturers of : " SOPHER "
Electrical Wiring Accessories.

Phone : 295780. Cables : " FAREAST ".
,, Br. : 292952-290529.

Ask For Free Illustrated Catalogue.

ELECTRICAL GOODS

SANDEEP ENGINEERING CO.

Motors, Pumpsets, Main Switches, Starters, Plug & Sockets, Exhaust Fans, Measuring and Indicating Instruments, Winding Wires and insulating materials, Cables, Motor & Starter Spares and other spares and accessories

Approved Dealer for
Crompton Greaves Ltd.

18, Pipermint Chawl,
L.B.S. Marg, Bhandup
Bombay 400078.
Phone: 583320

ELECTRIC GOODS

ZENITH ELECTRIC STORES

Reliable House for Electrical Requisites.

Manufacturers of : " SAMRAT " Switchgears & Power Capacitors.

Stockists of : Fans, Lamps, Meters, Underground Cables & all other Industrial Items.

51, Lohar Chawl, Bombay 400 002.
Phone : 316198. Grams : "ALLANABANDA".

ELECTRIC HEATING APPLIANCES MFRS.

KANTILAL CHUNILAL & SONS APPLIANCES PRIVATE LIMITED

80/82, Vithalwadi, Bombay 400002.
Phone : 314200. Grams : "SPHEREHOT". Telex : 011-3051.

Manufacturers of

"SPHEREHOT" Water Heaters & Elec. Heating Appliances. Automatic Storage and 'Mini' Instantaneous Water Heaters, Elec. Heaters for Textile Polymeriser, Stentering, Curing & Schriner Calender Machines. Also all types of Industrial Heaters for Water, Oil Alkalies, Acids, Furnace Heating Elements, Silica Heaters etc.

H. O. & Works : 3, Jawahar Road, Industrial Estate, Udhna, Dist. : Surat, Gujarat State.
Phone: 88419. Telex: 211

Sole Agents: Batliboi & Co. Ltd., Forbes Street, Fort, Bombay 400001.

BRANCHES ALL OVER INDIA

ELECTRICAL HEATING ELEMENTS THERMOSTATS & APPLIANCES

KANTILAL KESHAVLAL & COMPANY

80/82, Vithalwadi, Bombay 400002.
Phones: 314200 & 312043

For "SPHEREHOT" Automatic Storage and "Mini" Instantaneous type water heaters, Kettle Elements, Industrial Heaters, Thermostats, Atomatic Pop-up Toasters, Laundry Irons, Automatic Domestic Irons, Ovens, Room Heaters etc.

ELECTRICAL HEATING ELEMENTS & THERMOSTATS

PARAS INDUSTRIAL CORPORATION

Manufacturers :

Electrical Heaters namely, Bend Strip, Immersion, Cartridge, Finned Strip, Tubular etc. for use in Industries like Chemicals, Oil, Rubber, Textile, Plastics, Paper, Plating, Pharmaceutical etc.

10, Chandivli Estate,
Office : Saki Vihar Road, Bombay 400 072.
Phone : 584022.

ELECTRICAL HEATING ELEMENTS WIRES, CABLES & SWITCHGEARS

RAVAL & CO.

Domestic & Industrial Electrical Heating Elements, Wires, Cables, Switchgears and Transformers.

Shreeji Bhuvan, Lohar Chawl,
Bombay 400 002.
Phone : 313720. Grams : " GODSPEED "

Branch at :
22, Rabindra Sarani, Calcutta 700 073.
Phone : 275681.

ELECTRIC HEATING ELEMENTS & THERMOSTATS

SULABH CORPORATION

(A BENGALI Enterprise)

Indenting Agents, Importers & Stkts. of: Thermostats, Heating Element, Heat Control Switches, Nichrome & Resistance Wires, Neon Lamps, Syndanio Sheets, Silica Tubes, Enamelled Wires, Insulation Testers etc.

Kothari Mansion, Opp. G.P.O., Bombay 400001.
Phones: *(Office)* 261797, *(Resi.)* 388875, 389165.
Gram : NAINEEP.

ELECTRIC HEATING ELEMENTS

TECHNOTRADE ENGG. CO.

Truheat Electric Heating Elements Strip, Finstrip, Band, Immersion, Silica Cased Heaters

285E, B.B. Ganguli St.,
Calcutta-700012.
Tel: 265931

ELECTRICAL HEATING ELEMENTS & THERMOSTAT

TELELEC CORPORATION (INDIA)

N-29, Lane No. 4, Anand Parbat Industrial Estate,
New Rohtak Road, New Delhi 110 005.
Phone : 564378. Grams : " HEATERS "

Leading Manufacturers of :

Custom built industrial electric heaters, strip, tubular, finned, cartridge, silica/glass tubes and immersion heaters for water, oil, acid etc.

ELECTRICAL INSULATING MATERIALS

A. M. ELECTRICALS

1869, Electric Market, Bhagirath Place , Chandni Chowk, Delhi-110006.

Phones: (Office) 230247, 234621; (Resi.) 664614.
Authorised Stockists of:

NICHROME RESISTANCE WIRES:

Devidayal 80/20, Sunray-1, Ferocral-2, Ferocral-DS,
Kanthal A-1, DSD
(In Full Range)

Super Enamelled COPPER & ALUMINIUM winding wires, Eureka wires, D.C.C., D.P.C. Wires & Strips & All kinds of insulating materials.

ELECTRICAL INSULATING MATERIAL

CHIMANLAL SHAH & CO.

Authorised Distributors for:

"ROHTAS" Red Vulcanised Fibre sheets, Tubes, IMPORTED PAPER: Aluminium Foil, Manila, Kraft, Leatheroid, Presspan, IMPORTED SHEETS: Syndnyo, Klingerit, Polyester Film, Triflexil—Super Ena. Wire 45 to 50 SWG Kanthal & Nicrome Wire.

3D, Mangaldas Market, Mangaldas Road, I Fl., Post Box No 2538, Bombay 400002.
Phones: Office: 313885, 313827, 251354, 256855
Resi: 816886, 812480

ELECTRONIC INSTRUMENTS & CONTROLS

Manufacturers, Dealers & Consulting & Installation Engineers.

ELECTRONICS INSTRUMENTATION

11, Saptarang, Vakola Kalina Road, Kalina,
Bombay 400 029.

Phones: 269783, 542004 Grams; 'INSTRON'

Manufacturers of Spectrophotometers, Densitometers, Photo Control Units, Power Supplies, G. M. Counters & Agents for Foreign/Indian Mfrs.

ELECTRICAL INSTRUMENTS & METERS

GYRO LABORATORIES PRIVATE LTD.

Manufacturers of :

Single Phase/Poly Phase Meter Test Benches, Single Phase/Poly Phase Phanton Load Sets, Load Analyser, Ratio Meter, Relay Testing Set, Motor Test Benches, Control Panels, Instrument Current Transformers L.T. & H.T., Potential Transformers L.T. & H.T., Ohmmeters (Circuit Tester for Blasting), Three range safety Ohmmeter, Kelvins' Bridge, High Voltage Testers, KWh Check Meter, Test Terminal Blocks, CT/PT units. Wheatstone Bridges, Phase Sequence Indicator, and Special Types of Testing Equipments as per Buyers Specification. We also undertake repair/servicing of all kinds of Electrical Measuring Instruments.

8, Gazder Street, Thakurdwar, Bombay 400 002.
Telegrams : " GYROSTATIC ". Phones : 315002, 310846.

ELECTRICAL INSTRUMENTS

MECO INSTRUMENTS PVT. LTD.

Moving Coil, Moving Iron & Electrodynamometer type Voltmeters, Ammeters, Millivoltmeters, Milliammeters, Microammeters, Galvanometers, Clip-on-Ammeters, Insulation Testers, Phase Sequence Indicators, Ohmsmeters, G.P.O. Detectors, Cell Testers, Automobile Testers, Shunts, L.T. Current Transformers, Frequency Meters, Wattmeters, Power Factor Meters etc. etc.

Bharat Industrial Estate,
T.J. Road, Sewree,
BOMBAY 400015.
Phones: 447422, 442435. Telex: 011-5101 MECO IN
Grams: "STANCOR", Bombay-15.

ELECTRIC LAMPS, TUBES & OTHER ELECTRICAL GOODS

DHOOT BROTHERS

Authorised Dealers : Philips, Osram, Bengal & Bajaj. Available all types, sizes, volts & watts.

Stockists of : Everything electrical, Specialised for 'D' type cartridge fuses with socket & caps. Available in different types, rating & accessories. Flame & Explosion proof fittings & switchgears, Time Switch etc.

Beaumon Chambers, 27/33, Nagindas Master Road,
Fort, Bombay 400 023.
Phones: 270885 & 273604. Grams: "DHOOTBIJE"

ELECTRONICS INSTRUMENTS & CONTROLS

PAREKH COMMERCIAL CORPORATION

Authorised Distributors for Aplab Electronic Equipments such as : Power Supplies, Voltage Regulators, Inverters, Digital Instruments, Oscilloscopes, Electronic Test & Measuring Instruments.

Mistry Industrial Complex, Unit No. 61,
MIDC Cross Road 'A', Andheri (East),
Bombay 400 093.
Phones : *Office* : 566908 ; *Residence* : 291998.
Cable : " PARCOMCORP ".
Telex : ASCORP-011-2770.

ELECTRICAL MEASURING & TESTING INSTRUMENT

Insulation Tester, Avometers, Tongtesters, Volt & Amps meters, Power Factor meter, Cooling Fan, M.D.I. motor, Instrumental synchronous motors, etc.

NAYAN TRADE CORPORATION

G.P.O. Box No. 10061
Bombay-400 001
Phones: Off. 273842 Res: 585668.

ELECTRICAL MEASURING INSTRUMENTS

UDEYRAJ & SONS

Specialists in Clip-on-Tongtesters, Insulation Testers, Oil Testing Sets etc.

P. O. Box No. 6562, Worli,
Bombay 400 018.
Phone : 392447.

ELECTRIC MOTORS & PUMPS MFRS.

POWER MASTER

Electric Motors & Pumps Sets

Manufactured by:

NARHARI ENGINEERING WORKS

480, Kalbadevi Road, 4th Floor,
Bombay 400 002.
Phones: 312973, 319053, 573365.

Undertaking Dynamic Balancing job & repairing of Electric Motors.

Non-Standard Motors are our Speciality.

ELECTRIC MOTORS

JAY TRADING CORPORATION

G.P.O. Box No. 10061
Bombay-400 001.
Phone: Off. 273842; Res. 585668

Electric Motors, Kirloskar, Siemens, NGEF, Crompton, Remi, HBB. A.D., A.C. current & D.C. Motor (variable speed) Rectifier, Motor Starter, Switchgears, Acb, OCB, Control panel, etc.

ELECTRIC MOTOR SPARES

Electric Motor & Motor spares like cooling fan, end shield, fan cover, bearing cover, Rotor, centrifugal switches, Capacitors, Terminal Block, insulation material etc.

Contact:

NAYAN TRADE CORPORATION

G.P.O. Box No. 10061
Bombay-400 001.
Phones: Off. 273842; Res. 585668

ELECTRICAL TRANSFORMERS & SWITCHGEARS

KEYAL ENGINEERING CO.

29, Strand Road (2nd Floor)
Calcutta 700 001

Phones 224166, 229308, 221421
Grams : " KEYALBANDU "

Please Contact for.

POWER AND DISTRIBUTION TRANSFORMERS UPTO 1000 KVA, H.T. & L.T. SWITCHGEARS, MOTOR CONTROL CENTRES & CONTROL PANELS, ETC

ELECTRICAL RESISTANCES

TALSONS INDIA (FARIDABAD)

Regd. Factory & Office :
Plot No. 110, Sector 6, Faridabad.
Phone : Res. : 81-3943.

Manufacturers of :

C. I. Grid Resistance Elements, Wire & Punched Steel Resistance and Resistance Boxes for starting and speed regulation of Industrial Motors (A.C. slip Rings on D.C.) in E. O. T. Cranes, Rolling Mills Drives, Colliery Haulage Machines, Wire Drawing Mills, Sugar and Paper Mills etc.

ELECTRICAL SWITCHGEAR & CONTROL GEAR

ASSOCIATED ENGINEERS

Authorised Distributors for MEI Starters & O.C.Bs. KILBURN Starters & O.C.Bs. SHAKTI-USHA-GEC-BHEL Power Capacitors. DASS HITACHI single phase/poly phase KWH Meters. TULLU/CHAMPION Pumps, GEC Ceiling & Exhaust Fans. USHA-REMCO, Paper & Motor Starter Capacitors.

1860, Mahalaxmi Market, Bagirath Palace,
Chandni Chowk, Delhi 110 006
Gram : FIXEDPRICE
Telephones : 236447, 232390

ELECTRICAL SWITCHGEAR & CONTROL GEARS

M C B (INDIA) PRIVATE LTD.

Manufacturers of :

World renowned LUPUS' Miniature Circuit Breakers and Distribution Board. Ranging from 0.5 to 60 Amps. in SP, DP & TP with or without Neutral.

Also Microswitches, Mini equipment Protection switches, D.B.'s, etc. in collaboration with M. C. B. Co., U.K.

101, Arun Chambers, Tardeo, Bombay 400 034.
Phones : 378429 & 374117.

ELECTRIC SWITCHES & STARTERS

Sahayak

(A TRUSTED NAME IN L. T. CONTROL SWITCHES)

✻ REVERSE/FORWARD ✻ LIMIT ✻ ROTARY
✻ CENTRIFUGAL ✻ TOGGLE ETC.
ALSO H. R. C. FUSE HOLDERS & PUSH BUTTONS.

Sahayak engineering corporation

Basement 4, Commerce House, 140 N. Master Road
(Medows Street), Fort, Bombay 400 023.
Phones: 272547, 270955 Cable: "LOHVASTU"

ELECTRIC WIRES & CABLES MFRS.

ASIAN CABLES CORPORATION LIMITED

Office : "NIRMAL", 241 242, Backbay Reclamation, Nariman Point, Bombay 400 021.
Grams : "ASIANCABLE". Phone : 233678.

Manufacturers of :

Rubber and Plastic Insulated Electric Wires & Cables.
Factory : Pokhran Road, Thane.
Products : Rubber Insulated and Plastic Insulated Wires & Cables including Special Cables ; underground Paper Plastic Insulated Power Cables ; Super Synthetic Enamelled Wires, XLP Cables, etc.

Branches :

Bangalore : 51 A, Richmond Road, Bangalore 560 025.
Calcutta : 31, Netaji Subhas Road, Calcutta 700 001. Phone : 226831.
Delhi : 18-20, Hindustan Times Building, 12th Floor, Kasturba Gandhi Marg, New Delhi 110 001. Phones : 385471/72.
Madras : 15, General Patters Road, Madras 600 002. Phone : 82224.

ELECTRICAL WIRES & CABLES

MUCH ENGINEERING PVT. LTD.

7, Lake Road, Calcutta 700029
Phones : 469204, 421676
Manufacturers & Mkt.

Special Cables (Furnace Cables, Heatproof, Acidfumeproof, Teflon etc).
: Industrial Heaters.
: Winding Wires & Strips. (DGC/DCC).
: Copper Braided Tapes & Cords.
: Thermocouple & Compensating Cable.
: Electrical Resistances.

ELECTRIC WIRES & CABLES

SHREE NURSINGSAHAY MUDUNGOPAL ELECTRIC CO. PRIV. LTD.

AAC ACSR, Armoured & Unarmoured Cables, Flexibles, PVC Insulated & Sheathed Single Core & Multicore Flexible Wires, all conforming to ISI Specifications.

45-47, Lohar Chawl,
Bombay 400 002.
GRAM: PUSHTIMARG PHONES: 312036 & 37

ELECTROMAGNETIC/THRUSTOR BRAKE

INDIAN TRADE AGENCY

29, Strand Road (2nd Floor),
Calcutta 700 001

Phones : 224166, 229308, 221421
Gram "KEYALBANDU"

For positive stopping of machines without abnormal stress on mechanical components ask for A.C. & D.C. Single/Three phase solenoid, Three phase hydraulic Thrustor Brakes.

ELECTRO MAGNETIC

PETHE INDUSTRIAL MARKETING COMPANY PRIVATE LIMITED

69, S.K. Bole, 'Dagdiwadi', Dadar (W.R.)
Bombay-400 028

Phone Nos.: 4228998; 4224592.

Gram: MAGBRAKE, Bombay-400 028

Electromagnetic Clutches & Brakes, Multiples Disc Type Clutches & Brakes for Machine Tools, Spring Loaded (fail safe) Disc/Shoe Type AC/DC Brakes, Clutch Brake Combination, Eddy Current Couplings, Torque Motors, Fluid Couplings

ELECTRO TECHNICAL COMPONENTS

IEC

Indian Engineering Company

Worli Naka, Post Box 16551, Bombay-400 018.
Grams : 'AMVPOLT.' Telex : 011-4217.
Phones : 379544/374565.

Manufacturers & Suppliers of :

Switches for Electrical, Electronic & Auto Industries, Electro Magnetic Relays, Gas & Oil Relays, Terminal Connector Blocks, Panel Locks & Keys, Fuse Holders, and other Electro-technical Components.

ELECTRONIC COMPONENTS

INDIAN TECHNOLOGICAL PRODUCTS

Semiconductor devices of ECIL, Hyderabad. Relays & Switches of O/E/N India Ltd. Ferrite Cores, LED-LCD Displays of CEL Amphenol connectors of E.I.D. Parry India Ltd. Plastic Film Capacitors of CTR Mfg. Indus. Ltd. Electronic Hardware of Elcom. High current diodes & thyristors of B.H.E.L. Carbon Film Resistors of Kothari's. Electrolytic Capacitors of Alcon.

Flat No. 305-306, Building 35-36, Nehru Place,
New Delhi-110 019.
Phones: 682583 & 389244 Grams: INDIASBEST

ELECTRONICS

KAYCEE ELECTRONICS

Office:- Shop No. 7, Hanuman Building,
Kiln Lane,
Opp. Lamington Road,
Bombay-400 007.
6/31, Borla Co-op. Housing Society
Chembur, Bombay 400 074

Dealers in Electronic Components for both Industrial and Entertainment use, viz. IC's, Diodes, Transistors, Thyristors, SCRS, Tracs, UJT's Potentiometers, Condensors, FET, Helipots, Trimpots, Connectors, Tentelium Capacitors, Resistors and Valves etc

ELECTRONIC COMPONENTS

PEARL ELECTRONICS

Dealers in : Electronic Components for both Industrial and Entertainment use, viz. IC's, Diodes, Transistors, Thyristors, SCRS, Tracs, UJT's Potentiometers, Condensors, FET, Helipots, Trimpots, Connectors, Tentelium Capacitors, Resistors and Valves etc

9, Mandodary Building, Shamrao Vithal Marg,
(Kiln Lane), Off Lamington Road,
Bombay 400 007
Phone : 352181.

ELECTRONIC COMPONENTS

RUTTONSHAH-INTERNATIONAL RECTIFIER PVT. LTD.

Manufacturers of :

SILICON Power Diodes, Miniature Diodes, Compact Bridge Rectifiers, Avalanche Diodes, Rectifier Stack Assemblies, High Voltage Rectifiers, Zener Diodes, Power Transistors, SCRs and special diodes as per customer's requirement. Also for Battery chargers, Rectifier traction equipments, D.C. Power supplies, Hydrogenation Rectifiers, Inverters, Variable speed drives, etc.

International House, Vikhroli, Bombay 400 083.
Phone : 581585 (3 lines). Telex : 011-2388.
Cable : " LECRUT ", Bombay.
Branch Offices : 23, Aruna Building, Ist Floor, J. C. Road, Bangalore 560 002.
Cable : " RUTTONSHA ". Phone : 602685.
3E/14, Jhandewalan, Link Road, New Delhi 110 055.
Cable : " RESOLUTE ". Phones : 527078, 528102, 528186.
Telex : 031-4751.

ELECTROPLATING CHEMICALS

PROGRESSIVE CHEMICALS CORPORATION

28-29, Agarwal Ind. Estate
S. V. Road, Dahisar (East)
Bombay 400 068.

Manufacturers of :

Electroplating Salts, Brighteners, Chemicals, Plating Equipments & Jigs

Telephone : *Factory* : 663087.

ELECTROPLATING CHEMICALS

We Book Indents on behalf of :

M/s. STIFT KEPPELER FILZFABRIK, GMBH.

WEST GERMANY.

For WOOLLEN FELTS, WHEELS, BOBS, DISCS, SHEETS, etc. Suitable for POLISHING and BUFFING of ELECTROPLATING, PLASTICS, GLASS, MIRRORS, etc. (Can be imported under OGL Policy 1981-82).

Contact : **Mr. SURVEYOR, Messrs. V. PECH & CO,**
Aidun Building, 5th Floor, Dhobi Talao
Bombay 400 002.
Phones : 315534/253918. Telex : BYKM 011-4088

ELECTROPLATING CHEMICALS & HEAT TREATMENT SALTS MFRS.

RONUK INDUSTRIES LIMITED

RONUK HOUSE,
11-A, WORLI SEA FACE,
BOMBAY 400 018.

Phone : 4226261/62.

FOR ALL REQUIREMENTS OF ELECTROPLATING PLANT, CHEMICALS AND HEAT TREATMENT SALTS.

ELECTROPLATING MACHINERY & MATERIALS

CANNING MITRA PHOENIX LTD.

5, Convent Street, Bombay 400 039.

Manufacturers of :

Electroplating Salts, Polishing Compositions, Plating Plant & Equipment.

In Association with

Messrs. W. CANNING LTD.
Birmingham, U.K.
Phone : 230081.

ELECTROPLATING PLANT & EQUIPMENTS MFRS.

KIRTI ENGG. WORKS

Manufacturers of:

Electroplating Plant & Equipments

B.K. Chhabra Compound,
Bulsroyees Colony Road, Vakola Bridge,
Santacruz (East), Bombay 400055.
Phones: 543513 & 546468.

ELECTROPLATING MACHINERY & CHEMICAL

PLATEWEL PROCESSES & CHEMICALS

A Division of SHRI DINESH MILLS LIMITED
Atladra, Padra Road, P.B. No. 70,
Baroda 390 001.
Phone : 66118. Grams : " PLATEWEL ".

Manufacturers of Electroplating and Metal Finishing, Pre-treatment and Phosphating and Heat treatment Chemicals.

ELECTROPLATERS

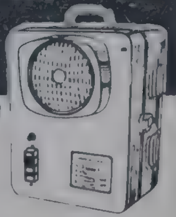
Precious Metals Plating • Bright Silver Plating Acid Gold Plating • Rhodium Plating and Acid Tin (Tinglow) Plating on Electronic and Electrical Components, Printed Circuits Board. Vat and Barrel Plating as per your specifications.

ZAVERI BROS.
8, KITCHEN GARDEN LANE
NEAR MANGALDAS MARKET,
BOMBAY 400 002.
TEL: [illegible]

EMERGENCY LAMPS

INSTALITE

First and foremost name in Automatic Emergency Lamps.



Now also maintenance-free model

20 models to choose from - including Tube lights and high illumination Lamps to suit individual requirements.

AUTOMATION—Props : TEST EQUIPMENTS (Elec) PVT. LTD.

310, 'Neelam', Dr. R. G. Thadhani Marg, Worli,
Bombay-400 018. Grams : 'INSTALITE'
TLX-011-4217. Ph: 393136/397213/379544,
Representatives all over India.

ENAMEL SIGNBOARDS & ENAMEL WARES

THE PIONEER ENAMELLING WORKS

VITREOUS ENAMELLED:

Electrical Shades and reflectors, signboards for publicity, Danger/Caution notice boards, house and other number plates, gauge plates for recording water level, and road signs. Enamelling job work undertaken. Organized for exports.

24, Lakshmi Building,
Sir Pherozeshah Mehta Road,
Post Box 1130, Bombay-400 001.

ENGINEERS & CONTRACTORS

NEW CONSOLIDATED CONSTRUCTION CO., LTD.

Engineers and Contractors.

Regd. Office : Rahimtoolla House, Homji Street,
Fort, Bombay 400 001.

Phones : 291682, 291797, 291888.

Grams : " PROJECTS."

Telex : " NCCL IN ", 011-3353.

Chairman : A. A. Jasdenvala.
Managing Director : Abbas Y. Jasdanwalla.

ENGINEERS (TRANSMISSION)

P. C. DUTT & CO.

71A, N. S. Road, Calcutta-700 001.

Makers of V-Belt Drives, Flexible Coupling, Universal Joints, Geared Coupling, Gears, etc.

Phones: 22-6633, 43-3169, 43-4423.
Cable: TRANSWORLD.

ENGINEERS & MACHINERY MERCHANTS

SORABJI & CO.

Engineers and Machinery Merchants.

Distributors for Crompton Motors, Pumps, Fans, Lamps, Ringsdorff Carbon Brushes, Usha, Orient and Almonard Fans.

Sir Jamshed House, 166, Bora Bazar Street, Fort,
Bombay 400001.

Phones : 262036, 4221924.

Grams : " FIELDCOIL ", Bombay.

ENGINEERING & STEEL FABRICATIONS

SHAPARIA DOCK & STEEL CO. PRIVATE LTD.

Sewree, Fort Road, Bombay 400 015.

Contractors for : Ships' Fittings & Ancillary Equipment for Shipyards & Shipowners, Army & Naval Engineering Equipments.

Manufacturing : Lifeboats, Rowing Boats, Rolling Shutters, Fire Proof Doors, Gates & Grills, Fencing, Wheel Barrows, Hand Carts & Trucks, Light Railway Equipment, Tipping Wagons, P. W. D. & Municipal Appliances, Railway Engineering Items, Roof Lights, Steel Storage Tanks & Light Structures etc.

Phone : 395067. Grams : " SHAPARIA ", Bombay 400 012.
Telex: 011-4259 'SHAP—IN'.

ENGINEERS & MANUFACTURERS

THERMOPACK ENGINEERS PVT. LTD.

Manufacturers of Cooling Towers. CROSS-FLOW Induced & Forced Draught. COUNTERFLOW Induced & Forced Draught. NATURAL DRAUGHT with fill & without fill. Special designs offered to suit customer's requirements.

21, Steelmade Industrial Estate, Marol
Maroshi Road, Bombay 400059.
Tel 583782

ENGRAVERS & DIE-SINKERS

MANKAME BROS. (ENGRAVERS) PVT. LIMITED

Industrial Engravers

405, Kalbadevi Road, Bombay 400 002.

Phones : *Office* : 313960. *Factory* : 894781.

Manufacturers of Leaver Presses for Limited Companies, Brass Name Plates, Peon Badges, Brass Seals, Rubber Stamps, Steel Punches, Biscuit Dies, Soap Moulds & Engraving of all sorts.

ENGRAVERS & DIE-SINKERS

ESTD 1951

MODERN ENGRAVERS

INDUSTRIAL AND GENERAL ENGRAVERS
Intricate Dies on 2D/3D Pantographs
& Spark Erosion Machine.
PARTNERS: V.P. VAGAL & R.V. VAGAL.

Jagruti Industrial Premises Co-op. Society Ltd.,
3rd Floor, Unit No. 6, Mogul Lane,
Mahim, Bombay 400016.
Phones: 451621, 464069. *(Resi.)* 452464.

ENGRAVERS & DIE STAMPERS

MASANI & COMPANY

Ararat, 89-C, Medows Street,
Fort, Bombay 400 023.
Phone: 271883

ENGRAVERS

Specialists in :
Embossed Letter-heads & Cards

Manufacturers of :
Steel Dies & Punches, Brass Name Plates, Seals, Metal and Rubber Stamps.

ENVELOPE MFRS.

CHETAN PAPER INDUSTRIES

Block 4, under Mahalaxmi Bridge,

West Approach, Clerk Road,

Bombay 400 034.

Phone : 395505.

ENVELOPE MFRS.

SUPREME ENVELOPE MFG. CO.

One of the Leading Envelope manufacturers for all kinds of envelopes in various sizes, Carrier Bags & Folding Bags are our Speciality.

20, Arun Chambers, Tardeo Main Road,
Bombay 400 034.

Phone : 375474.

ENVIRONMENTAL TEST EQUIPMENTS

HEATEX PRODUCTS PVT. LTD.

11, Bank Street, Fort, Bombay 400001.
Phone : 298485. Telex : 011-3756.

Manufacturers of :

Environmental Test Chambers either or in Combination of the featurers viz.

1. + 100°C to — 70°C and/or
2. Humidity 20% to 95% R.H. and/or
3. Pressure from 1 mm Hg abs. to 760 mm Hg.

ERECTION CONTRACTORS

DOWEL ERECTORS

Specialised:

Mechanical, Electrical Engineers & Erection Contractors for Heavy Equipment & Vessels, High and Low Pressure Piping for Fertiliser and Power Projects.

29, Dr. Guruswami Road, Madras-600 031.
Phones : 661320, 662116.
Gram: PIPEFAB.

ESTATE AGENTS & PROPERTY DEVELOPERS

MODEL ESTATE AGENCIES

(Estate Division of Buildwell Construction & Model Agencies).

7, Shanti Villa, Corner of 14th & 30th Roads, T.P.S. III,
Bandra, Bombay 400 050.
Phones : 534348 547958.
In Sri Lanka :

" ANANDA "
1, Abeyawickrama Avenue,
Mount Lavinia, SRI LANKA
Phones : 071-3384, 071-5015

EXERCISE BOOKS MFRS.

ROTAPRESS PVT. LTD.

Manufacturers and Exporters of "Bul-Bul" & "Myna" Brand Exercise Books and Printers of Packaging Paper in Reels and Sheets.

Regd. Office : Rahimtoola House, Homji Street, Fort,
Bombay 400 001.

Phones : 312299, 291682, 291797, 291888.

Grams : "TARPO". Telex : 011-3353.

Sales Depot : 82, Bhajipala Lane, Bombay 400 003.
Phone : 323998.

EXPANDED METALS MFRS.

LOKESH SALES CORPORATION

Manufacturers of

Perforated sheets and expanded metals in all designs and metals.

25, Strand Road, 256, Marshall House,
Calcutta 700 001.

CABLE : LOKESHSALE. PHONE : 22-0004

EXPORTERS & IMPORTERS

A. V. JOHN & COMPANY

Exporters & Importers

306-308, Vyapar Bhavan, 49, P. D'Mello Road,
Bombay-400 009.
Phones: 328872, 328873, 328874

Grams: "EXCELIMPEX", Bombay-400 009.
Telex: 11 6936 XLCS IN

EXPORTERS/IMPORTERS

AMALGAMATED UNIVERSAL AGENCIES PVT. LTD.

306, Lotus House, 33A, Sir Vithaldas Thackersey Marg.
Bombay 400 020.
Phone: 294130 Cables: "DETAMAG"
Telex: 11-2980 AUAL IN
Branch: 14/D. Basant Lok. Vasant Vihar. New Delhi 110 057
Phone: 672732 Cables: "DETAMAG"
Telex: 31-3864 AUAL IN

Exporters of

Stainless Steel Kitchen Wares. Table Wares. Hotel Wares. Mineral Specimens. Semiprecious Stones. Handicrafts. Sports goods and general merchandise.

Importers and Indentors of

Stainless Steel Sheets. Wires. Rods. etc. Aluminium Ingots and Extrusions. Tool & Alloy Steel. Chemicals. Plasticizers. Insecticides. Fungicides. Weed-Killers and Fine Pharmaceutical Chemicals and Fertilizers

---

EXPERT BUILDING SERVICES

Planning, Estimation, Coordination And Management

Through

Integrated Team-Work

Enquiries to.

THERVALANO ENGINEERING COMBINE

17, Kanti Terrace, Tejookaya Park,
Dr. Ambedkar Road.
Matunga, Bombay-400 019.

EXPORTERS

M S. CRESCENT COMMERCIAL CORPORATION

Near Nagpada Police Station.
100. Sofia Zuber Road. Byculla.
Bombay 400 008 (INDIA).

Phones : 372504 398818.

Cable : "THUNDIHAWA"

Telex : 5353 "CRES" IN.

EXPORTERS. IMPORTERS & COMMISSION AGENTS

EXIM INDIA

- Handicrafts
- Leather Articles
- Incense Products
- Perfumes
- Chemicals
- Plasticwares
- Textiles
- Engineering Items
- Process Foods & Agricultural Produce

Enquiries solicited:

10, Seeta Mahal, B. Petit Road, Bombay 400 036.
Phone: (91)22/367134.

EXPORT HOUSE

FANCY INDUSTRIAL CORPORATION

Manufacturers/Exporters

Agricultural Implements, Builders' Hardware, Pipe Fittings, Electrical Appliances & Accessories, Gas Mantles, Stoves, Lanterns and blow lamps and parts. Costume Jewellery, Handicrafts, Cotton, Silk, and Viscose Rayon handkerchieves, scarves, stoles sarees, ties, etc. etc.

Post Bag 5221, Bombay 400 009.
Phones : 337811/342565. Cable : "FANINDUS"
Telex : 11 5782 FNCY IN.

EXPORTERS & COMMISSION AGENTS

J. R. KOTAK & SONS

11, L. D. Ruparel × Lane,
Bombay 400006 India

EXPORTERS AND COMMISSION AGENTS

Coffee, Cashew, Cardamom, Rice, Cnsl, Walnut, Fishmeal and Bonemeal

Tel: 815285
Cab: JEARKOTAK TLX: 11 4122 JRK IN

EXPORTERS

K. TULSIDAS & BROS.

ESTD. 1963

MANUFACTURERS & EXPORTERS OF:
COTTON/SILK LADIES FASHION GARMENTS, JEWELLERY & FINEST HANDICRAFTS.

BEST QUALITIES — COMPETITIVE PRICES
REGISTERED OFFICE & SHOWROOM:
115, MAKER BHAVAN 3,
21, NEW MARINE LINES, BOMBAY 400020 (INDIA)
TEL: 312719/317495. CABLES: KAYTEEBROS.
TELEX: 113562 (KTB IN)

EXPORTERS & IMPORTERS

M/s. NEPAL SAGARMATHA TRADERS

Alakhia Road,
Birganj (Nepal).

Phones : 2092 & 2536.

Imports : Textile, Iron & Steel, All kinds of Oil, Spices. Footwear, Medical Equipments, Sundry items, Stationery Goods.

Exports : Big Cardamom, Medicinal Herbs, Dry Ginger, Pulses, Rice, Jute and Jute Goods.

EXPORTERS

Our Functions—**Export**

SAIBA EXPORTERS

363, Katha Bazar, Bhagubhai Chambers,
Room No. 36E, 5th Floor, Bombay 400009.
Phones: 337518 & 325921
Cable: Steroids Telex: 011-4598-SIBA IN

Fresh Onion, Vegetables, Rice, Sandalwood/Oil, Stag/Deer Horns, Coffee, Cardamoms, Cashewnuts, Etc.

INDENTORS

Chemicals, Pharmaceuticals of Chinese Origin viz. Menthol, Cassia, Paraffin Wax Etc.

EXPORTERS OF WOOLLEN & COTTON CARPETS & COIR PRODUCTS

VENJARA E. SALEMOHAMED & SON

Dealers, Agents, Manufacturers & Exporters of
Woollen and Cotton Carpets, Druggets & Handloom Shetranjis, Coir & Jute Products, Grass mats, Mattings, Linoleums. Straw mats.

81D, Lehri House, Mohamedali Road,
Bombay 400003.
Phones: 321459, 343858, 342067
Grams: "STRAWMAT"

EXPORTERS, IMPORTERS, INDENTORS & MFRS.

UNIVERSAL TAR & BITUMEN PRODUCTS

Head Office :

73A, Theatre Road, Calcutta 700 017.
Phones : 22-7953, 22-5891, 23-4211, 44-3315 & 44-9696.

Sales Office :

12, B. B. D. Bagh East, Calcutta 700 001.
Grams : "TARBITUMEN".

EXPORTERS & DEALERS

Herbs, Crude Drugs, Provisional, Groceries, Kirana etc

WORLD TRADING CO.

Above Punjab National Bank,
Khari Baoli,
Delhi 110 006 (INDIA).

Phone : 232672. Cable : "ACHRAJ"

FABRICATORS, ENGINEERS & MFRS.

BANDSHE ENGINEERS

Tough jobs in fabrication industry. We are experienced in executing tnem successfully.
Our range of services

Design and manufacture of pressure vessels, heat exchangers, reaction vessels, piping etc. to the clients specification. Pressed and spinned components, Structural fabrication. Machine components. Mfrs. of Cement Industry Equipments.

Office: 89, Tokersey Jivraj Marg, Opp. Jubilee Mills, Sewree,
Bombay 400015.
Phone: 446117
Works: Plot A/485, Road No. 24, Wagle Industrial Estate, Thane.
Phone: 592489.

FASTENERS

SHI ENGINEERS

Mfrs. of:
Non-ferrous, M.S., S.S., High Tensile and Corrosion Resistant Alloy Fasteners as per International Standards.

46, SIDCO Indust. Est., Coimbatore 641021.
Grams: "FASTENERS"
Phone: 32257.

FERRO ALLOYS

ALLIED TRADERS & SALES CORPN.

Dlrs. in Ferro Alloys, Metals, Foundry Minerals, Ferro Phosphorus, Al & Ni Shots, Graphite Electrodes, Crucibles, Powder, Stopper Heads etc.

"Gandhi House", 16, G. C. Avenue
Calcutta 700 013
Phones: 239227, 237542
Gram: SOAPSTONE

FERROUS AND NON-FERROUS METALS

COPPER BRASS & STAINLESS STEEL

BHUPENDRA METALS (INDIA)

13/21, 3rd Panjrapole Lane,
No. 202, Bombay-4. Ph.:357043
Gram: Metalkaka (Girgaon)

FIBREGLASS SHEETS & COMPONENTS

G.D.I. ENGINEERING PVT. LTD.

Mfrs. of Fibreglass Reintorced, Polystyrene Roofing Sheets. Also fabricating Moulded Components to Customer's Specification specially for Chemical Plants to avoid Corrosion.

135-A, B.R.B. Basu Road, Calcutta 700001.
Phones: 269969, 269951. Telex: 021-2552.

FIBREGLASS REINFORCED PLASTICS

PARAMOUNT ENTERPRISES

Chemical Storage Tanks, Dye Baths, Pipes, Exhaust Fans, Pumps, Pipelines, Ductings, Fibreglass Translucent Rooflight Sheets, Effluent Treatment Plants etc., etc. Jobs undertaken at site also.

Phones:
Office
TJ 223379
1-1-889 16/3, Tilak Road
Factory
Hyderabad 500 001..51134

FIBREGLASS

UNNATI CORPORATION

Manufacturers of:

Fibre Glass Cloth as per Indian and British Standards.
Teflon-coated Glass Cloth for enumerable end applications.
Varnished Glass Cloth. Glass Epoxy Laminates.

9, Ravi Chambers, 3rd Floor,
Pattharkuva, Relief Road,
Ahmedabad 380 001, Gujarat
Phone : 25257

FILTERS

FILTROLL

Offers you Import substitution :

- FILTER PAPERS & PADS
- FILTER CLOTHS
- PH & LITMUS PAPERS

For Quality, Quantitative and Industrial Filteration.

Please contact :

H. O.: **M/s. FILTROLL (India)**
105, Princess Street,
Bombay 400 002.
Phone : 310817. Gram : " FILTRITE "

Calcutta Branch: 1/5A, Prince Golam Md. Road, Calcutta 700 026. Phone : 422285.

AGENTS THROUGHOUT INDIA

FILTERS—FILTER MATERIALS & FILTER INSTALLATIONS

NAVGIRE & CO.

Mfrs. of different types of Filter Presses and other equipment for Chemical & Pharmaceutical Industries. Custom made to Specifications since 1909.

Navgire House, 163, Trimbak Parshram Street, Near Alankar Talkies,
Bombay-400 004.
Phones: 361829, 592319, 592638.
Telex: 011-6080 NVGR IN

FILTER PADS & PAPER

VICKY ENTERPRISES

House of Filter Paper and Filter Pads
Whatman, Sparkler, and Indian Filter Paper & Pads.

P.O. Box No. 584, Bombay 400 001
Phone: C/o 265026

FILTERS, FILTER INSTALLATION & MATERIALS

SPARKLER MANUFACTURING CO.
(U.S.A.) INDIAN DIVISION
(KAMITTER & CO.)

Distributors : Sparkler Range of Filters for Filtration of Pharmaceuticals, Antibiotics, Biologicals, Vegetable—lubricating & insulating oils, Chemicals, Beer, IMFL products, Paints Varnishes, Syrup, Fruit Juices, Plating Solutions, Steam Condensate, Industrial Domestic Water and anything that is liquid

Sales & Service

35, Chittaranjan Avenue, Calcutta 700 012.
Phones : 266072 & 260698.

FINE CHEMICALS

(Laboratory & Fine Chemicals)

s. d. fine-chem pvt. ltd.

Office : 315/317, T. V. Industrial Estate, 248, Worli Road.
P. Box No. 19160, Bombay 400 025.

Manufacturers of :

LABORATORY & FINE CHEMICALS, STAINS, INDICATORS AND CULTURE-MEDIA

(Biggest plant in Asia)

Factory : E27/E28, MIDC, Tarapur Industrial Area, Boisar 401 501 (Maharashtra).

Phones : Office : 4227480, 4226114, 4226196, 4226514
Factory : 471, 472, 473 (Boisar)

Telex : 5604 SDIN. **Grams :** "LABKEMICAL" Bombay 400 028

FIRE BRICKS & CEMENTS

BHARAT MINERALS & REFRACTORIES

Agents for Kumardhubi Fireclay & Silica Works Ltd., and Burn & Co. Ltd. for the Refractory Products, Sillimanite, Insulation, Acid Proof Fire Clay & Magnesite Bricks & Blocks

10.3 K.M., Gyani Border
P.O. Chikemberpur, G.T. Road,
Dist:- GHAZIABAD. PHONE: 201203.
Associates: Phone No. BOMBAY: 675273; MADRAS. 841441/844459; HYDERABAD: 261757; BANGALORE: 32511; BARODA: 56848.

FIREBRICKS & CRUCIBLES

DULI CHAND BIMAL PRASAD JAIN

COAL MERCHANTS

Authorised Stockists :

BURN STANDARD CO. LTD.

Firebricks, Fire-clay, Khariamiti, Soapstone Powder, Bentonite Powder, Graphite Powder, Ferro-silicon, Crucibles Pigeon, Vjyant etc.

Sales Depot .

Plot No. 47, Anand Parbat, Ind. Area, N. R. Road, New Delhi 110 005.
Phones: *Sales:* 568063 *Office:* 566100 *Resi:* 562786.

FIRE BRICKS

GANDHI SALES CORPORATION

Mfrs. & Stkts. of

Fire Bricks—Std. & all shapes & sizes in all grades, High Temp. Fire Cement & Clay, Insulation, Acid Proof Bricks, 85% Asbestos Magnesia etc.

138, Nagdevi Street,
Bombay 400003
Phones:
Office: 322392, 327995, 338423. Resi.: 458205.
Grams: C/o "BOMINERALS"

FIREBRICKS MFRS. AND EXPORTERS

INDUSTRIAL ASSOCIATES

Firebricks, Insulating, Sillimanite, Magnesite, Acid Proof Bricks, Fire Cement, Mortars etc.

26, Shakespeare Sarani,
Calcutta 700 017.
Phones Office : 449784, 448264, 434988
Resi. 473424.
Telex: 021 : 2711 RPDA IN.

FIRE EXTINGUISHERS & FIRE FIGHTING EQUIPMENTS

PROMPT FIRE ENGINEERS

Manufacturers

'PROMISE' Brand Fire Extinguishers, Fire Fighting equipments & Installation of Automatic Fire Alarm System, CO_2 System etc. Also undertake servicing & maintenance contracts.

214, New Narayan Peth, N. C. Kelkar Road,
Pune 411 030
Phones *Office* : 31839 *Resi.* : 55127

FIRE BRICKS

REFRACTORY AND MINERALS (INDIA)

Available from ready stock

All type of Fire Bricks, Blocks, Cements, Insulation Bricks etc. Specialised in Fire Bricks Lining job

187, Sabun Bhawan
2nd Floor, Shariff Devji Street
Bombay 400003
Phones: Off: 329354 Resi: 81 [illegible]

FIRE BRICKS & REFRACTORY MATERIALS

ROHIT TRADERS

HOUSE OF REFRACTORIES

Suppliers of :

All kinds of Fire Bricks, Acid Proof Bricks, Insulating Bricks and other Allied Refractory Materials.

Matruchhaya, 3rd Floor, Opp. Central Bank,
Kanpith Bazar, Surat 395 003 (Gujarat).
Phone : 28443. Grams : " GRACE ".

FIRE BRICKS & REFRACTORIES

NOWROJI N. VAKIL & CO.

Pottery Works
Naroda Road, Ahmedabad 380 025.
Phone : 373373. Grams : "POTTERY".

Manufacturers of :

Stoneware Drainage and Chemically Resistant Pipes and Fittings. Rasching Rings, Insulating bricks. Acid-proof bricks and Refractories and Clays, etc.

Bombay Office :
' EBY ' Castle, Mohamedally Road, Bombay 400 003.
Phone : 322803.

FIRE EXTINGUISHERS & FIRE FIGHTING EQUIPMENTS

FIRE CONTROL SERVICES

Mfrs. & dealers in:

"ANTIFIRE" Brand Fire Extinguishers, Fire Fighting & Safety equipments. Also undertake servicing & maintenance contracts.

1/11, Khadak Street,
Room No.5, Ist Floor,
Masjid Bunder,
Bombay 400 009.
Phone: 331607.

FIRE FIGHTING EQUIPMENT

Largest Manufacturers & Pioneer Exporters of:

1. Fire Fighting Hippo Duck Fire Hoses. Made to IS 636/1962. Type-I. Approved by National Test House. Mercantile Marine Department. Insurance etc
2. Jal Pravaah Water Delivery all Canvas Hose inside Rubber Lined for Irrigation purpose
3. Anchor Brand Medium Pressure Fire hose
4. Jai Kisan—An all agricultural purpose hose.

Contact

FIRE EQUIPMENT CORPORATION

P.O. Box No. 520. Bombay 400001 (India)
Phones: 263234 & 267605. Cable: MERCURY

FIREBRICKS MANUFACTURERS

PREMIER REFRACTORIES OF INDIA PVT. LTD.

All types of Fireclay, Alumina, Standard & Special Refractories, Insulation Bricks, Mortars, Cements, Castables & Ramming Masses.

Works at Katni (M.P.) - Phone: 2200

Rep. by:

WEST INDIA CORPORATION

D-10, Commerce Centre, Tardeo Road, Bombay 400 034.
Phone: 375274.
Regd. Office:
10, Alipur Road, Delhi-110054.
Phone: 221657.

FIRE FIGHTING EQUIPMENTS

RADIANT FIRE PROTECTION ENGINEERS

On Approved List of Tariff Advisory Committee in India

Contact us for:

Automatic Fire Proof Doors, Fire Hydrant & Automatic Sprinkler Systems and other Fire Fighting Equipments.

818, Parekh Market, 39, Kennedy Bridge,
Bombay-400 004.
Phones: 386577, 381676 Grams: 'FIRESAFETY'

FIRE EXTINGUISHERS & FIRE FIGHTING EQUIPMENTS

SHAH VADILAL JETHALAL

Stockist of:

All kinds of G.I. Buckets, **Fire Buckets** and all kinds of Ghamellas & Agrico Items.

149, Janjikar Street,
Bombay 400 003.
Tel : Office : 325195.

FIRE FIGHTING EQUIPMENT MFRS. & DEALERS

INDUSTRIAL COMMERCIAL CORPN.

Office : 157, Narayan Dhuru Street, Bombay 400 003.
Phone : 343751.

Manufacturers & Suppliers of :

Synthetic Rubberlined, Flax Canvas Fire Hosepipe, Hose Fittings, Fire-pumps, Extinguishers with entire range of Fire-Fighting Equipments.

Factory : 71 A, Government Industrial Estate, Kandivli (W), Bombay 400 067. Phone : 681650.

FLAMEPROOF LIGHTING FITTINGS

SERA INDUSTRIES

Unit No. 61, Mistry Industrial Complex, MIDC Cross
Road 'A'. Andheri (E), BOMBAY-400 093.

TELEX: ATCO 011-2770 CABLE: AMNISERA
PHONES: OFFICE: 259896, 295394
FACTORY: 566908, RESI: 293321

MANUFACTURERS OF 'SERA' FLAMEPROOF LIGHTING FITTINGS AND EQUIPMENTS

FLOOR GRATINGS (GRATINGS MANUFACTURERS)

INDIANA ENGINEERING WORKS

"Gratex" industrial floor gratings for power house, refineries, chemical plants, etc. made from mild steel/stainless steel/aluminium. Also Belt conveyors, Bucket elevators, Vessels, Storage tanks, Steel tiles.

Post Box 7409, Bombay 400 059.
Phones: 581903, 584743.
Grams: GRATEXFLO Telex: 011-6208

FLOORING TILES

" NECTILES "

NATIONAL TILES & INDUSTRIES (PVT.) LTD.

Manufacturers of : Marble-Mosaic, Terrazzo, Non-slippery, Heavy Duty Steelcrete & Plain Cement Tiles.

Office : 31, Hamam Street, Bombay 400 023.
G.P.O. Box No. 1647.
Phones : 271981, 272031. Grams : " NECTILES ".

FOAM RUBBER

Gram: CABRUBBER Phone: 864565/863763

Specialists in:-
FOAM RUBBER

MAHOMEDALLY NOORBHAI & CO.

Branches:-
CALCUTTA/MADRAS/LUCKNOW

REXINE, FOAM REXINE AND TAPESTRY CLOTH

144/148, EBRAHIM REHMATULLA ROAD,
BOMBAY-400 003.

FORGINGS AND ALLOY STEELS

INDIAN METAL FORGINGS

Post Box No. 7148, Wadala, Bombay 400 031.
Phone : 446715. Grams : " ALLOYFORGE ".

We undertake manufacture of open heavy Steel Forgings of Rounds, Rolls, Gear-Blanks, Shafts, Pinions, Blocks, Flats, Rings etc. as per drawings out of Carbon & Alloy Steels and Stock Rounds from Dia. 12 mm to Dia. 900 mm in MS, EN-8, EN-9, EN-19, EN-24, EN-31, EN-36, EN-353, EN-354, 20MN Cr5, SAE 8620 etc. Heat Treatment, Machining, Chemical, Physical and Ultrasonic testing facilities available.

FORGED SHAFTS

SANGAM supplies Shafts duly forged, normalized, Proof machined and ultrasonically tested out of EN-8, EN-9 and EN-24 or any other Carbon & Alloy Steels to INDIAN, BRITISH, ASTM, DIN or GOST standards.

SANGAM SHAFTS are available upto a maximum dia. of 400 mm and maximum length of 7000 mm.

SANGAM FORGINGS

64, Industrial Estate,
Bhilai 490020 (M.P.).
Phone : 954 Telex : 0771-201.

FORMICA & SUNMICA

MODERN GLASS MART

Dealers in Formica, Decolam, Super Decor Beautylem Melmeena & Plastic Sheets

63, Abdul Rehman St., Mandvi,
Bombay 400003. Phone: 327709.

FOUNDRY & STEEL PLANTS RAW MATERIALS

CHELARAM OMPARKASH

Ferro Silicon, Manganese, Chrome, Molybdenum, Vanadium, Tungsten & all other Ferro-Alloys, Fluorspar, Bentonite, Iron Ore, Dolomite, Limestone, Magnesite Peas, Bricks, Graphite Electrodes, Stoppers & Insulation Materials etc.

578, Ishwar Bhawan
Khari Baoli, Delhi 110 006

Phones:
Off. 25 3118
25 8827
Res. 22 6012

FOUNDRY EQUIPMENTS

FMC ENGINEERING WORKS PVT. LTD.

Cupolas, Core sand mixer, Core & Mould drying ovens, Sand mixer mullers, Shake out M/Cs., Auto Riddles, Sand Sieving M/Cs., Conveyors, Bucket elevators, Sand conditioning plant, Ladles & Ladle preheaters, Rotary Reverberatory Crucible Tilting, Melting furnaces, Air heaters etc.

Sonal Industrial Estate, Off Saki Vihar Road,
Behind John Baker & Sons,
Bombay 400 072.
Phone: 584829 Grams: 'FOMWORK'

FOUNDRY MATERIALS & REQUISITES

GARGI INDUSTRIES

Manufacturers of :

Foundry Chemicals, Exothermic Compounds, Briquetted Alloys and Ladle Additions, Inoculants, Covering Fluxes, Degassers, Mould and Core Dressings, Core Oils and Core Binders, and Distributors for M-Seal Epoxy Compounds.

2, Mercantile Apartments,
Opp. : Basant Studio, Chembur,
Bombay 400 074.

Phones : *Office* : 526292, 521545 ; *Factory* : 8264 (Vashi)

FOUNTAIN PENS DEALERS & STATIONERS

ENACO

ENAYATALI & CO.

262-264, Abdul Rehman Street, Bombay 400 003.

Dealers in : All famous makes Fountain Pens, Inks and Spare Parts including ' ENACO ' Fountain Pens, Inks, Gum, Carbon Papers & Stationers.

Phone : 321769. Grams : " ENAYAT ".

FURNACES

FMC ENGINEERING WORKS PVT. LTD.

Mfrs. of:

HEAT TREATMENT FURNACES for Annealing, Malleabilizing, Stress Relieving, Forging, Salt Baths, Tempering, Carburising, Rotary, Crucibles, and Crucibleless Reverberatory Tilting, MELTING FURNACES and Cupolas. Also Billet Reheating, Car Bottom, Rotary Hearth and other types.

Sonal Industrial Estate,
Saki Vihar Road, Behind John Baker & Sons,
Bombay 400 072.
Phone: 584829 Gram: 'FOMWORK'

FURNISHERS & DECORATORS

DARSHAK INTERIOR DECORATORS & FURNISHERS

Leading Designers and Interior Decorators of Latest type for offices, banks, residences, etc. Speciality in Fine Furnitures for office, kitchen, drawing & bed room etc.

2, Nirmal Kunj, Opp. UCO Bank,
M.G. Road, Ghatkopar (East),
Bombay 400 077.
Phone: 677172

FURNISHERS & INTERIOR DECORATORS

INTERWOOD

LEADING INTERIOR DECORATORS AND FURNISHERS FOR: OFFICES, BANKS & HOTELS. *EXPERTS IN:* ULTRA MODERN DESIGNS. *SPECIALITY IN:* AUDIO SPEAKER CABINETS ETC.

22, VADHANI INDUSTRIAL ESTATE,
L.B. SHASTRI MARG, GHATKOPAR, BOMBAY 400086.
PHONE : 583428.

FURNISHERS & INTERIOR DECORATORS

JYOTI DECORATORS

Specialists in:

Homes, Offices, Banks, Hotels and Factory Furnitures, Laboratory Furnitures. All types of Painting, Plumbing, Sanitary and Electrical Works. Major Building repairs and Water-proofing also undertaken. 335, Hind Rajasthan Dept. Centre, 95, Dada Saheb Phalke Road, Near Dadar (C. Rly) Station, Bombay 400 014.

Phones: Office 443963 Residence 463980
Prop: P. M. Shah.

FURNITURE

REKORD

For Office Furniture, Tables, Chairs, Non-Standard Cabinets, Almirahs, Racks and every type of Filing System including our unique Lateral Filing System.

Rekord Management Aids

9/3, Tardeo A/C Market, Bombay 400 034.
Phones: 373654, 398314 (Resi.) 694718

GALVANISERS

METALLITE INDUSTRIES

3, Daryaganj, New Delhi 110 002.
Phones : 272725, 279847, 592014 & 594015.
Gram : ' GALVANISER '.

Galvanisers and Manufacturers of :

M. S. & Galvanised Steel Structures, Pipes, Fittings, Tanks, Earthing Strips and Accessories, Electrical Goods, Refrigeration Equipments, Structures and General Fabrications of all types.

GARAGE TOOLS

GARAGE EQUIPMENT & TOOLS CO.

Kala Bhavan, 3rd Floor, Mathew Road,
Bombay 400 004.

Service Tools for Construction & Earth Moving Equipment, Pullers Hydraulic & Mechanical Garage Tool Sets, Engine Analysers & Testers etc.

Dremometer, Automatic Releasing TORQUE wrenches available up to 2,200 ft. lbs.

Phone : 360043. Grams : " GARAGEQUIP ".

GARDEN REQUISITES

DATTATRAYA INDUSTRIES PVT. LTD.

Regd. Office:
691/A, Poona-Satara Road, Pune 411 009.
Phones: 442724 & 447675 Grams: 'DIPRO'.
Bombay Office:
Sitaram Bldg., Dr. D.N. Road, Bombay 400 001
Phone: 343566 Grams: "DATTAINDUS"

Manufacturers of:

'DI' Make 'DIPRO' Spray Pumps, 'KLINKUT' Secateurs, Garden Tools, Adjustable Hose Nozzles. 'RAINBOW' Patented Adjustable Lawn Sprinkler, 'JALDHARA' low pressure Sprinkler & Sprinklers for Kitchen Gardening and 'YASHODHARA' Sprinkler Head for Agricultural Irrigation

GARMENTS EXPORTERS

GEMINI IMPEX PVT. LTD.

110, Kewal Industrial Estate,
Senapati Bapat Marg,
Lower Parel,
Bombay 400013.
Tel. Off. 372132
Fact. 396110, 376587
Cable: GEMINISTYLE, Bombay 400013.

Telex: 011-5873 A/B. GEMI

Manufacturers & Exporters of:
Ready-made Garments.

GARMENTS MFRS.

PARSHOTTAM & SONS

Tailors of all kinds of Uniforms for Security Inspectors, Guards, Peons, Drivers, Mills & Factory Workers. Also for BOILER SUITS & Curtains. Specialists in all kinds of CHEMICAL FILTER BAGS & Suppliers of Filter cloth, Acrylic, Terylene, Nylon & Cotton etc.

Lady Northcote Hindu Orphanage Bldg. 3,
Chowpatty Rd., Bombay-400 007.
Phone: 820383.

GAS, COKE, BRIQUETTES & TAR DERIVATIVES

BOMBAY GAS COMPANY LIMITED

Administration, Finance Offices and Show Room:
Empire House, 214, Dr. Dadabhai Naoroji Road,
Bombay 400001.
Grams: "CRISTOLITE". Phone: 267391 (5 lines).
Telex : 011 4712
General Manager : Dr. T.P.S. Rajan. .

Works:
Chinchpokli, Parel, Bombay 400012
Phone: 442411 (5 lines).

INCANDESCENT GAS LAMPS LANTERNS & STOVES

OPTIMOHAR INDUSTRIES PVT. LTD.

A Govt. of India Recognised Export House
Manu Mansion, 16, S. B. Singh Road,
Bombay 400 023.
Phones : 254353, 254409, 318443.
Grams : " SUNFLAMES ". Telex : 011-3410.

GOVERNMENT OF INDIA
Recognised Export House

Manufacturers & Exporters of :

Pressure Lanterns, Pressure Stoves, Blow Lamps, Mantles, Burners and Spare parts, Industrial Pressure Gauges, Printing Machinery.

GAS MANTLE MANUFACTURERS

SHAW B.K. MANTLEWORKS PVT. LTD.

18-B, Dum Dum Rd., Cal-30.

Pioneer Mfrs. of:

Gas Mantles, Both soft and hard of every description for Lamps & Lanterns, Domestic illumination, Street Lighting & Lighthouses

Phones: 226084, 225713, 225755.
Cable: "WHITENESS".

GAS WELDING RODS & WELDING ACCESSORIES

SHREE SHAMLAJI INDUSTRIES

15, Dadiseth Agiary Lane, Kalbadevi Road,
Bombay 400002.

Welding Electrodes, Gas Welding rods & Welding Accessories, speciality: C.I. machinable stainless steel & bronze electrodes, Stellite and Silver brazing rods, Tungsten Electrodes, L.T. Eutectic Welding rods, Holders, Goggles, Glasses, Hand Gloves & Nozzles, Regulators & Cutting sets etc.

Phone: 317811 Gram: SHAMIND

GASKET MANUFACTURERS

CYPHER ENGINEERING CO.

Gaskets of
All types, we make Gaskets as per drawings, samples and specification.

5, Chandan Apartments,
J.T.L. Almeida Marg,
Thane-400 601.

GASKETS MANUFACTURERS

DIKSON & COMPANY

8, Bharat House, 104, Bombay Samachar Marg
(Apollo Street), Bombay 400 023.

Phones : 271721/258916. Grams : " MEMPHIS ".

GUARANTEED GASKETS OF ALL TYPES INCLUSIVE OF STAINLESS STEEL SPIRAL WOUND GASKETS.

Please write for Price List.
We solve your Gasket Problems.

GAUGES & TOOLS MFRS.

EKOSHA GAUGES & TOOLS PVT. LTD.

Mfrs. of
Tool Room Accessories H.S.S./Carbide, Cutting Tools, Profile Tools, Jigs Mixtures, Plug/Snap Gauges, Import substitutes and also undertake various Precision Machining 50 BS in our imported copy turning. Horizontal Boring Cylindrical Surface and Profile Grindings and Gear Hobbing & Slotting machines

B-5, Gillander House, Calcutta 700001.
CABLE : "GAUGEKOHSA". PHONE : 227441

GAUGE GLASSES

KALIDAS HARJIVAN

(Estd. 1920)

Boiler Gauge Glasses, Toughened Glasses, "KLINGER" (Austrian) Gauge Glasses, Mica Packings, High Temperature Ceramic and Silica Tubes & Beads.

195, Samuel Street, Bombay 400009
Phones: 325525, 321882. Resi.: 810548
Grams: "MAHUVAWALA"

GAUGE GLASSES

NUNDLALL INDERCHAND PRIVATE LTD.

Importers and Stockists of :

Bishops Adamant Gauge Glasses, Rubber & Asbestos Rings, Lubricator Sight Glasses, Kinger type Reflex Glasses of all types and sizes.

10, Canning Street, Calcutta 1.
Phones : 225485 & 222910

GEARS

Gears for Industry

C. K. P. ENGINEERING WORKS

111, Ardeshir Dady Street, C. P. Tank,
Bombay 400 004.
Phones : 368989 & 363128.
Grams : " MECHJOB " Telex : 011-3461-CKP IN

Manufacturers of .
GEARS and SPROCKETS on Milling upto 12 feet diameter, Bevel Gears upto 4 feet and Worm and Worm Wheels as per drawings and/or specifications. Hobbing 2½ DP × 4"-6" capacity. Hardening and Grinding also undertaken.

GEARS & SPEED REDUCERS

ESSENTIAL ENGINEERING CO.

ESENPRO HOUSE,
24, Marol Co-operative Industrial Estate Ltd.,
Mathurdas Vasanji Road, J. B. Nagar Post,
Bombay 400 059

Phone : 586132.

Manufacturers of :
"Esenpro" Worm, Helical, Bevel and Spur Gears. Geared Motors. Torque Arm Shaft Mounted Gears, Open & Close type Variable Drivers, Chain Wheels and Chains, Pin bush type Coupling, Motor Generator Welding sets. Solari-Factory Clocks. Belt Conveyors, Screw Conveyors, Bucket Elevators.

Distributors for : Diamond Chains.

GEARS

GAJRA GEARS PVT. LTD.

Elve Chambers, Green Street, Fort,
BOMBAY-400 023
Phones : 298788, 298698, 298742
Grams : 'ELBUSCON'
Works : Station Road, DEWAS (M.P.)

Manufacturers and Exporters of best quality automobile and tractor Gears. Also on the approved list of The Association of All India State Road Transport Undertakings.

GEARS & TURNED PARTS

GALA GEARS

238, Nandanvan Industrial Estate, Block D, Unit I-A,
L. B. Shastri Marg, Thane 400 604.

Phone : 596065.

Manufacturers of :

- (1) Spur Gears
- (2) Helical Gears
- (3) Bevel Gears
- (4) Sprockets
- (5) Racks & Pinions
- (6) Silent Chain Sprockets

GEARS FOR INDUSTRY

FOR ALL TYPES OF INDUSTRIAL

GEARS, SPROCKETS CHAINS

Manufacturers:

MECCANO MACHINERY MFG. CO.

19, Arun Chambers,
Bombay 400 034.
PHONES : 379397, 394318. GRAM : MEKGEAR

GEARS

STANDARD MATERIALS AGENCIES

All types of Spur Gears upto 12 feet diameter, also Bevel, Worm, Helical and Spiral Bevel Gears made from Mild Steel, Cast Iron, Cast Steel, Meehanite, Gun Metal or Phosphor Bronze.

P. O. Box 1660, 45/46, Podar Chambers,
S. A. Brelvi Road, Bombay 400 023.
Dial : 253202/253262. Cable : "STANSIZE".
Telex : 011 3281 SMA IN
Regional Offices : Ahmedabad, Madras, Calcutta.
Representatives at : New Delhi, Pune

GEAR FOR CRANE CONTROL

STERLING CONTROLS

Quality Control Gear for Cranes and other Material Handling Equipment. Our Manufacturing Programme includes :

BRAKES : A.C. & D.C. Electromagnetic, Thrustor & Mill Duty Brakes.
CONTROLLERS : Power & Control circuit controllers, Drum Switches, Limit Switches.
RESISTANCE BANKS : Punched Steel and Wire Grid Type.
OTHERS : E. M. Clutches, Flexible Couplings, Vibrating and Magnetic Equipment.

Contact us for your specific requirements.
P.O. Box 17023, Dadar, Bombay 400 028.
Phones : 452297-8. Cable : "EMBRAKES"

GELATINE CAPSULES MFRS.

GELIKEPS PRIVATE LTD.

Regd. Office & Works :
Atladra, VADODARA 390012.

Manufacturers of :

Two Piece Hard Gelatine Capsules.

Phones : 59036 & 59160. Grams : GELIKEPS

Bombay Representative : 209, Prasad Chambers,
Tata Road No. 2, Bombay 400 004.
Phone : 359452.

GENERATOR AND EARTHMOVING MACHINERY SPARES

INDO TECHNIKA

Minerva Motor Market,
Kashmere Gate, Delhi 110006.
Phone: 229242.

Specialists in Original and Replacement Spares for CUMMINS and SKODA Generators and Heavy Earthmoving Machinery. Suppliers to Govt. Depts., Projects, Mines and Defence. Special attention to Export Orders.

GLASS & MIRRORS

HAKIMI SALES CORPORATION

37, Bapu Khote Street,
Bombay 400 003.

Phones : 342672 & 334487.

Dealers in :

Plain Glass, Insulating Glass, Heat Reflective Glass, Automobile Glass, Toughened Glass, Safety Glass, etc.

GLASS DEALERS

LIBERTY GLASS HOUSE

57-59, Dhanji Street, Bombay 400 003.

Phones : *Office* : 320623, 328589 & 341518
Resi. : 544258, 531896.

Grams : "URGENTGLAS", Chinchbunder,
Bombay 400 009.

Dealers in : All kinds of Sheet & Plate Glass, Wired Glass, Figured Glass, Safety Glass, Imported Glass, Gauge & Sight Glass. ATUL Toughened Glass for Mfg. Acrylic Sheets, R & C Glass Cutters.

EXPORTERS

GLASS BOTTLES

THE MAHALAKSHMI GLASS WORKS PVT. LTD.

Dr. E. Moses Road,
Bombay 400 011.
Grams : "RACEVIEW"
Bombay, Jacob Circle.
Phones : 373424, 392482,
895517, 397235.
Telex : 011-3085.

Sanatnagar P.O.,
Hyderabad 500 018.
Grams : "MALXMIGLAS",
Hyderabad 500 018.
Phone : 261531.
Telex : 0155-385.

Reputed Manufacturers of Containers in :

AMBER & CLEAR GLASS

More than Thirty Years standing in the manufacture of all varieties of Glass Containers for Milk, Pharmaceuticals, Vials, Aerated Waters, Perfumes, Cosmetics and Breweries and Distilleries.

Factories at : Bombay and Hyderabad.

GLASS BOTTLES & VIALS

R. G. GLASS INDUSTRIES

Specialists in Aerated Water Bottles, Saline Bottles & Penicillin Vials.

Admi. Office :

244, Maulana Azad Road,
P. O. Box 4564, Bombay 400 008.
Phones : 372326 & 396984.

GLASS FACTORIES

VGW

VAZIR GLASS WORKS LIMITED

Manufacturers, on fully automatic machines, of NOSOL USP Type I Borosilicate Amber & Flint Glass Vials, Bottles for Injectibles, Ear, Nose and Eye Drops and Transfusion Bottles in all sizes, as well as USP Type III Soda Lime clear glass antibiotic vials and Cosmetic bottles

M. Vasanji Road, Andheri, Bombay 400 059.
Phone : 576341-5. Telex : 011-4148.

GLASS & MIRRORS

DIADEM MIRROR

M. A. KACHWALLA & SONS

97-99, Dhanji St., Bombay 400003.
Phones : 324395. 326247.
Grams : "DIADEM".
Telex : 11-5827 (GLAS-10)

Stockists of : All kinds of Sheet, Plate, Wired, Mirror and Figured Glasses.

Manufacturers' Representatives for :
"Glasef" Toughened Safety Glass.

Stockists : DECORATIVE LAMINATES.

Manufacturers of 'DIADEM' Coppered back Mirrors.

GLASS & MIRRORS

MULLA MUSAJI MULLA ADAMJI ARSIWALLA

Manufacturers of :

'CROWN" brand mirrors in different sizes.

Dealers in all kind of Glasses.

138, Abdul Rehman Street,
Bombay 400 003.
Phones : 322304 & 348590.

GLASS

SAMIR GLASS TRADERS

Dealers in :

All kinds of Sheet and Plate Glass, Figured, Wired, Safety, Vetrolite, Opaque Glass and Mirrors, Hard Board and Glass Cutters. Specialists in welding glasses.

21-23, Dhanji Street, Parsi Gally, Bombay 400 003.

Grams : "SAMIRGLASS"
Phones : 326785
Resl. 522778

GLASS & MIRRORS

TASS MIRROR INDUSTRIES

Manufacturers of :

COPPERED BACK SILVERED GLASSES

Office :
138, Abdul Rehman Street,
Bombay 400 003.
Phone : 322304.

Factory :
Unit No. 68,
Unique Industrial Estate,
Rajendra Prasad Road,
Mulund (West),
Bombay 400 080.
Phone : 504156.

GLASS SHEETS & MIRRORS

V. GOPALDAS & CO.

Wholesale & Retail Dealers in : Sheet Glass of all thickness, Figured Glass, Wired Glass, Safety Glass, Toughened Glass, Plate Glass Mirrors, Silvered Glass and all other kinds of Imported Glass.

299, Yusuf Meherally Road (Masjid Bunder),
Bombay 400 003.

Phones { *Office :* 324364, 337451. *Resi. :* 476976.
Grams : " VICTORGLAS

GLASS (SHEET & PLATE)

MAHOMEDALLY VALIJI ARSIWALA

76, Abdul Rehman St., Opp. State Bank of India,
Bombay 400003
Phone : 325900
and
145, Jamli Mohalla (Bapu Khote Street), Bombay 400 003
Phone : 332467.

Direct Importers and Dealers in all kinds of :
Glasses, Plywood and Picture Mouldings.

Government and Railway Contractors

Godowns at : 2/4, Temkar Street, New Nagpada,
Bombay 400008
and at 145, Jamli Mohalla (Bapu Khote Street),
Bombay 400003.

GLASSWARE MFRS.

AJIT GLASS WORKS PVT. LIMITED

Office : 99, Haji Ahmed Devji Bldg., 2nd floor,
Mohamedally Road, Bombay 400 003.
Phone : 324702. Grams : " AJITWORKS ".

Manufacturers of :

Glass Jars, Bottles of all kinds suitable for Pharmaceuticals, Cosmetics, Ink, Milk, Squashes, Liquor, Aerated Water Industry, etc.

Factory : S. V. Road, Jogeshwari, Bombay 400 102.
Phones : 572293-94.

GLOVES MFRS.

ASHA RUBBER INDUSTRIES

L. B. Shastri Marg, Mulund,
Bombay 400 080.
Phone : 592209.

QUALITEX Brand, Acid and Alkali Proof
Industrial Gloves
Post Mortem Gloves
Surgical Gloves and Neoprene Gloves

X-RAY PROTECTIVE GLOVES AND APRONS.

GLOVES MFRS.

MAHESH INDUSTRIAL TRADERS

CYKRAMPS

Manufacturers & Exporters:

Surgical, Postmortem, Industrial, Electrical, Household gloves. X-ray proof apron & Gloves etc.
Rubbers sheetings, Washers, Gaskets, Moulded Items as per your specification.

35, Panchayat Wadi,
Bhuleshwar,
Bombay 400002.
Phones:
Office: 316476.

GLUE & GELATINE MANUFACTURERS

BAWA GLUE MANUFACTURING COMPANY

Office :

6433, Katra Baryan, Fatehpuri,
Delhi 110 006 (INDIA).
Phones: 232748, 231097, 238931 & 87-223.
Grams : " ZODIAC ", Delhi.

Manufacturers of :

" BAWA GLUE 555 " in cake and flake form most suitable for Gum-tape, Match, Textile, Nickel-Polish and allied industries.

GOLDCHIP & SILVERCHIP HSS TOOL BITS

Made from Imported High Speed Steel.
Grade WKE—4-Cobalt-10% and M-42-Cobalt-8%
It's the cutting edge that counts.

- Super hard
- Longer life between re-grind
- Size : 6 × 75 to 50 × 300 mm
- Squares, rounds, flats
- Parting & Form Tools
- Regular suppliers to HMT, HAL, BHEL, HTL, MICO etc.
- Exporters to Far East/Middle East/Continent.

Call for details:

B. P. STEELS

57/59, Zaveri Bazar, Bombay 400 002.
Phones : 321994 & 345802.

GRAB BUCKETS

SIMPLEX ENGG. & FOUNDRY WORKS

65, Industrial Estate, Bhilai 490020
PHONES : 5454 & 5603. GRAMS : SIMPLEX. TELEX : 0771-201

Manufacturers of :

Single Rope, Double Rope, Motorised, Hydraulic Grab Buckets from 0.5 cu.m. capacity to 10 cu.m. capacity suitable for Steel Plants, Mines, Cement Plants, Ports etc. according to customers' requirements.

GRANITE

PRINCE GRANITE INDUSTRIES

Bharat Tiles Compound, Signal Hill Road, Bombay 400033.
Phones : 895597, 374203

Mfg. Suppliers & Decorators of
Granite Slab in 12 decorative colours. Size & Thickness as per customers' requirements.

GRATING MFRS.

INDIANA ENGINEERING WORKS

'GRATEX' Industrial Floor Gratings for Power House, Refineries, Chemical Plants, etc. Made from Mild Steel/Stainless Steel/Aluminium. Also Belt Conveyors, Bucket Elevators, Chemical Plant Eqpt., Dairy Eqpt., Storage Tanks, Steel Tiles.

P. Box 7409, Bombay 400059
Phones: 581903 & 584743
Gram: GRATEXFLO Telex: 011-6208

GRATINGS MFRS.

METREX PVT. LTD.

Sunder Estate, Near Kamani Works, Shastri Marg,
Kurla, Bombay 400 070.
Phones: 674446 & 671512.
Grams : "METREUNIT", Kurla, Bombay.
Telex : C/o 011-4884.

Manufacturers of :
"METREX" welded as well as rivetted Floor Gratings & Stair Treads in various sizes.

GREETING CARDS

LUCKY TRADING CORPORATION

272, Abdul Rehman Street, Bombay 400 003.
Manufacturers of : Greeting Cards for Divali, X'mas, New Year, Idd, Birthday and Wedding Cards in new various attractive designs.
Phones: 327760 & 346017.

GREETING CARDS MFRS.

Pipal leaf paintings, hand painted in varied general designs and screen printed in portraits. Special designs/portraits work undertaken. Batik paintings, feather work/hand decoration on leaf and other varieties available.

Wedding cards, Cards for Divali, X-mas, New Year and other occasions also made.

Special requirements of actual users and exporters undertaken.

Direct export enquiries solicited.

Contact:

SEEMA INDUSTRIES

(Manufacturers & Exporters)

410, 14th Road, Khar, Bombay 400052 (India)
Telephone Nos.: 545755 & 325556

GREETING CARDS MFRS.

VAKILS CARD DEPT.

Greeting Cards, Wedding Cards, Frolicards, Children's Party Cards, Gift Wrappers, Decorative Letter Papers, 'Vakilets' for all occasions.

Showroom :
Vakils House, Sprott Road, 18, Ballard Estate,
Bombay 400 038.
Phones : 267252, 269121. Grams : 'BLADE'.

GUAR GUM & DERIVATIVES

VIVEKANAND MILLS (SAKI)

Manufacturers of:
Food Grade, Technical Grade and Commercial Grade of Guar Gum.

Plant:
Saki Vihar Road, Bombay-400 072.
Phone: 581130.
Office:
56, C.P. Tank Road, Bombay-400 004.
Phone: 357671.

GUMMED TAPE MFRS.

PLAIN & PRINTED—SIZE: 19 mm to 152 mm AND ONWARDS

ALSO NONCURLING GUMMED PAPER—SIZE: 45.7 cms × 58.4 cms

NATRAJ PAPER INDUSTRIES

46, Nagdevi Street, Bombay-400 003.
Phone: 327391.
Factory: AHMEDABAD.
Phones: 371235, 372116.

GUNNY BAGS, HESSIAN CLOTH & JUTE TWINE MERCHANTS

ANANDA KRISHNA TRADERS

Dealers in :

New & Old Gunnies, Hessian Cloth, Jute & Jute Products.

New 39 Anna Street, George Town, Madras 600 001,

Phones : Office : 28595 Resi. : 23714
Grams : AKEYTEE "

Suppliers to : Andhra, Karnataka, Kerala & Tamil Nadu.

GUNNY, HESSIAN, POLYTHENE BAGS MERCHANTS

MADHAVJI HIRJI & CO.

Stockists: New and old Gunny Bags & Polythene Bags, Twine, Hessian Cloth etc.

205, Shree Nivas, 382/84, Narshi Natha Street, Katha Bazar, Bombay 400 009.
Phones: Office: 323672, 348371
Resi.:679310.
Gram: GUNNYGOLD.

HANDICRAFTS

BHARAT INDUSTRIES CORPORATION

G.P.O. Box 288 , Opp. Red Gate, Bombay - 400 001
Phones : 264905-260074. Grams : 'ALAKHDHAM'.
Telex : 11-6571 ALAK IN

Govt. Recognised Export House

- Carpets & Rugs
- Ivory Artware
- Gems & Jewellery
- Silver Articles
- Silks & Stoles
- Brass Artware
- Copper Artware
- Wooden Artware
- Sandalwood Articles
- Pichhwai Paintings.

HANDICRAFTS

GORA INDUSTRIES

For all types of Aluminium Anodised Toys & other Handicrafts, Mementoes and Trophies For Army, Navy, Air Force and Civil

Office, Showroom and Factory:
"Vishnu Bhawan"
Mohanpura, Jodhpur 342001
Rajasthan
Phone: 23514

HANDICRAFTS

KAIRALI EMPORIUM

For Kerala Handicrafts—

Ivory Carvings, Wood Carvings, Bell Metal Lamps, Kerala Ceramics, Screwpine, Koragrass Products, Straw Pictures, Bamboo Products, Horn Articles etc.

Nirmal, Nariman Point,
Bombay 400 021
Phone : 232817

HANDKERCHIEFS

NATIONAL HANDKERCHIEF MANUFACTURING CORPORATION

Manufacturers of Leading Brands:-
"WESTMINSTER", "VORIS", "ELASTA":-
"ERAKA"–"SAMMY" "GENTLEMEN".
Ladies & Gents Handkerchiefs.

450, Girgaum Road, Tadwadi,
Bombay 400002
Phones:
Off: 315762 Resi: 544414, 691547
Grams: "HATHRUMAL"

HARDWARE & TOOLS

Estd: 1878

ABDULLABHAI FAIZULLABHAI PRIVATE LIMITED

Wholesalers & Retailers in Multifarious items of Hardware, Engineering Tools, Precision Tools, Instruments & Appliances, Pipe Fittings, Machinery & Metal Merchants.

Address: 60/62, Sarang Street,
Bombay - 400 003.
Phone: 326708 Grams: SMILING

HARDWARE DEALERS & IRONMONGERS

FAKIR CHAND MOHANLAL

Chawri Bazar, Delhi 110 006.

Phones :
Office : 265671. *Res.* : 264991.

Importers, Iron & Hardware Merchants.

Government Regd. Dealers for :
WEIGHTS & MEASURES

HARDWARE PIPES & FITTINGS

Manufacturers of : "LOHIYA" Brand Steel Belt Lacing.
PHONES :
Off.: 328845, 339152, 339231
Andheri Shop: 577371 Res.: 572074

LUCKY TRADING COMPANY

Agents for :
FENNER VEE - BELTS
Stockists For :
HARDWARE PIPE FITTINGS BALL BEARINGS & GENERAL SUPPLIERS
Office Address :
24, Nagdevi Cross Lane, 4th Fl., Bombay 400003
Retail Shop :
39, Nagdevi Cross Lane, Bombay 400003

HARDWARE

RAJEN ENGINEERING STORES

General Hardware Merchant & Mill Gin Stores Suppliers, Specialist in M.S. & S.S. Bolt Nut.

29, Kolsa Street, Ist Floor,
Bombay 400 003.

Phones: Office: 338608 Res.: 678178

HEALTH PARLOUR

VEERAJ HEALTH CENTRE

Garden View, Devidayal Road,
Mulund West, Bombay 400080.

For complete relaxation in comfort! Bombay's only top! Health centre and beauty clinic, Health, Figure and Beauty therapy for Gents, Ladies. The landmark in sophistication with a touch of class—"VEERAJ"!

for "Sophisticated exclusives" Aristocrats only! Relax Mentally, physically! Enjoy the luxury of "Swedish massage" Fabulous "Steambath" in immitable atmosphere! Membership open!

The only beauty therapy clinics for Gents.

HEAT EXCHANGERS

MIRCH-MIREX LIMITED

Dêsigners and Manufacturers of
Heat Exchangers, Oil Coolers, Chillers, Condensers, Liquifiers, Finned Air Heaters to International Construction Codes. Please write to :

Mirch-Mirex Ltd.,
S. Patkar Road (Hughes Road),
Bombay 400036
Phones : 827301, 04-05, Cable : MIRCHEX
Telex : MIRX 011-2119

HEAT RESISTANT COATING

MANIKANT BROTHERS

Makers of "EVEREST" H.R. Coating first of its kind in India. Heat Resistant (upto 620°C). Anti-corrosive. Acid Alkali Resistant, Resisting Oils, Petrol, Solvents, Mild, Gases, Weathering, Water, Steam, Acidic, Fumes, Direct Flames etc. (for Furnaces, Dryers, Ovens, Boilers, Chimneys, Pipe-lines, Etc.)

311, New Anant Bhuvan, (3rd floor), 257 65, Narsi Natha St., Bombay-400 009.

Phones: 322881, 326977, (Resi.) 474267.

Cables: MANIKANBRO, Bombay.

HEAT RESISTING PAINTS

STAR PAINT & OIL INDUSTRIES

**Crescent Chambers, 56, Tamarind Street,
Bombay 400 023.**

Phones : 272243, 272289, 272904 & 273201.

Grams : "STARPAINT"

Manufacturers of :
Industrial Paints, Synthetic Enamels & Allied Products. Specialists in Aluminium Paints, HEATEX ALUMINIUM & BLACK PAINT, High Temperature Heat Resisting up to 600°C, Vinylex Vinyl Paint, Chemical Resisting, Level Finding Paste & Allied Products.

HEAT TREATMENT

Annealing, Normalising, Case Hardening.
Hardening & Tempering.
Shrink Fitting. Stress Relieving.

*Specialist in Rolling Mill
Rolls & Al. Alloy castings of
LM-4, 9, 11, 16, 25, AU5GT etc.*

MICRO

MICRO STEEL TREATMENTS

B-79, Road No. 21, Wagle Industrial Estate,
Thane-400 604. Phones: 594931-594520.

HEAT TREATMENT SALTS MANUFACTURERS

GREACE ENGINEERS

F-11, Nand-Dham, Marol, Bombay 400 059.
Phone: 583877.
Gram: "HARDAID", Andheri.

Manufacturers of:
All types of Heat Treatment Salts, i.e. Liquid Carburising, Neutral Hardening, Quenching, Pre-Heating, Tempering, Austempering, Martempering, Blackening, Blueing, Pack Carburising and Rustremovers

Branch Office:
20, Regent Estate, Layalka Math
Calcutta 700 032
Phone: 722244

HERBO MINERAL MEDICINES

M/S. J. & J. DeCHANE LABORATORIES (P) LTD.

Residency Road, Hyderabad-500 001.
Phones: 57431, 57432, 57648 and 53533.
Grams: HERBOMINO.

Manufacturers of:
HERBO MINERAL MEDICINES
Popular Remedies:
ALBO-SANG: The Ideal Tonic for all ages. BIO-SAL: The Tears to Cheers Gripe Water for Babies.

HIGH FREQUENCY EQUIPMENT & TREATMENT

YATIN INDUSTRONICS

Manufacturers of Induction and Dielectric Generators upto 100 KW. Well-Equipped Workshop for Selective Hardening, Brazing, Annealing of Gears, Shafts, T.C. Tipped Tools and any other Components.

Bharat Coal Comp., Bail Bazar, Kurla,
Bombay 400 070.
Phones: 861191, 675615

Behind "Indickem", GIDC Estate, Vatwa, Gujarat
Phones: 876231, 876270

HIRERS OF FANS, FURNITURE ETC.

ON GOVT. LIST

FANS-FURNITURE HIRERS

ANIL ELECTRIC CO.

ELECTRICAL CONTRACTORS AND HIRERS OF FANS, FURNITURE ETC.

125, Vithalwadi, Kalbadevi, Bombay-400 002.
Phones: (Shop) 312793/315921, (Resi.) 894822

HOIST, CRANES & VARIABLE SPEED DRIVES

HOIST-O-MECH LTD.

Manufacturers (with foreign collaboration) of
Electric Hoists ¼ tonne to 30 tonnes. E.O.T. Cranes upto 50 tonnes capacity. Jib Cranes, Goliath Cranes, Special Purpose Cranes, Equipments for process Industries and Steel Plant Accessories to specific requirements, Wire Drawing Equipments, Geared Motors, Inducta Eddy Current Variable Speed Drives upto 200 H.P.

Pokhran Road No. 2, Majiwade, Thane 400601.
Phones: 592555, 501477, 503524 Telex: 011-4466

HOMOEOPATHY

The Leading House in Western India for genuine and reliable Homoeopathic and Biochemic medicines, globules, bottles, corks and other Physician's requisites; Books — American, English and Indian Publications.

ROY & COMPANY

176, Shamaldas Gandhi Marg (Princess Street),
Bombay 400 002.
Phone: 310504. Grams: "HOMOPATHS"

HOSES: FIRE & IRRIGATION

FIRE EQUIPMENT CORPORATION

When you want dependable and tested fire fighting Hippo—Duck hose or Anchor brand heavy duty 200 lbs. tested water delivery hose or Jal-Pravaah—the perfect irrigation hose, come to:

FIRE EQUIPMENT CORPORATION

166, Dr. D.N. Road, Post Box No. 520,
Bombay 400001.
Phones : 263234, 267605. Gram : MERCURY.

Quality Hosemakers to the nation since 1964.

HOSE PIPES MANUFACTURERS

M.G.R. INDUSTRIES

39/1, Canal West Road,
Calcutta-700 004.
Gram: "AGRIPIPES" Phone: 542129

Manufacturers of
'AGRIFLEX' Brand Rubber Hose Pipes from ½" dia. to 40" dia. viz. Suction & Discharge Hoses, Built-in Coupling Hoses, High Pressure Petrol Hoses, Sand & Gravel Hoses, Dredger Hoses, Dredger Sleeves, Acid & Chemical Hoses, Steam Hoses etc. conforming to relevant IS & BS specifications and all kinds of Rubber Gate Seals, Water Stops etc.

HOSES & BELTS

V. N. MEHTA & SONS

DUNLOP—WATER, AIR, PNEUMATIC, ROCK DRILL, STEAM, CHEMICAL & PAINT SPRAY HOSES, TRANS. BELTING, MAXRATE & MAXLIFE VEE BELTS.

71, Narayan Dhuru Street
Bombay 400 003.
Phones: Off. 335852, 330067;
Res. 472852

HOSIERY MANUFACTURERS

SURESH TEXTILES

Manufacturers & Exporters of

Stockinette, Mutton Cloth, Cleaning & Polishing Cloth, Cake Wrappers, all types of Hosiety Cloth, Vests, Industrial Cloth & Sanitary Cloth.

1, Kali Prasanna Singhee Road,
Calcutta 700002
Phones: 522498 & 522536 Grams: "STOCKINET"
Agents for Bombay:
M/S CHANDRAMANI ENTERPRISES
414, Bharat Chambers,
52-C, Baroda Street,
Bombay - 400 009.
Phone: 347507

HOSPITAL EQUIPMENTS

JANAK MANUFACTURING WORKS

Manufacturers of :—

Hospital Equipment for Ward, Intensive Care & Recovery.

Factory, Showroom and Office at:

Antop Hill, Wadala (East), Bombay 400 037.
Phones : 440171, 440769.
Grams : 'JANAKBED' (MT).
Telex: 011-4884 JKMG IN.

HOSPITAL EQUIPMENT

KALELKAR SURGICAL INDUSTRIES

Finest surgical instruments, fibrelight equipment, surgical diathermy, electromedical goods, medical sundries, autoclaves, sterilisers, suction pumps, anglepoise lamps, hospital furniture, enamel-rubber stainless steel goods and pathological equipment, etc.

305, Princess Street, near Rly. Station,
Bombay 400 002.
Phones : C/o 256299 & 313284.

HOSPITAL AND KITCHEN EQUIPMENT

Makers of :

Shadowless Operating Light, Heart-Lung Machine, Premature Baby's Incubator, Sterilizers, Hot Food Trolleys and Stainless Steel Heavy Duty Kitchen and Canteen equipment.

MAZDA MANUFACTURING CO.

6, Datta Mandir Road, Bhandup,
Bombay 400 078.
Phone : 581861.
Grams : "SHADOWLESS", Bombay.

HOTELS & RESTAURANTS

KHYBER RESTAURANT

145, Mahatma Gandhi Road, Fort,
Bombay 400 001.

THE RESTAURANT KNOWN FOR ITS INDIAN FOOD THROUGHOUT THE WORLD

Phones :
273227, 273228, 273229, 273848 & 273929.

HOTELS & RESTAURANTS

Sun-n-Sand

India's Luxury Beach Hotel
Centrally Air-Conditioned.
10 minutes drive from Airport
Swimming Pool, Permit Room, Open Air Patios, Health Club.
Juhu, Bombay 400 049.
Phone : 571481. Grams : "SUNANDSAND".
Telex No. 011-3282.

HOTELS

TOURIST HOLIDAY HOME

7, Link Road, Jangpura,
New Delhi.

- Fully Air-Conditioned
- Homely Environment
- Moderate Charges.

Phones: 618797, 698135, 625750 & 697810.

HOUSE OF WIRE NETTING

BIRANI & CO.

Head Office :

62/1A, Netaji Subhas Road, Calcutta 700 001.
Phones : 33-6117 & 32-4388. Grams : "BINIWIRE."

Importers & Manufacturers of :

All sorts of Wire nettings, Chain Link fencing, Garden Fencing Barbed wire, Expanded Metal & River Embankment Bricks, Mattress, Sausages etc.

HUMIDIFICATION, VENTILATION & AIRCONDITIONING ENGINEERS

C. DOCTOR & CO. PRIVATE LTD.

11, Homi Mody Street, Bombay 400 023.
Phones: 274538/274474/274448 Telex: 011-2218, Grams: "QUALITY", Bombay
Also at:

AHMEDABAD: Bank of Baroda Building, Gandhi Road, Grams: "DOCTORCO" Telex: 012-533

CALCUTTA: 3rd Floor, 5-A, Lord Sinha Road, Grams: "DOCTORCO (C)" Telex: 021-2014

COIMBATORE: 1st Floor, 47, Sir Shanmugam Road, R. S. Puram. Grams: "DOCTORCO" Telex: 0855-392.

Specialists in: Airconditioning, Humidifying, Ventilating, Cooling, Heating, Filtering, Dehumidifying, Textile Stores Suppliers, Importers & Exporters.

Sole Selling Agents for: Maize Products, Ahmedabad.
Sole Distributors for: Industrial Machinery Mfrs. (P) Ltd., Ahmedabad.

HYDRAULICS & PNEUMATICS

Manufacturers of custom made hydraulic cylinders with bores upto 500 mm, strokes upto 600 mm and pressure upto 700 kg/cm^2 for Marine application, Machine Tools, Earth moving equipment, drilling rigs etc.

FLUID POWER PVT. LTD.

11, Rock House, Worli Hill Road,
Bombay 400018.
Phone: 373416-17 Telex: 11-4149 FPPL IN

HYDRAULIC EQUIPMENT (OIL)

PEECO HYDRAULIC PVT. LTD.

Ambica Kundu Lane, Ramrajatala,
Howrah 4.
67-2017 (Calcutta)
OILDROLIK, SANTRAGACHI.

Manufacturers of :

"PEECO" Brand CUSTOM-BUILT Presses, Pumps, Testing Machines, Power Packs, Valves and other special purpose Oil-hydraulic equipment to suit your specific requirements.

HYDRAULIC MACHINERY

INDIAN HYDRAULIC INDUSTRIES PRIVATE LTD.

New Delhi 110 015.
Factory : 70, Shivji Marg, New Delhi 110 015.
Phones : 586939/587922/589956.

Manufacturers of :

Plastic Injection Moulding Machines—Horizontal, Vertical and Rotary type, Pressure Die Casting Machines, Hydraulic Presses, Broaching Machines, Ground Support Equipment for Aircraft, Truck Mounted Articulated Cranes, Truck Dumping Platforms, Tower Wagon and Hydraulic Hoists.

HYDRAULICS

INDO HYDRAULICS

310A, Commerce House, Nagindas Master Road,
Fort, Bombay 400 023.
Phone : 272670.

Oil hydraulic systems (Cylinders, Pumps, Valves Power Packs, Hand Pumps, Ermetto fittings, Hoses, Pressure Switches) and Hydraulic Presses.

THANE : C-9, Sunita Co-op. Hsg. Society,
Office : Next to Mangala High School, Thane 400 604.
Phone : 504724.
Works : W-86, Phase-II, M.I.D.C., Manpada,
Dombivli (East), Dist. Thane 400 601.
Phone : 354. Grams: "HYDRAULICS", Dombivli.

HYDRAULIC PRESSES, PUMPS & POWER PACKS

HYDRATECH

Custom-built Hydraulic Power Packs, Presses, Pumps, Motors, Jacks, Hand Pumps, Accumulators, etc.

K. Lekhraj Building, 2nd Floor, 20, L. T. Road,
Bombay 400 003.

Phones: 339140 & 331230.

HYDRAULIC PRESSES, PUMPS AND POWER PACKS

INDUSTRIAL HYDRAULICS

Hydraulic Presses, Pumps, Valves, Cylinders, Jacks, Power Packs, Intensifiers etc.

Lekhraj Building, Near Carnac Bridge,
Bombay 400 003.

Phones : 331230 & 339140.

HYDRAULIC PRESSES, PUMPS & POWER PACKS

PRESSWELD ENGINEERS

Manufacturers of :

Hydraulic Presses upto 5,000 tons capacity as per customers' requirements and also Power Pumps generating 12,000 P.S.I., Power Packs, 4-way, 3-way Control Valves, etc.

20, Lokmanya Tilak Road,
Near Carnac Bridge, Bombay 400 003.
Phones: 331230 & 339140. Grams : "HYPRESSURE".

HYGIENE/SANITARY PRODUCTS

ESTABLISHED 1925 BALSARA

BALSARA HYGIENE PRODUCTS
12-A, Jorewar Bhuvan,
M. Karve Road,
Bombay 400 020.
Phone : 256241.
Cable : " BALHYGIENE "

Manufacturers of : 'Puritas' Toothpaste (with clove oil), 'Puritas' Pressure/Storage Water Filters, 'Odonil' Air Purifier, 'Sanifresh' Lavatory Cleanser, 'Odomos' Mosquito Repellent, 'Odopic' Cleaning Powder.

ICE-CREAM CONES MAKING MACHINES

" GABBRIELLI " — made in Italy.

Complete plant for ice-cream cones production.

Sole Agents :

JASHVANT C. SHAH & CO.
Bharati Nivas, Block No. 6, 1st Floor, Besant Road,
Santa Cruz (West), Bombay 400 054.
Phones : 561563 & C/o 317587.
Grams : " OTCASNART "

IMPORTERS & EXPORTERS

DUBASH FRÈRES & CO.

Importers, Exporters, Manufacturers' Representatives

Manufacturers of :

Pharmaceutical Glassware, Ampoules, Vials, Tablet Tubes, Test Tubes, etc.

Victoria Bldg., S. A. Brelvi Road (Parsee Bazar Street),
Bombay 400 001.

Phones : 296069 & 296130. Grams : " DUBFRERES ".
Telex : 011-4739 " 'DFCO' IN ".

IMPORTERS—EXPORTERS & MFRS.

BEST FOR ALL

— ESTD. 1920 —

JK SEWING MACHINE

- DOMESTIC
- INDUSTRIAL
- ZIGZAG
- OVERLOCK
- BAGCLOSER

LEATHER PLASTIC SEWING ALL VARIETIES ■
SHOWROOM

J. K. SEWING MACHINES
282, S.V.P. Rd., Lehri Bldg., Bombay-400 004.
Phone: 351388

IMPORTERS & EXPORTERS

N. MANSETA & BROTHERS
(Estd. 1941)

Importers & Exporters
Commission Agents and General Merchants.

165, Lohar Chawl, P.O. Box 2225,
Bombay 400 002.

Phones : 314251, 314252 & 314204.
Grams : " MANSETACOY ", Bombay 400 023.
Telex No. 011-4779-NMAB.

IMPORT LICENCE

CHHOTAI ENTERPRISE

Agents for
Transfer of your valued Import Licences against Exports at best premium on prompt payment as per current Import Trade Policy.

502, Gokul, 5th Floor, 80-A, Baroda Street, Bombay 400009.
Phones : 346387, Resi. : 664948

INDUSTRIAL FANS & EQUIPMENTS

FLOW LINK INDUSTRIES

Manufacturers of:
Indl. Fans-Centrifugal, Axial Flow, Mancoolers, Roof Extractor, Tea Processing Fan, Dust & Fume Removal Plant, Air Treatment Equipment, Ventilation Engineers.

370, Jodhpur Park, Calcutta 700 068.
Phone : 460250

INDUSTRIAL ENGINEERS & DESIGNERS

M/S. MAGADHA CONSULTANTS

Industrial Engineers, Designers of Dairy equipment, EOT, Spl. Purpose & Heavy Duty Cranes, Conveyors, Pharmaceutical machinery, Chemical Plants, Evaporators, Spray Driers, Spiral and Wiped film heat exchangers.

D/301, Ashit Apartments,
Modibaug, Sudhir Pawar Road,
Pune 411016
Phone: 55657

INDUSTRIAL HEATING EQUIPMENT

G T Z (INDIA) PVT. LIMITED

(Successors to the Indian Branches of Getz. Bros. & Co., Inc. USA) International Merchants.

Manufacturers of : Gas Fired Infra-Red Burners for Industrial Heat Process Applications :

BOMBAY: Western India House, Sir P.M. Road, P.O. Box 910. Tel.: 253541/253570 259415. Tele. Address: "GETZ".
CALCUTTA: Bombay Mutual Building, 9, Brabourne Road, P.O. Box 152. Tel.: 269900/01. Tele. Address : "GETZIND".
MADRAS : No. 151 (330), Thambu Chetty Street, P.O. Box 1706. Tel.: 22134. Tele. Address : "GETZ".

INDUSTRIAL MINERALS MFRS.

ASSOCIATED MINERALS

Office : C-46, Pratapnagar, Udaipur (Rajasthan).

MINE OWNERS & Grinders, and Suppliers. Soapstone Powder and Lumps for Cosmetics, Textile, Paper, Rubber, Paints, Soap, Foundries, Pesticides and Fertilizer Industries, Dolomite, Pyrophylite, Feldspar for Ceramics and Paint, Glass Industries etc.

Also Soapstone Sticks.

Factory :

E-39/40, Industrial Area, Madri, Udaipur.
Mines in Kherwara Dist. (Udaipur).
Phones : 3174 & 5095.
Grams : "ASOMIN"

INDUSTRIAL MACHINERY MFRS.

STANDARD VACUUM EQUIPMENT INDIA

Manufacturers of : Rotary High Vacuum Pumps, Rotary Vane and Rotary Piston Types, Combination High Vacuum Pumping Units, Industrial Vacuum Cleaners, Water Ring Type Vacuum Pumps, Vacuum Impregnation Plants, Vacuum Measuring Apparatus and High Vacuum Accessories.

Please Reply to :

66, Sashi Bhusan Dey Street, Calcutta 700 012.
5/2, Sashi Bhusan Dey Street, Calcutta 700 012.
Phone 26-7306

INDUSTRIAL PERFUMES & ESSENCES

LANA FLORESSENS

Manufacturers of :

Specialised Industrial Fragrances

&

Flavours & Synthetic Essential Oils, etc.

For Cosmetics, Agarbathies, Soaps, Pharmaceuticals, Aerated Waters, Biscuits, Confectionery etc.

Unit 13, Swastik Industrial Estate, 178, Vidyanagari Marg, Kalina, Bombay 400 098.
Phones : 542928 & 532450.

INDUSTRIAL SAFETY EQUIPMENTS

TAMCO ENTERPRISES

Manufacturers and Stockists of
Arc & Gas welding accessories and Industries Safety Equipments. Safety Helmets, Safety Belts, Goggles, Hand Gloves, Safety Shoes.

Brushwell House, 240, Nagdevi Street, Bombay 400003.
Phones: Office: 338893, Resi.: 860557.

INDUSTRIAL THERMOMETERS

—MERCURY IN STEEL
—VAPOUR PRESSURE
—MERCURY IN GLASS
—BIMETAL

Northern India's Most Advanced Expertise on Heat Measurement.
Quality and Accuracy.
Manufacturers:

JAIN GLASS AND INSTRUMENTATION

C-47, Industrial Area, Lawrence Road,
New Delhi 110 035 (India). Phone: 714233.

INSTRUMENTS

SHREE TRADING COMPANY

Subhash Road, Amravati 444601
Phone : 4163

Dealing in :
Analytical, Medical, Electronic, Electrical, Soil, Concrete, Bitumen, Petroleum Testing Equipments.

INSULATION BOARDS (WOOD-WOOL)

FIBRETEX INDUSTRIES (INDIA)

89, Sector-6, Faridabad 121 006. Phone: 88434.

Manufacturers of:

"FIBRECRETE" Wood-Wool Insulation Boards Control Heat, Cold, Sound, Fire, Humidity & Fungus Proof. Ideal for All Kinds of Buildings.

Dealers:

GILLANDERS ARBUTHNOT & CO. LTD.
Churchgate, Bombay 400 020. Phone : 291361.
9, Bhavani Chambers, Ashram Road, Ahmedabad.
42, Regal Building, New Delhi 110 001.
Phone : 312847.

INSULATION (CONTRACTORS & ENGINEERS)

EXELITE INSULATIONS PVT. LTD.

Contractors for

Heat & Cold Insulation with Thermocole, Cool-Lag, Glasswool, Mineral Wool & Calcium Silicate, Temperature range from −200°C to +1000°C

301, India Printing House,
42, G.D. Ambekar Marg,
Tilak Road Extension, Wadala,
Bombay 400031.
Phones: 448814 & 443252

INSULATIONS (CONTRACTORS & ENGINEERS)

FIBRO INSULATIONS

Contractors for

Hot & Cold Insulation with Thermocole, Glass Wool, Mineral Wool. Also manufacturers of Glass wool & Exporters.

P.B. No. 4628, 127, Arun Chambers, Tardeo Main Road,
Bombay-400034
Phone: 398149

INSULATION MATERIALS

SOUTHERN INSULATIONS

Hylam, Ebonite, Nylon, Fibre, Mica, Prespex, Sindanyo.

117/14, Broadway,
Madras 600001.
Phone: 28505
Gram : "SOUTHERLAM"

INSULATION CONTRACTORS & ENGINEERS

LLOYD INSULATIONS (INDIA) PVT. LTD.

**PUNJ HOUSE, M-13, CONNAUGHT CIRCUS,
NEW DELHI-110 001.
PHONE: 353521.**

For insulation of Steam Turbines, Boilers & Accessories, Steam Pipes, Process Vessels, Storage Tanks, Cold Storages, Conditioned Spaces, Chilled & Hot Water Pipelines etc
with
ROCKLOYD LB, ROCKLOYD SPI, SPINTEX
LLOYDWOOL & THERMOLLOYD
Regional Offices at Bombay, Calcutta, Madras

INSULATION

MAG-HARD INSULATORS

Contractors & Engineers for Hot/Cold Insulation. Acoustics, Air Cond. & Refg. Plants, Ducts, Cold Storages, Waterproofing, False Ceiling & Oxychloride Flooring.

Head Office:
A-4, Jansukh Apt., Kasturba Road,
Kandivli (West)
Bombay 400067
Regd. Office:
Darya Bldg., 3rd Floor,
375, D.N. Road, Bombay 400001
Phones: 253967, 258134 Grams: "MAGASBA"

INSULATION MATERIALS

For your requirements in Insulation Material
Dr. Beck's Varnishes, Winding Wires.

Contact :

ASHWINKUMAR & COMPANY

Shreeji Bhuvan, 49, Mangaldas Road,
K. M. Sharma Marg, Bombay 400 002.

Phone : 311713. Grams : "ASHKABE".

INSULATION MATERIALS

INSULATION HOUSE

Kitab Mahal, 1st Floor, Dr. D. N. Road,
Bombay 400 001.
Phones : 261530, 388178.
Gram : " INSULORD ".

Specialist in :

Instrument Winding, Wires, High resisting wires, " Y " to " H " Class insulation, Fibre Glass & Mica, Bakelite, Ebonite, Fibre, Dr. Beck's Varnishes & Epoxy resins.
Polyester Film & Triflexil.

INSULATION MATERIALS

GANDHI INDUSTRIAL TRADING CO.

Mfg. & Stkts. in:

85% Asbestos Magnesia, Hard Setting Compound, High Temp. Fire Cement & Clay, Fire Bricks, Acid Proof Cement & Bricks, Hot & Cold Face Insulation Bricks, Minerals etc.

15, Arcadia, 172, Sir Bhalchandra Road, Dadar T.T., Bombay 400 014.

Phones: Office: C/o 327995, 322392, 338423;
Resi: 458205.

INSULATION MATERIALS

NEWKEM INDUSTRIES

Manufacturers & Contractors

- ★ Thermal Insulation
- ★ Acoustic Insulation
- ★ Fire Proofing Insulations

Products: Thermolite Calcium Silicate, Nulitewool, Mineral-wool, Glasswool, Nukelite, Vermiculite, Insulation & Finishing Cements.

Harganga Mahal
Khodadad Circle, Bombay 400014.
Phones: 454261—454264 & 467013.

INSULATING AND ENGINEERING MATERIAL MANUFACTURERS

PERMALI WALLACE LIMITED

(Collaborators: Permali Ltd., England)

Manufacture a comprehensive range of electrically insulating and engineering materials based on compressed wood, glassfibre and epoxide resin castings for LT to EHT applications. These materials are supplied in the form of Flat Sheets, Billets, Rods, Machined Components, Insulated Hardware, Tubes, Rings, Vacuum Resin Castings, Mouldings, Pipes, Linings, Complicated Shapes and Structures. Also undertake designing and consultation of electrical insulating systems. These products are serving almost all electrical equipment manufacturing industries, electricity boards, steel works, chemical plants, railways, defence establishments, aeronautical, textile, shipbuilding and many other engineering industries.

For details Please write to:

PERMALI WALLACE LIMITED, BHOPAL 462008.
Specialists in Reinforced Insulating & Engineering Materials

INSULATION MATERIALS

Manufacturers & Suppliers of:

Glasswool, Mineral Wool, Thermocole, Hard Setting Plaster, Asbestos Magnesia Heat & Cold Insulation Contractors.

SWATI TRADING CO.

Noble Chambers, 4th Floor, 28 A, Parsi Bazar Street,
Bombay 400 023.

INSURANCE

THE NEW INDIA ASSURANCE COMPANY LIMITED

(A Subsidiary of General Insurance Corporation of India)

Head Office :

The New India Assurance Co. Ltd.,
87, Mahatma Gandhi Road,
P. B. No. 969,
Bombay 400 023.
Phone : 274617-22. Grams: " NIASURANCE ".

INSURANCE REQUIREMENTS OR INSURANCE CLAIMS

Experience of over 30 years at your service.
Contact:

M/S. PERAJ PRIVATE LIMITED

(Estd. 1952—For Insurance Services)

45, Veer Nariman Road,
Fort, Bombay 400023.
Phone: 253154

INTERCOM SYSTEM

IDEAL INTERCOM SERVICES

(Intercom Engineers, Consultants & Contractors)

Maintenance & Installation of all types of intercom systems, specialists in Auto Exchanges. Supply of Telephone Equipments, spare parts, accessories and purchase of Old Exchange & Equipments. Authorised dealers for MAZDA TELEPHONE CABLES.

Head Office : " NOOR-E-IMDAD ", Ram Maruti Rd. Extn., THANE. Phones : 593970, 505445.

Branch : 1127, Shukrawar Peth, PUNE 411 002.
Phone : 440048.

INTERIOR DECORATORS & FURNITURE MFRS.

KAUSHAL

Interior Designers-Executors, Exporters. Specialists for all kinds of Interior furnishings, Artistic structures, False ceilings, Furniture units, under skilled supervision with best workmanship and materials.

1016, Raheja Chamber, Nariman Point,
BOMBAY-400 021.
Phones: 234909 - 244372

INTERIOR DESIGNERS

PANCHSHEEL ARTS

Interior Designers, Colour Scheme Experts, Painters & Modern Furniture Mfrs. Specialists : Latest type of Furnitures, False Ceiling, Signboards, Creative Interior Works.

335, Hind Rajasthan Dept. Centre,
95, Dada Saheb Phalke Road, Dadar,
Bombay 400 014.

Prop. Mrs. Aruna P. Shah.

Phones : *Office :* 443963
Resi. : 483980

IRON & STEEL MERCHANTS

ABBASBHAI KAMRUDDIN & SONS

Dealers of
"HINDUSTAN" Petroleum Corporation Ltd., Water-proofing work undertakers, Stockists of all Waterproofing & Insulation Products, Coalpitch, Coaltar, Asphalt, Bitumen, Damar, Cloth, Tarfelt, Tarfelt Roll, Expansion Join Sheets, M.S. Sheets, G.P. Sheets & Iron Merchants.

250, Maulana Azad Road, Opp. Bombay Mercantile Co-op
Bank Ltd., Bombay 400008.
Phones: Office: 893834
Resi.: 82567, 816434

IRON & STEEL MERCHANTS

ADAMJI LOOKMANJI & CO.

H.O.: Rahimtoola House, Homji Street,
Bombay 400001.

Steel, Tinplate, Hardware, Pipes, Tubes, Fittings, Government Contractors.

Partners :—
A. A. Jasdenvala F. A. Jasdanwalla
A. Y. Jasdanwalla Abbas Y. Jasdanwalla

Telephones: 291682, 291797 & 291888
Grams : "STEELYARD".

IRON & STEEL MERCHANTS

BISHAMBER DAYAL BADRI PERSHAD

Iron & Steel Controlled Stockists.

Importers & Dealers in :
ALL SORTS OF STEEL.

Sales Office :
Y-8, Naraina Warehousing Area,
New Delhi 110 028.
Phones: 565982 & 587646.
Resi.: 637639 & 634069.

IRON POWDER

★ ELECTROLYTIC
★ ATOMISED
★ CAST IRON

FOR
IRON POWDERS of any composition, mesh size and specifications.

Please Contact :

MICROMETALLIC INDUSTRIES

22-D, Govt. Industrial Estate,
Kandivali (W), Bombay 400 067.
Phones : 692884, 682596 & 566152.
Grams : "MICROGRIT". Bombay 400067.

IRON & STEEL

HOOSEIN & BROS., M. A.

Importing Agents representing Foreign Steel Mills and Steel Mill agents from all parts of the world since about 45 years.

Lakshmi Bldgs., Sir P. M. Road, Fort,
Bombay 400 001.

Cable Address : "TROPICALS".
Telephone : 299270. Telex : 2412 A/B : HODA IN.

IRON & STEEL MERCHANTS

STEEL CENTRE

Stockists & Wholesale Dealers in
Iron & Steel Materials, Rounds, Flats, Squares, Angles, Channels, Joists, Plates, Sheets.

512, Giriraj, 73, Sant Tukaram Road, Carnac Bunder,
Bombay 400009
PHONES :
Office : 327738, 342274, Resi. 216159

IRON & STEEL

UNIQUE STEEL SALES

32, Steelyard House, Sant Tukaram Road,
Iron Market, Bombay 400 009.
Phones: 323976, 321741 *Resi.*: H. C. Mehta: 675249, A. C. Mehta: 672641.

Stockists of:
Iron & Steel & Building Materials, Joists, Channels, Angles, Plates, Flats, Rounds & C.R.H.R. & G.C. Sheets. Also Dealing in Alloy Steel & Special Steels.

IRON & STEEL MERCHANTS

YASH PAL & COMPANY

'IRON SHEETS' Black Plain, CRC, GP/GC, M.S. Plates, Angles, Channels, Rounds & G.I. Wire etc.

Y-1A, Lohamandi, Naraina, New Delhi 110028
Phones:
Off. 583174 Res. 536262
Grams: "LOHAEXPORT"

JEWELLERS & DIAMOND MERCHANTS

M/s. A. K. MOTIWALA (Jewellers)

Government Approved Valuers

Exporters & Importers, Mfg. & Dealers of
All kind of jewelleries in gold, platinum & silver, precious & semiprecious stones & diamonds.

113, Turner Road,
Sanghji House, 1st Floor,
Bandra, Bombay 400050.
Phones: 539007 & 533657 Cable: "CROWNJEWEL"

JEWELLERS & DIAMOND MERCHANTS

BALA APPAJI & SON

(Estd. 1888)

Manufacturing Jewellers, Dealers in Diamonds, Precious Stones & Pearls. Appointed Valuers by the Govt. of India.

Bansilal Mansion, 9A, Homi Mody Street,
Bombay 400 023.
Phone : *Show Room* : 274558.

JEWELLERY

BAPALAL & CO., JEWELLERS

29, Rattan Bazar, Madras 600003

Phones: 32396 & 39573.

A Renowned Firm of Gold Jewellery— Silver Artware — Precious & Semi-Precious Stones — Manufacturing Jewellers, Silver Cups — Trophies, Caskets, Replicas, etc.

JEWELLERS & DIAMOND MERCHANTS

GAZDAR PVT. LTD.

TAJ MAHAL HOTEL, Bombay 400 039
Phone : 243666

Manufacturing

Jewellers, Dealers and Exporters of Gem Stones Specialised in Pure Platinum Jewellery. Appointed Valuers of Jewellery to the Govt. of India.

For **PURE DIAMONDS**

K. Wadia

GRANT-RD. BOMBAY

Phone : 371483. Grams : " GEMARTWORK ".
Appointed Valuers by :
THE GOVERNMENT OF INDIA.

JEWELLERS & DIAMOND MERCHANTS

NARBHERAM V. MINAWALA

Importers, Exporters & Manufacturing Jewellers
Dealers in
Gold Ornaments, Diamonds, Pearls, Precious Stones, Semi-Precious Stones & Real Jewellery of every kind.

6, Dharam Place, 100/103, N. S. Patkar Marg,
(Hughes Road), Bombay 400007.

Phones : Showroom: 364442, 364443 & 364444
Res. : 368417, 387175 & 368278
Gram: "SONACHANDI"
Appointed Valuers by the Govt. of India
We buy old Gold Ornaments, Diamonds, Pearls, Precious Stones, Semi-Precious Stones and Real Jewellery of all kind.

JEWELLERS, GOLDSMITHS & SILVERSMITHS

SHANTIVIJAY & CO.

Leading Jewellers & Emerald Merchants.

Showroom :
52, Janpath, New Delhi 110 001.
Phones : 320920 & 321249.

PARTNERS :
KASHMIRCHAND, BIMALCHAND, NAGINCHAND,
PRADEEPKUMAR, PRAMODKUMAR,
MRS. KAMLADEVI.
Grams : THOLIA & SANTGODHA.

JEWELLERS & DIAMONDS MERCHANTS

VAJUBHAI JEWELLERS

(Wellknown Minawala)

Dealers in
Gold & Real Diamonds Ornaments.

Vajubhai House,
252/58, Zaveri Bazar,
Bombay 400002
Phones: 315950 & 254285
Gram: 'SONAMINA'

JEWELLERS, GOLDSMITHS & SILVERSMITHS

Govt. Approved Valuers. (J. Form, W. Tax, Tax)

Messrs. WAMAN HARI PETHE
(Estd.: 1908)

Head Office :
Pethe Building, Jagannath Sunkersheth Road,
Bombay 400 004.

Dadar Branch :
Pethe Bldg., Ranade Road, Dadar, Bombay-400 028.

Diamonds, Pearls and Jewellery Merchants, Inquire for anything as to Sale, Purchase or Exchange; Reliable Jewellery at moderate prices; Ready stock and also made to order.

H.O.: Phones: 353521-22, *Dadar Branch:* Phone: 451592.

JEWELLERS & SILVERSMITHS

Y. A. HAJARE & BROS.
(Estd. 1927)

Silverware, Brassware, Presentation Articles, Sports Trophies, Shields, Silver Caskets and medals.

also:

Spinning Lathes & Machine Engravers on Three Dimension Deckel Pantograph.

Brass operation Theatre Shadowless lamp shades.

Address : 1st Panjrapole Lane, Madhavbaug,
Bombay 400 004.

Grams: "KRUPAWANTI" Phones: 363677 & 366162.

KALA JAMAN SWEET MEATS

BENGALI SWEET HOUSE

Specialist for :

Rasgulla, Ras Malai, Kala Jaman, Raj Bhog.

Free Home Delivery Service.

27-29, Bangali Market,
New Delhi 110 001.

Phones : 388855 & 388899.

KIRANA & CHEMICALS

KANHAIYA LAL RAM BILAS
Khari Baoli, Gadodia Market,
Delhi 110 006
PHONES: Office 238671, 237935
Resi. 258679, 252090

Kirana & Chemical Merchants.

Selling Agents and Stockists :

Waldies Ltd. (D. Waldie) : Red Lead, White Lead, Grey oxide, Zinc Oxide, Litharge and Lead Acetate etc.

Indian Wood Products Co.Ltd., IWP, KATHA.

LABEL MFRS.

For all types of Aluminium Anodised Embossed labels, Radio Grills & Panel Plates and Novelties.

Contact :

METAGRAPHS PVT. LTD.

164, Senapati Bapat Road, Matunga,
Bombay 400 016.

Phone: 453853.

Grams : " METAGRAPHS ".

LABORATORY EQUIPMENTS

CHEMI EQUIP

79, Devkaran Mansion, 1st Floor, Princess Street,
Bombay 400 002

Phone : 310084.

Dealers in :

Laboratory Chemicals, CORNING Glass Apparatus TEMPO, REMI, I.E.C. Scientific Instruments, JEBIVAK High Vacuum Pumps, Hydrometers, Silica Crucibles, Thermometers, Whatman Filter Papers, Jayant Test Sieves, Philips pH Meter & Imported Instruments.

Authorised Distributors TEMPO & REMI EQUIPMENTS.

LABORATORY & SCIENTIFIC INSTRUMENTS

Filter-papers & aids.

INDUSTRIAL-FILTRO — made in Italy, various types of filter-papers, pads and other articles for filtering.

" GIBERTINI " — made in Italy.

World famous first-class Laboratory & Analytical balances, Titration equipments, Hydrostatic balances. Electronic & digital with guaranteed accuracy.

JASHVANT C. SHAH & CO.

Bharati Nivas, Block No. 6, 1st Floor, Besant Road,
Santa Cruz (West), Bombay 400 054.

Phones : 561563 & C o 317587.

Grams : " OTCASNART ".

LABORATORY INSTRUMENTS

LAB-INSTRUMENTS

Spectrophotometer, Imported, ' Mettler ' Single Pan Balance.

Spectronic — 20, Photo Elec. Colorimeter, pH Meter, Flame Photometer, Refractometer, Polarimeter, Turbiditymeter, Brook Field Viscometer, Tintometer, Lovibond Comparator & Colour Discs, Microscopes, Autoclave, Sterilizer, Oven, Water Bath Incubator Centrifuge Machine, Water Still, Stirrers — Various types, Heating Mantles, Vacuum Pump, Test Sieves, Shaking Machine, etc. Soil Testing Machineries and Pharmaceutical Machineries.

341, 'Panchratna', Opera House (Near Roxy),
Bombay 400 004.

Phone : 383973. Gram : " LABWARE ".

LABORATORY EQUIPMENTS

LABEQUIP CORPORATION

Dealers in:

Single Pan Balances, Spectrophotometers, Colorimeter, Brookefield Viscometer, pH Meter, Refractometer, Polarimeter, Tintometer, UV Tubes, Stirrers, Centrifuge and all other items for research, quality control and analytical laboratory.

Post Box No. 696, Bombay 400 001.

Telephone : 293479. Cable : "EQUIPLAB"

LABORATORY EQUIPMENTS

MALIK ENGINEERING WORKS

Manufacturers of :

Lab Pulverizer, Jaw Crusher, Roll Crusher, Ball Mill Bench mixer, Compression testing machine, Sieve & Sieve shaker & other Soil, Cement, Concrete, Coal Aggregate, Paint, Bitumen, Sand, Rubber & General Laboratory Equipments.

Office :

10944/6, Shidipura, Karol Bagh, New Delhi 110 005.

Factory : B-84, Wazirpur, Main Industrial Area, New Delhi 110 052.

Phones : 516505, 519519.

LABORATORY EQUIPMENTS

SARAYU SCIENTIFIC CO.

Estd. 1950

Dealers in laboratory apparatus—glassware, platinumware, thermometers, thermocouples, etc.

2nd Floor, Moos Building, Next to Edward Talkies, 510,
Kalbadevi Road,
BOMBAY-400 002.

Phone: 313874.
Grams: HYDROMETER, BOMBAY-400 002.

LABORATORY CHEMICALS

B. BABULAL & CO.

Dealers in :

Laboratory Chemicals, Reagents & Industrial Chemicals.

Stockists of :

Sarabhai M. Chemicals, Baroda • E. Merck (India) Pvt. Ltd. • B. D. H. • SD's Lab. Chem.

71, Shamaldas Gandhi Marg (Princess Street),
Bombay 400 002.

Phones : *Office :* 299537, 314565 & 310291
Resi. : 818439 & 819069

Telegraphic Address: "PETROLIUM".

LABORATORY CHEMICALS

NARENDRA & CO.

Direct Importers & Stockists of :

LABORATORY CHEMICALS, FINE CHEMICALS, STAINS, INDICATORS & BIO-CHEMICALS.

8, Bode Chawl, Babu Genu Road,
Shamaldas Gandhi Marg,
Bombay 400 002.

Phone : 313468.

LABORATORY CHEMICALS

NATIONAL CHEMICAL CORPORATION

B. No. 9, Devkaran Mansion, Princess Street,
Bombay 400 002.

Phones: *Office :* 259733 (3 lines)
Factory : 502194.

Manufacturers of : Acids, Solvents & other various chemicals in AR & CP Grade.

LABORATORY CHEMICALS

(Stains and Indicators)

s. d. fine-chem pvt. ltd.

Office : 315/317, T. V. Industrial Estate, 248, Worli Road,
P. Box No. 19160, Bombay 400 025.

Manufacturers of :

LABORATORY CHEMICALS, FINE CHEMICALS, STAINS & INDICATORS AND CULTURE-MEDIA.

(Biggest plant in Asia).

Factory : E27/E28, MIDC, Tarapur Industrial Area, Boisar 401 501 (Maharashtra).

Phones : Office : 4227480, 4226114, 4226196, 4226516.
Factory : 471, 472, 473 (Boisar).

Telex : 5604 SD IN. Grams: "LABKEMICAL", Bombay 400 025.

LABORATORY & HOSPITAL FURNISHERS

VIP INSTRUMENTS & APPLIANCES

Manufacturers & Suppliers of :

Laboratory & Hospital instruments, Ovens, Incubators, Water Still, Water Bath, Heating Mantles, Hot Plates, Shaking Machines, Suction Pumps, Auto Clave, High Pressure Sterilizers, Shadowless Lamps, Corning Glasswares etc.

20/392, Trikamjighia Marg, Bombay 400 002.
Phones : 259381, 314735 ; *Resi. :* 811335.
Grams : "FLAXRAY", Bombay 400 002.

LAB INSTRUMENTS & ACCESSORIES

UNIQUE SCIENTIFIC SYNDICATE

Imp. & Stkts. of

Lab Instruments & Accessories, Porcelain & Silica Wares, Hydrometer, & Thermometer, Filter Papers, Laboratory & Industrial Chemicals.

17, New Mkt., 351, Sheikh Memon St., Bombay 400002
(INDIA)
Phones: 329589, 328580, 341345.

LADDERS MFRS.

FAMOUS LADDERS MANUFACTURING COMPANY

128-130E, Victoria Road, Byculla,
Opp. Masina Hospital, Bombay 400 027.
Phones: 376447 & 372244. Grams: "SAFELADDERS".

Pioneers & Largest manufacturers of all types of WOODEN & ALUMINIUM LADDERS such as Single & Folding Ladders, Wall Supporting & Self-Supporting Extension Ladders, Telescopic Wheeled Ladders, Jeep-Mounted Tower Ladders & Fire Fighting Ladders.

LEAD & PLASTIC ENGINEERS

GLOBE, GATE & ' Y ' TYPE LEAD VALVES
DIAPHRAGM VALVES RUBBER LINED
LEAD LINING, LEAD BONDING, FRP MOULDINGS

Promil

Expanded Polystyrene Packaging, Pipe Sections, Sheets & Insulation Materials.

K. K. NAG (PVT.) LTD.

23/5-A, Bund Garden Road,
Pune 411 001.
Phone : 26436.

LEATHER GOODS MACHINERY

HARMAN SALES UNION

All kinds of machinery for manufacturing Shoes, Footwear, Belts, Wallets, Briefcases, Suitcases, Hand bags, Garments and Tanning Machines.

24, Kala Bhavan, Mathew Road,
Bombay 400 004.

Phones : 350427, 385762 & 350189.
Telex : 011-3542 HRMN IN

LEATHERS

P. BASAK

9, Chidam Modi Lane,
Calcutta 700 006.
Phones : 552413 & 551204.

Manufacturers of :

Leather goods for hydraulic & industrial use, ' U ', ' V ' & flanged shaped, Chamois leather, leather bellows made from chrome leather used in steel plants, mills and leather for all purpose & varieties.

LETTERPRESS, OFFSET, SILK SCREEN PRINTERS AND PHOTO TYPESETTERS

VAKIL & SONS LIMITED

Commercial Printers & **PHOTO TYPESETTERS**
Specialists in Multicolour Printing by
Letterpress, Offset and Silkscreen
Also Computerised Photo Typesetting.
Office & Main Plant: Vakils House, Sprott Road
18, Ballard Estate, Bombay 400 038.
Phone: 269121 (7 Lines)
Grams: BLADE. Telex: 11 6928 VKIL IN
Worli Plant Offset & Photo Typesetting Division:
Industry Manor, Near Century Bazar, Bombay 400 025.
Phones: 4225780, 4220609, 4225989 Grams: RANGOLI.

"LIGHTING FITTINGS"

CRAFTS-DE-FLUORESCENT

221, Goregaon–Mulund Link Road,
Off-L.B. Shastri Marg, Bhandup,
Bombay 400 078.

Manufacturers of:

"FLUOROCRAFT" Lighting Fittings suitable for use with Incandescent, Fluorescent, Mercury vapour, Sodium vapour, and Metal Halide Lamps.

Phones: 584261/62-584796
Mazagaon: 375251/897221/898215.
Gram: "FLOCRAFT"
Telex: 11-3899

LIGHTS & LIGHTING FITTINGS

PREMIER LIGHTING INDUSTRIES PRIVATE LTD.

Manufacturers of :

" Daylight " Fluorescent Lighting Fittings, Ballasts and Accessories, Mercury Vapour Lanterns and their Ballasts.

Regd. Office : Jhaveri Building, 348/352, Abdul Rehman Street, Bombay 400 003.
Phones: 323743/4 Grams: "DAYFIX".
Telex : DEFX — 4561.
Factory : 16, Cama Industrial Estate, Walbhat Road, Goregaon East, Bombay 400 063.
Phones: 695241-695257.

LIME & CEMENT MANUFACTURERS & MERCHANTS

DYERSLIME & CHEMICALS PVT. LTD.

Manufacture & Supply : Chemical Lime, Building Grade Hydrated Lime and Unslaked Lime.

Representative : West India Corporation,
D-10, Commerce Centre, Tardeo Road,
Bombay 400 034. Phone : 375274.

Head Office :
10, Alipur Road, Delhi 110 054. Phone : 223792.

LIME CHEMICAL & INDUSTRIAL

LIME CENTRE

Suppliers of
each and every quality of Lime used in industries including Unslaked Quick Lime, Hydrated Lime etc.

Post Box No. 16776, Sion, Bombay 400022
Phone : 521214
Gram : "LIMECENTRE", Bombay - Chembur

LITHOGRAPHERS & OFFSET PRINTERS

NATIONAL LITHO WORKS PRIVATE LIMITED

Estd. 1931.

National House, 608, Bapurao Jagtap Marg,
Sant Gadge Maharaj Chowk,
Bombay 400 011.

Grams : " LITHOCRAFT ". Phone : 395174.

LOCKS MFRS.

Vaultex®

VAULTEX INDUSTRIES

Executive Office & Works:
4/24 Industrial Estate, Gorwa Road,
Vadodara 390016 (Gujarat).
Phone: 82671 Office
82489 - Factory

Manufacturers of:
Locks, Padlocks, Night Latches, etc.

LUBRICATING EQUIPMENTS

DEBLOAN & CO.

Centralised Lubricating Equipments similar to Tecalemite, U.K., Farvel, Alimite, U.S.A. and High Pressure Pipe Line Fittings and Coupling Nipples.

H. O. 100/A, Central Road, H. B. Town, Sodepur,
24-Parganas.
Phone : 581642.

LUBRICATION EQUIPMENT

S. A. LUBRICATING INDUSTRY P. LTD.

138, Beliaghata Road,
Calcutta 700 015.
PHONES : 247377 & 245527

Manufacturers of :
Lubrication Equipment : Double Line Pump, Dose Feeders, Single Line Pumps, Injectors, Bucket type and Lever Pumps, P. C. Pumps, Grease Fittings, accessories and grease nipples.

M.S. & G.I PIPES & FITTINGS.

VIKAS ASSOCIATES

Dealers in M.S. Rounds, Angles, Channels, Plates, Sheets, Beams and Sections. M.S. & G.I. Pipes and Fittings.

60, Latif House, Lokhand Jattha, Bombay-400 009.
Tel. : 327442 Gram: Ralokhand

M.S. BOLTS & NUTS

SOOD & COMPANY

S-11, Industrial Area,
UNNAO 209801 (UP)

Manufacturers of:
High Quality Bolts & Nuts

MACHINE TOOLS & ACCESSORIES

HINDUSTAN EXPORT & IMPORT CORPN. PVT. LTD.

Anand Bhavan, Dr. D. N. Road, Bombay 400 001.
Phone : 253885.
TLX—011—2748.

Sole Selling Agents for :

Machine tool builders of Western Europe, U.S.A., Japan & for HMT Pegard Horizontal Boring & Milling Machines, Jessops Hydraulic Cold Saws & Sharpening Machines.

MACHINE TOOLS

Kerry Jost

Kerry Jost Tools Limited

Hacksaws, drilling machines (bench, pedestal and line production models), radial drilling machines, precision machining.

60, Sir Phirozeshah Mehta Road, Bombay 400 001.
Telephones: 258150-61-66.
Factory at : 8, Avadi Road, Ambattur, Madras 600 058.
Sales Office at : 109, Lloyds Road, Madras 600 014.

MACHINERIES

MACHINEX V3

508, Neelkanth, 98, Marine Drive, Bombay 400 002.
Phones : 297068, 258621.

Dealers, Manufacturers & Sole Selling Agents for:

Machines to Manufacture Ghamellas, Utensils, Milk Cans, Stoves, Wire Nails, Nut Bolts, Drums, Barrels, Cycle Rim, Gas Cylinder, Ammunition Box, Miniature Lamps, Window Grills, Tractors/Automobile Parts, Sheet Rolling Mills, Presses Deep Drawing/Hydraulic/Mechanical Ovens, Furnaces, Glass Bottles/Sheet/Tumblers, Rubber, Bakelite & Construction Machines, Shearing Machines, Lathes.

MACHINE TOOLS

MACHINE TOOLS (INDIA) LIMITED

D-24, South Extension-Part II, New Delhi 110049.
Phones: 669544, 669551, 669668 & 667430
Telex: 3323 MTIL IN
Grams: MACTOOLIND, NEW DELHI

Provide Sales and Service for over 100 Leading Machine Tool Manufacturers in USA, Europe, Japan and India—Principal Manufacturers include Wickman, Staveley, Rank Taylor Hobson, Homma, Landis, Delapena, Webster & Bennett, Heller, Banning, Sculfort, Yasuda, Varinelli, Fellows, Warner & Swasey, Mysore Kirloskar, Kirloskar Electric Company

Also at

Bombay, Calcutta, Bangalore, Madras and Secunderabad

MACHINE TOOLS

MODGIL COMPANY

Kashmir Road, Batala.
Phones : *Office* : 97 ; *Res.* : 597.
Grams : " MODCONY-BATALA ".

Builders of DGS & D Grade-I Shapers in various strokes, Grade-I Guillotine shears of various sizes and models. Hand and power-presses spinning lathes and circle cutting machines.

MACHINES For Making

●Biscuits ●Ointment ●Envelopes ●Bread ●Soap ●Chalk Sticks ●Lozenges ●Nail ●Book Binding ●Tablets ●Candles ●Cardboard Box ●Combs ●Paint & Ink ●Pottery & Tiles ●Rubber Bands ●Gem Clip ●Stiff Collar

ORIENTAL MACHINERY (1919) PVT. LTD.

25, Rajendra Nath Mukherjee Road,
Calcutta 700001. Phone: 23-4840

MACHINERY FOR MARBLE & GRANITE

" COMANDULLI " — made in Italy.

Automatic machines for side & edge-polishing & bevelling, chamfering for granite slabs, pillars, monumental & similar articles. Also automatic machines for excavating marble blocks from quarries with diamond-bead wires, Hydraulic jacks & perforating machines.

PLASTEK ENGINEERING CO.

B-1, Neelkanth Chhaya, R. B. Mehta Road,
Ghatkopar, Bombay 400 077.
Phone : 676344.

MACHINERY & PLANTS

BOMBAY INDUSTRIAL ENGINEERS

Leading Suppliers Of :

Industrial dryers, Ovens, Boilers, Hydro extractors, Chemical equipment and Plants for manufacturing Surgical Cotton/Bandages, Leather Cloth, Paper/Straw Board, Biscuits, Confectionery & Khandsari etc.

32, Hind Rajasthan Centre, D. Phalke Road, Dadar (C. Rly.),
Bombay 400014.
Phone : 446227. Gram : "BOMBING"

MACHINERY—RICE HULLER

CHOPRA MACHINES CORPORATION

27/2C, Strand Road, Calcutta 700 001.
Phone : 220980.

Makers of:

'OSTAD' Rice Huller Machines.

MACHINERY MERCHANTS, IMPORTERS & EXPORTERS

INDIA MACHINE TOOLS CORP.

Dealing in Gujarat Make:

Lathes, Drillings, Shapings, Slotting Machines, Hacksaw Machines, Power Presses. Grinders, Polishers, Toolpost Grinders, Flexible Shaft Machines & Shafts, Surface Grinders, Tapping Attachments, Motors, Starters, Air Compressors, Sprayguns, Hand Treadle & Power Shears, Chucks.

62, Master Road, Bombay-400 023.
Phones: 273770 Resi: 379452.

MACHINERY IMPORTERS, DEALERS, MANUFACTURERS ETC.

Phone: 952201
Grams: 'KECEPE'
.Telex: 041-375

THE K.C.P. LTD.

Heavy Engineering Division.
Madras 600 019.

MANUFACTURERS OF: Heavy Industrial Machinery. Complete Sugar Plants. Cement Plants (Wet & Dry Process,. Plate Working Machinery. Pressure Vessels. Steel Castings. Manufacturing Sugar. & Industrial Alcohol at Vuyyuru. Krishna Dist., Andhra Pradesh. Manufacturing Cement at Macherla. Guntur Dist., Andhra Pradesh.

MACHINE TOOLS ACCESSORIES

Boring and Facing Heads, Dividing Heads, Collet Type Tapping Attachments, Keyless Drill Chucks, Magnetic Chucks, Indexing Attachment, Lathe Chucks, Pneumatic Chucks Micro Boring Head, etc.

MACHINE TOOLS SUPPLYING AGENCY

101, Narayan Dhuru Street, Post Box No. 3077,
Bombay-400 003.

Phones: 336738, 344156.
Gram: 'ÇOLETCHUCK'.

MACHINERY

PAUL & COMPANY

58, G. B. Road, Delhi 110 006.
Phones : *Office* : 525681.
Grams : "ASKPAUL".

Distributors for :

Electric Motors, Starters and Switchgears, Power Capacitors, Monoblock Pumps, Diesel Engines, Exhaust Fans, Booster Pumps & Portable Tools & Generating Sets.

MAGNETS

CERAMIC MAGNETS

For quality Ceramic Magnets, in any size, shape and configuration.

Please write to :

M/s. FERRI-MAG INDIA

P. Box 27, Chinchwad,
Pune 411019.

Phone : 82167.

MALLEABLE IRON PIPE-FITTINGS

Manufacturers of .

'ELKAY' Brand Galvanised Pipe fittings (½" to 4"), Malleable Machinery Parts, all kinds of Malleable Castings as per latest Indian Standards.

ELKAY MALLEABLE STEEL INDUSTRIES

Chadda Buildings, Civil Lines,
Barabanki 225 001 (U.P.).

Phone : 243 Grams : "ELKAY"

MANUFACTURERS

METALLISED POLYESTER/PLASTIC AND DECORATIVE FILM MANUFACTURERS

AMBICA METAYARN MANUFACTURING CO.

659, GIDC Estate, Makarpura,
Baroda 390 010.

Phone : 4738. Grams : "AMETAYARN".

Manufacturers & Exporters of

Metallic Yarn, Prism Films, Polyester Glitter and Embossed Plastic Films

MANUFACTURERS OF FOLLOWING METAL FINISHING CHEMICALS

Manufacturer & Supplier of Basic Electroplating Salts and Chemicals and fine Chemicals of precious metals ; Gold Cyanide, Gold Potassium Cyanide, Silver Sodium Cyanide, Copper Cyanide, Copper-Potassium Cyanide, Copper Sodium Cyanide, Cadmium Cyanide, Cadmium Oxide, Zinc Cyanide, Zinc Sodium Cyanide, Nickel Potassium Cyanide, Nickel Sodium Cyanide, Nickel Sulphates, Nickel Chloride, Sodium Stannate, Potassium Stannate, Tin Oxide, Vat and Barrel Anodes, Ready to use electroplating Salts of Gold, Silver, Copper, Cadmium, Zinc, Tin & Mercury, Brighteners of Zinc & Nickel.

MACHSONS PRIVATE LTD.

40-B, Milan, 87, Tardeo Road, Bombay 400 034.
Phones : 372263, 372788, 391649.
Grams : " MACHPLATE "

MANUFACTURERS OF VACUUM FORMING ARTICLES

THERMOFORMING INDUSTRIES

106, Sun Industrial Estate, Sunmill Compound,
Lower Parel (West), Bombay 400 013.
Phones : *Factory :* 894784.
Office : 273937 & 271918.

Manufacturers of : Decorative False ceiling for Living Room, Cinema House, Restaurant, Community Hall and Grills for Air-Conditioners. Door Panels, Crisper Trays, Chill Trays for Refrigerators and any kind of Industrial Vacuum Forming Products.

MANUFACTURES & REQUISITES

DUKE & SONS PVT. LTD.
Estd. 1889

Mfrs. of Aerated and Fruit Drinks, Mangola, Pineola and Nuorange. Home Deliveries & Wedding orders executed.

Sunder Baug Estate, Off Sion-Trombay
Road, Chembur, Bombay 400 088.
Phones: 524516, 524143.

MANPOWER SUPPLIER LABOUR SUPPLIER RECRUITING AGENT

M S. CRESCENT MANPOWER BUREAU,

MANPOWER SUPPLIER,

Government of India Recruitment
LICENCE NO. P-32 477/551.
Near Nagpada Police Station,
100, Sofia Zuber Road, Byculla,
Bombay 400 008 (INDIA).
Phones : 372504 398818.
Cable : " THUNDIHAWA "
Telex : 5353 " CRES " IN.

MAPS, CHARTS, BOOKS

INDIAN BOOK DEPOT

(MAP HOUSE)

Office : 2937, Bahadurgarh Marg, Near Deputy Ganj,
Delhi 110 006 (Phones : 513927 & 523635).

Publishers of :

Maps, Geography Atlases, Charts, Children Primers, Calendars, etc.

Branch Office : Nawnit Rai Chawla & Sons,
4430, Nai Sarak, Delhi 110 006 (Phone : 263861).

Press : Indian Art Press,
A/6, Mayapuri, New Delhi 110 064.
(Phone : 593536).

Residence : Ram Krishan Chawla (Mg. Partner),
30, Hathi Khana, B. G. Road, Delhi 110 006
(Phone : 513087).

MARBLE & TILES

ABU MARBLE MINING (PVT.) LIMITED

Office :
59, R. A. Kidwai Rd., King's Circle, Bombay 400 019.
Phone : 474764.

Specialists in : All types of Indian Marble & Stones, Contractors, Wholesalers and Retailers.

Factory : Motibaug, (opp.) R. K. Studio, Chembur,
Bombay 400 071.
Phone : 522181.

MARBLE & TILES

DUNCAN STONE CO.

Granite Marble, Tiles, Stones, Sanitary wares

Stockists of

" Johnson " tiles, " Cristlite " Bathroom fittings.

500, Maulana Azad Road, BOMBAY 400 004
Grams " TILERIES."
Phones : Office . 366907, 368010.
Show Room : 291894, 316110.
Residence : 359908

MARINE TRANSPORT CONTRACTORS

SHAPARIA DOCK & STEEL CO. PVT. LTD.

Regd. Office

Sewree Fort Road, Bombay 400 015.

Specialised for Marine Transport in Inland Waters as well as for Coastal & Offshore services, having a fleet of Self Propelled Cargo Barges, Dumb Barges, Tugs, etc. deployed at several Indian Ports.

Phone : 448361.
Grams : " SHAPARIA "
Telex : 011-4259 " SHAP " IN.

MATERIAL HANDLING EQUIPMENT

FIBRO INDUSTRIAL TRADING CO.

Manufacturers of:

Conveyors, Trolleys, Platform Trolleys, Skidjacks and other material handling equipment as per customers' specifications. Specialists for manufacturing 'BAHUBALI' Drum Trolleys, Drum Lifters, Drum Mixers, Drum Jockey and other allied Drum Handling Equipment.

Factory:

Kurla Andheri Road,
Sakinaka, Bombay 400072.
Phone: 671482
Cable: FIDRUM

MATERIAL HANDLING EQUIPMENT MFRS.

GUJARAT INDUSTRIAL TRUCKS LTD.

Manufacturers of :

Hydraulic Pallet Trucks, Lifting Trucks, Stackers, Industrial Trucks & Trolleys, Wheels, Castors etc.

Address :—India House, Walchand Hirachand Marg, Bombay 400 001.
Grams : "ANJUCASTOR". Phones : 261248, 269418.

Regd. Office & Works :—Surat-Navsari Road, P.O. Baroda Rayon, Udhna, Dist. Surat 394 220.
Grams : " AMEETRUCK ". Phones : 88321/88322.

MATERIAL HANDLING EQUIPMENT

indef

Chain Pulley Blocks, Chain & Wire Rope Electric Hoists, Ratchet Hoists & Travelling Trolleys, Cranes and Stores Stacker Cranes.

Manufactured by :

HERCULES HOISTS LTD., BOMBAY

Sole Selling Agents : Batliboi & Company Ltd.
V. B. Gandhi Marg, Fort, Bombay 400 023.
Phone: 243823.

MATERIAL HANDLING EQUIPMENT

INDIANA ENGINEERING WORKS

BELT, BUCKET, CHAIN, FLIGHT, OVERHEAD CHAIN, ROLLER, SCREW AND SLAT CONVEYORS AND ELEVATORS AS PER CUSTOMER'S SPECIFICATIONS. ALSO "GRATEX" FLOOR GRATINGS, STEEL TILES, TANKS, VESSELS.

POST BOX 7409, BOMBAY 400 059
PHONES : 581903, 584743
GRAMS: GRATEXFLO TELEX: 011-6208

MATERIAL & MECHANICAL HANDLING EQUIPMENT & CONVEYORS

Josts

Jost's Engineering Company Limited

Electrical and Mechanical Engineers

Material handling equipment, machine tools, spray painting and industrial finishing equipment, electrical testing instruments, electronic and telecommunication equipment, components and cables, noise and vibration test equipment, nucleonic laboratory instruments and medical equipment, hydrological instruments, pneumatic tube despatch systems.

60, Sir Phirozeshah Mehta Road, Bombay 400 001.
Telephones: 251850-61-66. Telex: 011-2722

Regional Offices at: 79, Maharshi Karve Road, Bombay 400 002.
19, Kemp Road, Bangalore 560 005.
19, British Indian Street, Calcutta 700 069.
Indra Palace, Connaught Place, New Delhi 110 001.

Branches at: Chandigarh, Lucknow, Madras, Pune and Secunderabad.

MATERIAL & MECHANICAL HANDLING EQUIPMENT & CONVEYORS

KONELS

CONVEYORS — ELEVATORS

(Fixed and portable belt conveyors, Bucket elevators, Gravity roller conveyors, chain slat conveyors, bag stacking machine, bag filling machine, overhead chain conveyors, screw conveyors and other mechanical handling equipments).

IDLERS & RETURN ROLLERS
(Troughed as well as straight type).

DESIGNED & MANUFACTURED BY

MESSRS. KONEL CORPORATION

Niranjan, 4th Floor, West of Marine Lines Station,
BOMBAY 400 002. Phone : 298457. Telex : 011-3937.

MATERIAL HANDLING EQUIPMENT

PULLING & LIFTING MACHINES PVT. LIMITED

B/10, Industrial Area No. 3, Meerut Road,
Ghaziabad (U.P.).

Manufacturers of :

" SAMSON " world famous material handling equipment of latest design and enduring quality.

Phone : 3974.

Regd. Office : 12, Sriram Road, Delhi 110 054.

MATERIAL HANDLING EQUIPMENT

SOUTHERN ENGINEERING WORKS

Administrative Office

83, Lattice Bridge Road, Madras 600041.

For Best quality Material Handling Equipments, such as Box Dumpall and Tipping Type Wheel Barrows. Sack, Battery and Platform Trolleys. Animal Drawn Vehicle and Trailer Axles for 1 to 8 Tonnes. 3 and 6 Tonnes capacity Agricultural and Industrial purpose Trailers. Channel Iron Base Frame for Genlite Sets.

Phone : 412066

MECHANICAL ENGINEERS

MECHANICO

22, Noorali Lane Calcutta 700 014

Manufacturers of

Crushing, Grinding, Mixing, Pressing, Conveying & Handling Equipment for Ceramic, Chemical & Allied Industries.

Phones : 433169 & 662516.

MEDICAL CONSULTANT

DR. S. KRISHNA KUMARI

M.B.B.S., D.G.O. (Madras).
F.R.C.S.Ed., M.R.C.O.G., F.R.C.O.G.

Professor and head of Dept., OBST. & GYNAE.
St. John's Medical College & St. Martha's Hospital.

RATHNA CLINIC,
55/2, Chickbazar Road, Off Queen's Road,
Bangalore 560 051.
Phone: 566186.

MEDICAL PRACTITIONER

ACUPUNCTURIST

Physician and Cardiologist

Dr. Abdul Jalil, M.B.B.S. (Luck.), M.Sc. (McGILL), M.D. (Luck.), F.C.C.P. (U.S.A.), F.R.S.T.M.H. (Lond.), Fellow, Japanese Acupuncture Soty. Ex-Physician, United Nations.

C-51, Nizamuddin East, New Delhi 110 013.
Tel: 694035, 262126, 42891.

METAL INDUSTRIES

NATIONAL METAL INDUSTRIES

15-A, Parel Village Road, Bombay 400 012.

Phones : 442400 & 447475. Grams : "MANMUL"

All kinds of Sheet Metal Pressings are our speciality.

Manufacturers and Exporters of :

Brass, Copper, Stainless Steel & Hindalium Utensils, Nami Oil Engine Spares, Automobile, Refrigeration, Scooter & Tractor Parts.

METAL LABELS & ADVTG. GIFTS MANUFACTURERS

EXCEL PROCESS PVT. LTD.

India's leading manufacturers of fully Etched, Anodised and Embossed multi-coloured Aluminium Name Plates, Advertising Gifts & Novelties, Sales Aids, TV & Radio Decorations, Grills, Instrument panels, Product Identification Plates, Data & Instruction Plates, Charts & Diagrams, Badges, Tokens & Dials for instruments, clocks, etc.

City Office & Showroom :

112, Mittal Chambers, Nariman Point,
Bombay 400 021.
Phones: 235164 & 573327. Telex: 011-3123.

METAL LABELS

METAL & TRANSFER LABELS MFG. CO.

Mfgrs. of Quality Aluminium Anodised Labels, Brass, Stainless Steel Etched Labels, School Badges, Dials, Embossed Medals, Keychains, Bank Tokens, Buckles, Buttons in Silver, Copper, Brass, Aluminium for Police, Government/Workers, PVC Stickers, Water Transfer, Ceramic Transfer Etc.

174, Princess Street,
12, Gold Mohur,
1st Floor, Bombay-400 002.
Phones: Off. 312122 Resi. 565726.

METAL POWDER MANUFACTURERS

ANJU (MISC.) INDUSTRIES

5/50, Tardeo Air-Conditioned Market,
Tardeo, Bombay 400 034.

Phones : *Office* : 897924 ; *Resi.* : 578411.

Available with guaranteed purity (over 99·5%), fineness (— 300 mesh), Iron free (less than ·002%), Non-Ferrous Metal Powders viz. :

ZINC DUST, ZINC OXIDE, BRASS POWDER, El. COPPER POWDER, TIN, LEAD El. IRON, LEAD TIN SOLDER & LEAD TIN SILVER SOLDER ETC. POWDERS.

METAL MFRS. MERCHANTS

EYRE SMELTING LTD.

Mfrs. of

Fluxes for all types of Soldering, Fryolux Solder Paint, Body Patching Solder, Car Body Patching Filler, White Metals, Solders, Silver Brazing Rods, Aluminium Alloy and Copper Alloy Ingots, Printing Metals, Phosphor Bronze Rods.

P. B. No. 2296, G. P. O., Calcutta 700001.

182/115, Diamond Harbour Road, Thakurpukur,
Calcutta 700 063.

Plot No. 16, Ambattur, Madras 600098

2E/20, Swami Ram Tirth Nagar, New Delhi 110055

METALLIZING

METALLIZING EQUIPMENT CO.

Mfrs. of complete Metallizing Plants & Metal-Spraying Wires etc. Also undertake site jobs of anti-corrosion.

H.Q. Chopasni Rd., Jodhpur. Br.: 15, A to Z Indl. Estate, Ferguson Rd., Bombay 400 013.

Phones: 22680, 21367 *(Jodhpur)*, 397854 *(Bombay)*

METALLIZERS

METALLIZERS PVT. LTD.

Specialists in:

Metallizing & Rebuilding Worn-out Crankshafts, Rotor Shafts, Ram-Rollers & Other Machine Components. Jobs at Sites also undertaken.

C-28, Indust. Estate, Guindy,
Madras 600032.
Phones: 431565 & 21703.

MICA

Mica Sheets, Tapes & Tubes Exporters

INDIA MICA & MICANITE INDUSTRIES LTD.

INDIA MICA & MICANITE INDUSTRIES LTD.
Post Box No. 38, P. O. Jhumritelaiya,
Kodarma (Bihar).
Cable : " MICANITE ", Jhumritelaiya.
Phone : Office : 101 ; Works : 72.

Manufacturers & Exporters of :

MICANITE SHEETS
MICANITE TAPES
MICANITE TUBES

Specialists : Pure Mica Washer, Strips, Splittings.
Bankers : STATE BANK OF INDIA — KODARMA.

MILL STORES AND HARDWARE MERCHANTS

M. P. MUDGAL & CO.

Stockists and Dealers in Engineering, cutting and measuring tools and instruments. Pulling and lifting tackles, Grinding wheels, drills, reamers, milling cutters, Slitting saw, band saw, Hacksaw blade, Tool Bit, Carbide tip and tools etc.

1915. Sirkiwalan. Ramesh Market.
Hauz Qazi. Delhi 110006.
Phones: 264200. 265055. Grams: SMALLTOOL

MINES OWNERS

NANAK SINGH SARDARI LAL

Estd.: 1932.

506, Netanagar, Kydganj, Allahabad 211 003.

SILICA SAND MINE OWNERS

Your enquiries for high grade silica sand washed/unwashed for manufacturing quality glass or sodium silicate for foundry purposes.

Grams : "SARDARILAL", Shankergarh,
"NANAKSAND", Allahabad 50081.

MINERAL DEALERS

BOMBAY MINERAL SUPPLY CO.

Mfg. & Stkts. in

85" Asbestos Magnesia, Hard Setting Compd., High Temp. Fire Cement & Clay, Fire Bricks, China Clay, French Chalk, Calcite, Whiting Bentonite, Graphite, Red Oxide, Quartz etc.

138, Nagdevi Street,
Bombay 400003.
Phones:
Office: 322392, 327995, 338423. Resi.: 458205.
Grams: "BOMINERALS"

MINERALS

MAG-HARD MINERALS

Manufacturers and suppliers of:

85% Asbestos Magnesia, Hard Setting Compound, Glasswool, Mineral Wool, Plaster of Paris, Fibreglass, Crown Wool Products, Wire Netting, Lacing Wire, Jute Canvas, Black Bituminous Paint, Asbestos Pluff, Fibre & Powder, China Clay, Dolomite, Whiting Powder, Yellow Ochre, French Chalk, Fire Cement, Fire Clay, Calcite, Foundry Material, Refractories & Insulation Contractors.

Darya Building, 3rd Floor,
375, Dr. D.N. Road, Bombay 400001.
Phone : 253967. Grams : 'MAGASBA'.

MINERALS

SINGHALSONS

Mine-owners & Suppliers :

Silica Sand, Soap Stone, Dolomite, Iron Ore, Mica Powder & Other Minerals.

1687, Arya Samaj Road, Karol Bagh,
New Delhi 110 005.
Phones : *Office* : 561045 ; *Resi.* : 569860.

Branch :

Shop No. 9, 1st Floor, Chameliwala Market,
M.I. Road, Jaipur 302 001 (Rajasthan).
Phones: 63709; *Resi.*: 63791.

MINERAL MERCHANTS & MFRS.

INDUSTRIAL MINERALS & CHEMICAL CO. PVT. LTD.

Manufacturers of :

Minerals, Ores, Chemicals, Insecticides and Pesticides formulations etc.

13, Shriniketan, 2nd Marine Cross Lane,
M. Karve Road, Churchgate,
Bombay 400 020 (India).

Phones: *Office*: 251643, 298113, 292877 & 256155.
Grams: "IMCHEL".
Telex : 11-4338, 11-2085 & 11-2017.

MINERALS AND METAL SCRAPS

Minerals and Metal Scraps for sales and purchases. Consult for :—

(1) Limestones, lime, dolomite—raw or burnt, all grade.
(2) Soapstones, china clay, yellow ochre, red oxide, lump or powder of all grade.
(3) Granite stone blocks all colours and all sizes. Dressed block stones for building decorations.

Small orders entertained and promptly delivered at the door.

R. T. BHANDAGE, B.Sc.,

Consulting Geologist.

Javali Bazar Road, Gadag 582 101, Karnataka.
Phones : *Office* : 8620 ; *Resi.* : 8650.

MINERALS

- ASBESTOS MAGNESIA 85%
- HARD SETTING ● FIRE CEMENT
- GRAPHITE ● KAOLIN
- PUMICE ● CHINA CLAY
- KIESULGHAR ● FRENCH CHALK
- CAL. CARBONATE, etc.

THAKKAR MINERAL INDS.

57, S. V. P. Road, Dongri, Bombay 400 009.
Phones : *Office* : 861421 *Factory* : 445200.

MINERAL SUPPLIERS

ORIENTAL MINERALS

Mine Owners & Foundry Materials Suppliers. Available for Export : Silica, Graded Sands, Bentonites, Quartz, Graphites, Refractories, Fireclays, Limestone, Mica, Soapstone, Ochres & Ores.

Pulverising Job undertaken.

C/8, Brick Bunder, Bombay 400 033.
Phone : 375532.

MINE OWNERS & EXPORTERS

We are largest Mine owners and Exporters of Bentonite from India. Can also supply other Drilling Mud Chemicals like Mica, Barytes, Walnut shell, etc. We also export Indian Rice and Spices. Enquiries solicited for prompt attention.

ASHAPURA MINECHEM INDUSTRIES

129/131, Kazi Sayed Street, Bombay 400 003.
Phones : 343536/344814. Cable : " CHEMUDS "
Telex : 011-2103 ASHA IN

MINES OWNERS

GROVER SILICA WORKS

Silica Sand Mine Owners

High Grade Silica Sand — Washed/Unwashed/Coarse/Medium/Fine/Superfine

For manufacturing quality Glass, Sodium Silicate; For Foundries, Refractories and Insulators.

506, Netanagar, Kydganj, Allahabad 211003
Phone: 50081 Allahabad
Gram: "NANAKSAND" Allahabad

MOSQUITO CURTAIN FABRICS

PRIYADARSHINI FILAMENTS

Office & Factory:
16, IV Stage, Industrial Extn.,
P.B. No. 4423, West of Chord Rd., Rajajinagar,
Bangalore 560044.

'Pioneers in Manufacturing of Monofilaments & end products like Mosquito Curtain Fabrics, easy chair fabrics, wire mesh, filter cloth, niwar tapes etc. out of H.D.P.E.'

Phones:
80031, 80039 (2 plus 6) PMBX.
Grams: 'PRIYAFIL'.

MOTOR CYCLES/SCOOTERS & ACCESSORIES

ALLIBHAI PREMJI TYREWALLA

Dealers for ENFIELD Motorcycles, FALCON Scooters, BSA Motorbikes and SUVEGA Mopeds. Also Spare Parts, Accessories and Helmets.

Tyre Terrace, Allibhai Premji Road, Near Apsara Cinema, Bombay 400 007.
Phone: 375721 - 379413.

MOTOR & BUS BODY BUILDING MATERIAL DEALERS

JAFFERBHAI & COMPANY

106-108, Ibrahim Rahimtulla Road,
Bombay 400 003.
Phone : 863324. Grams : " NECESSITY ".

Distributors
for " FIBROFLEX " Rubberised Coir Mattresses.

Dealers in :
CALICO'S CALI HIDE (FOAM REXINE), MOTOR ACCESSORIES, BUS BODY FITTINGS, HOOD & CUSHION MATERIALS, SPONGE & RUBBER PACKING SECTIONS, etc.

MOTOR BUS AND COACH BUILDERS

RUBY COACH BUILDERS PRIVATE LIMITED

Regd. Office :
86-92, Andheri-Kurla Road, Bombay 400 059.
Phone : 576331. Telex : 011-3876

Branch Works :
Opp. Naroda Rly. Station, P.O. Naroda, Ahmedabad.
Phone : 87211. Telex : 01-2346.

Specialists in :
Single and double decker bus bodies, Luxury coach, Articulated bus body, Load trucks, Tippers, Station wagons, Pickup vans, Delivery vans, Ambulance vans, Refrigerated vans, etc.

MOTOR CARS & TRUCKS

SAH & SANGHI

Dealers for Bajaj Scooters, Bajaj Pickup Vans, Bajaj Delivery Vans, Bajaj Autorickshaws, Bajaj Auto Track Trailers, Tempo Three-Wheeler vehicles, Matador Four-wheeler Diesel vehicles, Hindustan Trucks and Ambassador Cars, Voltas Air Conditioners, Tushar Water Coolers and Opal Refrigerators. Also dealers for REPCO Clutch Parts, Crono Locks and Diamond chains.

Sales & Adm. Office : " Giri Kunj ", 11C, N. S. Patkar Marg, Bombay 400 007. Phone : 821423.
Telex No. : 011-3259. Grams : " CLOCKWORK ".

Sales & Service Organisation at Thane : Bombay-Pune Road, Navpada. Phones : 592535, 594484.

Heavy Repair Shop at Worli : Prakash Mills Compound, Off Globe Mills Passage. Phones : 375432, 375433, 375434 & 391044

Tempo Division : Jail Road, Opp. : B.D.D. Chawl No. 110, Bombay 400 013. Phones : 378327 & 396479.

Sales & Service Organisation at Malad : Survey No. 26, Plot 'D', Ramachandra Lane Extension, Valnai, Bombay 400 064. Phones : 695610 & 693472.

Service Station : Dr. A. Besant Road, Worli, Bombay 400 018. Phones : 371704 & 391031.

MANUFACTURERS OF DUMPERS, TIPPERS, BUS BODIES & DRIVER'S CABS

M/S. SUPER STRUCTURES PRIVATE LTD.

V. N. Naik Road,
Margao, Goa.

Phone : 3141 (4 lines).

Grams : " SUPERSTEEL ", Margao, Goa.

Telex : 0196-216.

SIEMENS

- MOTORS
- CABLES
- SWITCHGEARS
- STARTERS
- CONTACTORS
- RELAY
- LIMIT SWITCHES

Authorised Dealers :

TOYO ENGINEERING CO.

Hari Niwas, M. G. Road, Thane 400 602.
Phones : 592527 & 594368.

MOULDED & METAL BONDED RUBBER ITEMS

MACHINEWORKS (INTERNATIONAL) LIMITED

"Benson House", 1, Auckland Place,
Calcutta-700 017.

Phones: 441748 (2 lines), 447898 & 440189.
Telex: 021-3453 MIL IN

Manufacturers of:
V-Belts, Endless Rayon Cord Belts, Conveyor Belts, Hoses Expansion joints, Solid Rubber Tyres and other industrial Rubber moulded and Metal Bonded items.

MULTI-COLOUR FLEXO PRINTERS IN PAPER & POLYTHENE

PRINT-PACK INDUSTRIES

B-3/8, MIDC Industrial Area,
Nanded 431 603.

Phone : 3436 P.P.

Manufacturers of :
Carrier and Shopping Bags, Rolls, Sheets, Textile & Bread Wrappers, All kinds of Labels etc. upto Four colours

---

NEON SIGNS

BRITE NEON SIGNS (Regd.)

Manufacturers of:

Quality Neon Signs and Plastic Glow Signs of distinction, and specialists in Servicing & Maintenance of existing neon signs on yearly contract basis.

Head Office:
119 D.B. Gupta Market, Karol Bagh,
New Delhi 110005. Phone: 521393.

Branch Office:
Choudhary Market, Patna 800004.
Phones : 53333, 52578

NEOPRENE RUBBER SHEETINGS

Neoprene, Synthetic, Nitrile, Steam, Natural, Neo-Crok, Ele-matting Fluted & Chequered Canvas & Nylon insertion sheets, conveyor beltings

As per I.S.-B.S. Din. Astm. Specn.

Size

1 mtr x 2 mtrs x 1 m/m to 25 upto 60 mm thick. Bigger size : Width upto 1500 mm x 10 to 15 mtrs. Length in required thickness. Also "0" Rings oil seals diaphragms & Moulded and extruded items from : Neoprene, Nitrile, Silicon, Viton & P. T. F. E. Teflon.

KIRAN RUBBER INDUSTRIES PVT. LTD.,
"BHAYANI" HOUSE,
91-B Sherif Devji St. (Chakala St.)
Bombay-400 003.
Phones: 339225/334887
Gram: "BHAYANIRUB"

NEWSPAPER AGENTS

KAIKOBAD BYRAMJEE & SON (AGENCY), PVT. LTD.

Selling and Distributing Agents for Greater Bombay upto Ambernath and Virar of The Times of India, The Evening News of India, The Illustrated Weekly of India, Dharmayug, Navbharat Times, Filmfare, Femina, Parag, The Economic Times, Maharashtra Times, Sarika, Indrajal Comics, Dinaman and Annuals.

Directors : Pheroz Kaikobad Byramjee, Khushrooh P. Byramjee & Tehmi P. Byramjee.

P. O. Box 836, Bombay 400 001.

Phone : 26-2355. Grams : " INDIANA "

NEWSPAPERS & PERIODICALS

ANANDA BAZAR GROUP OF PUBLICATIONS

6 Prafulla Sarkar Street, Calcutta 700001.
Phones: 23-2283 & 23-8541.

Ananda Bazar Patrika (Daily)
Business Standard (Daily)
The Hindusthan Standard (Daily)
Sunday (Weekly)
Desh (Weekly)
Anandamela (Fortnightly)
Anandalok (Fortnightly)
Bhumilakshmi (Bengali bi-weekly)
Ravivar (Hindi Weekly)
Business World (English Fortnightly)
Sportsworld (Weekly)

NEWSPAPERS & PERIODICALS

EVE'S WEEKLY

(India's Premier Women's Magazine)

Sanj Vartaman Press, Bombay Samachar Marg,
Fort, Bombay 400 023.

Price: Rs. 2 00 per copy (pp. 58). Annual Subscription Rs. 105 (Inland), Rs. 240 (Foreign) (Sea Mail). Editor: Gulshan Ewing. Advt. Manager: D. N. Chopra. Advertisement Rates: Casual—Full page Rs. 3,400, Half page Rs. 1,800, Quarter page Rs. 950. Contract—Full page Rs. 3,200, Half page Rs. 1,700, Quarter page Rs. 900. Island Position (Contract) Rs. 2,500, Island Position (Casual) Rs. 2,750. Colour Half page (Col.): 1-8 insertions Rs. 4,500; 9-16 insertions Rs. 4,000.

Phone : 271444. Grams : " EVESWEEKLY ".

NEWSPAPERS & PERIODICALS

"JAM-E-JAMSHED"

(Established 1832)

Anglo-Vernacular daily.

J. B. Marzban & Co., Private Ltd.

Ballard House, Mangalore Street,
Bombay 400 038.

Tel. Address : " JAMSHED ", Bombay 400 038.

Phone Nos.: 26-2571, 26-2572-73.

NEWSPAPERS & PERIODICALS

" OCEANITE "

THE MARITIME MAGAZINE OF INDIA

Udyog Bhavan, 4th Floor, 29, Walchand Hirachand Marg, Ballard Estate, Bombay 400038.
Phones: 26-3052, 26-5507 & 26-9321.
Grams: " OCEANITE "

Editor : K. E. Sukhia ; *Manager :* B. V. Marathe.

" OCEANITE " is the only Nautical Magazine (Quarterly) published in India. It enjoys, and has been so enjoying since 1945, unrivalled circulation among the shipping companies, ships' officers, firms, associations of seafarers and Government departments engaged in any manner of maritime activities, both in India and abroad.

NON-FERROUS METALS & ALLOYS

COPPER ALLOY INDUSTRIES

1/14, Industrial Estate, Vyasarpadi,
Madras 600039.
Phone: 35008.

Phosphor, Bronze, Leaded Bronze, Gun Metal, Brass, Alloy Copper, Rods, Bushes, Bearings, Castings & Automobile components.

NON-FERROUS & FERROUS METALS

MONTANA PRIVATE LTD.

Regd. Office :

Rahimtoola House, Homji Street, Bombay 400001.

Ferrous & Non-ferrous Metals Detinners, Suppliers and Exporters of Detinned Scrap.

Phones : *Head Office :* 291682; *Refinery :* 375715.

Grams: " MONTLIT ".

Telex No. 011-3353.

Chairman : Mr. A. A. Jasdanvala.

NON-FERROUS METALS & METAL POWDERS

NAHAR REFINERIES & METAL MART

Manufacturers of:
Aluminium Powder, Shots, Notched Bars & Alloy and Dealers of Non-Ferrous Metals including Magnesium, Zinc, Aluminium etc.

4, M.Byrappa Lane
Ranasinghpet,
Post Box-7158.
Bangalore 560053.
Phone: 72127.

NON-FERROUS METALS

SHANTI METAL REFINERY

Manufacturers of
Antimonial Lead • Pig Lead • Type Metals • White Metals • Antifriction Bearing Metals Copper Shots • Copper-Lead Shots • Granules

Office:
Shanti, C-1, Opp. Kaveri Building Datta Mandir Road.
Dahanukar Wadi, Kandivli West.
Bombay 400 067.
Phones : 682221, 694785

NON-FERROUS METALS

SHUJA METAL CENTRE

55-57, Nakhoda Street,
Bombay 400 003.

Phones : 322361, 343797. Grams : "SHUJAMETAL",

Direct Exporters and Stockists of :
Copper, Brass, Stainless Steel, Aluminium and Phosphor-Bronze Rods, Pipes, Sheets, Sheathings, Wires, Strips & Tin, Lead, Zinc Sheets, Gun Metal Rods & Bushes, and Phosphor-Bronze Hollow Copper Nails, Washers & Gaskets.

NON-FERROUS METALS

STANDARD METAL COMPANY

Props. : **B. C. Guin & Co. (P) Ltd.,**
101, Netaji Subhas Road,
Calcutta 700 001.

Manufacturers & Stockists :
Brass, Copper, Bronze, G. M. Lead, Zinc, Bearing Metal, White Metal, etc. Casting & Machine Spares for all Industries & Mines.

Phones :
22-5270 & 22-4542.

Cable :
" PERFOSHEET "

NUT-BOLTS & SCREWS

ATUL BRASS INDUSTRIES

Manufacturers
In Brass Parts for Elec., Automobile Accrs., Stove, Petromex Parts, Brass Nut-Bolts & Screws etc. Any precision work can be done.

44, Digvijay Plot, P.B. No.5009,
Jamnagar 361005 (Gujarat)
Phone: 6054

NYLON & POLYESTER FILAMENT YARN MANUFACTURERS

GARWARE NYLONS LIMITED

Marketing Division:
Express Towers, Nariman Point,
Bombay 400 021.
Phones: 230745, 230807, 230946 Grams: GARNYL

Manufacturers of:
Nylon and Polyester Filament Yarn, Nylon Fishnet Twine, etc.

NYLON COMPONENTS

GENERAL DISTRIBUTORS (INTERNATIONAL)

Manufacturers of:
Nylon Components, Viz. Gears, Bushes, Valve Seat, Roller Bearings, Blocks & Tubes etc. to customer's Specification. Available Nylon Rods upto 24" dia.

135-A, B.R.B. Basu Road, Calcutta 700001.

Phones: 269969, 269951. Telex: 021-2552 RTAN
CABLE: NODNAT

OCTROI REFUND CONSULTANTS

BONAFIDE OCTROI SERVICE

LICENSED OCTROI REFUND AGENTS & CONSULTANTS

128/132, Kazi Sayed Street, 3rd Floor,
Raja Bahadur Building,
Bombay 400 003
Phone : 331644.

OFFICE STATIONERY & REQUISITES

M. M. KADERJEE & CO.

245, Abdul Rehman Street,
Bombay 400 003.
Phone : 326154.

Stockists of :
KORES Products ARROW Brand
Ammonia Papers.

Importers & Suppliers of :
Office Requisites, Drawing Materials, Gummed Tapes, Cellulose Tapes, Stationery Paper and Thermocole.

OFFICE EQUIPMENTS

PRECISION TY-WRITERS CO.

Dena Bank Bldg., 3rd Floor, Fort,
Bombay 400 023.

Phone : 298104.

Dealers in :

Office Equipments, Typewriters, Calculators, Duplicators, Cheque Writers, etc. Machines bought, sold, exchanged, hired and repaired under guarantee.

OFFICE EQUIPMENT

REKORD

For Office Furniture
Tables, Chairs, Non-Standard Cabinets, Almirahs, Racks and every type of Filing System including our Unique Lateral Filing system.
Rekord Management Aids

9/3, Tardeo Air-Conditioned Market
Bombay 400 034
PHONES : 398314, 373654 *Resi*. 694718.

OFFICE EQUIPMENT MFRS.

Roneo Vickers

Specialists in the latest filing/visible recording system, postal insurance franking machines, industrial stitchers, duplicators and other aids to business efficiency as also sophisticated medical hospital equipments.

Regd. Office : 136, Sunder Nagar, New Delhi 110 003.

Sales Offices : New Delhi, Calcutta, Bombay, Madras, Hyderabad, Bangalore, Cochin, Ahmedabad, Pune, Chandigarh, Lucknow, Patna & Jaipur

Works: New Delhi & Faridabad.

New Delhi Phones · 618387, 88, 89. Grams : "RONEOVICK"
Telex · 031-2998

OFFICE EQUIPMENT & SUPPLIES

METHODEX SYSTEMS PVT. LTD.

Regd. Office:
608, Meghdoot, Nehru Place, New Delhi-110 019.
Phones: 682475 & 682476 Gram: "METHODEX"
Telex: ND 031-3579

Information Storage/Retrieval Equipment for Information Control. Visible Card Record Equipment. Filing Cabinets. Lateral Simplified and Conventional Filing Systems and Files. Methograph Panels for Display & Control of Vital Data. Electronic Calculators. Rep. for: (1) Hermes Precisa International SA, Switzerland for electric typewriters; (2) Minolta Camera Co. Ltd., Japan for plain paper copiers, and microfilming equipmment.

Branch Offices:
Ahmedabad, Bangalore, Bhopal, Bombay, Calcutta, Chandigarh, Delhi, Hyderabad, Indore, Jaipur, Lucknow, Madras, Pune, Patna, Srinagar, Baroda.

OFFSET PRINTERS

BOLTON

FINE ART LITHO WORKS
(ESTABLISHED 1909)
274, JAWJI DADAJI ROAD, BOMBAY 400 007

Photo-offset printers who undertake
multi-colour quality work of precision.
Accurate and faithful reproduction guaranteed
Winners of numerous National,
State and CAG awards and A.I.F.M.P. trophies.
Phone : 367411 (4 lines) Telex : 011-3650
Grams: "Boltonlito", Bombay 400 007.

OIL MILLS MACHINERY MFRS. & DEALERS IN INDIA

B. KUMAR METAL WORKS

Sitafalwadi, Mount Road, Mazagaon, Bombay 400 010.

Phone : 370805. Grams : "BEKUMAR"

★

Engineers, Manufacturers ; Specialists in Oil Mill Machinery & Spares and manufacturers of Gautam Oil Expeller.

OIL MANUFACTURERS

Kind Attention Oil Manufacturers!

REFOIL MINERALS INDUSTRIES

Manufacturers of Activated Fuller's Earth.
43, Gautamnagar, R.C. Road, Baroda 390 007.
Phone: 63592 Gram: BOILER

We manufacture special Decolourising Neutralising grades of Activated Fuller's Earth for vegetable industry, solvent-extraction units, transformer oil manufacturers and white oil, spray oil, lubricating oil, burnt oil and grease manufacturers.

OIL SEALS, 'O' RINGS & RUBBER GOODS

M s. Spare-Age (India) Pvt. Ltd.

4-B, Purshottam Building, Tribhuvan Road,
Bombay 400 004.

Phones : { *Office* : 357623 384052 / *Factory* : 595264 — Grams : "AGEOILSEAL"

Manufacturers & Exporters of :

Largest Range of OIL SEALS, 'O' RINGS and Synthetic Rubber Parts.

ON RATE CONTRACT WITH D.G.S. & D. FOR OIL SEALS.

OIL SEALS & 'O' RINGS

SUPER TOOLS CENTRE

G-36, Sarvodaya Nagar, Bombay 400 004.
Phones : 369066 & 344972.

Manufacturers of :

Neoprine & Synthetic Rubber Sheets, Rods, Rubber Bushing, 'O' Rings & Oil seals, Fibre & Ebonite sheets, Rods & Parts, Rubber Diaphragm, Circlips.

Stockists & Suppliers of :

Ballbearings, Nut-Bolt, Tools, Millgin, V-Belts, Precisions Stainless steel, Hardware Automobile, P.V.C. Tubing & General suppliers.

PACKING LABELS & CARTONS

MOHAMADI FINE ART LITHO WORKS

Proprietors : Allibhoy Sharafally & Co., Private Ltd. (Estd. 1878 ; Incorporated : 1938). Mohamadi Buildings, Gunpowder Road, Mazagaon, Bombay 400 010.

Lithographers, Offset and Letterpress Printers and Carton manufacturers.

Phones : 863728 & 863735. Grams : "KORAN"

PACKAGING

BAJAJ PLASTICS LIMITED

Imambada Road, Nagpur 440 018.
Phones : 23567/8. Grams : "BAJAJPLAST"
Telex : 0715-270.

Manufacturers of :

HDPE WOVEN SACKS

Always readily available Laminated or Plain sacks in 16 mesh, 850 denier, 610 mm width in any lengths. Sacks also manufactured according to customer's specifications.

PACKAGING

BUHARIWALA & SONS, B.C.

(Estd.: 1925)
5, Graham Road, 1st Floor, Ballard Estate,
Bombay-400 038.
Phones: 265451/53. Grams: 'BECIBESONS'.
Licensed Clearing, Shipping, Baggage & Packing Agents.

Branch office:
Administration:
1310, Pragati Towers, Rajindra Place, New Delhi-110 008
Tel: 56540.
3/A, Asaf Ali Road, Saraswati Devi Bldg., New Delhi-110 001
Tel: 276356.

PACKING & PACKAGING

COMMERCIAL PACKING SERVICES

Manufacturers of :

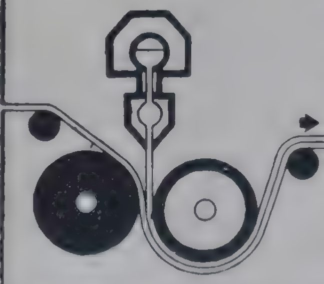
Printed Waxed Wrappers, Poly Coated Wrappers & Specialised Packaging Materials for all Industries.

53/54, Unique Indtl. Estate, P. Box 7773,
Dr. R. P. Road, Mulund (West), Bombay 400 080.
Phones : *Office & Fact.* : 591757 ; *Resi.* : 503178.

PACKAGING

Custom Designed Poly-coated Products for Industrial, Agricultural and Consumer Packaging

Pharmaceutical, Foodstuff, Chemical, Dyes, Detergent, Pesticide & Fertiliser, Cattlefeed etc



"DUCK" EXTRUSION LAMINATED POLYETHYLENE
PAPER, HESSIAN, COTTON, HDPE FABRIC & FOIL ETC

DUCK LAMIPLAST
CIB Plot No. 463 G.I.D.C. Industrial Estate, Makarpura, Baroda 300 009.
Gram: "Lamination" Phone: 4599
Telex: AKSHAY-BRD-35

PACKERS & MOVERS

All your packing and moving problems can be solved by us at Hyderabad & Bangalore

JET PAK

Members of The Association of Indian Packers and Movers
Packing, Moving, Shipping, Air Freight

3-6-22, Himayatnagar,
Hyderabad 500029
Phone: 32200, Grams: GETPAK

No. 26, Annexe, Hotel Kamadhenu
M.G. Road, Bangalore-560008

PAINT MANUFACTURERS

BRIGHT PAINTS (P) LTD.

Paint Makers of Repute since 1951. Mfrs. of ISI Marked Oil Bound Distemper, Glass Putty, Synthetic Enamel etc. and all other Industrial, Decorative & High Build/Performance Coatings, Thinners and Aids.

Saki Vihar Road, Bombay 400072.
Phones: 583938, 582218, 581125.

Grams: 'PAINT MAKER', Bombay 400072.
Telex: 011-6448 AJIT (IN).

PAINT MFRS.

✻ ELEPHANT BRAND

DEKORA

DRY DISTEMPER

Manufactured By :

DEKORA PIGMENTS & PAINTS (P) LTD.

A-1/7, 'Jepika House', KRISHAN NAGAR,
DELHI-110 051. • Phone : 213862

Manufacturers of :
DISTEMPERS, CEMENT PAINTS,
LIME COLOURS & OXIDE COLOURS ETC.

PAINTING & DECORATING CONTRACTORS

JAMES & COMPANY

Never ever repent again. We undertake quality painting jobs with guarantee. Home & Industry Specialists—Plants & Equipments.

47, V.P. Road, Bombay 400004.

Phones : 353150, 356899.

PAINT MANUFACTURERS

JOHNSONS PAINTS & CHEMICALS (INDIA) PRIVATE LTD.

Thinners of All Kinds, Automotive and Industrial Lacquers, Synthetic and Stoving Enamels.

Regd. Office : 1410, Bank Street, New Delhi 110 005.
Factory : Nilothi Nangloi, Delhi 110 041.
Residence : Sachar Inderjit Singh.

Phones : *Office :* 564698,
Factory : 87304,
Residence : 590131

PAINTING CONTRACTORS

KAPADIA BROTHERS

(ESTD. 1910)

Painting contractors and paint merchants of repute, stockists of
NEROLAC AND GARWARE PAINTS

81, Abdul Rehman Street,
Bombay 400003.
Phone: 324108.
Grams: "DECORATORS"

PAINT MFRS. & MERCHANTS

Grams : "PUTLI"

KOHINOOR PAINTS PVT. LTD.

Manufacturers of:
QUALITY PAINTS, ENAMELS, VARNISHES & DRY COLOURS

Head Office :
13, Rattan Chand Road,
The Mall, Amritsar 143 001
Phone : 42882.

Regd. Office :
155, Katra Baryan, Fatehpuri
Delhi 110 006.
Phone : 231124.

WHO IS WHO :

Mg. Director: S. Sobha Singh Sachdeva ; *Directors:* S. Trilok Singh Sachdeva, S. Gurbir Singh Sachdeva, Smt. Tejinder Sachdeva, S. Kriplal Singh Sachdeva.

PAINTS MFRS. & MERCHANTS

MERA CHEMICALS

Shardhanand Marg, Delhi-110 006

Phones: Delhi—522804, 232021 & 231019
Ghaziabad—201029.

Metallic Cellulose Lacquers for Cars, Fans, Pencils, Wood, Rubber, Leather, Aircraft Dopes, Thinners, Bakelux Synth. Stoving and Airdrying Enamels, Insulating Varnish, Chemical Resistant Paints, Epoxy Paints, Rust Pretreatment Chemicals and Epoxy adhesives.

PAINTS

METRO COLOUR INDUSTRIES

Factory :
[illegible] 26, Industrial Area, New Rohtak Road.
New Delhi 110 005.

Phone : 563778

Grams : "CEMPAINT", New Delhi.

Importers, Exporters & Manufacturers of
ALL KINDS OF CEMENT COLOURS.

PAINT MANUFACTURERS

RAJDOOT PAINTS (P) LTD.

Rajdoot Paint House, 19, DDA Commercial Complex, Kailash Colony Extn., (Zamrudpur), New Delhi-110 048.
Phones:
Off: 681015, Works: 654394 & 652261.
Res: S. S. Dhingra 615816
K. S. Dhingra 631817
G. S. Dhingra 634369

PAINTS, ENAMELS & VARNISHES

RAJKAMAL SUPPLYING STORES

295, Abdul Rehman Street,
Bombay 400 003.

Factory : Sunbeam Colour Works.
Phones : *Office* : 321895 *Factory* : 522140 *Resi.* : 213663
Grams : " RAJPAINT ".

Direct Importers and Stockists of :
Paints, Dry Colours, Brushes, Varnishes and Artist Materials.

Manufacturers of :
Lake Colours, Chrome Colours, Dry Colours, Distemper, Paints, Varnishes. Poster Colours, etc.

PAINTS, ENAMELS & VARNISHES

STAR PAINT & OIL INDUSTRIES

Crescent Chambers, 56, Tamarind Street,
Bombay 400 023.
Phones : 272243, 272289, 272904 & 273201.
Grams : " STARPAINT ".

Manufacturers of : Industrial, Marine and Building Paints ; Natural & Synthetic Enamels & Allied Products. Specialist in " SILVEX " Aluminium Paint, HEATEX ALUMINIUM BLACK PAINT, High Temperature Heat Resisting upto 600°C. Vinylex Vinyl Paint, Chemical Resisting & Allied products.

PAINT MFRS. & MERCHANTS

UNIVERSAL PAINTS CORPN. (P) LTD.

Marol, Military Road,
Bombay 400 059.
Phones : 583719 & 323581.

Manufacturers of :
Stoving, Epoxy, Heat Resisting Aluminium, Acid & Alkali, Zinc Rich, Synthetic N. C. Paints and all types of Thinners, Marine Paints.

FLAMBOYANT, WRINKLE, HAMMERTON FINISH.

PAINTS HARDWARE MERCHANTS

NEW SAHNI PAINT HOUSE

PAINTS HARDWARE MERCHANTS

CHOWK MULTANI DHANDA,
PAHARGANJ, NEW DELHI 110055
PHONES: OFF. 528989, 527979

PAINTING CONTRACTORS

S. MORE & CO.
(1929)

Turn-key interior decoration, metal and plastic signages, Sculptors, Painting Contractors, Architectural Models

34-38, Hamam House, Ambalal Doshi Marg, Fort,
Bombay 400023.
Phones: 274293 & 274552

PAINTING CONTRACTORS

SHROFFERA

Professional Painting People with Paint Know-how & 44 years Trade Experience.

Jain Niketan, Gujar Lane, S. V. Road,
Santacruz, Bombay 400 054.
Phone : 532898.

PAPER

bpm

BHARAT PAPER MART

(Estd. : 1932)

Bharat Bhuvan, 51, Sutar Chawl, Bombay 400 002.
Grams : " GLAZE ". P. O. Box 2245.
Phones: Office: 327267, 325329; Resi.: 387372, 382190.

Authorised Dealers of : Titaghur Paper Mills Co. Ltd., Calcutta; Bengal Paper Mills Co. Ltd., Calcutta; Indian Paper Pulp Co. Ltd., Calcutta; Mandya National Paper Mills Ltd., Karnataka; Mysore Paper Mills Ltd., Bhadravari (Mysore State); Hindustan Paper Corpn. also contact us for products of **ROHIT PULP & PAPER MILLS LTD.**

PAPER BOX MFRS.

KRISHNA BOX FACTORY

37(II) MIDC Central Road, Andheri (East),
Bombay 400 093 (India).
Phones: 579174-579175.
Cables: "CORRUGATED".

Manufacturers & Exporters of:
Folding cartons of all types, multicolour printed, decorative & plain, duplex, corrugated & grey board boxes for pharmaceuticals, cosmetics, food products, electrical accessories, motor-parts and other industries.

Also shipping cartons and textile labels.

PAPER

VINDHYA'S
DIAMOND COTE

DIAMOND COTE ART PAPER, ART CARD, CHROMO PAPER, CHROMO CARD, BLACK CENTRED ART CARD, IVORY CARD. HEAT SEAL PVDC COATED PAPERS, ETC.

Manufactured by :

SHREE VINDHYA PAPER MILLS LIMITED

Empire House, 3rd Floor, Dr. D. N. Road, Bombay 400001.
Phones : 268807 08, 269316. Grams : "VINDHPAP"
Telex : 011-3699.
Factory & Regd. Office : Panchak, G. D. Somani Marg, Nasik Road (Maharashtra). Phones : 6339/6432.
Regional Sales Offices· Delhi, Calcutta & Madras.

PAPER-BOARD CARTON MANUFACTURERS

MOHAMADI FINE ART LITHO WORKS

Proprietors : Allibhoy Sharafally & Co. Private Ltd. (Estd. 1878 : Incorporated : 1938) ; Mohamadi Buildings, Gunpowder Road, Mazagaon, Bombay 400 010. Lithographers, Offset and Letterpress Printers, and Carton Manufacturers. Phones : 863728 & 863735. Grams : "KORAN."

PAPER & BOARDS

GANDHI BROTHERS

4th Floor, Nitin Mansion,
203. Dr. Dadabhoy Naoroji Road,
Bombay 400 001.
Phones : 261345, 266241.
Resi. : 563309.

Sole Concessionaires for :
"Silverseal" Gummed Label and Stamp Papers, Transfer Decal Papers, V.P.I. Papers, Sticker Label Papers, Plastic & Foils and wholesale dealers in Boards, Adhesive Tapes and Gummed Tapes.

PAPER & BOARD MERCHANTS

JYOTI TRADING CO.

49/51, Sutar Chawl, 1st Floor.
Bombay 400 002.
Phones: 327139 & 349411.

Distributors for :
Bengal Paper Mills Co. Ltd., Mysore Paper Mills Ltd., Hindustan Paper Corporation, Mandya National Paper Mills Ltd., Titaghur Paper Mills Co. Ltd.

PAPER & BOARDS

PRAHLADRAI DALMIA & SONS

86-88, Bajaj Bhavan, Nariman Point,
Bombay 400 021.
Phones : 234149, 234189 & 234128.
Grams : "PANQUICK".

Authorised Distributors for :
ROHTAS INDUSTRIES LTD., DALMIANAGAR
ASHOK PAPER MILLS LTD., JOGIGHOPA
BOMBAY SALES AGENCIES

Authorised Distributors for:
THE WEST COAST PAPER MILLS LTD., Dandeli.
THE ANDHRA PRADESH PAPER MILLS LTD., Rajahmundry.

PAPER COATED WITH SILICONE FOR RELEASE PURPOSE AND OTHER SPECIALITY PAPERS

AVAILABLE SINGLE SIDE OR BOTH SIDES COATED IN REAMS, REELS FOR SELF-ADHESIVE LABELS AND INDUSTRIAL APPLICATIONS OR RELEASING TACKY PRODUCTS LIKE ASPHALT, RUBBER, WAX, ETC. ALSO AVAILABLE LABEL STOCK, P.V.D.C. COATED PAPER, ANTI-RUST PAPER, ANTI-FUNGAL PAPER, SELF-ADHESIVE, FLAME RETARDANT PAPER, GREASEPROOF TREATED PAPER AND MASKING TAPE.

Contact :

PYLOFF PACKAGING PRIVATE LIMITED

Maneckji Wadia Bldg., 5th Floor, 127, M. G. Road,
Fort, Bombay 400 023.
Phones: 272840, 273191, 273038. Grams: "PYLPAK".

PAPER & BOARDS MFRS.

SWASTIK PAPER INDUSTRIES

Factory :
Sewree Cross Road, Bombay 400 015.
Phone Nos. 445714 & 441723.

Manufacturers of :
"PAGODA" brand
CORRUGATED PAPER & BOARDS

PAPER CONVERTING MACHINES MFRS.

INDUSTRIAL PAPER MACHINES PVT. LTD.

A-32, Phase I, Naraina Industrial Area,
New Delhi 110 028.

Phones : *Showroom-cum-office :* 531353 & 535052.
Regd. Office-cum-Resi. : 668723.

29, Sona Industrial Estate, P. P. Road,
Andheri (East), Bombay 400 069.
Phones : *Office :* 579023 ; *Resi. :* 542675.

Manufacturers of :

IPM-131 Paper Bag Machines, Flexographic and Rotogravure Printing, Gum Coating, Paper Lamination, Slitting and various other Paper Conversion Machines

---

PAPER CONE & TUBE MFRS.

'Remember for your requirements of :

PAPER CONE
&
PAPER TUBE

Phone : 4657.

KAMAL PAPER CONE INDUSTRY

Shed No. 11, Industrial Area, Maxi Road,
Ujjain (M.P.) 456 001.

PAPER MILLS SELLING AGENTS

JAI DAYAL KAPUR

Wholesale Paper Merchants & Distributors for :

Ballarpur Industries Limited, for their Unit : SHREE GOPAL of High Grade Qualities of Printing, Writing and Packing Papers, with brands of 'Rising Sun', 'Sunlit', & 'Sunshine', For their Unit: Ballarpur of High Grade M. F. & M. G. Papers with 'Three Aces' Brand.

31, Sutar Chawl, P.O. Box No. 2581,
Bombay 400 002.
Phones: 328848 & 328849.

PAPER MERCHANTS

PARAS VYAPAR SANGATHAN PVT. LTD.

Distributors :

THE TITAGHUR PAPER MILLS CO. LTD.
ASHOK PAPER MILLS LTD.

3623, Netaji Subhash Marg,
New Delhi 110 002.
Phones : 274562 & 274579.

Res. : 32, Netaji Subhas Marg. Phone : 277149.

PAPER MERCHANTS & PLASTICS

RAM NATH & SONS

2386, Chawri Bazar, Delhi 110006
Phones: 261517, 264831, 260290, 263290 & 589095
Resi.: 263232.

Marketing:

Lustracote art paper—chromo paper—art card—chromo board—black centered art card. Charukote & Maxigloss Cast—Coated Paper & Boards—Suruchi art card-regal pac. Quality paper & boards—writings—printings—M.F. Kraft paper in reams and reels—creamwove—Banks—Bonds Speciality papers (INDIAN & FOREIGN)

'SUNPAC' POLYPROPYLENE HOLLOW CORRUGATED BRAND

'SUNFLEX' PVC FILMS & SHEETINGS BY CAPRIHANS

PAPER MERCHANTS & STATIONERY MANUFACTURERS

Serving Small and Medium Newspapers for procuring all kinds of Newsprint against import or buffer stock.

SANJAY ENTERPRISES (P) LTD.

20, Ansari Road, Daryaganj, New Delhi 110002.
Phone: 271561

(Govt. Authorised Newsprint agents)

PAPER MERCHANTS

SINDHU PAPER MART

8, Rohit Chambers, Ghoga Street,
Fort, Bombay 400 001.

Wholesalers : STRAW PRODUCTS LTD.
(J. K. Paper Mills)
TITAGHUR PAPER MILLS CO., LTD.

Phones : 318563 & 253697.

PAPER MILLS' SELLING AGENTS

BOMBAY SALES AGENCIES

86-88, Bajaj Bhavan, 8th Floor, Nariman Point,
Bombay 400 021.

Phones : 234149 (5 lines).
Grams : "PANQUICK".

Authorised Distributors for :

Papers & Boards manufactured by West Coast Paper Mills Ltd. & Andhra Pradesh Paper Mills Ltd., viz. White Poster, Kraft, Manila, Pulp Board, Maplitho etc.

PAPER TUBES & CORES

BULCON FIBRE DRUMS PVT. LTD.

Mfrs. of Paper Tubes, Cores, Sleeves of any sizes and specifications. Also Fibre Drums.

Contact:
58, MIDC, Andheri (East), Bombay 400 093.
Phones: 568619. 566672, 573228.

PAPER WAXERS

NANJAPA & SONS

Leading Wax Paper Manufacturers
Laxmi Woollen Mills Compound,
Shakti Mills Lane, Off Dr. E. Moses Road,
Mahalaxmi, Bombay 400 011.
Phones : 376887 & 378547.

Specialists in :

Waxing Paper Rolls & Sheets (Printed & Plain), Corrugated Sheets, Cork Sheets, Cartons & Boards. We also undertake Slitting and Rewinding Jobs.

PARQUET FLOORINGS

'WOOD MOSAIC'

Manufacturers & Exporters:

DELUX FLUSH DOORS (EXPORT) CORPORATION

38, Bombay Timber Market,
Near Reay Road Rly. Station,
Bombay 400 010.
Phones: 378810, 545066, 547720 & 693894.

PATENT & TRADEMARK ATTORNEYS

CALCUTTA TRADE MARK CO.

(Established 1933)

236, Chandni Chowk (Fatehpuri),
Post Box No. 1237,
OLD DELHI 110006.

Govt. Regd. Patent & T. M. Attorneys-Advocates (Sharma & Sharma).

Phones: *Office*: 259952; *Resi.*: 530981.

PATENT & TRADEMARK ATTORNEYS

L. S. DAVAR & CO.

(Established 1932)

(INDIA AND FOREIGN COUNTRIES)

Head Office: Flats 1B & 1C, Monalisa, 17,
Camac Street, Calcutta-700017.
Branch Office: 59, Nehru Place,
506, Shakuntala
New Delhi 110019.

PATENT AND TRADEMARK ATTORNEYS

R.K. DEWAN & CO.

(Founder: DEWAN RAJKUMAR) Estd. 1942

For any difficulty in registration or infringement proceedings of trade marks/patents in India/abroad (Pune Branch: 1147-B, Shivajinagar, Near Police H.Q., Pune 411016).

78, Podar Chambers, Fort, Bombay 400001.
Phones: Bombay 296662, Pune: 57455.

PATENT TRADEMARK

TEMPLE OF INDUSTRIES

Estd. 1941

Patent, Trademark, Design
and
Copyright Attorneys.

Temple of Industry,
257-A, Jagannath Shankarshet Road,
Bombay 400 004.
Phone : 354148.

PENCIL MFRS.

Apsara & NATARAJ
PENCILS

Write Smoother, Darker & Last Longer

Quality Products of :

HINDUSTAN PENCILS PRIVATE LTD.

510, Himalaya House, 79, Palton Road,
Bombay 400 001. Phones: 266874-75.
Telegram Address : " WRITESFINE ".

Associate Concern :

APSARA ARTISTS MATERIAL INDUSTRIES

Manufacturers of : APSARA ART MATERIAL.

PERFORATED METAL SHEETS

METAL PERFORATORS

43, Abdul Rehman Street,
Bombay 400 003.
Phone : 325837.

Manufacturers of :

Expanded Metal Sheets, Perforated Sheets in all kinds of Metals & Galvanised Chain Link Fencing.

PERFORATED METALS AND CABLE TRAYS

METAL PERFORATORS PRIVATE LTD.

Manufacturers of : Industrial Screens in any Sheet Metal like Mild Steel, Stainless Steel, Brass, Copper, Aluminium, Zinc, etc. Cable Trays is our Speciality.

Factory : 14th Road, Udyognagar, Udhna (Dist. Surat, Gujarat). Phone : 88610.

Bombay Office : 5, Anees Chambers, Carnac Road, Bombay 400 001.

Phone : 263001. Grams : " DUTYBOUND ".

PERFUMERS & COSMETICS

PATANWALA PRIVATE LTD.

182-84, Abdul Rehman Street,
Bombay 400 003.

Stockists :

" AFGHAN SNOW BEAUTY AIDS ",
"AFGHAN ANTISEPTIC CREAM & ASAD PAIN BALM "

Manufactured by :

E. S. Patanwala, Bombay 400086.

Phone: 322899. Grams: " OTTODUNYA".

Dealers in Cosmetics, Toilet Goods, Perfumery, GOLD & SILVER JEWELLERY, Diamonds, Pearls, Emeralds, Rubies & other Precious Gems.

PEST CONTROL

ALL INDIA MEDICAL CORPORATION

Specialists in:

Pest Control, Chemicals & Insecticides extermination of White Ants, Cockroaches etc. Also Mfrs. of PEST CONTROL Chemicals, like Malathion, Cyanogas, ZINC Phosphide, Aluminium Phosphide, DDT, BHC, Chloradane, Heptachlor formulations and other Agro Chemicals.

Office:

185, Princess Street, Bombay 400 002.
Phone : 315390.

PEST CONTROL

DR. SARUP'S PEST CONTROL PVT. LTD.

At your service for guaranteed extermination of Cockroaches, bugs, ants, etc., for pre & post construction treatment of buildings against white ants, rodent control and fumigation of export cargoes.

203, Dr. D. N. Road,
Bombay 400 001.
Phones : 261777 & 267229.

PEST CONTROL

PARAGON PESTICIDES

Well trained staff - fully equipped - guaranteed services for: anti-termite pre and postconstruction treatment, disinfestation, rodent control etc.

CONTACT:

PARAGON PESTICIDES,
4th Floor, 164, Mody Street, Fort, Bombay-400 001.
Tel.261399.

PEST CONTROL

SCIENTIFIC PEST CONTROL

Termite Control (Residential & Industrial), Disinfestation (Residential & Industrial), Vector (Mosquitos, Flies Control), Carpet Treatment, Rodent Control, Cockroach, Bug Control, Soil & Foundation Treatment, Pre Construction & Post Construction Treatment.

Specialists in: Fumigation of Export Cargo, Marine Fumigation & Industrial Fumigation

Head Office: Mulji Jetha Building, 1st Floor, 185, Princess Street, Bombay 400002. Tel: 315390

Administrative Office: 8th Road, Akhand Jyoti, Santacruz (E), Bombay 400055

Phone: 544831 & 549753.

Contact: Mrs. E.P. Shrivastava or Mr. F.J. Baker.

PEST CONTROL

HARDY'S PEST CONTROL SVCG. (REGD.)

1620, Bahadurgarh Road, Delhi 110 006.
Telephones: 51-5766 & 52-3460.

A trusted name in guaranteed TERMITE (White Ant) ERADICATION in the POST CONSTRUCTIONS ; BUILT-IN Termite Control in the PRE-CONSTRUCTIONS ; sophisticated methods in the control of Domestic Insects, Garden Pests, and Field Rats, FUMIGATION of food grains etc. etc.

Technical Director : Dr. Y. S. BEHL, MBAS, AMESA, PPC, PCT (USA).

Manager: Y. Harsh Behl.

PEST CONTROL

PEST CONTROL (INDIA) PVT. LTD.

1954 to 1979 **Silver Jubilee Year**

Consulting Entomologists—Disinfestation, Fumigation and Sterilisation Services—Termite, Rodent, Vector, Weed and Marine Pest Control, also Carpet Treatment. Laboratory and Consultancy Services for residue analysis. **Members:** National Pest Control Association Inc., U.S.A.—Entomological Society of India—Indian Pest Control Association—British Wood Preserving Association—British Pest Control Association.

Yusuf Bldg., Mahatma Gandhi Road, P.O. Box 1510, Bombay 400023.
Phones: 251546-94 Grams: "PESTCIL" Telex: 11—5166 PCI
Chairman & Managing Director: N. S. Rao.

PESTICIDES

PESTICIDES INDIA

504, 'Mansarovar'	Grams: VEGFRU
90, Nehru Place,	Phone: 682369
New Delhi 110 019	Telex: 031-2660

Manufacturers: Pesticides, Fungicides, Herbicides, Weedicides, Rodenticides, etc. Manufacturing more than 60 products and having more than 20 branches all over India and large exporters.

Head Office and Export Houses:

Post Box No. 20	Grams: VEGFRU
Udaisagar Road	Phones: 5391, 5392
Udaipur	5393, 5394
Rajasthan	Telex: 033-202
India	

PETROLEUM JELLY I. P.

Mineral Oils, Lubricating Oils and all types of GREASES.
For wholesale and retail requirements

Contact :
The Leading Manufacturers

A. & P. TRADERS

61, Bhandari Street, Mandvi, Koliwada,
Near New Masjid Bunder Bridge,
Bombay 400 003.
Phones : 324651 & 337387.

PETROLEUM JELLY I.P. & GREASES MFRS.

CHEMIEFINE

Manufacturers of
Petroleum Jelly I.P. & Greases

Factory: 12, Vaibhav Industrial Estate
Mahakali Caves Road
Chakala, Andheri (East)
Bombay 400 093

Office: "Mahavir Darshan"
416, Narshi Natha Street
Bombay 400 009

Phones: 338420, 333810, 345899

PETROLEUM PRODUCTS

PANAMA PETROLEUM PRODUCTS

Lubricating Oil, Industrial Oil, High Grade Motor Oil, Petroleum Jelly & Greases.

"Mahavir Darshan", 416, Narshi Natha Street,
Bombay 400009.
Phones: 333810, 338420 & 345899.
Gram: "CHEMIJELLY"

PHARMACEUTICALS

BIOLOGICAL E. LIMITED

Das Chambers, 25, Dalal Street,
Bombay 400 023.
Phone : 273829. Grams : " BIOEXTRACT ", Bombay.

Manufacturers of Liver Extracts (Oral and Injectable grades), P.A.S., I.N.H., Heparin, Bacteriological Peptone and Specialities such as Bethadoxin-12, Beparine, Bepanex and other range of Anti-T.B. Drugs and Vaccines and Sera.

PHARMACEUTICALS

BOMBAY TABLET MANUFACTURING CO.

Manufacturers of Pharmaceutical Products.

Office : 304, S. Gandhi Marg, Bombay 400 002.

Depot : Brijwasi Bungalow, I. B. Patel Road, Goregaon (East), Bombay 400 063.
Grams : " SACCHARIN ".

Factory : Tablet House, Near Anupam Talkies, Goregaon (East), Bombay 400 063.

PHARMACEUTICALS

CIPLA

The Chemical, Industrial & Pharmaceutical Laboratories Ltd.

289, Bellasis Road, Bombay 400 008.
Phones : 392891/92 93. Grams : " CIPLAB "

Manufacturers of :
Drugs and Pharmaceutical Products,
Fine Chemicals, Steroids, Alkaloids.

PHARMACEUTICALS

GEOFFREY MANNERS & CO., LTD.

Manufacturers & Distributors of Basic Bulk Drugs, Pharmaceutical Formulations, Cosmetics, Toiletries and consumer goods.

Registered & Head Office :
Magnet House, Narottam Morarjee Marg, Ballard Estate,
Bombay 400 038. Phone : 266991.

Ethicals, Pharmaceuticals and Personnel Divisions and Budget Department :
Udyog Bhavan, Walchand Hirachand Marg, Ballard Estate,
Bombay 400 038. Phone : 266002.

Factories :
(1) Hattersley Mills Estate, Lal Bahadur Shastri Marg, Ghatkopar,
Bombay 400 086. Phone : 582361.
(2) Plot No. 81, MIDC Estate, Satpur, Nasik 422 007.
Phone : 8172.

Bombay Sales Office :
Veer Savarkar Marg, Dadar, Bombay 400 028. Phone : 4229428.

Sales Offices :
Ahmedabad, Bangalore, Calcutta, Chandigarh, Cochin, Gauhati, Hyderabad, Jaipur, Kanpur, Madras, New Delhi, Patna.

PHARMACEUTICALS

GERMAN REMEDIES LIMITED

Manufacturers of Drugs & Pharmaceuticals.

'A' Building, 3rd Floor, Shiv Sagar Estate,
Dr. Annie Besant Road, Worli, Bombay 400018.
Phone : 395621. Cables : "PHARMAGENT".

Factory : M. Vasanji Road, Bombay 400 093.
Phone : 571291.

Branches : Calcutta, Delhi, Madras.

PHARMACEUTICALS

THE HIMALAYA DRUG CO.

Pioneers in Drug Cultivation and Research since 1930

Shivsagar 'E', Dr. A. B. Road, Worli,
Bombay 400 018.

Phones : 379996 (4 Lines). Grams : "SERPINA".
Telex : 011-3977.

PHARMACEUTICALS

NYMPH LABORATORIES

Manufacturers & Exporters of :

All kinds of Pharmaceutical Tablets of Standard quality and all kinds of Ointments. Eye Ointment sterilized by Isomed, Bombay.

Enquiries Solicited at :

164, Senapati Bapat Marg, Opp. Phoenix Mills,
Lower Parel, Bombay 400 013.
Phones : 373183 & 376491.
Grams : "NYMPHLABS".

PHARMACEUTICALS

MAC LABORATORIES PRIVATE LIMITED

Great Social Building, 60, Sir Pherozeshah Mehta Road.
G.P.O.Box 1831, Bombay 400001.
Phones: Office: 253201, 253301 & 253396
Factory: 583291 & 583292
Grams: "MACLON". Telex: 011—4112

1. Pharmaceutical Plant: VIDYAVIHAR, BOMBAY 400086.
2. Chemical Plant: 20, GIDC, Vapi, Dist. Bulsar (GS).

Manufacturers and Exporters of Pharmaceuticals and Bulk Drugs

---

PHARMACEUTICALS

PARKE DAVIS (INDIA) LIMITED

Pharmaceutical Manufacturers

Administrative Office & Factory :
Saki Naka, Bombay 400 072.

Phone : 581471 (7 lines).
Grams : "CASCARA", Bombay 400 072.
Post Box No. 8917, Saki Naka, Bombay 400 072.
Telex : 011-4854.

PHARMACEUTICALS

PFIZER LIMITED

Manufacturers & Distributors of a complete range of pharmaceuticals, pharmaceutical chemicals, nutritional and healthcare products, agricultural and animal health products and feed supplements.

Registered Office : Express Towers, Nariman Point,
Bombay 400 021. Phone: 232824 (20 lines).

Offices & Depots : Ahmedabad, Bangalore, Bombay, Calcutta, Cochin, Cuttack, Gauhati, Indore, Jaipur, Lucknow, Ludhiana, Madras, New Delhi, Patna, Pune, Secunderabad and Srinagar.

Plants : Thane-Belapur Road, Thane.
Phones: 922-8231/8421.

178, Industrial Area, Chandigarh.
Phones: 32591-2-3.

PHARMACEUTICALS

S. M. PHARMACEUTICALS

Chloroquine Phosphate I.P./B.P. M-Chloro Aniline, Metanilic Acid, 4-7 Dichloroquinoline, Vanadium-Pentoxide Powder/Chips (98% min.), Calcium Sennosides, Ammonium Metavanadate (99% min.) Potassium Permanganate, Boric Acid, Nitro Benzene and other Chemicals & Pharmaceutical raw materials

119/3, Lohar Street, Maskati Mahal
Bombay 400 002.
Phones : 317342 & 313613.

PHARMACEUTICAL & DRUG RAW MATERIALS

BHARAT MERCANTILE CO.

98, Princess Street,
Bombay 400 002.
Phones : 310336 & 316564. Grams : "TRIUMPH".
Telex : 011-3445.

All kinds of Pharmaceutical Raw Materials.

PHENOLIC RESIN COMPOUNDS

Tipcolite Phenolic Resins/Compounds for Electrical Engineering Applications.

Conforming to IS-1300/BS. 771 Specifications.

Pioneers & Largest Manufacturers & Exporters :

TIPCO

THE INDUSTRIAL PLASTICS CORPORATION PVT. LIMITED

14, Hamam Street, Fort, Bombay 400 023.
Phone : 274441. Grams: "PLASTIPCO", Bombay.

PHOTOGRAPHIC GOODS & PHOTOGRAPHERS

AUDO VISO CORPORATION

Manufacturers of:
Micrographic, Photographic, Audio Visual & Crime Detection equipment, Large Exhibition Blow-ups, Microfilming jobs, Servicing and Hire of Audio Visual Equipment.

E-48, Connaught Place,
New Delhi 110001.
Phones: Anil Kumar 352527
Office: Accts. 312528 & 310051.
Resi: Anil Kumar & Arun Kumar 650294.

PHOTO ENGRAVING (PROCESS) MFRS.

COMMERCIAL ART ENGRAVERS PVT. LTD.

Makers of:
Quality blocks in one & Multicolours, Mats, Lead Stereos, Rubber Stereos & Offset Plates.

6, Saraswati Mandir, J. Shankar Sheth Road,
Bombay 400007
Phones: 359511 - 12.

Colour blocks & Offset Plates Making Dept.

386, Vir Savarkar Marg, Bombay 400025.
Phone: 4228541

Direction: F. R. Poonawala & Sons.

PORTRAIT STUDIO & COMMERCIAL PHOTOGRAPHERS

For Life-Like Studio Portraits; Photos for Matrimonial Purposes; Commercial, Industrial and Product Photography; Colour & BW Film Processing and Murals for Exhibitions and Window Displays.

DELHI PHOTO COMPANY

78, JANPATH, NEW DELHI 110 001
Phones: 320577 & 322786

PHOTOGRAPHERS

Forward Studio

(KODAK GOLD MEDALLIST)

Accredited Press Photographer. For speaking portraits, life-like paintings, finished enlargements, Party & outdoor functions photography specialists, be black & white or colours. Cine movie 8 & 16 mm.

Photographers to : All India Radio, Bombay, Air India, Television Centre, Bombay Samachar, Admn. Commandant (Army), Bombay, Govt. of Gujarat.

Courteous and Quick Service at reasonable rates.

Dhutpapeshwar Building, Mangalwadi, J. Shankerseth Road, Bombay 400 004.
Phones : 355225, 355330.

PHOTOGRAPHER

GODFREY ANDREWS

COMMERCIAL & INDUSTRIAL PHOTOGRAPHER

For work connected with :

Advertising	Factories & Construction
Table Tops	Architecture
Modelling	Interior Decoration

5, Shobha Sagar "A", Dr. Ambedkar Road,
Bandra, Bombay 400 050.
Phone : 531253.

PHOTOGRAPHERS, MOVIE MAKERS AND DEALERS

1) B/W & Color, Studio & Outdoor Photography , 2) D & P Service for Color and B/W Films, 3) Rental of Audio-Visual equipment, 4) Hire of TV Crews, 5) Camera Repairs, 6) Picture Framing (Flush), 7) Super 8 & 16 mm Function movies

RANGOON STUDIO

58, Janpath, New Delhi-110 001.
Phones: 321276/322433
Cables: PHOTOCINE.

PICTURE FRAMERS

CHEMOULD

Factory : Marol, Andheri-Kurla Road,
Bombay 400 059.
Phones : 572345, 564286

Retail Shop : 271, Princess Street, Near Parsee Dairy,
Bombay 400 002.
Phone : 318295.

Gallery : Jehangir Art Gallery, 1st Floor,
Bombay 400 001.
Phone : 244356.

PIPES, PIPE FITTINGS & TUBES

Stockists in & Dealers of :

Seamless Steel Tubes, Hydraulic Pipes,
Boiler Tubes & E.R.W. Pipes.

AFKARS TUBES CORPORATION

Plot No. 152, Reay Road,
Bombay 400 033.

Phones : *Office* 899240, 892764 Grams :
Res. 534358 "ARCOPIPES"

PIPES, SEAMLESS, HYDRAULIC, E.R.W. & BOILER TUBES

DHANESH TUBE COMPANY

Stockists of Seamless pipes & tubes, E.R.W. pipes, Hydraulic & Boiler Tubes, M.S. & Carbon Steel Tubes etc.

Sales Off: Y-191, Naraina, New Delhi-110 028
Tel: 567494
Res.: 17/40, Shakti Nagar, Delhi 110 007.
Tel. : 711243

PIPES, BOILER & STAY TUBES

EASTERN STEEL EQUIPMENT CO.

5/1, (2nd Floor), Clive Row, Calcutta 700001.

Manufacturers of

Black Pipes of various standard and odd sizes and Pipe fittings, Flanges, Dealers of Black & Galvanized E.R.W. Seamless Boiler & other Tubes. Specialise in the manufacture of Oxygen Lancing pipes and undertake Pipe Fabrications.

GRAM: "EASTEQUIP". PHONES: 226050. 237982.

PIPES & TUBES

NEMAT ENGINEERING WORKS

Dealers in

All kinds of ERW & Seamless Pipes, Boiler Tubes, Hydraulic Pipes, Square & Rectangular Tubes & Pipe Fittings.

Specialists in

Barrel Nipples in BSP & NPT Threads

145, Nagdevi Street,
Bombay 400003.
Phones: 326833-345864

PIPES, TUBES & FITTINGS

Specialists in:

Electric poles and other tubular structures, Seamless and E.R.W. pipes, tubes, fittings, Valves, Bends etc.

SUPERNOVA STEEL TUBE INDUSTRIES

19-20, Piru Lane, Bombay 400009.
Phone: 868924

PIPE FITTINGS AND VALVES

CHATUR PARMANAND VASWANI

59, Dr. V. B. Gandhi Marg (Forbes Street),
Bombay 400 001.

Phones : 242984 & 244303. Grams : "CLIMATEER".

FLARE AND COMPRESSION TUBE FITTINGS, ANGLE VALVES, SERVICE VALVES, RELIEF VALVES AND NEEDLE VALVES, SPARE PARTS FOR TECUMSEH COPELAND MELCO REFRIGERATION COMPRESSORS.

PIPES & FITTINGS MERCHANTS

NECET TRADING CORPN. PVT. LTD.

94, Nagdevi Street,
Bombay 400 003.

Phone : 323945. Grams : "NECETPIPES".

Telex : 11-5924 NEPI IN.

Cast Iron S/S & Double-flanged Pipes, Specials, Sluice Valves, G. I. Pipes, Fittings and G. M. Valves available in large stock.

PLASTER OF PARIS DECORATORS

PLASTER KALA KENDRA

Contractors: Plain & Decorative false ceiling of Plaster of Paris, Sitatex, Jolly Boards, Thermocole, etc for Flats, Shops, Showrooms, Hospitals, Bungalows, Offices, Hotels, Factories, Theatres, etc.

176, Third Kumbharwada,
Bombay 400004.
Phones: 364232; Shop: 4221065

PLASTER OF PARIS

UNIVERSAL PLASTER INDUSTRIES

Mfrs. of:

Surgical Plaster of Paris, I.P. High grade dental, Unipotter pottery grade & all other grades of Plaster of Paris. Quality guaranteed.

20B, Belur Road, Liluah 711204,
Howrah (W.B.)
Phones: 664107, 665571, 662835, 220159.

PLASTIC ACRYLIC SHEETS-RODS

PLASTIKA ENTERPRISE

120, Bapu Khote Street, 1st Floor (Jamali Mohalla), Bombay 400003
Phones : *Office* : 339180, 336456; *Resi.* : 663639, 665331
Grams : "ACRYPLAST", Bombay 400003.

Dealers :

Acrylic Plastic Sheets 1 mm to 25 mm Clear & colour. Acrylic Rods/Tubes transparent 3 mm to 75 mm available Ex-stock. Cutting/Fabrication as per your drawing/design undertaken.

PLASTIC (ACRYLIC) FABRICATION

SUPER INDUSTRIES

201, Sona Udyog Industrial Estate, Parsi Panchayat Rd.,
Andheri (East), Bombay 400 069.
Phones : *Factory* : 563371; *Resi.* : 541302.

Manufacturers of :

Acrylic Plastic Glowsign Boards, Industrial Products, Gift Articles, Custom-made requirements for architects, designers and interior decorators.

Specialists in : Quality Furniture and Accessories for Hotels, Homes and Offices.

Dealers in : Acrylic Plastic Sheets, Rods & Tubes.

PLASTIC ARTICLES

VINYL PROCESSORS

Post Bag No. 6936, Bombay 400 054.
Phones : 535090 *Works* : 682076.
Grams : " VINYPROCES ", Bombay 400 054.

Manufacturers of :

Industrial Items, Automobile Parts, Charms, Industrial Give aways, Gifts, Novelties, Bottles and Containers, Stickers, Decals and Transfers.

PLASTIC BLOW MOULDING MFRS.

JAI KAUSHAL PLASTIC INDUSTRIES PVT. LTD.

Manufacturers of : Plastic Blow Moulding Containers for Packaging and Collapsible Tubes of all varieties.

Office: 31, Sutar Chawl, Bombay 400 002.
Phones : 328848/49.

Factory: *Unit No.* 1: Block-C, Ghatkopar Industrial Estate, L. B. Shastri Marg, Ghatkopar, Bombay 400 086. Phone: 582244.

Unit No. 2: M.I.D.C. Taloja Industrial Area, Plot No. 8, Dist. Kolaba, Village Navada, Taluka Panvel.

PLASTIC BAKELITE & RUBBER

VIJAY BAKELITE TRADING CO.

Manufacturers & Exporters of:

Beak-type droppers, dropper assemblies, pvc-rubber teats Caps, spoon, stoppers and polythene bags.

Office: 8, Chakala Street, Bombay 400003.
Tel: 320381-2, 343834.
Factory: 51, Industrial Area, Ulhasnagar 421004.
Tel: 429-888-165.

PLASTIC INTERCHANGEABLE DISPLAY AND CHARTING BOARDS

C.J. INDUSTRIES (LNL)

Manufacturers of

'Prestosign/Prestograph' Interchangeable Display and Charting Boards for Visual Planning, Organising & Control of Operations. Scripts Available: English, Hindi, Marathi & Arabic.

Hampton Court, Nathalal Parekh Marg, (Near Colaba P.O.), Bombay 400 005.
Phones: 213103/212752 Grams: PRESTOSIGN

PLASTIC DECORATIVE LAMINATES

CAPRIHANS INDIA LIMITED

Manufacturers of: Sungloss Decorative Laminate, Sunlam Industrial Laminate, Suntex P.V.C. Leather Cloth, Sunvic P.V.C. Rigid Sheets, Sunflex P.V.C. Films and Sheeting, Sunstrene High Impact Polystyrene Sheets, Sunpac Plastic Corrugated Board, Lustracote Art Paper, Chromo Paper, Art Card and Black Centered Art Card. Also White/Coloured Printing Papers, Wove, etc.

Block 'D', Shivsagar Estate, Dr. A. Besant Road,
Worli, Bombay 400 018.

Phones : 391961-66. Telex : 011-3169. Grams : "CAPRIHANS".

Branches : Delhi, Calcutta, Madras, Bangalore, Ahmedabad & Hyderabad.

PLASTICS

PEARL POLYMERS PRIVATE LIMITED

Factory:
27-A, Nazafgarh Road,
New Delhi 110015
Phone: 530789

Office:
204, Rohit House, Tolstoy Marg,
New Delhi 110001
Phone: 385733

Manufacturers of:
PVC Pipes, Profiles, Compounds, Master-batches, Polypropylene Films & Plastic Containers.

PLASTIC

RELIABLE & POPULAR HOUSE OF NIWAR
in attractive colours & designs for
domestic & furniture use.

Contact:

PRAKASH PLASTIC INDUSTRIES

F-2/B, Ruvapari Road,
Bhavnagar 364 001.
Phone : 28206. Grams : "NIWARHOUSE".

PLASTIC MACHINERY

"L-M-P" — Lavorazione Materie Plastiche S.p.A. — TORINO — Italy, Manufacturers of complete plant for Production of EXPANDED POLYSTERENE & POLYETHELENE SHEETS, RIGID P.V.C. PIPES, SECTIONS, SHEETS, FILMS etc.

S. R. M. P. — THERMOFORMING — MILANO — Italy: Manufacturers of thermoforming, vacuum-forming and form-fill — & — seal automatic machinery for packagings.

"CACCIA" world-famous ROTATIONAL Moulding machine, also turbo-mixers, dosers, vacuum feeding plants for plastic & chemical compounds (PVC resins etc.).

"EUROMATIC" — European Plastic Machinery Mfg. A/s. — COPENHAGEN — Denmark. Manufacturers of automatic machinery for plastic collapsible tubes.

Sole Agents :

JASHVANT C. SHAH & CO.

Bharati Nivas, Block No. 6, 1st Floor,
Besant Road, Santacruz (West), Bombay 400 054.
Phones : 561563 & C/o 317587. Grams : "OTCASNART."

PLASTIC MACHINERY

JUNEJA ENGINEERING WORKS

A-36, M.I.D.C. Industrial Area
Street No. 2, Andheri (East)
Bombay 400 093. (INDIA).
P. O. Box 9404. Phone : 576681.

Manufacturers & Exporters of ;
Machinery for Plastic Industry.

Specialists: (1) Blow Moulding Machines; (2) Extrusion Plants; (3) Scrap Grinders; (4) Colour Mixers.

PLASTICS MACHINERY MFRS.

R. H. WINDSOR (INDIA) LIMITED

Plot E-6, U Road, Thane Industrial Estate,
Thane 400 604.
Phones: 593561 (5 lines). Telex: 011-3497 RHW IN
Grams : "WINPLAS", Thane, Bombay.

Branches at :
Delhi, Madras, Calcutta, Ahmedabad & Bangalore.

Manufacturers of :
World famous "WINDSOR" range of machinery for processing Plastics, viz. Injection Moulding Machines, Blow Moulding Machines, Extruders, and Take-off Equipment, under exclusive licence and in collaboration with
GKN WINDSOR LIMITED
Chessington, Surrey, England.

PLASTIC MFRS.

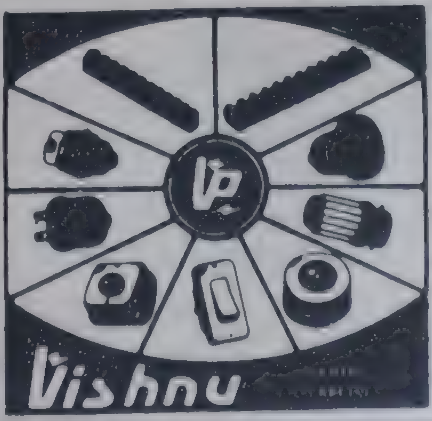
JAGDHIR DESAI & CO.

13, Rustom Sidhwa Marg (Gunbow Street), Fort,
Bombay 400 001.
Phone: 259996.
Grams: "ALLNOVEL".

Plastic Dealers and Manufacturers of Plastic Presentation Articles.

PVC Packaging a Speciality.

PLASTIC MFRS.



For Durability & Quality insist on **Vishnu** products

Manufactures & Exporters of :
Plastic Electrical Accessories, Industrial and House-Hold Articles.

10/1729, Sonifalia, Desaipole,
SURAT-395 001
(India).
C/o 39642.

PLASTIC PIPES & FITTINGS

CLIMAX PIPES PVT. LTD.

18B, Brabourne Rd.,
Calcutta 700001.

Gram: SUPERB Tlx: 021-2597
Branches at: Bombay, Baroda, Delhi.

Manufacturers of:

Polyethylene/PVC pipes & fittings and heavy duty wide width PE Film.

PLASTIC PURSES, HAND BAGS & FOLDERS

BACHUBHAI N. SHAH

Mfrs. of
Plastic Purses, Wallets, Diaries, Diary Covers, Folders, File Covers, Telephone Directory Covers, Foams, Ladies Hand Bags, Menu Card Covers, and Record Albums, All types of Book Covers.

170, Abdul Rehman Street,
Bombay 400003.
Phones: Off: 328387 Resi: 381314

PLASTIC VACUUM FORMING

THE VACUUM FORMING COMPANY

3/21, Prabhadevi Industrial Estate, 402, Veer Savarkar Marg, Bombay 400 025.

Phones : 4224430, 4224437.

Manufacturers of :

Vacuum Formed Industrial and Household Articles, Light Fixtures, Moulded Polythene Hats, Table Covers and Luncheon Sets, Decorative Trays, Wall Panels and Ceiling Boards, etc. Own Mould-making facilities. Prompt deliveries.

PLASTICWARE

MODERN PLASTIC COMPANY

36, Sutar Chawl, Bombay 400 002.
Phones : 320291 & 325797.
Grams : " PRIMEPAPER ", Kalbadevi.

Leading Dealers in :
INDUSTRIAL & HOUSEHOLD PLASTICWARES & MANUFACTURERS.

Stockists for :
POLYOLEFINS INDUSTRIES LIMITED, BOMBAY.

PLAYING CARDS MFRS.

THE HINDUSTAN PLAYING CARDS MANUFACTURING CO.

Vidyanagari Marg, Kalina, Santa Cruz (East),
Bombay 400 098

For Playing Cards to suit all tastes & pockets. Advertisement Playing Cards, Cartoons, Calendars & Offset Printing to Customers' satisfaction.

Phone : 534185. Grams : " HINDCARDS ".

PLAYING CARDS

METRO PLAYING CARD COMPANY

(Estd. 1948)

Manufacturers & Exporters of :
Quality Playing Cards, Pioneers in Publicity Playing Cards.

Branches at :
DELHI, CALCUTTA, MADRAS, KANPUR, RAIPUR, VIZIANAGARAM & VIJAYAWADA.

Head Office :
Metro Estate, Vidyanagari Marg, Bombay 400 098.
Phone : 531687.

PLYWOOD DEALERS & MFRS.

ABDEALLYS

Distributors of 'PG' Shuttering Plywood and Flush Doors. Dealers in all kinds of Plywood, Block Boards, Hard Boards, Laminated Sheets, etc.

119, Bazargate Street, Bombay-400 001.
Phones: 263842, 269225
Grams: "IMPEXAGENT"
Telex: 11-3181 NOOR IN

PLYWOOD

CITY PLYWOOD DEPOT

Distributors :

ANCHOR Plywood & Flush Doors, NOVATEAK Particle Boards, FORMICA Decorative Laminates, INSULATION Boards & JOLLY TILES, DECORATIVE Veneers & FEVICOLE.

Opp. Chitra Cinema, Dr. Ambedkar Road,
Dadar, Bombay 400 014.

Phones : 442927, 448623. Grams : " FURNIPLY ",

PLYWOOD MFRS. & DEALERS

MAHOMEDALLY VALIJI ARSIWALA

76, Abdul Rehman Street,
Opp. State Bank of India, Bombay 400 003.
Phone: 325900

&

145, Jamli Mohalla (Bapu Khote Street), Bombay 400 003.
Phone: 332467.

Dealers in all kinds of Plywood, Teakwood, Furniture wood and also chairs-seat.

PLYWOOD & LAMINATES

PLYWOOD EMPORIUM

Leading Stockists :
Formica, Lucky, Decolam, Sungloss, & other Laminates. Plywood—All types, Flushdoors, Insulation Boards, Perfotiles, Mowicoil, Fevicol, etc.

61, Chittaranjan Avenue, Calcutta 700012
Phones : 278808, 276326

PNEUMATIC TOOLS

INDUSTRIAL & MINING TOOLS CO.

Manufacturers & Stockists of:
Pneumatic Tools, Riveting and Chipping Hammers, Chisels, Snaps, Vibrators, Rammers, Steel Drills, Grinders, Impact Wrenches, Drill Rods and Drill Bits, Moil Points, Extension Drill Steel Equipments, Jack Hammers, Drifters, Pavement Breakers, Spares of Ranges, Down the Hole Hammers and Air Compressors of All Types, Air Line Lubricators, Air Hoses & Fittings Etc.

30, Chittaranjan Avenue,
Calcutta 700012.
Phones: Off: 27 4874 & 26 5056 Resi: 42 2770
Gram: AIRWHOLE

PNEUMATIC INSTRUMENT TUBING

UDEYRAJ & SONS

Specialists in single and multicore, armoured and unarmoured polythelene copper tubes etc.

P. O. Box No. 6562, Worli.
Bombay 400 018.

Phone : 392447.

PNEUMATIC TOOLS

PNEU-TECH ENGINEERING

17, Ashok Industrial Estate, P. O. Box No. 7772,
L. B. Shastri Marg, Mulund,
Bombay 400 080.

Manufacturers of :
Pneumatic Hand Grinders, Die Grinders, Angle Grinders, Heavy duty Straight Grinders and Chipping Hammers. Also Component Spares for Air Compressor & Pneumatic Tools.

Phones : *Office* : 595697, 501334 ; *Resi.* : 525238.
Grams: "NEWSPARES-MULUND", Bombay 400 080.

POLYTHENE PLASTIC BAGS, ROLLS MFRS.

LALITKUMAR & BROS.

Manufacturers of :
Polythene Plastic Bags, Layflat Tubings, Rolls etc. from 1" to 44" width in various gauges from 70 to 2000 gauges. Available mostly ex-stock.

Sales Office :
7/10, Botawala Bldg., 3rd Floor, Room No. 1,
8, Horniman Circle, Fort,
Bombay 400 023.
Phones: 319479, 316636. / *Res.*: 679845.

POLYTHENE TUBING, BAGS, SHEETS & ROLLS ETC.

POLYFAB PLASTIC INDUSTRIES

Polythene High density Coloured & Carrier Bags.

311, Navjivan Bldg., 121/127, Kazi Syed Street,
Bombay 400 003.

Phones : 323736, 346271 Grams : "POLYFAB".

POLYTHENE BAGS MFRS.

Manufacturers & Exporters of :
LD/HD POLYTHENE BAGS, ROLLS, HDPE WOVEN BAGS, FABRIC ROLLS, POLYPROPYLENE BAGS, ROLLS, ETC.
(TREATED/PLAIN/NATURAL/COLOURED)
PRINTED IN MULTICOLOURS.
Phones : Office : 343388 & 341744
Resi. : 474146
Grams : "KISHOREBAG", Bombay 400 003.

POLYTHENE INDUSTRIES

17/21, Essaji Street, Off Samuel Street,
Bombay 400 003 (INDIA).

POLYTHENE BAGS

POLYTHENE

TUBINGS • BAGS • ROLLS
PLAIN & FLEXO PRINTED
BAGS upto FOUR COLOURS

Mfgrs. **SHREE MAHALAXMI TRADING CORPORATION**
198, Kalbadevi Road, 3rd Floor,
Bombay-400 002, Phone : 31 43 41

Factory : 310, B. Mandapeshwar Ind. Estate, S. V. P. Road,
Borivli (W), Bombay 400 092.
Mfrs. also of Flexo Printed Polypropylene Bags & Sheets.

POLYTHENE PLASTIC BAGS, ROLLS MFRS.

TEX INTERNATIONAL

Manufacturers of:
POLYTHENE & H.M. COVERS, BAGS, SHEETS, ROLLS & PORTABLE GODOWNS in all sizes & gauges.

B-15 & 22, Ansa Industrial Estate,
Chandivali, Saki Vihar Road,
Bombay 400072.
Fact. Tel: 565846 Res. Tel: 562121

POLYSTYRENE MOULDING POWDER

We Book Indents for:
POLYSTYRENE MOULDING POWDER,
GENERAL PURPOSE, HIGH IMPACT,
From : ITALY.
CRYSTAL OR COLOUR.
PELLETS, GRANULES, BEADS, POWDER.
Also Polyethylene Powder from U.S.A.
Contact: Mr. Surveyor.

M/s. V. PECH & CO.
Aidun Building, Dhobi Talao,
Bombay 400 002.
Phones: 315534 253918. Telex: BYKM 011-4088.

PRECIOUS & SEMI-PRECIOUS STONES

Direct manufacturers of precious & semi-precious stones cut and polished for mounting, strings and necklaces of precious and semi-precious stones; jewellery of precious and semi-precious stones set in silver; Ivory carvings; exotic hand paintings on cotton, silk and ivory

YORK ENTERPRISES
(Gold Medalists)

Block N-209, Greater Kailash-I
New Delhi 110048
Phones 642708 & 641925 Cables YORKEN, New Delhi.
Telex No.: 31-4991 YORK IN

PRECISION & HIGH TENSILE MANUFACTURERS

NUTS

ADJUSTING, CAP, NYLOCK, CASTLE HEX.,
ROUND OR ANY SHAPE
for AUTOMOBILE & SPL. PURPOSE
APPROVED DEFENCE SUPPLIER

KAPURTHALA INDL. CORPN.
E-65, FOCAL POINT,
Ludhiana 141 010.
Phone : 34336.

PRECISION TOOLS

P. B. SHAH & CO. (MADRAS)

Specialist in
Engineering Precision tools, *Agents* for Mitutoyo Mfg. Co. Ltd., Japan, Distbors. for Gedore Tools, Addison-Tools, SAP Hack-Saw Blades, Yotana/Apex Vices, 'Geco' Revolving Centres, Praga Products.

182, Linghi Chetty St., Madras 600001.
PHONES : 29521, 25187

PRESSURE COOKERS

MARLEX

With Stainless Steel Containers
SIZES 4, 5, 6.5, 7.5, 9, 11, 12.5 or 16 LITRES.
VEEJAY'S TRADING CORPORATION
102, Raheja Chambers, 213, Nariman Point, Bombay 400020.
Phones: 223659 223927. Grams. "MARLEXCOOK".

PRINTING MACHINES & SUPPLIERS

CHANDLER & PRICE (INDIA) LTD.

Manufacturers & Suppliers of:
Fine Printing Machinery in collaboration with Chandler Price Co. of USA. Original Platen Presses, Pilot Presses, Automatic Paper Cutters also spares and rebuilding service

NSE Estate, Western Express Highway
Goregaon (East), Bombay 400 063
Phone : 682278.

PRINTING

GURU NANAK CALICO PRINTING WORKS

Manufacturers & Suppliers of:
Printed & Tukridar Chaddars of various new designs of Shamianas & Kanats with fast & guaranteed colours

F-18, D.B. Gupta Market,
Karol Bagh, New Delhi 110005
Phone: 521585

PRINTED CIRCUITS

"HIGH QUALITY CIRCUITS OF ALL TYPES"

Plated through Hole, Multilayer and other sophisticated Printed Circuits for Calculators, Computers, Instrumentation, Communication and Aerospace Applications.

HEGDE & GOLAY LIMITED

(An Indo-Swiss Joint Enterprise)

Messrs. Hegde & Golay Limited,
'Shreeshyla', 8th Mile, Kanakapura Road,
Bangalore 560062
Phones : 42111 (8 lines)
Telex : 0845-217 HG IN

PRINTERS (OFFSET)

JAY PRINT PACK PVT. LTD.

Printers by Photo Offset, handling all kinds of jobs — Reprints of books, labels and packaging items.

8/39, Kirti Nagar Industrial Area,
New Delhi 110015.

Phones : 537353, 533344.

PRINTING INK MANUFACTURERS

J. B. A. PRINTING INKS LTD.

Registered Office :
Lal Bahadur Shastri Marg, Bhandup, Bombay 400 078.
Phones : 592471 (3 lines), 501386, 593070.
Grams : "BESTINX." Telex 011-2386.

Manufacturers of: PRINTING INKS AND VARNISHES

Branch Factories :

Bombay : Lal Bahadur Shastri Marg, Bhandup, Bombay 400 078.
Calcutta : 211/207, Upen Banerjee Road, Behala, Calcutta 700 060.
Delhi : A-42, Rewari Line, Ind. Area Phase II, Mayapuri, New Delhi 110 027.
Madras : Plot No. 76, Ambattur Ind. Estate, Ambattur, Madras 600 058.
Nagpur : Shed A-7, Plot B-11, M.I.D.C. Ind. Estate, Hingana Road, Nagpur.
Ahmedabad : A-1/3, G.I.D.C. Ind. Estate, Naroda, Ahmedabad.

PRINTING PRESS

PUBLICITY PRINTERS

(OFFSET)

Specialists in the manufacture of:

- ★CARTONS
- ★LABELS
- ★CATCHCOVERS
- ★BAGS
- ★POSTERS
- ★CALENDARS
- ★LEAFLETS
- ★FOLDERS

OFFICE: 7, Homji Street, Fort, BOMBAY-400 001.
Phones: 261502/3 & 261297.

PRESS: Publicity House, Tokarsi Jivraj Wadi,
Sewree, BOMBAY-400 015.
PHONES: 443574 & 440299

PRINTING METALS

SHANTI METAL REFINERY

Manufacturers of :

- ★ Type Metals
- ★ Lino Metals
- ★ Mono Metals
- ★ Stereo Metals
- ★ Antimonial Lead

Office :
Shanti C-7, Opp. Kaveri Building, Datta Mandir Road,
Dahanukar Wadi, Kandivli (West),
Bombay 400 067.
Phones : 682221, 694785.

PRINTING INKS DEALERS

SUPER INKS TRADERS

Leading Dealers in
FLEXO Gravure, Printing Inks, Matric Sheets, Stereo Rubber, Distributors for Coates, Rainbow, Ganges, United, JBA Printing Inks.

114, H. R. D. Centre, D. S. Phalke Road, Bombay 400014.
Phones: 446260, 446894, Resi. 471403.

PRINTING PRESSES

ALMATS PRINTERS

7A-8A, Thakkar Industrial Estate,(Delisle Road) N. M. Joshi Marg, Bombay 400011
Phones: 370409-378832

Quality Multicolour Printers

Specialists in :
Colour Cartons, Labels, Literature, Magazines, Calendars, Diaries, Wedding & Greeting Cards.

PRINTERS — LETTERPRESS

ASHOK PRINTING WORKS

22A, Syed Abdulla Brelvi Road,
(Parsi Bazar Street), Fort, Bombay 400 001.
Phone : 255347.

Quality Printers for :
OFFICE REQUIREMENTS

PRINTING PAPER CONVERTING MACHINES & SUPPLIES

INDO-EUROPA TRADING CO. P. LTD.

Mfrs., Importers, Exporters & Suppliers of

All kinds of Printing—Letterpress, Offset, Rotogravure, Flexographic-machines, Cardboard Box & Carton Making, Book-Binding, Paper Converting & Allied machinery & materials. Sole Agents for English Halley Rotogravure Printing Machines, GBC American Laminating Plastic Comb binding, Paper Shredding, ID Photo Systems, Collating machines & supplies. Famous Tiger Brand Paper Cutting Machines, Italian Automatic Paper Cutting Machine, Automatic Paper Bag etc.

9, Dalal St., Fort, Bombay 400023.
Phones: 274730 & 271921
Shantilal K. Doshi—Bombay 400007. (Residence)
Phone: 379282
Offices: Delhi, Madras, Calcutta. **Factories:** New Delhi, Madras.

PRINTING PRESSES

THE IDEAL PRINTERS PVT. LIMITED

Regd. Office & Works : Unit No. 1, Bell Bldg., Sir P. M. Road, Bombay 400 001.—Phone : 253626.

Unit No. 2—ASOKA PRESS, Gokhale Road South, Bombay 400 025. — Phone : 4224293.

Unit No. 3—Elar Bldg., Senapati Bapat Marg, Bombay 400 028. — Phone : 4220963.

Unit No. 4—Shri Laxmi Silk Mills, Kasturchand Mills Estate, Bombay 400028.—Phones: 4223671 & 4222392.

PRINTERS' SUPPLIERS

RAJ & COMPANY

DEALERS IN : Printing Machinery, Inks, Roller Composition, Types, Cornerstone Pattern Quoins, Lightweight Metal Furniture, Hand & Type High Numbering Machines, Paper Cutting Knives, Steel Cutting Rules & complete line of Sundries for Letter Press & Box Making Units. ALSO Sundries for Offset Units :—Rubber Blanket, Damping Hoses, Graphic Films, Zinc Plates, Moleskin, Sponges, Bronze Powder & other Sundries.

AGENTS FOR : " PRINITEX " Indian Make Printing & Paper Cutting Machines.

STOCKISTS : " SUPERTYPES ", " TYPES THAT TALK " Cast to last.

" Technova " Aluminium Anodised Plates

40, Cawasji Patel Street, Fort, Bombay 400 001.
Phones 317512, 257468 ; Res. : 522080. Grams : " INKOPRINT "

PRINTING TYPES & MACHINES REQUISITES

KAMLA TYPE FOUNDRY (P) LTD.

1686, Sohanganj, Subzimandi, Delhi 110 007.
Phones : 223776 & 228359.

Manufacturers & Exporters of :

Hindi, English, Punjabi, Russian Types & Borders etc.

PROFILE CUTTERS

PLATE PROFILE INDUSTRIES

Manufacturers of

M.S. Profile Cutting from 5 mm to 250 mm thick and dealers in Iron & Steel. Specialists in Gear Box Template of Cranes.

Plot No. 55, 1st Lane,
Darukhana, Mazagaon,
Bombay 400010.
Phones:
Off.: 397695; 899911 Resi.: 676076

PROVISION MERCHANTS

GREAT WESTERN STORES

(*Proprietors :* F. D. Mehta & Co.)

Wine & Provision Merchants and Cold Storage Specialists.

Standard Building, Dr. Dadabhai Naoroji Road, Fort, Bombay 400 001.

Phone : 316941.

PUBLICITY ORGANISERS

SELVEL PUBLICITY & CONSULTANTS PRIVATE LTD.

All-India Outdoor Publicity Organisers.

Ravindra Mansion Annexe,
194, Dinshaw Vachha Road, Bombay 400 020.
Phones : 240512 & 240560.

Branch Offices at :
Madras, Bangalore and Hyderabad.
Associated Offices at: Calcutta, Delhi and Jaipur.

PUBLISHERS, BOOKSELLERS & PRINTERS

Hind Pocket Books Private Ltd

Pioneer Publishers of quality paperbacks in English, Hindi, Urdu & Punjabi.

G. T. ROAD, DELHI-110 032.

Phones : 202046 & 202332.

PUBLISHERS & BOOKSELLERS

RAJPAL & SONS

leading Publishers and Booksellers and largest Stockists of Hindi Books.

Showroom :
Kashmere Gate, Delhi 110 006.
Phone : 226201.

Office :
Kashmere Gate, Delhi 110 006.
Phones : 223904, 229174.

PUBLISHERS & BOOKSELLERS

Rupa . Co.

Book Publishers, Agents and Wholesalers.

15 Bankim Chatterjee Street, Calcutta 700 073.
94 South Malaka, Allahabad 211 001.
102 Prasad Chambers, Opera House, Bombay 400 004.
3831 Pataudi House Road, Daryaganj,
New Delhi 110 002.

PULLEYS

STANDARD MATERIALS AGENCIES

Pulleys made from Cast Iron, Steel or Aluminium either solid or Split type for 'V' Belts, Link and Canvas Belts or Ropes.

P. O. Box 1660, 45/46, Podar Chambers
S. A. Brelvi Road, Bombay 400 023.
Dial : 253202/253262. Cable : "STANSIZE"
Telex : 011 3281 SMA IN

Regional Offices : Ahmedabad, Madras, Calcutta.
Representatives at : New Delhi, Pune

PUMPS & PUMPING MACHINERY

(Electrical & Diesel)

DREWET CHOWNA & CO.

Pumps Specialists :

Centrifugal, Deep and Shallow Well, Sewage, Acid, Chemical etc. Hydraulic, Ship Jacks, Car Washers, DCC Hydraulic Test Pumps, Air Compressor, Air Blower. Service after sale guaranteed.

Adenwala Bldg., 123, Medows Street, Fort,
Bombay 400 001.
Phones : 274112 & 274124.

PUMPS & PUMPING MACHINERY

MAHARASHTRA MACHINERY SPARES CORPN.

Dealers in :

Electric & Diesel Monoblock and Coupled Highhead & Deepwell Pump Sets for Fire-Fighting & Water Supply. Also Submersible, Chemical & Rotary Gear Pumps and their replacement spares. *We undertake Erection, Maintenance & Repairs of all types of Pumps.*

32, Bombay Samachar Marg, Fort, Bombay 400 023.
Phone: 274843.

PUMPS MFRS.

GENERAL MACHINERY CORPORATION (CALCUTTA)

13, Ganesh Chandra Avenue, Calcutta-700 013
Phones: 266826, 269360.
Gram: 'JAGRITI'

Manufacturers of

GMC Gear Oil Pumps, Centrifugal/Centripedal Pumps, Generating sets, Authorised dealer for Suguna Single Phase Motors, HBB Motors, MEI Control Gears, ELMECH Power Capacitors, Jyoti Pumps Specialists in Marketing monoblock, domestic, sewage pumps, jet & Ejecto pumps, Gear Oil Pumps, Chemical Pumps, Irrigation, High Pressure High Head Industrial Pumps.

PUMPING SETS & ELECTRIC MOTORS

NEW INDIA ELECTRIC & TRADING CO.

Suppliers of Pumping Sets for Agricultural, domestic & Industrial use, Monoblock types, Deepwell Boiler feed, rotary, chemical & vacuum pumps. Electric motors single & 3 phase, S. Agts: Lincon Motors, Starters & Main Switches.

38, Ambalal Doshi St., Hamam House, Bombay 400 023................ Phones: **271177/271597**

PUMPS & PUMPING MACHINERY

VIJAY ENGINEERING & MACHINERY CO.

Bombay Mutual Annexe Building, Cawasji Patel Street,
Fort, Bombay 400 001.

Phones : Regd. Office : 257836 & 298991.

Sales Office: Sharif House, 74, Shaheed Bhagatsingh Rd.,
Fort, Bombay 400 023. Phone : 252576.

Distributors—Dealers for Kirloskar Diesel Engines, Kirloskar Electric Motors, Kirloskar Asea Starters, Kirloskar Diesel Engine Pumpsets, Kirloskar Electric Pumpsets, Jyoti Vertical Turbine Pumps, Mico Fuel Injection Equipments.

PUMPS & PUMPING MACHINERIES

WATER SUPPLY SPECIALISTS PVT. LTD.

Regd. Office : 8, Ambalal Doshi Marg,
Bombay 400 023.

Phones : 274396 & 274554.
Grams : " PUMPMEN ".

" WASP " Shallow-Well & Deep-Well Non-Automatic and Automatic Water Systems to ensure cool, fresh, pressurised supply of water for households, industries, villages, etc. Also available : High-Pressure Bulldozer Reciprocating pumps, Triplex Reciprocating pumps for Industrial Cleaning ; Boiler Feeding etc. ; Deepwell Submersible pumps ; Deepwell Turbine pumps ; Centrifugal pumps ; Rotary Gear & Vane pumps; Back-Pull-Out Design Chemical Process pumps ; Chemical Process pumps in Ultra High Molecular Weight Polyethylene ; Fountains ; Sprayers ; Car-Washers ; Hydraulic Test pumps and Hand pumps.

PUMPS & PUMPING SETS

DREWET CHOWNA & CO.

Pumps Specialists — Centrifugal, Deep and Shallow Well, Sewage Acid, Chemical, Fire Fighting Hy. Hand Test, Pressure Pump etc. Hydraulic Ship Jacks, Car Washers. Service after sale guaranteed.

Adenwala Bldg., 123, Medows Street, Fort,
Bombay 400 001.

Phones : 274124 & 274112.

PUMPS & PUMPING SETS

TALWALKER BROTHERS LTD., W.R.

For all types of 'KIRLOSKAR' Pumps, Specially suitable for Air-conditioning, Chemical, Sugar and Sewage Plants, Submersible Pumps, Jet Pumps, Self-priming Pumps, Gear Pumps etc. Pumps of various material of Construction. Monoblock Pumping Sets, Sugarcane Crushers & Groundnut Decorticators, Sluice & Reflux Valves, Cast Steel Valves, Pulp & Foot Valves. Diesel Oil Engines, Water Cooled & Air Cooled, Marine Engines, Diesel Engines for repowering Petrol Jeeps, Electric Motors of all types, Flame-proof Motors, Geared Motors, Starters, Alternators, Coolant Pumps. ALSO ENGINE & ELECTRICAL DRIVEN FIRE FIGHTING PUMPSETS.

Lentin Chambers, Dalal Street,
Bombay 400 023
Phones: 271774, 271657 & 271875
Grams: "PUMPENAMEL".

PYROMETERS

UDEYRAJ & SONS

Specialists in Thermocouples, Resistance Thermometers, Pyrometers, Cables etc.

P. O. Box No. 6562, Worli,
Bombay 400 018.

Phone : 392447.

P.V.C. LEATHER CLOTH MFRS.

THE BHOR INDUSTRIES LIMITED

Manufacturers of ' Valkal ' the most modern match for leather, ' Raja ' brand P.V.C. Leather Cloth, ' Feather Touch ' expanded Vinyl (Foam) Leather Cloth, ' Natraj ' Brand P.V.C. unsupported Films & Sheetings, ' Marblex ' Asbestos Vinyl Flooring Tiles, ' Muralon ' Wall Covering, ' Steelgrip ' P.V.C. Electrical Insulation Tape, ' Book Binding Cloth '.

Regd. Office : Sir Vithaldas Chambers, 16, Apollo Street,
Bombay 400 023

Trade Enquiries to Sales Division at
392, Veer Savarkar Marg, Bombay 400 025.
Phones : 4222241-2. Grams : " COVERCLOTH ".

P.V.C. LEATHER CLOTH MFRS.

DHARAMPUR LEATHER CLOTH CO. LTD.

10, Chowpatty Sea Face, Bombay 400 007.

Manufacturers of :

PVC Leather, Sheeting, Oil Cloth, Hood Cloth, PVC Coated Acid and Alkali Resisting Hand Gloves, PVC Wallpaper.

Phones: 359258 & 350600. Grams: " PUNEM ".

P.V.C. SHEETS

Authorised Dealers :

* **CALICO** " CALIPLAST " brand P.V.C. Sheets. Calender Foils for general purpose, Opaque and Transparent Decorative Sheets, Flexible Sheets for Gaskets & Packaging and Flooring Sheets.

DILIP PLASTICS

5, Shamsheth Street, Bombay 400 002.

Phone : 330845. Grams : " STYLOART ".

PVC/PLASTIC RAW MATERIAL

HEMANT UDYOG

63, Rama Marg,
NEW DELHI 110015.

DEALERS AND STOCKISTS:
ALL KINDS OF P.V.C. RAW MATERIALS.
Phones: 53-1770 & 534861

P.V.C. SOLVENT CEMENT

For your requirements of:
'M-SEAL' 'Araldite' 'Threseal'. 'Fevicol'. 'Dendrite'. 'Speb-7' Adhesives. Moly & Mosil Lubricants. P.V.C. Solvent Cement. Glass Wool. 'BOLINJ-KAR' Steel Belt Lacings. 'India Super Graphite Crucibles, Fibre Sheet, HAWCO Surface hardening Powder. Silicone Spray. Dic Penetrant. Loctite & Fortite anaerobic adhesives. Coating Compound. Silicone Greases. Plus-Gas'. 'Rustolene' & 'Loozen' Rust Releasers.

Contact: NAGDEVI TOOL STEEL MART

186, Nagdevi Street, Bombay 400003.
Phone: 323023. Gram: 'TENDERERS'.

RADIO COMPONENTS

Fuse Holders & Glass Fuses, Terminals & Banana Plugs, E.P. Plugs & Sockets (Diff. TY.), RCA Plugs & Sockets, DC Plugs & Din Plugs, LED Holders & Turret Terminals, Recording Cords (Diff. TY.), A/C. Btty. Cords & Sockets Etc.

AHUJA ELECTRONICS

Katra Sat Narain (3rd Floor), 1219, Chandni Chowk, Delhi-110 006.
Phones: 250292, 258185

RADIO COMPONENTS

SINGH RADIO COMPANY (INDIA) PVT. LTD.

Manufacturers of:

Orion Tape Recorder, Calculator, Radios & Cassette Tapes

21, Darya Ganj, Ansari Road,
New Delhi-F.A.C.
Phones: 274278/537712/532014

RAYON, NYLON AND POLYESTER YARN MANUFACTURERS

THE BARODA RAYON CORPORATION LTD.

Manufacturers of :
Rayon Yarn, Nylon Yarn, Polyester Yarn, Sulphuric Acid, Anhydrous Sodium Sulphate, Sodium Sulphide & Carbon Disulphide.

Head Office :
Hoechst House, 193, Backbay Reclamation, Nariman Point,
Bombay 400 021.
Phone : 232030. Grams : " RAINBOW "
Telex : (FATE) 011-3436
(FATE) 011-4719 Purchase & Sales Deptts.

Registered Office : P.O. Baroda Rayon, Udhna,
Dist. SURAT 394 220.
Phone : 88371 Grams : " RAINBOW ". Telex : BRC 018 217
Managing Director : S. P. GAEKWAD.

REAL ESTATE AGENTS

AUTO ASSOCIATES

Real Estate Agents & Automobile Consultants

Blumoon Complex, 63, M. G. Road,
Bangalore 560001.
Phones: 51201, 50784

REFRACTORIES

Bhaskar Stoneware Pipes Pvt. Ltd.

(Per Pro Amar Nath Bhaskar Sons)

Mfrs. of Refractories, Insulating Bricks & Cements, Firebricks, High Alumina, Sillimanite, Acid Resisting Bricks, Castables, Ramming Masses, S.W. Pipes.

H.O. Ishwar Nagar, Phones:
New Delhi 110065 636272
638157
Amar Nagar (20.4 KM, Mathura Road)
Faridabad 121003 825581
Sales & Works, Faridabad 825221

REFRACTORIES

CALCINED BAUXITE

JELLY & CO.

301, Dalamal Chambers
29, New Marine Lines, P.O. Box 11102
Bombay-400 020, Tel: 294036,
318557, Grams: JELUMINA

Stockists for

REFRACTORIES

PIONEERS IN REFRACTORIES

ALEXANDER & RAYMOND (Bombay)

Manufacturers of : High Temperature Fire Cements, Castable Refractory Concretes, High Heat Duty Ramming Mass, Lining and Maintenance Refractory Materials. Boilers & Steam Pipe Lagging. Bitumen Water Proofing Compound. Also undertake complete refractory lining of all types of Boilers and Furnaces.

P. O. Box No. 1046, Bombay 400 001.
Phone : Res. : 573040.

REFRACTORIES & FIRE BRICKS

INDUSTRIAL MINERALS & MILL STORES TRADERS

Mercantile Bldgs., P. B. No. 2076,
Calcutta 700 001.

Manufacturers of :

'IMCO' Complete Refractories including Brick, Cement, Castable, Monolithic, Insulating, Ramming Mass etc., etc.

Branches :

P. B. No. 1195, Delhi 110 006.
P. B. No. 1445, Madras 600 017.

REFRACTORIES

MAHAVIR INSULATIONS PVT. LTD.

Manufacturers of special type of Insulation Refractories such as Mica Insulation Bricks a perfect substitute of Diatomicious, Molar, Keisulgher Bricks. Hot & Cold Face Insulation with Bauxite & Kyanite base, Insulation Castables, Insulating Aggregate and Insulating Mortar, Cement, Pourable Insulations and Insulating Bricks as per ISI Specifications

Mahavir Nagar, Gangapur Road, BHILWARA-311 001 (Rajasthan).

Phones: 6885, 6510, 6207

Cable. 'MIPL'.

REFRACTORIES

MAHAVIR REFRACTORIES CORPORATION

High Alumina Bricks, Standard and Special Size Fire Bricks, Cupola, Seating Blocks, Arch Bricks, Sillimanite Bricks, Acid Proof Bricks, Insulation Bricks (Hot and Cold Face), Mica Insulation Bricks, Special shaped Bricks as per drawings, Chemically Bonded Magnesite Bricks, Magnesite Ramming Mass, Heat Resisting Cement, Marcoset-50, Castable Refractories, etc.

Maker Bhavan No. 2, 18, New Marine Lines,
Bombay 400 020.
Phones : 311742, 311969, 311934 ; *Godown* : 396447.
Telex : 011-4220 Fire.

REFRIGERATION AND AIR-CONDITIONING

KHERA GAS SERVICE

Authorised dealers in Kelvinator Refrigerators, Air-conditioners, Washing Machines, Water Heaters, Delstar Vacuum Cleaners, Burshane Gas and its appliances.

11, Roshanara Road, Delhi-110007.

Phone: 256865.

REFRIGERATION & AIR-CONDITIONING

Refrigeration & Air-conditioning Components & Spares, Compressors, Overload protectors, Relays, Thermostat controls, solonoid valve, thermometer, open & sealed compressors. Freon/Mafron (refrigeration gases) 11, 12, 22 and others.

Contact:

NAYAN TRADE CORPORATION

G.P.O. Box No. 10061, Bombay-400 001.
Phones: Off.: 273842; Res.: 585668

REFRIGERATORS & AIR-CONDITIONING

RADIOCRAFTERS

Headquarters for Sales-Service—All types of Industrial, Marine, Domestic Refrigerators, Air-conditioners.

Opp. Charni Road Railway Stn., Queen's Road, Bombay-400 004.
Phones: Office: 354406, Works: 356003.

ROLLER CHAINS

RAJKAMAL TRADERS

23, Hamam Street, Bombay 400 001.
Phone : 270463.

Sole Distributors for .

IDEAL make Loom accessories and also stockists for Flat Card Top Chains and Lappets. Stockists for all kinds of imported and indigenous Transmission Steel Roller Chains — British & ASA Standards. Stockists for ROLEX ' Brand PIV Gear Chains

ROLLER GRINDING

INDUSTRIAL GRINDING CO.

Grinding & Polishing of Rubber/Ebonite rolls, cotton Bowls, jute Bowls, Metal rollers and all types of Industrial rollers.

110, Naroda Indust. Estate, Naroda, Ahmedabad 382330.
Phone: 827277

ROLLING MILLS CRUCIBLES

We Book Indents on behalf of :

M/s. MORGAN THERMIC, FRANCE

SILICON CARBIDE & MAGNESITE CRUCIBLES
in various shapes, size and types.
Mr. SURVEYOR

Contact :

Messrs. V. PECH & CO.

Aidun Building, 5th Floor, Dhobi Talao,
Bombay 400 002.
Phones: 315534 252918. Telex : BYKM 011-4088.

ROLLING SHUTTERS

SATJAI ENGINEERING INDUSTRIES

56A, Dilshad Garden, Shahdara, Delhi 110 032.
Phones : 202335 & 202468. Grams : "SATROLL"

Satendra Jain, *Proprietor.*
Res. Phone : 668727.

Manufacturers of :

Rolling Shutters in special heavy and jointless slats of deep convex corrugations, Electrically operated shutters conforming to ISI 6248 – 1979, Rolling Grills, Steel Windows, Doors as per ISI 1038 – 1975, Steel fabrications etc. Suppliers to Govt. & Private Contractors, CPWD, P & T and other Govt. Departments.

ROLLING SHUTTERS MFRS.

STAR ROLLING SHUTTERS MFG. CO.

Manufacturers of All Types of :-

Rolling Shutters, Collapsible Doors, M. S. Grills, Water Tanks, Structural Works, Steel Windows, Compound Gates etc. etc.

Factory:

Plot No. 43, Street No. 14, Marol M.I.D.C., Andheri (East),
Bombay 400093.

Office:

139, Dr. Mitrasen, Mahimtura Marg, Near Round Temple,
S.V.P. Road, Bombay 400004.

Phones :

Factory : 579268, Office : 354315, Resi : 578204

ROPE MERCHANTS

ADAMJI KADERBHOY

(Estd. 1894)
337, Katha Bazar, P.O. Box 5046, Bombay 400 009.
Phones: 321533 & 322485. Grams : "RAJKOTWALA"
Telex : 011-5800.

Manufacturers : Stockists of Manila, Sisal, Hemp, Wire and Coir Ropes, Polyfin Ropes & Twines, Coir Mattings, Jute Ropes and Products, Flax, Twines, Cordages, Flax Canvas and Tarpaulins, Chains, Chain Slings and all kinds of lifting Tackle and Shipchandlery Stores. Exporters and Importers.

Distributors for :

The Ganges Rope Co. Ltd., Calcutta.

ROPE DEALERS

PIPES, HARDWARE & GEN. MERCHANTS

CHANDULAL & CO., KATHAWALA

Dealers in Coir yarn, fibre & ropes, Sisal, Manila & Synthetic Ropes, Jute Spun Yarn, Coal tar, Coal Pitch etc. Pipes-fittings, Iron, Hardware & General Merchants.

11, Kazi Syed Street (Shak Gali),
Bombay 400009
Phone: 325598 Branch: Jew Town,
Gram: CORDCOIR COCHIN-2

ROPES & TAPES

TODI & CO.

Manufacturers :

ROPES, WEBBINGS, CORDAGES & TAPES in COTTON, NYLON, RAYON or SILK.

Office :

Todi Estate, Sun Mill Compound, Lower Parel,
Bombay 400 013.
Phone : 371336.

Sales Office & Works :

Mathuradas Mill Compound, Lower Parel,
Bombay 400 013.
Phones : 374568 & 393588.

Manufacturers of :

Rope Ladders & Endless Belts.

ROPERIES

OCHHAVLAL CHHOTALAL & CO.

207-209, Nagdevi
Street, Bombay
400 003.

Stockists of .

Manila, Sisal Ropes, Spun Yarn & Synthetic Ropes, etc. Mfrs. of Slings & Nets, Cotton & Jute Ropes, Tubular Bindings, Twine, Strings, Line Dori, Jute & Hemp Heald Cord, Webbings, Tapes, Cotton & Nylon. Authorised dealers, Jaya Shree Textiles & Industries Ltd., for Flex & Linen Threads

Phones: Office: 324944. Resi.: 816926 Grams "KACHERIA,"
Chinch Bunder, Bombay

ROPES & SHIPCHANDLERS

ADAMJI KADERBHOY

Specialists in :

Ropes—Manila, Sisal, Coir, Hemp, Jute and Wire, Synthetic Ropes and Twines, Fibre, Wire & Chain Slings and Netslings, Fenders, Blocks, Shackles and General Shipchandlery Stores, Flax Twines, Canvas and Flax Products.

Distributors : Ganges Rope Company Limited.
Sole Stockists : Jay Shree Textiles & Industries.
337, Katha Bazar, Bombay 400 009.
Phones: 321533, 322485. Grams: " RAJKOTWALA".

ROSIN & TURPENTINE

EMPEE CORPORATION PVT. LTD.

44, Cawasji Patel Street, Bombay 400 001.

Selling Agents of :

" CHIR " brand Rosin & Turpentine
to I.S.I. Grade.

Grams : " ROSTURP ". Phone : 257782.

ROSIN, FORTIFIED ROSIN SIZE, TURPENTINE, ESTER GUM, PINE OIL & SYNTHETIC RESINS

PRABHAT GENERAL AGENCIES

Manufacturers of :

Pine Oil, Terpeneol, Terpinolene, Dipentene, Veg. Turpentine, Modified Phenolics, Mallics, Alkyds, Pine Tar Gum, Rosin etc.

195, Kalbadevi Road, Bombay 400 002.
Phone: 310359 (3 Lines).
Telex: PEEGEEA—011-4161.

ROSIN & TURPENTINE

TASHI ROSIN & TURPENTINE PROJECT

SAMDRUPJONGKHAR

BHUTAN

RUBBER GOODS DEALERS

AEROSHYAMM

(Estd. 1954)

Rubber Rollers, suitable for Binny Satke. Dandekar KIRON. MG. Shakti. ONKAR. Damodar (Japan) & Equwalent Machines. Rice Polishers for Modern Rice Mills, Paddy Separator Wheels Solid Balls. V-Belts BB 80 and BB 75 special size & other sizes. Table Mats. Nail Brush. Foam Rubber Mattresses and many items.

22, 1st Flr., Swadeshi Market,
Sadar Bazar, Delhi 110006
Phone: 514557 Grams: "ANNOOPPAMM"

RUBBER 'O' RINGS & OIL SEALS

GOTOM ELASTOMERS

3/156, Subhash Nagar,
New Delhi 110 027.

Manufacturers :

'O' RINGS, OIL SEALS, HYDRAULIC SEALS, DIAPHRAGMS & OTHER SYNTHETIC RUBBER PARTS FROM NEOPRENE SBR, NITRILE, POLY ACRYLIC, SILICONE & VITON RUBBER AS PER SPECIFICATIONS.

RUBBER GOODS MFRS.

HINDUSTAN RUBBER WORKS

P. Box No. 9104, Prabhadevi, Bombay 400 025.

Manufacturers of:

Rubber/Ebonite Rollers, Rubberlining of Tanks & Industrial Articles of Rubber/Ebonite

Phone: 4221965.

RUBBER LINING & RUBBER GOODS

INDUSTRIAL LININGS

Rubber-lining of Chemical Equipments, Mfrs. of Moulded & Extruded Rubber Products, Rubber Rollers.

547, Kalbadevi Road, (Dhobitalao)
Kavarana Bldg., Bombay 400002.
Tel.: 311809

RUBBER GOODS

JAYASHREE RUBBER INDUSTRIES

Post Box No. 3673, 88/90, Kika Street, Bombay 400 004.
Phone : 361292.

Manufacturers of :

Moulded & Extruded Rubber Components from Neoprene Nitrile, Hypalon, Natural, Ebonite, Silicon & Viton Rubber for Rayon, Cement, Chemicals, Sugar, Engg., Fertilizer & Petro-Chemical Industries, 'O' Rings, Oil Seals, Heavy Duty Canvas Impregnated 'U', 'V' & Cup Seals, Gaskets, Bushes, Diaphragms with Nylon & Canvas Reinforced & any Rubber parts as per Customer's Drawing and Specification.

Specialists in :

All kinds of Rubber Tubings for Air, Gas, Vacuum, Acid & Chemicals.

RUBBER GOODS

For 20 years we have maintained high standard of quality:

Rice De-husking Rubber Rolls, Speciality Rubber to metal bonded components, Factorises, Reclaim Rubber.

Contact

ORGANO CHEMICAL INDUSTRIES

M-3, Industrial Area, Sonepat.

RUBBER/EBONITE ROLLS & RUBBER BLANKETS

M/s. LATHIA INDUSTRIAL SUPPLIES CO. P. LTD.

Manufacturers of

Rubber-ebonite rollers, Rubber blanket for shrinking range and Dull finish, Evaset rubber sleeve, Expander rubber sleeve, rubberlining and industrial rubber articles.

108/110, Naroda Industrial Estate,
Naroda, Ahmedabad 382330
Phones: 827338, 827339 & 827340
Grams: "UCANRELY" Telex: 012-407

RUBBER GOODS MFRS.

KIRTI RUBBER WORKS

205-7, S. V. Road, Jogeshwari,
Bombay 400 102.
Phones : 573639 & 572076.
Grams : " EVERLAST ", Bombay 400 102.

Specialised in :

Rubber/Ebonite Rolls, Rubber Lined Vessels & Pipes, Natural/Neoprene/Hypalon/Butyl Industrial Moulded and Extruded Goods and Diaphragms for all types of Valves.

RUBBER GOODS MFRS. & DEALERS

MERCHANT BROTHERS

151, Nagdevi Street, BOMBAY 400 003.
Phones : *Office* : 326840. Grams : " YOUTH "
Resi. : 810056.

Authorised dealers of : DUNLOP & GOODYEAR

Rubber Hose, Beltings, V-Belts, Trolley Wheels, Fire-fighting Equipment, Rubber Sheets, Insertions, Rubber Gloves, Gum-Boots, Plastic Pipes & Fittings, Oil Resistant Neoprene Sheet & Other Moulded Parts, etc.

TRADE INQUIRIES INVITED.

RUBBER GOODS

PATCO INDUSTRIAL SUPPLIES

Mfrs. of:

Moulded Industrial Rubber Goods & Allied Rubber Parts for Sugar, Chemical Cements, Paper General Engg. Industries. Also Rubber Lining of Eqpts.

176-178, Indt. Estate, P.O. Sangli Dist.
Sangli (Maharashtra) 416416
Phone: 2076.

RUBBER GOODS

RAWAL RUBBER WORKS INDIA PVT. LTD.

Pioneer Manufacturers of:

All types of Rubbers & Ebonite Rollers.

Factory: Parsee Panchayat Road, Andheri (East), Bombay 400069
Phone: 574752
Office: 1st Floor, Sukh Sagar, Sandhurst Bridge, Bombay 400007.
Phones: 354283 & 356824

RUBBER FOAM & POLYURETHANE FOAM

TRADE LINCS

Wholesale dealers in:

Rubber Foam & Polyurethane Foam Sheets, Mattresses, Bus, Scooter, Cinema & Car seats & Rilaxon Coir Foam.

96, Muktaram Babu Street, Calcutta 700007.

Phones: 34 0679/2628. Gram: FOAMAT.

RUBBER PRODUCTS MFRS.

RUBBER & ALLIED PRODUCTS

36, Madhusudan Palchodhury Lane,
Howrah 711 101.
Phones : 69-2151, 69-2270.
Grams : " WHEELTYRE ".

Manufacturers of :

All sorts of Moulded, Extruded jobs, Lining of Tanks & Pipes ; Rubberising of Rollers & Manufacturers of Rubber Water Stop, etc.

SAFETY APPLIANCES

CROWN INDUSTRIES

Matani Niwas, New Nagardas Road, Andheri (E),
Bombay 400069.
Phone: 572872.

Manufacturers of:

Industrial Safety Equipments, Specialists in Hand-gloves, Leg-Guards, Aprons, Sleeves, Boiler Suits etc. in Leather, Asbestos, Canvas, Rubber and their combinations.

SAFETY EQUIPMENTS

INDUSTRIAL MEDICAL ENGINEERS

Caxton House, 2E, Rani Jhansi Road,
New Delhi 110 055.
Phone : 520997.

Manufacturers of :

All types of Respiratory Protective Equipment — viz. Resuscitator, Gas Masks, Breathing Apparatus and Air Line Respirator etc.

SAFETY ITEMS/SAFETY WEARS

KEWALSON

Mfrs. of Industrial safety items, viz. Helmets, Ear Muffers, Face shield, Welding screen, Safety goggles (Melters, Grinders, Chippers, Dust, Welders), Dust Mask, Respirators, Apron, Sleeves, Hand Gloves, Leg-guards, Gum Boots, Glasses welding, Laminated Shelter Proof, Toughened etc..

4787/12, Hauz Qazi, Delhi 110 006 525554

SAFETY EQUIPMENTS AND WELDING ACCESSORIES

NITYANAND LEATHER WORKS

Manufacturers of:

All types of Welding Accessories & Safety Equipments & Largest Stockist of Asbestos, Chrome Leather, Canvas, Hand Gloves, Aprons, Sleeves, Boiler Suits, Leg Guards, Welding Hand Screen, Electrode, Holder, Plastic Face Shield, Welding Goggles, Dust Proof respirator and Leather, Rubber Moulding articles etc.

Shankar Gaikwad Chawl No. 4,
Dharavi Road, Bombay 400017.
Phone : 483395.

SANITARYWARES, TILES

Ceramica

98, Medows Street, Bombay 400 023.
Phone : 274175.

Leading Wholesalers of :

● PARRYWARE	Vitreous Superfine Sanitaryware
● SPECTRA	Vitreous Mosaic Tiles
● PENGUIN	ISI Quality Bathroom Fittings
● COMMANDER	Plastic Toilet Seats

SANITARY DEALERS & SANITARY ENGINEERS

MAHABIR PERSHAD & SONS

For all Sanitary Goods, C. P. Bathroom Fittings, Glazed Tiles, A. C. S. W., G. L. C. L., Soil & Rain Water Pipes & Fittings, Water Heater, A. C. Plain & Corrugated Sheets, SUTNA LIME etc.

Chawri Bazar, Delhi-110 006.
Phones: 262735, 264854 & 525308.

SANITARYWARES, PIPES & FITTINGS

NANALAL AMBALAL & CO.

(Estd. 1917)
69, Nagdevi Street, Bombay 400 003.
Phones : 322754, 324597.

Leading Wholesalers of :

● PERFECT'S	Stoneware Glazed Pipes
● PARRYWARE	Vitreous Superfine Sanitaryware
● SPECTRA	Vitreous Mosaic Tiles
● PENGUIN	ISI Quality Bathroom Fittings
● COMMANDER	Plastic Toilet Seats

SANITARY ENGINEERS

NARIMAN NALLASETH ENGINEERING CO. PVT. LTD.

LEADING ALL INDIA SANITARY ENGINEERS & CONTRACTORS

Undertake execution of Large Schemes of Water Supply, Drainage, Fire Fighting, Central Hot Water Supply, Process & Laboratory Piping.

Specialists in : LUXURY 5-Star Hotels, Hospitals and Large Industrial Complexes.

" Seervai Bldg. B ", 20-G, Naushir Bharucha Marg
(Sleater Road), Bombay 400 007.
Phones : 372327 & 375672.
Grams: " SHOWEROSE ", Girgaon, Bombay 400 004.

SCIENTIFIC & LABORATORY INSTRUMENTS

CENTRAL SCIENTIFIC SYNDICATE

475, Jagannath Shankar Seth Road (Chira Bazar),
Bombay 400 002.
Grams : " MAXSERVE ". Phone : 316867.

Dealers in Scientific and Laboratory Requirements.

Suppliers of Chemistry, Physics and Biology Instruments.

SCIENTIFIC APPARATUS, INSTRUMENTS & LABORATORY EQUIPMENTS

D. SHAH & COMPANY

D'SCO' 'LAPIZ'

Suppliers & Manufacturers of: Hospital & Laboratory Equipments, Microscopes, Photo Electric Colorimeters, Automatic Colony Counters, Haemometers, Autoclaves, Sterilizers, Ovens, Incubators, Serological Baths, Micro Slide Storage Systems, Centrifuge Machines, Rotators, Inoculation Hoods, Anaerobic Jar, Focimeter, Reagents, Glassware.

24, Sardar Griha Building, 198, Lokmanya Tilak Road, Bombay 400002. Phone: 311054. Gram: "SCIENCAIDS"
Factory: Medica Instruments Manufacturing Co.,
Senapati Bapat Marg, Opp: Phoenix Mills,
Bombay 400013. Phone : 394037.

SCIENTIFIC INSTRUMENTS

J.P. VYAS & COMPANY

20, Mangaldas Bldg. No. 7, Second Floor, Room No. 440
Kitchen Garden Lane, Bombay 400002.
Phones: Off: 314735 & 259381. Res: 811335.
Gram: "FLAXRAY", Bombay-2:

Importers & Suppliers of:

Laboratory & Hospital Imported Instruments, Spectronic 20 Spectrophotometer, Klett Summerson Photo Electric Colorimeter, Coleman Electronic Photo Fluorometer, Lovibond Tintometer, Brook Field Viscometer, Flame Photometer, PH Meters, Laboratory Abbe Refractometer, Polarimeter Single Pan Automatic Analytical Balance, Comparator, Automatic Slide Projector, Microscopes, Whatman Filter Papers etc

---

SCIENTIFIC INSTRUMENTS

KALIDAS HARJIVAN

(Estd. 1920)

Scientific, Electronic, Petrolieum Instruments, Laboratory Plastic/Teflon/Silica Porcelainware, Standard ASTM/IP/Precision Thermometers, WHATMAN filter paper and Thimbles and all other Laboratory articles.

195, Samuel Street, Bombay 400009
Phones: 325525, 321882. Resi.: 810548
Grams: "MAHUVAWALA"

SCIENTIFIC APPLIANCES

MODERN BALANCE WORKS

Manufacturers of :

- SCIENTIFIC BALANCES — Monopan, Projection, Chainomatic, analytical, Chemical & Physical in macro to micro,
- 'A' grade weight boxes upto 200 g.
- ELECTRONIC — fan regulator.

D 54/19, Aurangabad, Varanasi 221 001 (U.P.).
Phone : 67058.

SCIENTIFIC APPARATUS, INSTRUMENTS & LABORATORY EQUIPMENTS

NARANG SCIENTIFIC WORKS PRIVATE LTD.

C-255, Mayapuri, Industrial Area, Phase II,
New Delhi 110064.
Phone : 592609. Grams: " THERMOELEC ".

Manufacturers of :

NSW Precision Heat Controlled

Equipments for :

Industries & Research Laboratories, Industrial Oven Conveyor Type, Driers & Furnaces, Laboratory Ovens, Incubators, Water Baths, Humidity Chambers, Muffle Furnaces, B.O.D. Incubators & Capillary Type Thermostats.

SCIENTIFIC APPARATUS

NIHAL ENGINEERING CORPORATION

B-53, Naraina Industrial Area, Phase II,
New Delhi 110 028.
Phone : 585373.

Exporters & Manufacturers

Precision Scientific Instruments & Lab. Equipment, Vacuum Instruments and Coating Units, Furnace, Ovens, Incubators, Shaking Machine, Glassware, Moisture Tester, pH Meter, Bomb Calorimeter etc.

SCIENTIFIC INSTRUMENTS MFRS.

ORIENTAL SCIENCE APPARATUS WORKSHOPS

AMBALA CANTT. (INDIA)
Phones : 20796, 21472. Grams : " SCIENCE".
Telex : 392-204 OSAW IN.

Manufacturers & Exporters of :

Precision Scientific apparatus for Universities, Colleges & Research Laboratories. Our specialities are Optical, Electrical, Electronics, Engineering Instruments, Electronic, Electrical & Mechanical teach-aids & Seed Processing Plants plus other Agro equipment.

Branch at :

2/54, D. B. Gupta Road, Karol Bagh, New Delhi 110 005.
Phone : 521145. Telex : 31-2304, New Delhi.

SCIENTIFIC INSTRUMENTS

PRECISION BALANCE (INDIA)

6, Wood Street, Gr. Floor, Calcutta 700016
TEL. : Off. : 43-3476. Resi. : 33-5684

Leading manufacturers of PBI' brand export quality scientific balances, weight boxes and other allied items.

Specialists in

- Single pan electrical balance (gm. and carat).
- Torsion Balance.
- Top Pan Loading Balance.
- Double Pan analytical balance.
- Chemical & Physical Balance.
- Working model balance specially for weights & measures dept.
- Servicing & Repairing for any Precision Balance undertaken.

SCIENTIFIC APPARATUS INSTRUMENTS & LAB. EQUIPMENTS

WIDSONS SCIENTIFIC WORKS

Mfrs. of 'WISWO' Auto Claves, Autopsy Saw, B.C.D. Incubators, Baths all type, Centrifuge Machines, Chromotographic Cabinets, Ovens, Electrophoresis Apparatus, Kjeldhal Units, Incubators, Microscopes, Heating Mantles, Muffle Furnaces, Seed Germinators, Steel & Wood Slide Cabinets, etc.

10, West Sadar Thana Road, Delhi 110006.
Phone: 511841

SCIENTIFIC APPARATUS, INSTRUMENTS & LABORATORY EQUIPMENTS

Y. VAKIL & CO.

Dealers in : Scientific, Surgical & Pathology Instruments, 'Corning' Glassware, Silica & Porcelain Wares, Pressure Gauges, Dial Type Thermometers, Filter Papers, Filter Cloth, Filtering Aids, Stamping Holders for Marking Batch No. & Expiry Date on Labels & Cartons, Laboratory Chemicals, Standard Solutions, Indicator Papers, PH Meters, Colorimeters, Microscopes, Culture Media Reagents, Quikfit & Q.V.F. Assemblies & Spares.

201, Khetwadi Main Lane, Bombay 400 004.
Phone : 354125.

SCRAP FERROUS & NON-FERROUS

HINDUSTAN SCRAP CORPORATION

Buyers & Sellers of :

Heavy Copper Scrap, Brass & Aluminium Sheet Cuttings, Brass Borings, Zinc Dross & Lead Slag, Tin & Nickel dust and Iron & Steel Scrap, M. S. Rounds-Coils, Wire H. B. G. I. and Industrial Rerollable Material.

Office : 11, Oza Market, Darukhana, Bombay 400 010.
105A/5, Reti Bunder, Darukhana, Bombay 400 010.
Phones : *Office :* 376563, 371052
Resi. : 471515
Godown : 673583

SCREW MACHINE & WOOD

LALLUBHAI AMICHAND LTD.

Props.: The Dun Aluminium Factory.
Regd. Office:
48/50, Kansara Chawl, Pydhonie,
Bombay 400002.

Mfrs. of:

M.S. & Brass Machine Screws, M.S. & Copper Rivets, Washers.

THE DUN ALUMINIUM FACTORY

Plot No.150, Mankhurd, Agarwadi Road, Bombay 400088.
Phones: 524661-2-3-4.
Phones: Regd. Office 362328-29. Adm. Office 395806.

SEAFOODS EXPORTERS

JRK SEAFOODS PVT. LTD.

11, L. D. Ruparel × Lane,
Bombay 400006/INDIA

PROCESSORS & EXPORTERS OF INDIAN SEAFOODS

Tel: 811140
Cab: JEARKEFOOD TLX 11 4122 JRK IN

SEAMLESS PIPES

RAMESHCHANDRA SANTRAM

205, Sant Tukaram Road,
Bombay 400009.
Phone: 322214 Telex: 011 3564 RCS IN
Gram : RAMESHLILA.

For:

CARBON STEEL SEAMLESS PIPES & TUBES from 6 mm Nominal Bore to 300 mm Nominal Bore in various thickness up to 13 mm for various industrial applications.

SECURITY SERVICES

INDUSTRIAL PERSONNEL & SECURITY SERVICES PVT. LTD.

We are guarding over 100 clients in Northern India to their entire satisfaction. Security Consultants & Undertakers to Public, Private & Industrial Concerns.

Admn. & H.O.:
19F, Basant Lok, Vasant Vihar, New Delhi 110 057.

Regd. & Liaison Office:
8, Diamond House, P.B. 7032, 1/18 B, Asaf Ali Road,
New Delhi 110 002.
Phones : 671378, 275489. Cable : "SECRETCALL"

SECURITY SERVICE

UNIVERSAL SECURITY & DETECTIVES (INDIA)

Affiliate: Security & Investigation Bureau (I) Pvt. Ltd.

Security, Detective and Guard Service (Organised by former high Police & Military Officers, eminent Lawyers & Forensic Scientists).

Head Office: 9, Lalbazar St., Calcutta 700 001. Phone: 233101/238276.

Branches: 1) Delhi—22, Sainik Far, ND 110062, Phone: 651150. 2) Bihar, 3) Orissa, 4) Assam.

SEWING THREADS

BHARMAL THREAD WORKS

Manufacturers of:

Wellknown A-1, A-11, A-2, A-3, BTW, Panama, Skylark & Nuclear Brands.

10, Saifee Jubilee Street,

Near J. J. Hospital,

Bombay 400003.
Phone: 862141

E. H. TUREL & COMPANY

Dealers

Sewing Machines, Parts, Needles, Attachments etc.

Sole Agents

"**BROTHER**" industrial sewing machines
"**KANSAI SPECIAL**" elastic inserting, double picotting, tucking, shirt-fronting, tandem sewing etc., machines
"**NAOMOTO**" irons, Steam pressing equipments
"**RENOWN**" smocking, fagotting, ornamental
"**SEIKO**" all types of leather, shoe and heavy duty machines

Indenting Agents

"**YAMATO**" overlock, Flat-lock machines

Service and Maintenance Contractors
Repairers of Repute

48, Clare Road,
Byculla, Bombay 400008
Phones: 374622 & 397643
Telex: 3846, 3369 Cable: TWORAIL

SEWING THREADS MFRS. & MERCHANTS

ISHWARDAS & CO.

2, Sutar Chawl, Bombay-400 002.
Phone: Off: 323641. Res. 314786.
Grams: BADMINTON.
Distributors: MODI THREAD MILLS.
Stockists for: Calico Mills.

Alexander Thread Co.,
J & P Coats (I) P. Ltd.

Sewing, Embroidery & Industrial Threads. Manufacturers, Exporters & Dealers in all sorts of threads.

SHIP BUILDERS

AFCO LTD.

(A wholly owned Subsidiary of the Bombay Burmah Trading Corporation Ltd.)

Marine Consultancy : Design Services and Computer Programme Library for Ship Calculations.

Agents for :

FODENS MARINE DIESEL ENGINES.
Office at : 9, Wallace Street, Fort, Bombay 400 001.

Phone : 269351.
Grams : "FEDACRETE", Bombay.
Telex : 011-2858 BBTC-IN.

SHIP BUILDERS

SHAPARIA DOCK & STEEL CO. PVT. LTD.

Regional Offices & Shipyard.

Specialised for Shallow Draft Passenger Cargo Vessels upto 1,000 tons, Tugs, Barges, Launches, Lifeboats, Pontoons, Hopper Barges, Dredgers, Navigational & Mooring Buoys, Buoyant apparatus, Ship Ancillary & Marine Fittings.

Phone : 448361. Grams : "SHAPARIA".
Telex : "SHAPIN" — 011-4259. Bombay 400 015.

SHIP REPAIRERS & SHIPCHANDLERS

Service to Ships under one roof

PATEL ENGINEERING WORKS

Hiralal Maganlal & Co.
(Estd. 1917)
(C. K. Patel & Sons)

Mahavir Darshan, 99, Bhandari Street,
Bombay 400 003.
Phones : Office : 330271/2/3, 341467. Workshop : 378896
Grams : "WALNUT".

SHIP-REPAIRERS, SHIPCHANDLERS, DUBASHES, CHIPPING, PAINTING, TANK CLEANING AND LIGHTERAGE CONTRACTORS.

All types of Fibreglass repairs undertaken

SHIPCHANDLERS

ABDULHUSEIN PEERBHAI & SONS

SHIPCHANDLERS

Stockists of : MARINE STORES, CHAINS, WIRE ROPES, CHAIN PULLEY BLOCK, CRAB WINCHES, ANCHORS, BINNACLE COMPASS, CHAIN-SLINGS, WIRE ROPE SLINGS, WIRE ROPE NETS, MANILA ROPE NETS ETC.

66-68A, Peerbhai Building,
Narayan Rao Koli Marg (Bhandari Street),
Bombay 400 003.

Phone : 323956. Grams : "STUDCHAIN".

SHIPCHANDLERS

AEMPHICO ENGINEERING WORKS

Builders of :

Aluminium Craft, Windows, Ladders, Gangways, Lifeboats, Funnels, Wheelhouse, Trawlers, Cowl and Mushroom type Ventilators, Punkah Louvres, etc.

Swadeshi Mills Estate, Opera House,
Bombay 400 004.

Phone : 357086. Grams : "MOTORPOWER".

SHIPCHANDLERS

ESOOFALI ESMAILJI KARACHIWALLA & CO.

43-45, Narayan Rao Koli Marg, Mandvi, Bombay 400 003.

Phones : 321617 & 329167. Workshop Phone : 671473.
Grams : "SLING". Telex No. : 011-5125

Manufacturers and Stockists of : Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chainslings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Plate Lifting Clamps, Hydraulic Jacks and Mechanical Jacks etc.

SHIPCHANDLERS

R. SHARP & SON PRIVATE LIMITED

Kaiser-I-Hind Building,
Currimbhoy Road,
Ballard Estate,
Bombay 400038.

Phone: 262440.

Telegraphic Address: 'GRANITE'

SHIPCHANDLERS

WESTERN INDIA MARINE MILLS & ENGINEERS

Stockists of :

Marine Stores, Chains, Wire Ropes, Chain Pulley Blocks, Crab Winches, Anchors, Pull Lifts, Pulling & Lifting Machines, Rope & Wire Rope Pulley Blocks, Shackles, Thimbles, Bulldog Grips. All types of accessories, hoses, etc.

185, Janjikar Street, Bombay 400 003.

Phones : 327728, 338658. Grams : "WIRECHAINS".

SHIPPING AGENTS

EVERETT (INDIA) PVT. LTD.

Fort House Annexe, 221, Dr. Dadabhoy Naoroji Road
(Post Box 523), Bombay 400 001.

Telephone : 269751. Telex : 2554.

Telegraphic Address : "STARLINER" and "EVORIENT" Bombay.

Head Office : Calcutta. *Branch :* New Delhi.
Shipping Agents, Brokers & Operators.

Agents for :

Everett Orient Line, Keystone Shipping Co., Ogden Marine Inc., Marasia, S.A. and Seven Seas Transportation (Container Division).

SHIPPING AGENTS

in Goa

HIRALAL & COMPANY

'Thakker House', Post Box 8,
Vasco da Gama, Goa.

Serving Shipowners, Attending Clearing, Forwarding, Shipping work for over 30 years at Marmagoa Harbour.

Phones : 2298, 2299, 2453 (Ext. 9 Lines).

Telex Nos. 0191-204, Grams : "THAKKER".
0191-268. A/B, "THKR IN" VG-204/268.

SHIPPING, CLEARING & FORWARDING AGENTS

ABRAHAM D. & SONS PRIVATE LTD.

Custom House & I.A.T.A. Air Cargo Agents.

Hague Building, Sprott Road, Ballard Estate,
Bombay 400 038.

Tele. Address : "HELAL".

Phones : Office : 260361/3 & 263994.
Godown : 377741 & 374097.
Residence : 240070 & 292958.

SHOES MINERS' SAFETY

KOHINOOR RUBBER WORKS PVT. LTD.

Manufacturing of

All type of Rubber & Canvas Shoes since 1934. Licence of I.S.I. for manufacturing of Miner Safety Steel Toe Cap Boots as per IS: 3976. Gum Boots Steel Toe, All Rubber Steel Toe, P. T. Shoes, Industrial Gum Boots, & Hot Water Bags etc.

35/1A, Canal East Road, Calcutta 700001
Phones: 356161; 359244/45 & 359238
Gram: "JUSTIFYING"
TELEX: 021-2790/KOHIRUB

SHOTS & GRITS

- Chilled Iron Shots & Grits.
- Heat Treated Iron Shots & Grits.
- Steel Shots & Grits.
- Cut-wire Steel Shots.

Please Contact :

MICROMETALLIC INDUSTRIES

22-D, Govt. Industrial Estate,
Bombay 400 067.
Phones : 692884, 682596 & 566152
Grams : " MICROGRIT ", Bombay 67.

SILICA-GEL MFRS.

MINCO PRODUCTS

17, T. H. Road, Madras 600 081.

Manufacturers of

" MINGEL BRAND "

SILICA GEL

Blue Indicating & White Non-indicating Type.

Available in various mesh,
sizes and packings.

Grams : " SICAGEL ". Phone : 551188.

SILICONE & VARIOUS OIL EMULSIONS

Manufactured by :

JAYCEY CHEMICAL INDUSTRIES

P. B. 164, Kukies 28/826,
Trivandrum 695 001.
Phone : C/o Kukies Holiday Inn 63877.
Grams : " JAYCEYTEE ".

Main emulsifiers based on ethanolamine-fatty acid condensates are prepared on our own. We control quality by using best raw materials.

SILK SCREEN PRINTERS

VARNA GRAPHIC ARTS

Specialists in Silk Screen Printing Posters, Show Cards, Booklets, Labels, Banners, Glass, Plastics, Tin Transfers-Sticker.

18, Vaju Kotak Marg, Fort,
Bombay 400001 .... ☎ (Office) 266817

Annapurna Services Industrial Estate,
46, Tilak Road, Ghatkopar (East),
Bombay 400086 .... ☎ (Facty.) 672400

SILVERSMITHS

BELIRAM JAIN SILVER WARE MFG. CO.

Dealers in: Silver Tea Sets, Cutlery Sets, Bowls, Trays, Presentation Articles etc.

DARIBA KALAN, DELHI 110006.
Phones—Off.: 277656 Res.: 711083

SILVER RECLAIMERS/REFINERS

RAJAT UDYOG

Producers & Refiners of Silver

Reclaiming Silver from Silver Contacts, Photo Paper, Silver Nitrate, Cine/X-Ray Films, Hypo Solution, Silvered Cullet Glass/Mirrors, Silver Sludge & other Industrial Raw Materials.

33, Todi Industrial Estate,
N.M. Joshi Marg, Chinchpokli,
Bombay 400011.
Phone: 397552

SLOTTED ANGLES MFRS.

AMSONS INDUSTRIES

211/213, Kalbadevi Road,
Bombay 400 002.
Phones : 314771, 310567 Telex : 011-2101-RAMA

Manufacturers of :

SPEEDEX Slotted Angles System
& STACKABLE Storage BINS.

SLOTTED ANGLES MFRS.

METREX PVT. LTD.

Sunder Estate, Near Kamani Works, Shastri Marg,
Kurla, Bombay 400 070.

Phones: 674446 & 671512.
Grams : "METREUNIT", Kurla, Bombay.
Telex : C/o 011-4884.

Manufacturers of :
"METREX" Slotted Angles & Accessories.

SLOTTED ANGLE MANUFACTURERS

PILCO MARKETING & MFG. CORPN.(INDIA)

2/39, ANSARI ROAD, DARYA GANJ, NEW DELHI-110 002.
Phones: 276756, 262562, 263594. GRAM: ERECTION.
Works: B-58, WAZIRPUR INDUSTRIAL AREA, DELHI-110 052.
Phones: 741818, 712670.

Manufacturers of : Pilco slotted Angles/Space Saving Racks, Plastic Bins, Library Stacks, Cable Trays. Specialise in Designing and erection of Mezzanine Floors, Two-Tier Structures, Sheds, Stores, Godowns, Record Rooms etc.
Dealers Network Throughout INDIA.

SOAP & TOILETRIES

M/s. KENNY'S SOAP FACTORY

D2-8, Corlim Industrial Estate,
Corlim (Ilhas), Goa 403 110.

Manufacturers of :

Washing Soaps, Toilet Soaps, Liquid Soap, Cleaning Powder, Phenyl, etc, etc.

Trade Inquiries Solicited.

SOAP & CLEANING MATERIALS

VIVEK OIL & SOAP INDUSTRIES

SHED A-1, Sidhpur Co-operative Industrial Estate Ltd.,
Lal Bahadur Shastri Marg, Ghatkopar,
Bombay 400 086.

Phones : 324714 & 581527.

Manufacturers of full range of :
Soaps, Soap Bars, Cakes & Chips, Synthetic Detergents, Liquid, Powder.

- Suppliers to various organisations.
- Special benefits offered for long term contracts.
- Supplies offered at special company price to mass consumers.
- Free periodic delivery at any point in Greater Bombay.
- Personalised Service.

SOUND EQUIPMENTS

AHUJA RADIOS

215, Okhla Industrial Estate,
NEW DELHI 110020

Phones : 631549 & 631853.

Manufacturers of :

PUBLIC ADDRESS EQUIPMENT
& CASSETTE RECORDERS.

SOUND & PROJECTION EQUIPMENT & ELECTRONIC PRODUCTS

PHOTOPHONE LIMITED

Manufacturers of Audio Visual Cinematographic, Sound & Projection Machinery and Professional grade Communication and other Electronic Products.
Registered Office:
7, Saki Vihar Road, Bombay-400 072. Tel: 582493. Telex: 011 6615.
Factories:
7, Saki Vihar Road, Bombay-400 072. Tel: 582493.
SEEPZ, Bombay-400 096. Tel: 565239.
Mapusa Industrial Estate, Phase II, Caraswada, Mapusa, Goa. Tel: 621.
Telex 0194 273.
Sales Offices:
Bombay, Calcutta, Madras, New Delhi, Ahmedabad, Bangalore, Secunderabad, Cochin, Coimbatore, Hubli, Jaipur, Jullunder, Lucknow, Madurai, Nagpur, Patna, Vijaywada, Visakhapatnam and Cuttack.

SPRAY PAINTING & INDUSTRIAL FINISHING EQUIPMENT MFRS.

Bullows

Bullows India Private Limited

Spray guns, air filter and reducing valves, pressure paint containers, spray painting booths, technical services on painting installations.

60, Sir Phirozeshah Mehta Road, Bombay 400 001.
Telephones: 258150/61/66.

SPRING & NUT BOLT MANUFACTURERS

ACME TRADERS

Manufacturers of:
All types of springs - odd size of bolts - carriage bolts and square head bolts - diaphragm washers etc. to suit your requirements and specifications.
ON GOVERNMENT LIST
Telegram: COVERPAPER. Phones: 324862, 349370.
Resi. 361265.
54, Sutar Chawl, Room No. 19,
Bombay 400 002.
Orders for small quantity are also accepted.
Phones : 324882, 349370. Resi. : 361265

SPRING MFRS.

COSMOS INDUSTRIES

Tension, Compression, Torsion Conical, Special Shape, Barrel Shape, Wireforms, Stripforms, Spiral Springs, Clips, Rings, Circlips etc. Mfrs. of all types of springs to customers specifications on latest automatic machines.

2/2, Sainath Industrial Estate,
Off Aarey Rd., Goregaon (E),
Bombay 400063.
Phones:
Works: 693459 & 694699 Off: 311605

SPRING MFRS.

SHREE SHAKTI IRON WORKS

54, Sutar Chawl, Bombay 400 002.

Phones : 324862 & 349370 Res. : 361265. Grams : " COVERPAPER "

Manufacturers of :

All types of Precision & Heavy Duty wire coil springs, strip springs — Doctor Blades, Conveyor —Washers; against drawings or samples for all Industrial machineries — ON GOVT. LIST.

STEEL SPRING SPECIALISTS.

Small quantity also undertaken

SPRING MFRS.

SWAMI (SPRING MFG.) & CO.

THE PREMIER & PIONEER SPRING MFRS. IN INDIA.
FLEXIBLE COUPLING SPRINGS

Specialists in Manfg. SPRINGS of all types, Couping Springs, Coil Springs, Compression Extension, Torsion, Flats, Valve Plates, Disc Springs, Circlips, Trailer Springs, Rolling Shutter Springs, Truck & Car Springs of all types & models. Spring Washers etc.

40/1, Strand Rd., Calcutta 700001
Phone : 22-4583

SPROCKETS

STANDARD MATERIALS AGENCIES

All types of Sprockets made from Mild Steel, Cast Iron, Cast Steel, or Meehanite with Cast or Machine cut teeth.

P. O. Box 1660. 45/46, Podar Chambers,
S. A. Brelvi Road, Bombay 400 023.

Dial : 253202/253262. Cable : " STANSIZE "
Telex : 011 3281 SMA IN

Regional Offices : Ahmedabad, Madras, Calcutta.
Representatives at : New Delhi, Pune.

STAINLESS STEEL HOUSEHOLD UTENSILS

BATHIJA UDYOG

Office: Import Warehouse (N), Strand Road,
Calcutta 700 001.

Factory: 62/D/2, J. N. Mukherjee Road,
Ghusuri, Howrah.

Phones: 22-0973/5241 (O), 24-7597 (R).

Manufacturers & Exporters of :

Stainless Steel Household Utensils, Cutlery, Hospitalwares, Chemical Plants, Vats, Pans, Perforations, etc. etc. according to customers' specifications and requirements.

STAINLESS STEEL RAW MATERIAL

COPPER
BRASS &
STAINLESS
STEEL
श्री

BHUPENDRA METALS (INDIA)

13/21, 3rd Panjrapole Lane,
No. 202, Bombay-4. Ph.:357043
Gram: Metalkaka (Girgaon)

STAINLESS STEEL TUBES, RODS & SHEETS

SAILESH METAL CORPORATION

Stainless Steel, Non-Magnetic and Magnetic, AISI. 304/316/321/410, Sheets, Plates Pipes, Rods, Flats, Squares, Hexagonals, Wires etc. Also Copper, Brass, Phosphor Bronze, Aluminium Sheets and all sections.

32/34, 1st Carpenter Street,
Bombay-400 004.
Gram: RASEEMET. Phone: 363706

STAINLESS STEEL

SHAH ENTERPRISES

OFFER

"**FLOWN**" Stainless steel bar stock/fabricated thermowells with screwed as well as flanged ends.
Bulb dia. — 1/4" onwards. Bulb Length — 30".
"**FLOWN**" Stainless steel pipe fittings from 1/4" to 6" in socket weld, butt weld and screwed design, range include elbows, tees, reducers, nipples, couplings, stub ends, flanges, serrated rings, caps, plugs etc.
"**FLOWN**" Antimonial lead valves from 1/4" to 6". Range cover gate & globe valves, check valve, non-return valve, level indicator valve etc. Suitable for weak sulphuric acid, chromic acid, chromate etc.
For your requirement please contact :

SHAH ENTERPRISES

12/A, Unnat Nagar, 16, Shanti Sadan, S. V. Road, Opp. Polychem
Factory, Goregaon (West), Bombay 400 062.

STAINLESS STEEL INDUSTRIAL RAW MATERIAL

SHETH BROTHERS

Stockists of Stainless Steel Plates, Pipes, Rounds in Magnetic & Non-Magnetic grade 410/420/304/310/316/321.

195, Samuel Street, Bombay 400009.
Phones: 320628, 329945.
Grams: MILAP.

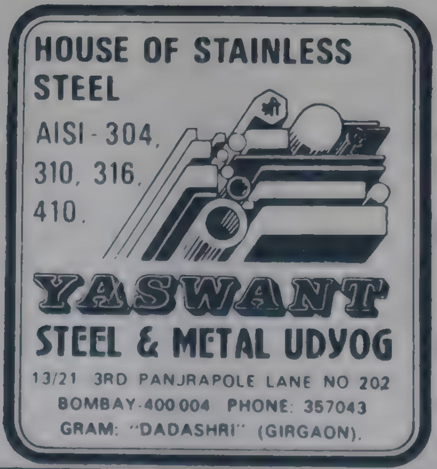
STAINLESS STEEL & ALLOY STEEL RAW MATERIALS

UNISTEEL CORPORATION

Dealers and Stockists of Tool & Alloy Steel, Die Steel, Stainless Steel Sheets, Plates, Rounds, Pipes, Stainless Steel Nuts and Bolts, in all quality and specifications.

1915, Sirkiwalan, Ramesh Market, Hauz Qazi,
Delhi-110 006.
Phones: 265055, 264200 - *Resi.* 718421.
Grams: 'SMALLTOOLS'.

STAINLESS STEEL



HOUSE OF STAINLESS STEEL
AISI - 304,
310, 316,
410.

YASWANT
STEEL & METAL UDYOG
13/21 3RD PANJRAPOLE LANE NO 202
BOMBAY-400 004 PHONE: 357043
GRAM: "DADASHRI" (GIRGAON).

STAINS & INDICATORS

(Laboratory Chemicals)

s. d. fine-chem pvt. ltd.

Office : 315/317, T. V. Industrial Estate, 248, Worli Road,
P. Box No. 19160, Bombay 400 025.

Manufacturers of :
LABORATORY & FINE CHEMICALS, CULTURE-MEDIA,
STAINS & INDICATORS.
(Biggest plant in Asia)

Factory : E27 E28, MIDC, Tarapur Industrial Area, Boisar 401 501
(Maharashtra).

Phones : Office : 4227480, 4226114, 4226196, 4226516
Factory : 471, 472, 473. (Boisar).
Telex : 5604 SDIN. Grams : "LABKEMICAL", Bombay 400 025

STAPLERS 'RADO' NO. 10.

Manufacturers:

CHOKSI INDUSTRIAL ASSOCIATES

46, Nagdevi Street, Bombay-400 003.
Phones: Office: 327391, 329610.
Works: 685501.
Nickel Chrome Plating is our speciality.

STATIONERS

BAWLA TRADERS

Manufacturers of well-known
" KHYBER " BRAND
OFFICE FILES and
ALL TYPES OF ENVELOPES

289, Abdul Rehman Street, 2nd Floor
Bombay 400 003

Phones : *Office* : 324822 : *Resi.* : 891740

STATIONERS & OFFICE REQUISITES

DADAR BOOK DEPOT

Leading Dealers in

All types of Stationery, Paper, Account Books, Engineering & Drawing Instruments, Gum Tapes and Office Requisites

Ranade Road, Bombay 400 028

Phone : 452011.

STATIONERY MFRS.

EVERGREEN SYNDICATE

Stationers & Paper Merchants, Importers & Stockists of all kinds of Office Stationery; Chief Stockists of Cellulose Self-Adhesive Tape, Brown Kraft Gummed Tape, Teleprinter Rolls and Drawing Materials

Dealers of : **KORES & CAMEL Products.**

Head Office :
19/21, Ambalal Doshi Marg, Bombay Mutual Chambers,
Fort, Bombay 400 001. Phone : 270415.
Branch : 89B, Jolly Maker No. 2, 8th Floor, Nariman Point, Bombay 400 021. Phone : 230066.
Grams : " TAPEKING ".

STATIONERY MFRS.

JAGJIVANDAS NANDLAL & CO.

(Estd. 1916)
237, Abdul Rehman Street, Bombay 400 003.
Phones : 323634, 346219.

Wholesale Stationers, Importers and Stockists of Artist Materials, and Distributors for well known brand Gateway Tracing Paper. Sole Distributors for Electric Pen-Pencil, Typewriting Carbon Papers and Sole Selling Agents for Electric Staple Pins in sizes 24/6, 26/6 and B/8 and Orenta Staple Pins in size 24/6, Nos. Sy10, 23/8, 23/10, 23/12, 23/15, 23/17 and 66, 5/16, 7/16 and 9/16. Stockists of Orenta Punching Machines, Pins and all kinds of office stationery and drawing office equipments.

STATIONERS & MANUFACTURERS

S. BRIJLAL & SONS

209, Abdul Rehman Street, Bombay 400 003.
Phones : 320687, 326705. Grams : "PENCILSHOP".

Distributors for :

1. Staple Machines "Golden Touch", "Diamond Touch", "Venus", "Wax 10", "Max 10".
2. Punching Machines "Max".
3. Rubber Bands "Natraj".
4. Fountain pens and Ball pens, "Neelam", "Plaza".
5. Pins & Gemclips "Aristo", "Billy"
6. Colour box "3 Babies".
7. Nylon scented picture erasers (similar to Japan make).
8. Pencil sharpeners "Gopi", "K.P.", "Safe".

STATIONERS

STANDARD TRADING CO.

All sorts of Office Stationers, Drawing Office Equipment and Survey Instruments, Pencil, Stencil Papers, Duplicating Ink Tracing Cloth, Tracing Paper Etc. Etc.

223, Himalaya House, 79, Paltan Road,
Bombay 400 001.
Phones : 267850 & 269464.

Head Office :

43, Ezra Street, Calcutta 700 001.
Phones : 266915, 341665 & 269802.

STATIONERS & PRINTERS

EXPRESS STATIONERY SERVICE

Stationers, Commercial Printers, Paper Merchants.

12A, Rustom Sidhwa Marg,

Bombay 400 001.

Phones: 263987 & 267079.

STEAM & HYDRAULIC PACKINGS

INDUSTRIAL MINERALS & MILL STORES TRADERS

Mercantile Bldgs., P. B. No. 2076,
Calcutta 700 001.

Manufacturers of :

'IMCO' Complete Range of Steam & Hydraulic Packings including Acid & Alkali Proof Packings.

Branches : P. B. No. 1195, Delhi 110 006
& P. B. No. 1445, Madras 600 017.

STEAMSHIP AGENTS

J. M. BAXI & CO.

Steamship Agents & Stevedores

16, Bank Street, Bombay 400 023.

Phones: 253871 & 258381. Grams: "BAXICO".

Branches at all ports on the East and West Coast of India.

Telex: 011-2549 NJCO, 011-3439 BAXI BY.

STEEL BALLS

SPHERE ENGINEERS PRIVATE LTD.

Plot A-287, Road No. 16/Z, Wagle Industrial Estate,
Thane 400 604.
Phones : 504260, 592841.
Grams : "METROBALLS", Thane.

Manufacturers of : METRO STEEL BALLS.
Industrial grade Steel Balls.
GRINDING MEDIA Steel Balls.
Bicycle grade Steel Balls.

STEEL DOORS & WINDOWS

(as per IS : 1038 of 1975)

ALUMINIUM ENTRANCES,
SLIDING WINDOWS, PARTITIONS,
LOUVRES, NORTHLIGHT GLAZING.

Contact :

M/s. WINDOORS SUPPLY CO.

410, Ushakiran, 4th Floor,
Raopura Road, Vadodara 390 001.
Phone : 57095.

STEEL FABRICATION

SHREE BHARAT INDUSTRIES

3, Darya Ganj, New Delhi 110 002.

Phones : 272725, 270238 & 594015.
Gram : " BUCKET ".

Manufacturers of :

Buckets, Agricultural Implements, Overhead Structures, Pans, Tanks, Trailor & Trolleys, Galvanized Steel Products and General Steel Fabrications.

STEEL FURNITURE MFRS.

CHANDAN METAL PRODUCTS PRIVATE LIMITED

Manufacturers of:
Steel Furniture & Security Equipment for Offices, Homes, Hospitals, Canteens, Libraries, etc.

Executive Office & Works:

Gorwa Road, Vadodara 390 016 (Gujarat).
Phone: 82671 (5 lines). Grams: "CHANDAN"

STEEL STRIPS (C.R.) MANUFACTURERS

GRAHAM FIRTH STEEL PRODUCTS (INDIA) LTD.

Regd. Office & Works :

Firsteel Compound, Behind Jogeshwari Marshalling Yard, Western Express Highway, Goregaon (East),
Bombay 400 063.

Phones: 686731, 686734, 686735 & 691802.
Grams: " GRAMFIRTH ".

Telex: 011-6473, Bombay 400 062.

Manufacturers of :

Narrow Cold Rolled Steel Strips of Plain and Medium Carbon.

STEEL TUBULAR POLES

BOMBAY TUBES & POLES CO.

ESTD. 1954

Plot No. 100, Darukhana 2nd Lane, Mazagaon,
Bombay 400 010.

Phones: 395719, 379802 & 398378.

Grams : " TUBESPOLES ", Victoria Gardens.

Telex : 011-4383 N21M.

Manufacturers & Exporters

Factory: D-129, TTC Area, MIDC, New Bombay.
Phone: 8746.

STEEL TUBULAR POLES & BRACKETS

PIPES & POLES FABRICATORS

209, Rajgor Chambers, Surat Street,
Bombay 400009.
Phone: 326581; Resi.: 678384. Gram: TEJSONRAJ.

Manufacturers of: Steel Tubular Poles & Brackets

Dealers in: Galvanised & black pipes, E.R.W. & Seamless tubes, boiler tubes, hydraulic tubes, iron & structural materials.

STEEL TUBULAR POLES

Manufacturers and Exporters

SHIVAM POLES MANUFACTURING AND ENGINEERING COMPANY

4-5, Industrial Estate,
Baroda 390 003.

Phones : 82213, 57329 & 55316.
Grams : " SHIVAM POLE ".

Steel Tubular Poles for :
STREET LIGHTING & OVERHEAD LINES.

STEEL TUBES

KOCHHAR TUBES PVT. LTD.

Round
12.7 mm to 63.5 mm OD, Thickness .9 to 3.2 mm
Square
12.7 mm to 63.5 mm
Rectangular & Oval
Various sizes ready stocks at mill rates

157, Princess St., Bombay-400 002.
Phones: 313471 & 314536

STEEL WIRE ROPES

MYSORE STEEL WIRES

Manufacturers of

H.B. Wire, Annealed Wire, G.I. Wire, Barbed Wire, Stay Wire, Cold Heading Quality Wire & Wire Products.

Office & Works:
Dyavasandra Industrial Area,
Whitefield Road, Bangalore 560048
Phones: 58436, 72048 Gram: "GIWIRE"

STEEL WIRES MFGRS.

SUPER WIRE INDUSTRIES

Office: 212/16, 3rd Floor, Sheriff Devji Street, D'Cor House, Bombay 400003 (India)
Phones: 347570, 343413 Grams: MORAKISH

Manufacturers of:

HIGH CARBON & MILD STEEL WIRES

Dealers & Exporters of:

QUALITY STEEL WIRES, WIRE ROPES & WIRE PRODUCTS

STEEL WOOL

GOLDEN FLEECE STEEL WOOL MANUFACTURING COMPANY

Manufacturers of

Long Strand Uniform Steel Wool in Various Grades from 00—6.

25/27, Lohar Chawl,
Bombay 400002.

Phone: 310911

STENCIL CUTTING MACHINES

STENCIL CUTTING MACHINES

For marking cases, cartons, crates, bags etc

Sizes Available ¼", ⅜" ½", 1", 1½" 2"

SALES ● SERVICE ● REPAIRS

Manufacturers M/s. G G R ENTERPRISES
4/1 Madan Street, Calcutta-700072 ESTD 1958
Gram PLISTENCIL Phone 277065, 244998

STEVEDORES & DUBASHES

Steamship agents, Master Stevedores, Dubashes, lighterage contractors

DARABSHAW B. CURSETJEE'S SONS (BOMBAY) PVT. LTD.

Darabshaw House, Ballard Road,
Bombay 400038.
Grams: 'DEADWEIGHT'
Phone: 260021 (4 lines) (Dock Office: 262230)

also associates at

Calcutta, Visakhapatnam, Magdalla (Surat), Sikka, Bhavnagar, Bedi-port, Navlakhi, Veraval, Karwar, Porbunder & Kandla.

STEVEDORES & DUBASHES

EASTERN BUNKERERS LTD.

Stevedores, Dubashes, Landing, Victualling, Chipping & Painting Contractors, Clearing, Forwarding & Insurance Agents.

Scindia House, Narottam Morarjee Marg,
Ballard Estate, Bombay 400 038.
Phone : 262461. Grams : "VAVTO".
Telex: 011-2205, 011-3519.

Calcutta Office :

20, Netaji Subhas Road, Calcutta 700 001.
Phone : 223156. Grams : "VAVTO".

Directors : Smt. Sumati Morarjee (*Chairman*), R. P. Vevaina, J. C. Nanavati, S. P. Patel, Dhirajlal Maganlal Dalal, Ambalal Kilachand, D. M. Gajaria, N. M. Trivedi.

STEVEDORES & LIGHTER CONTRACTORS

HILL, SON & DINSHAW PVT. LTD.

Master Stevedores & Contractors.
Act as Owner Charterers' Agents.

Marshall Building, Ballard Estate,
Bombay 400 038.

Phones :

Office : 262281, 262282, 266105, 262491.
Godown : Sholapur Street : 863402.
Godown : Darukhana : 378975.
Residence : Managing Director : 485755.

STEVEDORES & DUBASHES

R. SHARP & SON PRIVATE LIMITED

Kaiser-I-Hind Building,

Currimbhoy Road, Ballard Estate,

Bombay 400 038.

Phone : 262440. Grams : "GRANITE".

STICKERS-LABELS-SCREEN PRINTING

Manufacturers of:

Plastic & Paper Stickers, Labels, Publicity Stickers & Industrial Stickers, Multi colour screen printing on any surface instant sticking & decorative, Designing & printing of prestigious letter heads & visiting cards.

DECORATIVE SCREEN PRINTERS (TI)

103, Shiv Shakti Ind. Estate,
Near 'Shreyas' Cinema, L.B.S. Marg,
Ghatkopar, Bombay 400086.

Phone: 584616.

STONEWARE PIPES & FITTINGS

PERFECT STONEWARE PIPES

P.O. Perfect Pottery Works, Jabalpur, M.P.
Phones : 20079, 20423 & 20297.

PERFECT SANITARY PIPES
Industrial Area, Bharatpur (Rajasthan).
PERFECT SANITARY WARES, Ratlam, M.P.

Manufacturers of :

Best quality Saltglazed Stoneware Pipes & Fittings from 75 mm. dia. to 450 mm. dia. in 60, 75 cm. and one metre lengths.

Our Delhi Office at : 4647, Bazar Ajmeri Gate,
Delhi 110 006.

STORAGE TANKS

ESTD : 1915

HIND TANK MANUFACTURING CO.

Tanks for storaging Water, Oil, Kerosene, Petrol, Diesel, Alcohol, Acid, Pressure Vessels of Mild Steel & Stainless Steel, Oil Transportation tankers

Gram : "INDUSPLANT"

(1) 6th Kumbharwada Lane, Bombay 400004.
Phones : 361845, 367272

(2) Plot 52, Marol Industrial Estate, M. I. D. C., Bombay 400093.
Phone: 568920

STORAGE TANKS

VISHAL ENTERPRISES

15, Dhamji Shamji Industrial Estate,
Lalbahadur Shastri Marg, Vikhroli,
Bombay 400083.
Phones: Fact. 585253/585897, Resi. 523606.
Grams: "VOLUNTRY"

Fabricators and Erectors of:

Oil storage tanks of any capacity and dimensions, lorry tankers, water tanks and laying and welding of M.S. pipelines for govt. and private undertakings.

STRUCTURAL ENGINEERS/STEEL FABRICATORS

R. PURUSHOTTAM & CO.

Steel Structures for

Factories, Sheds, Godowns, Platforms, Fabrication of Tanks, Pressure Vessels, Road, Building & Construction Machinery

A-36, Laghu Udyog Kendra, I.B. Patel Road, Goregaon East,
Bombay-400 063
Phone: 685305

STRUCTURAL & MECHANICAL ENGINEERS & STEEL FABRICATORS

INDIA TUBE MILLS AND METAL INDUSTRIES PRIVATE LIMITED

Specialists in : Pressure Vessels, Oil Storage Tanks, Stainless Steel & Aluminium Tanks & Mfg. of Bright Steel Bars.

Regd. Office : 6th Floor, 'Dhiraj Chamber',
9, Waudby Road, Bombay 400 001.
Phones : 265783/5.

Factory : Agra Road, Vikhroli, Tagore Nagar,
Bombay 400 083.
Phones : 581541/42/43. Telex : 011-2691.
265783/84/85. 011-2173.

STUD BOLTS & NUTS

High Tensile Stud Bolts, Bolts, Nuts, Stainless Steel-Alloy Steel

FOR

High pressure, High temperature, Low temperature

Contact

PRECISION TAPS & DIES PRIVATE LIMITED

294/3, Vidyanagari Marg, Kalina, Bombay 400098
Tele. : 547492-93-94. Telex : 011 3745 LUNA

LUNA FASTENERS

FOR

Oil Refineries, Fertilizers & Petro Chemical Industries. Any sizes and length in Metric & UNC

SUGAR MERCHANTS

R.P.M. SREENIVASULU & BROS.

Dealers in
Sugar & Khandasari

68, 2nd Main Rd.,
New Tharagupet, Bangalore 560002
Phones:
Off: 603495, 607274, 606251 Res: 603612
Cable : 'ARPIEM'

SURGICAL INSTRUMENTS

BHARUCHA INSTRUMENTATION & CONTROL

Manufacturers of

"BHARUCHA" brand Surgical Instruments such as PULSE MONITOR, TEMPERATURE MONITOR RESPIRATOR ETC.

7, Camangar, Mile 3/1, Nagar Road,
P.O. Dunkirk Lines, Pune 411014, India.
Phone: 24788

SURGICAL & SCIENTIFIC GOODS

CHIMANLAL SHAH & CO.

1st Floor, 3D, Mangaldas Market, Mangaldas Rd.,
Post Box No. 2538, Bombay 400 002.

Phones : Office : 313885, 313827, 251354, 256855
Resi. : 816886, 812480

Authorised Distributors for :

GLASSVAN' All Glass/Luer Lock Syringes (Interchangeable, ISI), & B. P. BLADES ISI Suture Needles, Hypodermic Needles, Electronic B. P. Apparatus, SURGICAL DRESSINGS (Ab. Cotton, Gauze, Roller Bandages, Lint), and Surgical Sundries.

SURGICAL DRESSING & 'SANTEX' SANITARY TOWELS

DIAMOND SURGICAL DRESSINGS WORKS, THE

381, SANE GURUJI MARG,
BOMBAY-400011.

PHONES: 374636 - 387106.

Manufacturers and Exporters of

'Elephant' Brand absorbent cotton, wool, IP and BPC, surgical dressings and 'Santex' sanitary towels.

SURGICAL DRESSINGS

Manufacturers of :

'AMBULANCE' BRAND SURGICAL DRESSINGS namely Absorbent Gauze, Absorbent Lint, Bandage Cloth, Roller Bandages, Triangular Bandages, "STERILE GAUZE PADS" and Cotton Wool.

REPACKERS of PHARMACEUTICAL DRUGS namely Powders, Liquids, Oil etc.

THE GOLDEN FIBRE & DRESSING SYNDICATE

Damodar Bldg., 3rd Floor, 105, Princess Street,
Bombay 400 002.
Telephone : 313613.

SURGICAL INSTRUMENTS & APPLIANCES

IMPERIAL SURGICAL CO. PRIVATE LTD.

" India House ", Opp. G.P.O., Fort, Bombay 400 001.

Leading Manufacturers of : Hospital Equipment, Importers of Surgical Instruments, Hospital Sundries, Catguts and Ligatures, Dental Instruments, Electro-Medical Equipment. *Agents :* " ISCOMED " Syringes and Needles. Also " ULTRADENT " Dental Equipments, Sterilizers, Shadowless Lamps, Suction Apparatus and other Equipments. Grams: "IMPSURGCO"

Phones : 266511 & 266512

Branches at : Lucknow, New Delhi and Bangalore.

SURGICAL & HOSPITAL EQUIPMENTS

JOHAR SALES (INDIA)

SURGICAL DRESSINGS

Bandages, Gauze, Lint, Cotton

3746, Parmanand Street, Daryaganj, New Delhi-110002

Phones: 279619, 261410

SURGICAL INSTRUMENTS

KHOSLA & COMPANY

Manufacturers and Exporters of
Surgical Instruments & Dressing material specially Eye Instruments.

★

157, S. Gandhi Marg,
Bombay 400 002.
Phones : 312423 & 295245.
Telex : 011-2956 KIPL IN.

SURVEYING INSTRUMENTS

STANDARD TRADING CO.

Pioneers Dumpy Levels Theodolites Mining Dials, Compasses, Planimeters, Tracing Papers, Tracing Clothes & Office Stationeries.

223, Himalaya House, 79, Palton Road,
Bombay 400 001

Phones . 267850 & 269464

Head Office :
43, Ezra Street,
Calcutta 700 001.
Phones : 266915, 341134 & 341665.

SWITCHES

"AG" Brand

CENTRIFUGAL SWITCHES

For ELECTRIC MOTORS

TRANSACTO

Devkaran Mansion, Block No. 6, 1st Floor,
Vithaldas Road, Bombay 400 002.
Phone : 359710. Cables : " OTCASNART ".

SWITCHGEAR & BLOCK MFRS.

HIND ENGINEERING COMPANY

"HEC" Clip-on Switchgear Terminal Blocks and Self Connecting Terminal Blocks with complete Accessories and Panel Board Accessories.

32, Ezra Street, Calcutta 700001.
Phone: 26-6340, 34-3519. Gram: "HINDLETICO".

TAILORS AND DRAPERS

DEVI SAHAI CHARAN DASS

AJMAL KHAN ROAD, NEW DELHI
110005
DRAPERS AND TAILORS
Phone : 566325

TAILORS & DRAPERS

FAMILY GARMENT STORE

Shirts-T.Shirts-Ties-Belts-Swimwear-Jeans-Socks-Hankies-Gowns-Under Garments-Bra-Panties-Baba Suits-Frocks-Feeding Aids.
For All Your Garment Needs
VISIT

MOHANLAL SONS

the family shop & 'men's top tailors'
'B' Blk., Connaught Place, Inside Carona Shoe Shop, New Delhi 110 001. Ph.: 343718-320815.

TANK MFRS.

R. PURUSHOTTAM & CO.

Mfrs. of :

Vessels & Tanks of M.S., S.S. & Alluminium for Oil, Sugar & Chemical Industries.

A-36, Laghu Udyog Kendra, I. B. Patel Road,
Goregaon East,
Bombay 400 063

Phone : 685305.

TARPAULINS

AGRAWAL & SONS, S. P.

Tarpaulins, Tents, Lorry Covers, Cotton, Jute, Grey, Dyed or Waterproof Canvas, Industrial Canvas, Bags, Twines, Hessian, Ropes etc.

Navjiwan, 4th Floor, Room No. 3,
125/27, Kazi Syed Street,
Bombay 400 003.
Phones : (*Office*) : 320415 & 661129.
Grams : " PROOFDUCK ".

TARPAULIN

'DUCK'

TARPAULIN
MOST TRUSTED NAME

DWARKADAS VELJI TALPATRIWALA

YOGESHWAR, 135/137, Kazi Syed Street,
Bombay 400 003.
Tel.: 323232. Grams: " VELTHAKKER ".
TLX DUCK : 011-5114.

TARPAULINS

JERAM SHIVJI & SONS

Wasiamal Bldg., 180, Yusuf Meherali Road,
Bombay 400 003.
Phones :
Office: 320326 & 330895.
Resi. : 473944.

JESHI BRAND 100% WATERPROOF
JC
TRADE MARK
TARPAULINS

Stockists of :

Tarpaulin, Hessian, Jute Gunny Bags, Twines, Cotton Canvas, Linoleums, Jute Carpets etc.

TARPAULINS

KHIMJI VELJI & CO.

62, Dontad St. (Khadak)
Bombay 400009.
Phones: 325443 & 338342.
Grams: 'IRONHOOPS'

Mfrs. of:

'KHIMCO' Brand Waterproof Tarpaulins, Canvas, Polythene Film, Waterproof Papers, Hessian Bags, Wax Papers, etc. Dealing in Packing Wood, Baling Hoops, Box Strapping (for packing all sorts of Textile Products) Filter Cloth etc.

TARPAULINS

KOOVERJI KARAMSHI TALPATRIWALA

Gaumukh Bhuvan, Opp. Masjid Railway Station,
Bombay 400 009.

Manufacturers of :

Waterproof tarpaulins, truck, wagon, scooter,
Machinery & Baloony covers.

Dealers in :

Cotton, Jute canvas and all kinds of packing materials.
Tarpaulins available on hire.

Phones: 324893 & 345129. Grams: " DUCKCANVAS".

TARPAULINS

MORARJI PERAJ & CO.
TALPATRIWALA

Mfrs. :

WELLKNOWN 100% WATER PROOF
" ELEPHANT " BRAND TARPAULINS

Polythene & Paperlined Gunny Bags, Hessian Jute & Cotton Canvas, Twines, etc.

138, Masjid Bunder Rd.,
Bombay 400 003.

Phones: 322352, 320326. Grams: " TALPATRI "

TAXIMETERS & PRECISION INSTRUMENTS

R. C. EDWARDS & CO. PRIVATE LTD.

16, Arthur Bunder Road, Colaba, Bombay 400 005.
Phones : 241940-244812. Grams : " EDDICOM ".

Manufacturers of :—FARE METERS
" ARGO " Taximeters, " EDCO " Autorickshaw meters, Kienzle Vibracorders and other Precision Instruments.

Chairman, Board of Directors: Mrs. Anup Jagtar Singh.

Managing Director :—Mrs. Anup Jagtar Singh.

Operations Director : Mr. Kamalbir Singh.

TELEPHONE ENGINEERS

Crystal Electrical Industries

TELEPHONE ENGINEERS
SPECIALISTS IN
INSTALLATIONS AND MAINTENANCE
OF
AUTO INTER-COM-SYSTEM—TELEPHONE WIRING

Dealers in:

Armoured & unarmoured Telephone Cables, Control Cables (1.5 sq mm & 2.5 sq mm), Co-Axial Cable, Jumper Wires, Hook Up Wires, Junction Boxes, Telephone Spares, Exchange Spares & Accessories.

1-D, Thacker Industrial Estate,
N. M. Joshi Marg, Bombay 400 011.
Phones: Office: 397672, 899408 & 890685 Resi.: 503140 & 505037.

TEFLON/PTFE PRODUCTS

G.D.I. ENGINEERING
PVT. LTD.

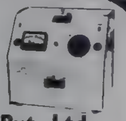
Mfrs. of:

P.T.F.E./TEFLON Rods, Sheets, Tapes, Universal Rope Gaskets, Tubings etc. Also producing Components Viz. Seals, Bearings, Bushes etc. to Customer's Specifications.

135-A, B.R.B. Basu Road, Calcutta 700001.
Phones: 269969, 269951. Gram: 'NODNAT'.
Telex No. 021-2552.

Testing Equipments

AUTOMATION



Props: Test Equipments (Elec.) Pvt. Ltd.
310, 'Neelam', Dr. R. G. Thadhani Marg,
Worli, Bombay-400 018.
Grams: "INSTALITE", Telex: 011-4217.
Phones: 393136/397213/379544.

Representatives all over India.

Manufacturers and pioneers of Testing Equipment (Electrical & Electronic) e.g., High Voltage and Oil Test Sets upto 100 K.V.; "Unitest"—Lamp & Fuse Tester, Motor and Fan Test Panels, Appliances Testers, Pin hole and Abrasion Testing Apparatus.

Also **xtena** —Extension Cord Box and
INSTALITE— Emergency Lamps, etc. etc.

TEXTILE AUXILIARIES

FOR
EMULSIFYING WAX
&
TEXTILE AUXILIARIES

ASHOK CHEMICALS

1st Floor, 43, Princess Street,
Bombay 400 002.
Phones : Resi. : 354061. Office : 254853.

TEXTILE AUXILIARIES AND DYESTUFFS

ESKAY CHEMICAL CORPORATION

Manufacturers & Exporters
of
SKAYWHIT
Fluorescent Whitening Agents

22D, Parsi Bazar Street, Fort, Bombay 400 001.

Phone : 256305. Grams : " ESKAYCHEM ".

TEXTILE MILL STORES

PRAKASH TRADING CORPORATION

Mangrol Mansion, Bora Bazar Street,
Bombay 400 001.

Phones : Office : 264639. *Resi.* : 577505.
Grams : " DHANLAXMY " Bombay.

Manufacturers & Suppliers of :

All types of textile bobbins, wooden and metal requisites for cotton, woollen, silk & jute mills. Also specialists in Lickerin Wire, Fillets of all types, Card Comb Blades and other Spg. & Wvg. Accessories.

TEXTILE ENGINEERS

THE NEW INDIA INDUSTRIES LIMITED

R.O. & Works : Jetalpur Road, Baroda 390 005.
Phones : 63431-32-33-34-35. Telex : 075 315 NIL IN.

Foremost Manufacturers of :

' INDIA ' brand best Egyptian Cotton Healds, Steel Reeds, 'CYCLE ' brand Wire Healds, All Metals Reeds, Flat Steel Healds, Jute Cambs, Jute Reeds, ' SWAR ' brand Egyptian Cotton Yarn and Staple Fibre and Blended Yarn, ' AGFA ' Camera and ' AGFA ' Photographic Printing Papers.

Bombay Office :

' Baktawar ', Nariman Point,
Bombay 400 020.
Phones : 230748, 230980 & 230921.
Telex : 3975 NILI IN.

TEXTILES & JUTE MACHINE MFRS.

JOHN T. HARDAKER (INDIA) PVT. LTD.

Jacquard Machines Makers, Harness Builders, Card Cutters, Designers, Cloth Samples Cutting Machines and Material Handling Single Lift Utility Truck Manufacturers and General Engineers.

Office & Works :

Ganpatrao Kadam Marg, Lower Parel,
Bombay 400 013.
Phone : 373469.

TEXTILE MACHINERY SPARE PARTS

AUTO-ARTS

Leading Manufacturers and Suppliers of :

All types of Textile Machinery Spare Parts for Spinning, Weaving, Auto Looms Spares, B.C. Winding, etc. Also manufacturers of all types of Yarn Guide Drum for Winding Machines and our Special Designed Temple Rollers for all types of Filament Yarn suitable for Auto Looms and Plain Looms.

7/8, Navjivan Society Building No. 3,
Lamington Road, Bombay 400 008.
Phones : 379021, 894205 & 397155.

TEXTILE MACHINERY ACCESSORIES MFRS. & DEALERS

NATIONAL WIRE HEALD WORKS PRIVATE LTD.

Manufacturers of : All types of Wire Healds and Flat Healds and Droppers.

Regd. Office : Lakshmi Building, Block 70, 4th Floor, Sir Phirozeshah Mehta Road, Fort, Bombay 400 001.

Phone : 26-9581 (3 Lines). Grams : " KEYHEALDS."

Works : 54 56, Hill Side, Tardeo Road, Bombay 400 034 and Mohili, Andheri-Kurla Road, Bombay 400 072.

Sales Office : At British Mill Stores Co., Sir Vithaldas Chambers, Homy Mody Street, Fort, Bombay 400 023.
Phone : 255235.

TEXTILE PROCESSING MACHINES

SARDAR TEXTILE ENGS. PVT. LTD.

Seksaria Industrial Estate, S. V. Road,
Malad (West), Bombay 400 064 (INDIA).

Phones : 691725, 695029, 693617 ; Res. : 692700.
Grams : " INFRARED ", Malad, Bombay 400 064.

Manufacturers of :

Pin/Clip Stenters ; Multilayer Pin Tenters for Woollen Blankets ; Float Dryers ; Drying Ranges ; Pneumatic Mangles ; Polymerising/Curing Machines ; Jiggers ; Winches ; Kiers ; Agers ; Infrared Ovens ; Continuous Conveyor type and Batch type dryers for various applications etc. etc.

TEXTILE (COTTON) MILLS

THE RAGHUVANSHI MILLS LIMITED

11-12, Senapati Bapat Marg, Bombay-400013.
Phones: 393171-2-3. Grams: "RAGHUBIR".
Telex: NAIN IN 011-4107.

Spindles 56,340, Art Silk Looms 176.

Cotton Yarn 10s to 120s, Staple Fibre Yarn, Blended Mixed Yarn and Polyester, Nylon and other Man-Made Fibre Fabrics, Shirtings, Suitings, Sarees and Dress Materials.

Chairman & Managing Director:
Shri Hareshchandra Maganlal.

THERMAL INSULATION

INDUSTRIAL MINERALS & MILL STORES TRADERS

Mercantile Bldgs., P. B. No. 2076,
Calcutta 700 001.

Specialists in Heat & Cold Insulations.

Manufacturers of :

' IMCO ' 85% Magnesia, Hardsetting—Cement, Calcium Silicate Insulation—Slabs & Pipe Sections made out of 85% Magnesia, Calcium Silicate & Asbestos Fibre & allied Products.

Branches : P.B. No. 1195, Delhi 110 006
& P.B. No. 1445, Madras 600 017.

THERMOFOIL HEATERS

GOODWILL CRYOGENICS ENT.

P. Box 8318, Deonar Post Office, Bombay 400 088.

US make

RTDs, STDs, PT-100, THERMOFOIL HEATERS, Flex Circuits, Thermocouples, Thermisters, Thermowells, Bearing Temp. Detectors, etc.

High Vac. Cryo Pumps, Liquid Helium Plants, Closed Cycle Refrigerators, Cryogenics Instrumentations, Liq. N_2 & Liq. He containers.

Superconductors, High Vac. Systems etc. and everything in Cryogenics and temperature measurement.

TILES & MARBLES

BHARAT TILES & MARBLE PRIVATE LIMITED

32, B. Samachar Marg, Bombay 400 023, India.
Telephones : 274837 & 274965. Telegrams : ' ENTENTE ', Bombay.

Manufacturers of :

Terrazzo, marble-mosaic and plain coloured cement tiles for floor and walls. Non-slip tiles for staircase steps & footpaths. Special heavy-duty STILAN Tiles for floors of factories, mills, railway platforms, etc. " PRIMA " tiles using large marble pieces which make a good substitute for marble. Manufacturers of VITROBRITE, a decorative textured plaster for inside/outside walls of buildings.

Suppliers of :

THERMO-LITECRETE lightweight building and insulating boards for insulating asbestos and terrace roofs ; for controlling condensation and humidification loads in mills ; for lightweight partitions and false ceilings in buildings, etc.

TILES (STEEL FLOORING HEAVY DUTY)

INDIANA ENGINEERING WORKS

"Steel-O-Tile" M. S. and Cast iron tiles for durable maintenance-free antiskid industrial flooring. Also manufacturers of "Gratex" floor gratings, conveyors, elevators, vessels, tanks.

Post Box 7409, Bombay 400 059.
Phones: 581903, 584743.
Grams: GRATEXFLO Telex: 011-6208

TIME RECORDERS—FACTORY CLOCKS

PARESH ENGINEERING CO.

Sole Selling Agents in India for ISGUS, W. German Electro-automatic Card Time Recorders, Time & Date Printers, Job Costers etc., Sales, Service & Repairs also, Exporters & General Merchants. Other Products: Reduction Gears, Electric Motors, Geared Motors, Variable Speed & Chain Drives etc.

7/10, Botawala Bldg., 3rd floor, 8, Horniman Circle, Fort, Bombay-400 023.

Phones: 316636; 319479; 292852; Res.: 676074.

Grams: "ISGUSAGENT"

TIMBER MERCHANTS & SAW MILLERS

ANAND TIMBER TRADERS

Mfrs. of
Packing Cases, Crates, Shooks, Pallets & Planks, Suppliers of all types of timber, Pine, Deal, Fir, Chir, Teak, Mango & Jungle wood etc.

170, Reay Road, Bombay 400010.
PHONES :
891254, 395771, 593206 (Thane)

TIMBER MERCHANTS & SAW MILLERS

B. F. WADIA AND SONS

142, Reay Road, Bombay 400 010.

Phones : 371934 & 378873.

TIMBER MERCHANTS, SAW MILLERS AND STOCKISTS OF ALL VARIETIES OF TIMBERS.

TIMBER

FAKHRI TIMBER TRADERS

Ulwa Road, PANVEL, Dist. Raigad.
Phone : 2528

Stockists of :

All kinds of Timber, Vellapine, Silver Oak, Teakwood Bullies & Bamboos.

Bombay Office : 186/188, Janjikar Street, Bombay 400 003.
Phones : 323183, 346654

TIMBER MERCHANTS

MESSRS. FATEHMOHAMED OOSMAN SONS

Timber Merchants & General Contractors

Plot No. 125, Godown No. 1 & 2
Mustafa Bazar, Bombay 400010.

Phone: Office: 398393, 890956
Cable: WOODFINE BOMBAY 10

TIMBER MERCHANTS

RAMESHCHANDRA & COMPANY

158, Reay Road, above R. E. Mody,
Opp. Reay Road Railway Station,
Bombay 400 010.

Phones :
Office : 892151 & 893080. *Resi.* : 575789.
Grams : " TIMBERLAND

Dealers & Stockists of :

All kinds of timbers, suppliers to leading industries and Govt. Departments. Packing wood, Pinewood, Birchwood, and Teakwood. Also Exporters. Suppliers of Dunnagewood to ships at short notice.

TIMBER MERCHANTS & EXPORTERS

SHREE SHANKAR VIJAY SAW MILL

108, Reay Road, Bombay 400033.

Specialists of :

Dandeli & Balarsha Teak Wood, Rose Wood, Haldoo (Bobbin Wood), Black Ebony and other fancy wood in logs and sizes.

Phones: 376260, 376638, 391982 & 398165.

Cable : ALL TIMBER.
Telex : PATWOOD—011-4876
,, WOODTOP—011-5613.

TIMBER & PLYWOOD

MAKLAI
TIMBER & PLYWOOD CO.

Exporters & Importers

Dealers in all sorts of Timber such as C.P. Teak, Dandeli Teak, Balarsha Teak etc. Jungle wood, Vellapine, Silver Oak etc. Plywoods such as Commercial, Veneers, Block Boards, Flush doors etc. All kinds of Cement Sheets, Plain, Corrugated, Trafford etc. and Fevicol.

79, Ghoghari Mohalla, P.O. Box 3140,
Bombay 400003.
Phones: 332242, 344771, 335701
Gram: "BURMAHWOOD", Bombay-3.

TIMERS

SHAH ELECTRONICS

114, Kewal Industrial Estate,
Senapati Bapat Marg,
Lower Parel, Bombay 400013

Phone : 397184. Grams : " TIMESWITCH ".

MOTORISED — Auto-Reset, Manual & Cam Timers, Time Totalisers, Photo-Cell Controls & Synchronous Motors.

TIN CONTAINERS

ESOOFALLY DAWOODBHOY

Manufacturers & Exporters of :

Tin, Galvanised and other metal Boxes of every Size & Description.

Phone : 862433.

18, Saifee Jubilee St., Bombay 400 003.
Grams: "WELLWORTHY" Bombay, Chinch Bunder.

TIN PRINTERS & BOX MFRS.

KIV TRADING CO.

Manufacturers of :

Tin Containers, Screw Caps, Aluminium Seals, Pilfer Proof Caps, Anodised Novelties, Presentation Articles, Tin Seaming & Vial Closing Machines.

1st Parsiwada, Khetwadi,
Bombay 400 004.
Phone : 352180. Grams : KIVGROUP "

TIN PRINTERS

THE METAL PRINTERS COMPANY

Office : Bhupen Chambers, Dalal St., Bombay 400 023.
Grams : " METALPRINT ".
Phones : *Office* : 274812, 270884
Calcutta : Harington Court, 6, Harington Street.
Phone : 441743.
Madras : Cassein Terrace, 2nd Floor, New No. 9,
Woods Road, Madras 600 002.
Factory: 103, Govt. Industrial Estate, Kandivli West,
Bombay 400 067. Phones: 693418 & 692806.

Manufacturers of:

METAL POSTERS, CALENDARS, CASH BOXES, DECORATED CONTAINERS, TRAYS, TOYS, CLOCK DIALS, etc.

TIN PRINTERS & CONTAINERS MANUFACTURERS

ZENITH TIN WORKS PVT. LIMITED

Manufacturers of Plain and Lithographed Tin Containers, Open Top Sanitary Cans, Aluminium Collapsible Tubes, Aluminium Pilfer Proof & Roll-On Caps, Fancy Metal Trays etc.

Keshav Khadye Marg, Post Box No. 7941, Bombay 400 034.
Phone : 379971. Grams : ' ZENITHTINS '
Telex : Zentins 011-2189.

Directors :

M. S. Barodawala, H. A. Barodawala and A. A. Barodawala.

Res. : 126, Cadell Road, Mahim, Bombay 400 016.
Phones : 452041, 464209 & 454692.

Res. : Alaba Block F 4, Cyrus Avenue, Bombay 400 008.
Phones : 378498, 371093.

Res. : 502 A, Surya Apartments, 53, Bhulabhai Desai Road,
Bombay 400 026. Phone : 823834

TOOLS

For everything in Precision Measuring Equipment, Metal Cutting and Threading Tools, Gauges, and all Workshop Equipment.

Please Contact

ENGINEERS' TOOLS CENTRE

P.O. Box No. 3499, 93-A, Nagdevi Street
Bombay 400003
Phones: 322554, 323392 Res: 586945.
Grams: "HAPPYDEAL" (Chinchbunder, Bombay)
Stockists of:
Miranda, Warrior/Totem, Bahco Taparia, IT/Addison, SAP/Regal, etc.

TOOLS (DIAMOND)

J.K. ENGINEERING (Diamond Works)

Leading Mfrs. of:
All Types of Diamond Dressing Tools, for Industrial Purpose, Diamond Wheels, Boring Tools, Rock Well Diamond Indentors, Glass Cutters, Hand Laps., Compounds, Pastes & Powders, Industrial Diamonds of all Purposes.
408, Jivaraj Niwas, L.B.Shastri Marg,
Kurla, Bombay 400070.
Phone: 551543.

TOOLS

RAJ TOOLS CORPORATION

50, Bibijan Street, P.O. Box 3451, Bombay 400003.
Phone: 339740.

Stockists & Suppliers of :

PRECISION MEASURING TOOLS, ENGINEERING TOOLS, GARAGE TOOLS & EQUIPMENTS, METAL WORKING, CUTTING & THREADING TOOLS, HARDWARE ITEMS.

TOOL ALLOY STEEL

Wishing our customers & well-wishers

A VERY HAPPY NEW YEAR

Dhiraj STEEL CO.

93, MOHAMEDALI ROAD, BOMBAY 400003
PHONE: 322340-325862 TELEX: 011-4649

TOOL & ALLOY STEEL

E.N. STEELS

EN-8 & EN-9
Available Ex-stock
Also all types of
TOOL & ALLOY STEELS
Ask:
CONSOLIDATED STEEL CORPORATION
30 Narayan Dhuru Street,
Bombay 400 003
Phone: 327784
Gram: HIGHCARBON

TOOL & ALLOY STEELS

LACHHMIDHAR KANSHIRAM

201, Yusuf Meherali Road,
Bombay 400 003.
Phones : 320413, 320414, 326544.
Telex : 011-3715. Grams : "IRONGOODS".

Authorised Stockists of : M/s. Mahindra Ugine Steel Co. Ltd., Bombay.

Stockists of : Bearing Steels to specn. SAE-52100/EN-31, O.H.N.S., H.C.H.C. Die Steel, Stainless Steel, Hot Die Steel, Nickel Chrome Steels, EN-24/EN-36 and all other EN specn. steels.

TOOL, ALLOY & SPECIAL STEELS

BATHIJA CORPORATION

HOUSE OF SPECIAL STEELS

Post Box No. 663,
Import Warehouse (N), Strand Road, Calcutta 700 001.
Phones: 22-0973/5241 (Office); 24-3987 and 247597 (Resi.). Grams: "TITANIUM"

Importers, Stockists :

Tool, Alloy & Special Steels, all Purposes, all Sections & all Specifications.

We have facilities for Cold Drawing, Turning, Centreless Grinding, Cold Rolling, Hot Rolling, Forging, Annealing for all the materials.

TOOL, ALLOY & SPECIAL STEEL

CAMBAY TOOL STEEL CO.

Dealers in : Tool and Alloy Steel—High Speed Steel—High Carbon—High Chromium Steel—Oil Hardening Non-Shrinking Steel—Carbon Steel—Stainless Steel—Nickel Chrome Steel—Silver Steel—Hot Die Steel—EN Specification Steel, etc.

Office : 92A, Memonwada Road, Dada Mansion,
Bombay 400 003.
Phones : 329009 & 336959.
Grams : "CARBOSTEEL".

TOOLS AND EQUIPMENTS

M. P. MUDGAL & CO.

Erection tools, garage tools, hand tools, pulling and lifting tackles, precision tools and Hydraulic Pulling and Lifting equipments etc.

1915, Sirkiwalan, Ramesh Market,
Hauz Qazi, Delhi 110006.
Phones: 265055, 264200; Resi: 718421.
Grams: SMALLTOOL.

TOYS — WOODEN

M/s. KHAZANA

Manufacturers & Exporters of :

" Skillofun " wooden educative toys & games, presentation items, complementaries, utility items, etc., etc.

9, Okhla Industrial Complex,
Phase II, Scheme III,
New Delhi 110 020.

Phones : 637196 & 693874.

TRACTORS & EARTHMOVING MACHINERY PARTS

PREFIT INDUSTRIES

Importers & Suppliers of:

Spare parts of all types of Crawler Tractor and Earthmoying Machinery, viz. Bulldozers, Shovels, Excavators, Cranes, Loaders, etc. and also RECONDITIONING OF BULLDOZER AND SHOVEL UNDERCARRIAGE AND MANUFACTURING OF IMPORT SUBSTITUTION ITEMS.

1st Floor, Sardargriha Building,
198, L. Tilak Marg, Bombay 400002.
Phones:
Office: 313273/313385 Factory: 445580/4224369

TRADE MARK & PATENT ATTORNEYS

ASHOKA TRADE MARKS CO.

(Trade Mark & Patent Attorneys)

14, Amar Chambers, Nahar House,
14-F, Connaught Place,
New Delhi 110001
Phones : 44836, 43450
Res. : 560846

TRADE MARK PATENT, DESIGN & COPYRIGHT ATTORNEYS

INTERNATIONAL TRADE MARKS BUREAU

(Estd.: 1945)
Manekji Wadia Bldg., 1st Floor,
Above Chicago Radio,
127, Mahatma Gandhi Road, Fort,
Bombay 400 023.
PHONE (Office): 272158

TRADING AGENCIES

INDUSTRIAL TRADING AGENCIES

Authorised Stockists :

" EVEREST " Hand Tools, Hacksaw, Bandsaw Blades, Ball Bearings, Hose Clips, Grease Cups, Oil Cans, Steel Balls, Spring Washer, Asbestos Goods, Cutting Pliers, Cotter Pins, Emery Paste, Plastic Pipe and all kinds of Rubber and Hardware Goods.

50, Bibijan Street, Bombay 400 003.
Phones : *Office :* 325838 & 328151 ; *Resi.* 374470.
Grams : " HOSEPIPE "

TRANSFER LABELS

GOOD WORK CO.

Mfrs. of all kinds of TRANSFER LABELS (Potteries Ceramic), Acid Proof, Water Slider, Waterproof and Varnished Transfer Labels, Metal Labels (Embossed), Brass, Aluminium — Etched and Embossed.

GWC Building, A-4, Naraina Industrial Area, Phase-II
New Delhi 110 028.

Phones : 584246 & 588959.

TRANSLATORS AND INTERPRETERS

TRANS-INTER ASSOCIATES

Services :

Competent in technical translations in German-English-German. Alongwith expert services for delegations and conferences, seminars, exhibitions, etc. Also undertake translations and offer interpreter services in European and Arabic languages.

Enquiries solicited :

10, Seeta Mahal, B. Petit Road, Bombay 400 036.
Phone : (91) 22/367134.

TRANSPORT CONTRACTORS

FLEET OWNERS

A. G. CARRIERS

A Single Source for multiple Transport needs, giving specialised services by Trucks, Trailers for Oversize consignments, Dumpers, Tankers, Refrigerated Vehicles etc. Approved Freight Forwarder of Railways. Branches all over India.

Steel Chambers, Broach St., Bombay 400009

PHONES :
327133, 320268/69-60 (Bombay), 592367 (Thane)

TRANSPORT CONTRACTORS

"Remove bad corruption from the market, get your goods first of all in the market of South India & Gujarat rush your cargo

Dial . 860103, 869387

M/s. Associated Roadlines Corpn.

18/24, Nandlal Jani Road,
International Rubber Building.
Wadi Bunder,
Bombay 400 009.

TRANSPORT CONTRACTORS

BAXISSINGH & CO.

Leading Transport Contractors, Suppliers of Cranes & Trailers on hire, Specialists in Clearing and Transport of Heavy & Lengthy packages.

H.O. 5, P. D'Mello Road,
Bombay 400009.

Phones 861831-32/862041-42
Gram: ROADGOYAR, Chinch Bunder,
Bombay 400009.
Telex: 011-3341 RSCO IN.

TRANSPORT CONTRACTORS

INLAND CARRIERS (BOMBAY)

Daily Service from Bombay to Akola, Amraoti, Nagpur, Jabalpur, Durg (Bhilai), Raipur, Full load accepted any City of India.

112, Sarang St., Kokha Bazar,
Bombay-400 003.

Office: 345673, 343237, 327710.
Godown: 335420, 367831. Thane Gdn.: 596007

TRANSPORT CONTRACTORS

MANGATRAM BROS.

25, P. D'Mello Road, Bombay 400 009

Transport Contractors

Specialised in handling heavy material
Trucks: 5 to 25 ton capacity
Trailers: 20 to 300 ton capacity
Crane: upto 25 ton capacity, truck mounted.

Branches : Ahmedabad, Baroda & Delhi.

Phones : 865973/74175. Telex : 3631.
Ahmedabad—446346. Telex : 493.
New Delhi—45037. Telex : 4287.

TRANSPORTERS AND GOODS CARRIERS

MONTGOMERY CO-OP. GOODS TRANSPORT SOCIETY LIMITED

Transporters, Govt. Contractors & Fleet Owners. Premier Road Transport for Bombay, Kanpur, Ahmedabad, Indore, Lucknow, Bareilly Punjab, Haryana & U.P. Full trucks available for all the important towns of India.

Admn. Office: Roshan Ara Road Delhi 110 007	25 7320 25 6793 25 6294
Booking Office: Mori Gate	22 7511 22 4654
U.P. Border	20 0095 20 0196

TRANSPORT CONTRACTORS

GRAM : NEPCAR. PHONE NOS. : 27-4700, 27-4701, 27-9954.

NEPAL CARRIERS

P-15, India Exchange Place Extension, Calcutta 700073.

Bombay	Delhi	Kanpur	Indore
320837	271351	67763	33761
Muzaffarpur	Darbhanga	Ranchi	Patna
4238	2024	20210	21961
..	Gauhati		
NEPAL SIDE	24432		
Raxual	Birganj	Hitauda	Kathmandu
76	2149	416	11901, 14109
Jogbani	Biratnagar	Dharan	Rajbiraj
	3470	...	.
Nautanwa	Bhairwa	Pokhra	Butwal
39	...	261	
Nepalganj	Jaynagar	Jankpurdham	

TRANSPORT CONTRACTORS

"Remove bad corruption from the market, get your goods first of all in the market of South India & Gujarat, rush your cargo."

Dial : 867171, 864394

NEW GEE DEE FREIGHT CARRIERS

301/308, Trapinex House
15, Sholapur Street,
Bombay 400 009

TRANSPORT

NEW HARIYANA TRANSPORT CO.

(The most trusted Name in Road Transport World)
Daily Parcel between: BOMBAY-DELHI-MADRAS-CALCUTTA-NAGPUR-RAIPUR-BOKARO-RANCHI-TATA-GHATSILA-KORBA-SAMBALPUR-ERODE
HO: 155/C, Mahatma Gandhi Road, Calcutta 700007. Phones: 34-8315, 34-3075 and you will find NHT under your command.

TRANSPORT CONTRACTORS

RAHUL TRANSPORT PRIVATE LTD.

TRANSPORT CONTRACTORS & TRUCK OWNERS
Phones: (Off.) 343237, 327710, 345673
Cable: "INACARS"
Thane Booking:-
M.V. Bhatia Compound, Near Savani Transport, Eastern Highway.
Phone: 596007
Godown:-
2nd Panjrapole Galli, Opp. Kapole Wadi,
Bombay-400 004.
Phone: 355420, 367831

TRANSPORT CONTRACTORS

ROAD TRANSPORT CORPORATION

Zonal Office:
Mittal Chambers, Nariman Point, Bombay 400021.
Phones: 233887 - 4 lines.
Bombay Office:
Nooruddin Chambers, 87/B, Devji Rattansy Marg,
Bombay 400009.
Phones: 336405, 336406 & 336410.
Booking Office & Godown:
842, Mansion Road, Carnac Bunder, Bombay 400009.
Phone: 337999.
Delivery Office & Godown:
Office: Ashok Chambers, Devji Rattansy Marg,
Bombay 400009. Phone 329602.
Godown: 20, Wadi Bunder Road, Bombay 400010. Phone: 863255.
Thane Office:
Kishore Industrial Estate, Majiwada, Thane
Phone: 593855, Grams: "SOUTHEAST" Telex: 011-3641.

TRANSPORT CONTRACTORS

SOUTH EASTERN ROADWAYS

Zonal Office:
Mittal Chambers, Nariman Point, Bombay 400021.
Phones: 233887 - 4 lines.
Bombay Office:
Nooruddin Chambers, 87/B, Devji Rattansy Marg, Bombay 400009

Phones: 336405, 336406 & 336410.
Booking Office & Godown:
1, P.D'Mello Road, Bombay 400009. Phone 327411.
Delivery Office & Godown:
Office: Ashok Chambers, Devji Rattansy Marg, Bombay 400009
Phone 329602
Godown: 20, Wadi Bunder Road, Bombay 400010.
Phone: 863255.
Thane Office: Kishore Industrial Estate, Majiwada, Thane
Phone: 593855.
Grams: "ROADGLIDE" Telex. 011-3641

TRANSPORT CONTRACTORS

SOUTH FREIGHT CARRIERS PRIVATE LIMITED

Ahmedabad, Bangalore, Bhadravathi, Belgaum, Coimbatore, Chandigarh, Calcutta, Chherhata, Delhi, Ernakulam, Faridabad, Ghaziabad, Hardwar, Hyderabad, Indore, Ichapuram, Khetrinagar, Kanpur, Ludhiana, Lucknow, Madras, Madurai, Mettur Dam, Modinagar, Nasik, Pune, Sivakasi, Thane Tatanagar, Renukoot, Tuticorin.

Ashok Chambers, Broach Street
Bombay 400 009
Phones : [illegible]55

TRANSPORT & CONTRACTORS

SURAT GOODS TRANSPORT PVT. LTD.

Fleet Owners & Transport Contractors. Daily services to Ahmedabad, Bangalore, Baroda, Belgaum, Calcutta, Coimbatore, Delhi, Hyderabad, Indore, Madras, Metturdam, Pune, Surat, Salem, Thane, Vapi & Udhna.

K. Parikh House, 47, P. D'Mello Road,
Bombay 400 009.

Phones: 335555, 328555, 324572, 334355

TRANSPORT CONTRACTORS

WITH BEST COMPLIMENTS

from

TRANSPORT CORPN. OF INDIA LTD.

Transport House,
128-B, Poona Street,
Bombay 400 009.

Phones : 336341 (4 lines).

TRAVEL AGENTS

INDTRAVELS

Division of Airfreight Pvt. Ltd.
Neville House, Nicol Road, Ballard Estate,
Bombay 400 038.
Phone : 265761—6. Grams : "INDTRAVELS".
Telex : 2734 AFT IN.

AIR AND RAIL TRAVEL
Hotel bookings in India and abroad ; charter and group bookings.
Passport, documents and Reserve Bank formalities.

TRAVEL AGENTS

KANTHARIA TRAVEL CORPORATION

for PASSAGES by SEA, AIR, RAIL, ROAD.
DOMESTIC & INTERNATIONAL.

Santram Road, NADIAD
(Gujarat).

TRAVEL SERVICE

ASIATIC TRAVEL SERVICE

Takes care of the traveller.
P.B. 1568, 12, Murzban Road,
Bombay 400001.

Phones: 268151.
Resi.: 241361. Aspit, Azarmi.
Grams: "AIRASIA" Telex: 3151.

TRAVEL-AGENTS

KUNDU TRAVEL AGENCY

Bombay-Calcutta-Madras.

HOTEL BOOKING FACILITIES available at our Bombay Office for Kashmir — Hotel New Park; Darjeeling — Hotel Monalisa.

KASHMIR PACKAGE TOUR
CALCUTTA-DARJEELING-KATHMANDU
SINGAPORE TOUR

L.T.C. Approved. Contact:

KUNDU TRAVEL AGENCY

604, Auto Commerce House, 6th Floor, Kennedy Bridge,
Nana Chowk, Bombay 400 007.
Phones : 364176, 383959.

TRAVEL AGENTS

SPACE TRAVELS

Travel Agents, Tour Organisers, Air Charters, All Travel formalities, free consultation.

Nanabhay Mansion, 4th Floor, Sir P.M. Road,
Bombay 400001. BR 255652
257773

Branch: Goa
Cable: BRAJI, Bombay

TRAVEL AGENTS

SUBEDAR & SONS

Travel Agents — Passage Brokers — Licensed Recruiting Agents for supply of Manpower. Booking of International AIR & STEAMER Tickets done and Travel Documents arranged.

182, Angappa Naick Street, Madras 600001.
Phone: Off: 23620 Per: 21507.

TRAVEL AGENTS

THAKKERS TRAVEL SERVICE

General Sales Agents — Goa for KLM Royal Dutch Air Lines.

Thakker House, Post Box 8,
Vasco-da-Gama, Goa.

Phone : 2861.
Grams : "THAKKERSERV."
Telex : 0191-204 & 0191-268.
A B, "THKR IN" 204 268.

TRAVEL AGENTS & TOUR OPERATORS

THOMAS COOK (INDIA) LTD.

Thomas Cook Building, Dr. D. N. Road,
Bombay 400 001.
Phone : 258556. Telex : 011-2096.

Travel agents with over 1,000 offices and representatives in 141 countries throughout the world. International & Domestic Travel, Tour Operators & Foreign Exchange Dealers.

Branches in India : Bangalore, Madras and New Delhi.

TRAVEL AGENTS

VENSIMAL BASSARMAL & BROS.

Krishna Nivas Bldg.,
New Silk Bazar, 3, Bomanji Master Road,
Kalbadevi.
P. O. Box 2112, Bombay 400 002.
Phone : 314233. Grams : "VENSIMAL".

Travel Agents recognised by the Government of India, I.A.T.A., Principal Steamship Lines, Airlines & Indian Railways.

Branch : Podar Chambers, Gr. Floor,
18, Rabindra Sarani, Calcutta 700001.
Phone : 263230. Grams : "VENBASBRO".

TROLLEYS, WHEEL BARROWS, PALLET TRUCKS, TRAILERS ETC.

EAGLE ENGINEERING COMPANY

For Trolleys, Wheel Barrows, Pallet Trucks, Lifting Trucks of all types, all sorts of wheels, Trailers. etc.

35, Chittaranjan Avenue, Calcutta 700012.
Phone : 26-2077.

TUBULAR STRUCTURES

P.P. MANUFACTURING CORPORATION

Regd. Office: 13, Shivsagar, Mahatma Phule Road
Vishnu Nagar, Dombivli (West) 421202.
Sales Office: 413, Commerce House, Nagindas
Master Road, 4th floor, Fort, Bombay-400 023
Phone: 272773.
Factory: W-2, M.I.D.C., Phase II, Manpada Road,
Dombivli. Pin: 421 204.

TUBE WELLS

DRILLERS INDIA (P) LTD.

Tubewell Drilling Engineers. Contact for WATER EXPLORATION TUBEWELLS for Irrigation. Industries & DRINKING WATER for supplies in cities Mfrs. of all kinds of Tubewell Pipes & Fittings

54 Rajinder Nagar Market
New Delhi 110 060

Phone : 560146 Grams : " DEEPWELL

TUBE WELL BORING CONTRACTORS

MOTI TUBE WELLS

Tube wells for water schemes, factories, farms, housing society, test bores for minerals, foundations of dams & bridges.

670, Parsi Colony, 2nd Building, Opp. Bank of India,
Wadala Church Branch, Dadar, Bombay
400 014.
Phone: 445371.

TUNGSTEN CARBIDE PRODUCTS

BADANI INDUSTRIES

Mfrs. of BRAZED CARBIDE TIPPED & HSS CUTTING TOOLS viz. Reamers, End Mills, Slot Drills, Shell End Mills, Side & Face Cutters and also Single Point Tools

Factory & Office
W-C, M.I.D.C Industrial Area, Nagpur 440 028

Phones : 7320, 22205
Grams : " BADANITOOL"

TUNGSTEN CARBIDE PRODUCTS

WIDIA (INDIA) LIMITED

Manufacturers of : Tungsten Carbide Tips, Throwaway Inserts for Turning and Milling, Widadur Coated Inserts, Pellets, Tools, Widax Toolholders, Widax End Mills, Dies, Solid Carbide Reamers, Lugged Reamers, Tungsten Copper, Hardfacing Welding Rods, Hardfacing Electrodes, Button Bits for Down the Hole Drills, Coal Auger Drills, Spade Drills, WIDAX Milling Cutters

Regd. Office & Works :
8 9th Mile, Tumkur Road, Post Bag 2280
Bangalore 560 073
Phone : 38321 Grams : "WIDIA" Telex : 0845 224

TYRE DEALERS

RELIABLE TYRES

Leading Stockists and Dealers of

All kinds of Tyres and Tubes of all Makes for Trucks, Cars, Tractors, Scooters, Earth Movers and Automobile Accessories

Harish Chambers, 315, Samuel Street, Vadgadi,
Bombay 400 003
Phones : *Office* : 334972, 341730, 330874.
Resi. : 523796, 392577.

TYRE MFRS. & DISTRIBUTORS

BOMBAY TYRES INTERNATIONAL LTD.

Regd. Office and Factory
Hay Bunder Road, Bombay 400 033.
Telephone: 395021 (8 lines)

District Office : Swadeshi Mills Estate,
Mama Parmanand Marg, Bombay 400 004.
Telephones : 352621-23.

District Offices also at: Ahmedabad, Bangalore, Bombay, Calcutta, Cochin, Cuttack, Delhi, Gauhati, Hyderabad, Jabalpur, Jaipur, Jullunder, Lucknow, Madras and Patna.

TYRE MFRS.

RELAY CORPORATION

10/1D, Lal Bazar Street, Calcutta-1.

Manufacturers of Original "UNIQUE" Brand Tyre and Diaphragm type flexible Couplings for two Shafts, as well as for Direct Flywheel Mounting of Diesel Engines. Also "RESISTOFLEX" Anti-Shock/Vibration Mountings and Foundation Pads.

Phones: 23-2093/23-9057

Telex: 021-3133

UMBRELLA MANUFACTURERS & MERCHANTS

(Estd. 1860)

EBRAHIM CURRIM & SONS

Manufacturers of :

Famous Stag Brand Umbrellas. Also Parasols, Golf & Garden Umbrellas.

Rahim Bldg., Princess St., Bombay 400 002
Phone : 312238.

Branches : Madras 1 ; Calicut 1.

UMBRELLA MANUFACTURERS

MOHENDRA DUTT GRANDSONS

Quality Folding and Standard Umbrella makers. 'REGENT' brand Garden, Survey, Trolley, Ceremonial, Fishing and Golf Umbrellas.

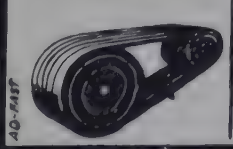
25A, Beniatola Lane
Post Box 10861
Calcutta 700009.
Phones: 321421, 345137
Cable: "SUN AND RAIN" Calcutta

V-BELTS & FAN BELTS

REDUCE YOUR PLANT MAINTENANCE COSTS WITH

HELICORD V-BELTS

Conforming to I.S.S. 2494 & B.S.S. 1440



& FAN BELTS

CONTACT:
CHETAN TRADING CO.
65, Sarang Street, Bombay 3.
Phone: Off: 322547, 339651
Resi. 476068

VEE BELTS

MOTILAL KALIANDAS & CO.

Endless or open-ended cotton woven & rubber conveyor belts, vee belts, special application belts, montana rubber canvas belting cut edge or round edge, link belts, vari-speedbelts, cone drum belts, timing belts, etc.

80, Nagdevi Street, Bombay-400 003.

Phone: 323502.

VALUER APPROVED BY I.T.

M.V. BHARNE

B.E. Mech., B.E. Elec., MIE., FIV.
Chartered Engineer, Registered Valuer for Machinery & Plant, Surveyor/Loss Assessor.

P.O. Box 180, Panjim (Goa), India
Phone:
Off: 3660 Res: 3332
Grams: UMA, Panjim.

VALVES & COCKS

MANNA ENGINEERING WORKS

62, Shree Kishan Bhakat Lane.
Howrah 711 101.

GUN Metal, Cast Iron, Cast Steel, Stainless Steel, Valves, Cocks, Pipe and Pipe's Fitting.

Phone : 69-2937.

VALVES MFRS.

PELICAN VALVES & ENGG. WORKS

57/2, 'Q' Rd., Belgachia, Howrah.

Mfrs. of

C. I. Sluice Valves; Parallel Slide Valves, Stop Valves, Globe Valves, Reflex Valves, Air Valves & Diaphragm Valves, C. I. & S. S. & G. M. Valves & Cocks of all types.

City Office : 10, Canning St., Calcutta 700001.
PHONES : 663506 - 225485

VEGETABLE OILS

**MANILAL LAXMICHAND/
MANILAL OIL CO.**
110, Ghorupdeo Road, Bombay 400033.
Phones: 375378, 378885 & 897776.

SOAP OILS-RICE BRAN OIL, NEEM OIL, KARANJIA FATTY ACIDS, KOKUM SEEDS, CASTOR OIL/DERIVATIVES

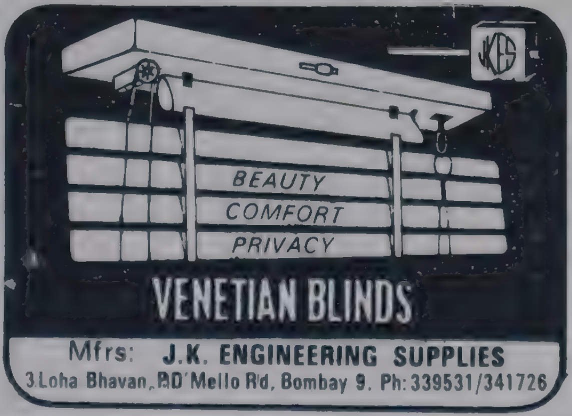
VENETIAN BLINDS

**AEROLUX VENETIAN BLINDS
MANUFACTURING CO.**

'AEROLUX' Model Venetian Blinds self-adjusting type, can be raised or lowered in tilted or open positions — tilting with shaft system — aluminium top & bottom rails — no wood at all.

5, Malcha Marg Market,
Chanakyapuri, New Delhi 110021.
Phone: 374389 (ND)

VENETIAN BLINDS



Mfrs: **J.K. ENGINEERING SUPPLIES**
3 Loha Bhavan, P.D'Mello Rd, Bombay 9. Ph: 339531/341726

VERMICULITE MICA PROCESSED MIVARMA

MALBAR MINERALS

Mica Sheets/Powder, Raw/Processed Vermiculite Golden Mica, Mivarma Granules/Flakes/Powder for Tar Removal after Solvent recovery of Benzene, Toluene, Ortho Nitro Toluene, etc. Tower Packings such as Raschig/Pall Rings, Intalox/Berl Saddles, Ceramic/Porcelain Balls, etc. Calcined Iron Free Quartz Powder, Coconut Shell Powder, Calcined Magnesite, MgO, Asbestos, Marble, Kiesulgar, Ground Cotton, Wood Flour, Hydrated Lime, Calcium Hydroxide/Oxide/Carbonate etc.

44, Bhagwan Bhawan, 4th Floor, 196-198, Samuel Street,
Bombay 400 009.
Phones: 328805, 693922, 684070. Gram "PARASKRUPA".

WANTED AGENTS
IN ALL UNREPRESENTED VILLAGES, TOWNS AND CITIES OF INDIA & OTHER COUNTRIES FOR

WISDOM
INTERNATIONAL MONTHLY
Nagamani Garden Street,
Madras-600001

- Readership exceeds 6,00,000
- Exported to Foreign Countries

WRITE TODAY FOR AGENCY TERMS

WASHING & DYEING COMPANIES

THE DIANA-ECLIPSE CO.

Cleaners & Dyers.

Specialists in :

Carpet & Upholstery Cleaning Service.

Address :

Holland House, Colaba Causeway, Bombay 400 039
Phone : 230619.

PARAG ', 27, Pedder Road,
Bombay 400 026.
Phone : 351987.

WATCH STRAPS & BRACELETS MFRS.

Aristo

DESAI TRADING CO.

Manufacturers of :

" ARISTO " brand Watch Straps and Bracelets.

Address :

189, Abdul Rehman Street, Bombay 400 003.
Phones : 321170 & 349528. Grams : " MANPRAN ".

WATCH STRAPS & BRACELETS MFRS.

VOG & CO.

Empire Bldg., Dr. Dadabhoy Naoroji Road,
Bombay 400001.

Phone : 264068. Grams : " VOGSTRAPS ".

Manufacturers of : Quality Nylon Watch Straps, Bracelets in Stainless Steel & Rolled Gold & Clocks.

WATCH & CLOCK IMPORTERS & MANUFACTURERS

EASTERN WATCH

231-3, Dr. Dadabhai Naoroji Road, Bombay 400 001.

Watches and Clocks Manufacturers and Importers. Tower Clocks Specialists. Every type of Electric Clocks, Time Recorders, Floral Clocks, Master & Slave Clocks System & " EXPLOSAF " Safety Torches.

Post Box No. 263.

Phones : 261962 & 266779.

WATER FILTERS

ESTABLISHED 1925
BALSARA

BALSARA HYGIENE PRODUCTS

12-A, Jorawar Bhuvan,
M. Karve Road, Bombay 400 020.
Phone : 256241.
Cable : " BALHYGIENE ".

Manufacturers of : ' Puritas ' Pressure/Storage Water Filters, ' Odonil ' Air Purifier, ' Sanifresh ' Lavatory Cleanser, ' Odomos ' Mosquito Repellent Cream, ' Expel ' Drain Cleaner, ' Odopic ' Cleaning Powder & ' Promise ' Toothpaste (with Clove Oil).

WATER FILTRATION PLANT MFRS.

WATER FILTERS COMPANY

Manufacturers of:

Quality Plants and Spares viz. Water Filtration, Chlorination, Pre-Treatment and Media etc.

56, Netaji Subhas Road,
Calcutta 700 001.
Dial: 26-5305.

WATER METERS

CAPSTAN METERS (INDIA) LTD.

Manufacturers of all types of :

Water meters from 15 mm to 600 mm in collaboration with Guest & Chrimes Ltd., England.

Works & Sales Office: Tonk Road, Jaipur 302 015. Phone : 82367
Regd. Office : 52, Janpath, New Delhi 110001 Phone : 320959
Bombay Office : 104, Marine Chambers, New Marine Lines, Bombay 400 020 Phone : 294101

WATER TREATMENT PLANTS, INSTRUMENTS & CHEMICALS

DRIPLEX WATER ENGINEERING PVT. LTD.

Manufacturers of:
Pressure Filters, Rapid Gravity Filters, Softeners, Demineralisers, Chlorinators, Dosers, Swimming Pool Filteration Plants, Public Health Water Supply Schemes, Clarification Systems, Water Treatment Chemicals, Waste and Effluent Treatment Plants, etc.

"DRIPLEXHOUSE", No. 1, Panchsheel Community Centre,
New Delhi 110 017.
Phones: 652352, 650942 Gram: WATERENGG
Telex: 031-4604.

WATERPROOFING CONTRACTORS

G. B. JOSHI & CO.

Stockists of Shahabad, Tandur, Kotah and all types of Stones, Marbles, Tiles. General Contractors and SPECIALIST WATERPROOFING Contractors.

364, Ladiwale Joshi Compound, N.C. Kelker Road, Dadar, Bombay-400 028.
Phones: 454294, 451870

WATER TREATMENT PLANTS & CHEMICAL VESSELS

VINNY TECHNOCRATES PVT. LTD.

17A, Palace Court, 1, Kyd Street, Calcutta 700 016.

Manufacturers of :

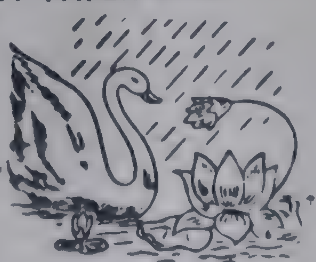
Water Treatment Plants, Heat Exchangers and Chemical Process Eqpt. as per customer's requirement. We also do FRP/Rubber/Lead Lining jobs and fabrication of S.S. & M.S. Eqpt., Pipings, Ductings, etc.

(Specialized in Turnkey Projects)

Phones : *Office : 248858* *Works : 663665*
Residence : 467435

WATERPROOF PAPER MFRS.

NEPTUNE'S
Waterproof Papers



Manufacturers of :

WATERPROOF PACKING PAPER
- Jute-lined Paper
- Polythene-lined Hessian Paper and Bags
- Polythene-lined Kraft Paper
- Hessian-lined Paper
- Bituminised Hessian Waxed Paper Etc. Etc.
- Roofing Felt.

NEPTUNE WATERPROOF MFG. CO.

OFFICE : 105, Churchgate Chambers, New Marine Line Street, Bombay 400 020.
Phones : 297893, 254223 & 253836. Grams : " READYCASH ".
Telex : 011-3835 MRTN

WAXED-WATERPROOF PAPERS

CRESCENT PAPER WAXERS

Mfrs.: Wax coated papers for Protective Packaging against Rust, Water, Moisture in Rolls & Sheets.

14, Ganesh Ch. Avenue, Calcutta 700 013.
Phones: 23-7830 & 23-4200.

342, Grant Rd., Bombay 400 007
Phones: 39-4701 & 39-4702.

Telex : 0213199, Calcutta.
0113236, Bombay.

WAX MFRS.

THE MEHTA INDUSTRIES

Manufacturers of:
Best quality Paraffin Wax, Chlorinated Wax, Wax etc.

18, Nehru Road, Sivakasi 626123.
(Tamil Nadu)
Phones: 491 & 732. Cable: "CARGO".

WAX MFRS.

House of quality waxes
Beeswax I.P. B.P.
Emulsifying wax I.P.
Microwax-Carmubawax

All type of waxes as per your specification

SPAN WAXCHEM
INDUSTRIES

636/3, Companywala Market,
Kapasia Bazar, Ahmedabad 380001.
Telephone · 443020.

WEAVERS & PERFORATORS

CENTRAL AGENCIES

4672 21, Darya Ganj,
Opp. DESU Cash Office, Delhi 110 002

Mfgrs. of . Nickel & Stainless Steel Liners, Perforated & Wire Woven Screens, Cotton & Synthetic Filter Fabrics, Centrifugal & Vacuum Filter Screens & other spares including Polypropylene Decking Grids and cloth

Phones : *Office* : 273602
Resi. : 270422

Grams : " RUBSUTEX "

WEAVING & SPG. ACCESSORIES

(1) All Metal Heald Frames
(2) Drop Wires
(3) Wire Healds
(4) Flat Steel Healds
(5) All Metal & Pitch Bound Reeds
(6) Mechanical Warp Stop Motion
(7) Leno Doup Healds & its accessories
(8) Stainless Steel Sleeves & Cones
(9) Plastic Bobbins & Nylon Parts
(10) Auto Loom Parts — Cimmco Ruti
(11) Comber Needles
(12) Synthetic Sewing Threads
(13) Beam Flanges
(14) Any type of Electroplating to Textile Accessories

Contact :

Messrs. RASDEEP ENTERPRISE

809, Building No. 3, Navjivan Society (Commercial), 8th Floor
Lamington Road, Bombay 400 008. Phone : 898136
Grams : " ENTERDEEP "

WEIGHING MACHINES

ACME SCALES CO.

Makers of "Acme" Suspended Scales, Weigh Bridges. Platform Scales, Self Indicating Scales.

324-C, Grant Road, Bombay-400 007.
Phones: 377702. 397279. 391198. 898628

Agents: AVERTEX MACHINE TOOL CO.
47/11-E. Hudson Lines, Delhi-110 009.
Phone. 719530

WEIGHING MACHINES

ASIATIC MACHINERY CORPORATION (P) LTD.

10/1. Kailash Chandra Lane. Howrah 711104.

Manufacturers:
'ASIA' Brand Automatic Weighing Scales. Dial and Steelyard Type Road Vehicle and Wagon Weighbridges. Repair and Service Contractors of all types of Weighing Machines

Kingsway Camp
Phone: 672253 (Howrah)

WEIGHING MACHINES

AVAL SCALES INDUSTRIES (P.) LIMITED

E-148, Kalkaji, New Delhi 110 019

Factory: Plot No. 44, Sector 27-C, 13 3, Mathura Road, Faridabad, Haryana

Phones: Office: 637413; Factory: 825805.

Manufacturers of
AVAL Weighbridges, Cart and Lorry & Other Scales. Undertake maintenance, repairs and conversions of all scales

WEIGHING MACHINES

AVON SCALES COMPANY

28, Motia Khan, Jhandewalan Road, New Delhi 110055.
Phone : 515286

Platform Weighing Machines, Trolley Cart & Lorry Weighbridges all capacities. Steelyard, Dial & Digital. Electronic Weighing Machines, Industrial Scales, Beam Scales & Counter Scales.

WEIGHING MACHINES & SCALES

FIDAALLI GULAMALI

(Estd. 1885)

163, Janjikar St., Bombay 400 003.
Phone: 326133.

Factory:
Wagle Industrial Estate, Thane.

Show Room :
41-A, Sarang Street, Bombay 400 003.

Manufacturers & Dealers:

Weighing Machines, Scales and General Merchants. Stockists of : Saple's Laboratory Balance, AVERY & SALTER Weighing Machines.

WEIGHING MACHINES

GIRI BROTHERS

For all your Weighing needs Electronic & Mechanical Ticket Printing type. Self Indicating & Steelyard type Lorry Weighbridges & all other weighing machines—Efficient After Sales Service available.

Post Box No. 1646,
51, Rajaji Saalai,
Madras 600001.
Phones: 28064 & 37722

WEIGHING MACHINES SCALES

UNIQUE INDUSTRIES

Prem Nagar, Ambala City,
Haryana 134003.

Grams: "SCALES". Phone: 56485.

Manufacturers of :

Spring Balances ★ Weighing Scales ★ Counter Scales ★ Weights ★ Measures ★ Weights & Measuring Instruments.

WEIGHING MACHINES

LIBRA INDUSTRIES

"Jeevan Sahakar", 5th Floor,
Sir P.M. Road, Bombay-400 001.
Telephones: *Office:* 291326, *Factory:* 582808. Grams: 'WEIGHRITE'.

Manufacturers & Exporters of:-

"LIBRA" (West German) Counter Scales, Platform Scales, Personal Bathroom Type Weighing Scales.

'DETECTO" (USA) Electronic Digital Platform Scales, Self & Semi-Self Indicating Counter Scales, Baby Dial type Weighing Scales, Physician's Scales with height measuring Gauge, Kitchen Dial Type Scales.

WEIGHTS & MEASURES

SHANKER WIRE PRODUCTS INDUSTRIES

Manufacturers & Exporters :

METRIC WEIGHTS for use in Commercial & Bullion trade, laboratories; weighing machine testing; PRO-WEIGHTS for Steelyard type weighing machines; COUNTERWEIGHTS for balancing on heavy machine; NEWTON WEIGHTS for Creep Machines and any other WEIGHTS as per buyer's specification.

Phone : 210. Grams : "SWFI"

B. Deoghar (S.P.) 814112.
Bihar, India.

WELDING

B.E.C. STEEL CONDUIT PIPE, and FURNITURE TUBES
welded by ERW and High Frequency Weld Process

P. D. JAIN & BROS.

123, Lohar Chawl, Bombay - 400002

Tel : 314718 - 313480

WELDING MACHINES

MAHENDRA IRON & STEEL WORKS

Mfrs. of National Arc Welding Transformers, Repairers of Spot & Butt Welding Machines, all types of Welding Machines.

11-A, Kharwa Lane, Trimbak Parshuram Street, Bombay 400 004
Phones: (Office) 361356 (Resi.) 389132.

WELDING MACHINES, ACCESSORIES & SPARES

N. K. AGGARWAL & BROS.

Distributors: D & H Secherson Electrodes Pvt. Ltd., INDORE. Stockists: Calcium Carbide, Welding Cables, Welder's Glasses, Regulators, Blow Pipes Etc.

Authorised Stockists: 'EUTECTIC' Low Temperature Welding Alloys.

23, Ansari Road, Daryaganj, New Delhi-110 002.
Phone: 276569.

WELDED WIRE MESH

RATNA INDUSTRIES

24, K. M. Mathura Road, Faridabad 121 003.
Phones : 82-5451, 82-5609 & 82-5662.
Grams : " RATNA ".
Telex: 343-241.

Manufacturers of :

Welded Wire Mesh for concrete reinforcement, screens, partitions, enclosures, window grills, pallets for storage, machinery guards, crates, animal cages, gates, tree guards and numerous other applications.

WELDING ACCESSORIES

SPARKWELD

34, Balaram Bhawan, 350-52, Grant Road,
Bombay 400 007.

Phones : 392667/393275. Grams : " SPARKWELDS ".

Manufacturers of :

All kinds of ARC & Gas Welding Accessories & Safety Equipment as per I.S. & B.S. specifications.

Write for Price List & Literature.

WELDING & SAFETY EQUIPMENTS & ACCRS.

KUKREJA TRANSFORMER MANUFACTURING CO.

Office-cum-Factory : A-9, Wazirpur Indl. Area, Delhi 110052
Phones: Office: 526525, Factory: 742353, Res.: 504443.
Grams: "SUPERWELD"

Manufacturers of :

1 Arc Welding Transformers, Single/Double Operators, Air/Oil Cooled, Pin Type/Indl. Regulatory Type (Stepless).
2 Spot Welder
3 Butt Welder
4 Rectifier (Both for D. C. Welding and Electroplating)
5 Welding Cable (Alum. and Copper Conductor)
6 Regulators Oxy/Acety/Burshane (L.P.G.) Hydrogen/Nitrogen
7 All types of Rubber Hoses to IS 3572, 911, 913 etc
8 Gas Welding Torches
9 Cutting Nozzles DA/L.P.G. (Burshane)
10 DEALERS IN WELDING AND SAFETY MATERIAL A TO Z

WELDING MACHINES

MECHELONIC WELDERS PVT. LTD.

Manufacturers of:

Spot, Projection, Seam, Butt and Flash Butt Welders, Friction Welders, Brazing & Metal Gathering Machines, Multi Operators, AC & DC Arc Welders, Container Welding Machines.

18, Govt. Industrial Estate, Kandivli (W),
Bombay 400 067.
Phones : 691979/685608. Tlx. 4926

WINDING WIRE MFGRS.

HINDUSTAN TRANSMISSION PRODUCTS LTD.

Office:
Shree Niketan, F Block, Shivsagar Estate,
Dr. Annie Besant Road, Bombay 400018.
Phones: 394027 & 394868. Grams: "GOLDEN-WIRE".

Manufacturers of:

Enamelled Copper Wires & Strips with/without additional Paper & Cotton covering, Wire drawing machines, Synthetic resins, various types of Wire Enamels, Insulating Varnishes, Homo Polymer & Co-polymer Emulsions, etc.

WIRES

FASTENERS & FORMERS

Manufacturers of:

M. S. Wires, Annealed Wires, G. I. Wires, Wire Nails, Bolts & Nuts Etc.

Office & Works:
Dyavasandra Industrial Area,
Whitefield Road, Bangalore 560048
Phones:
Fac.: 58436 Res: 72048

WIRES

ALWAYS INSIST ON "GADIA" BRAND

Mfrs.

GADIA WIRES

Manufacturers of super enamelled & self solderable copper wire, copper wire drawing machines & enamelling plants.

5/8, Amrit Sagar Talab, Tripolia Gate, Ratlam
457001, INDIA
Tel.No. : Works 770; Res. 70

WIRE ROPES & CHAIN PULLEY BLOCKS

GAUTAM TRADING COMPANY

184, Nagdevi Street,
Bombay 400 003.

Stockists of :

Wire Ropes, Fittings, Chains, Pulley Blocks, Slings, Lifting Tackles etc.

Phone : 321497.

WIRE & WIRE PRODUCTS

ARKAY WIRES (P) LTD.

Manufacturers, Exporters of :

Galvanised, Barbed Wires, Concertina barbed Wire, Plain & G. I. Wires, Stranded Wires, Chainlink Fencing, Wire Nails & other Hardware Items. Can supply as per Indian & International Standards.

117/491, Pandu Nagar,
Kanpur 208 005.
Phones: 81638, 81639, 81415. Telex No: KP-230.

WIRES AND HARDWARE

BASANIWAL BROS. PRIVATE LTD.

For your requirements of : H. B. Wire, G. I. Wire, Annealed Wires, Half Hard Wires, Barbed Wire, Stay Wire, Umbrella Rib Wire, Spring Steel Wire, Wirenails, Agrico-Tools, Phowrahs, Crowbars, Shovels, Pickaxes, Hammers Etc. and ALSO WIRE DRAWING MACHINES.

2. Maharashi Debendra Road,
Calcutta 700 007.
Phones : 337261. 340830.
Grams " STEELUDYOG ". Telex : CA2842 (AEON).
Bombay Office : BPT Plot No. 273,
Block No. 15, Kolsa Bunder,
Darukhana, Bombay 400 010.

WIRE PRODUCTS MFRS.

NEMAT WIRENETTING PRODUCTS

145, Nagdevi Street, Bombay 400 003.
Phones: Office: 326833, 345804
Works: 374735, 398112.

Manufacturers of :

G.I. & M.S. Crimped, Square Mesh, Chain Link for Fencing, Blowroom Jali, etc.

Specialists in :

CHAIN LINKS & CRIMPED WIRENETTING.

Dealers in : G.I. & M.S. Pipes, Boiler & Hydraulic Tubes of all kinds.

WIRE PRODUCTS MFRS. & DEALERS

EVERGREEN WIRECLOTH FACTORY PRIVATE LIMITED

Leading Manufacturers of : Gava Separators (Demister — Mist Eliminator), HYFLUX Column Packings, Welded Wiremesh for general use and for Reinforcement for wired Glass and Suppliers of other wire products — Stainless Steel, Ferrous & Non-Ferrous Wire Mesh, Industrial Screens Air Filter Wire Mesh, Chain Link Fencing etc., etc.

Laxmidas J. Thakker (Chairman). Chandrakant L. Khagram (Mg. Director). Ajit L. Thakker (Director).

Regd. Office :

3-D, Maker Bhavan No. 2, 18, New Marine Lines, P.B. No. 11100,
Bombay 400 020.
Phones : 312461 & 312706.
Grams : " WIREMESH ", Bombay 400 020.
Telex : 011-3244. Code : " MESH IN ".

WIRE, WIRE PRODUCTS, MILD STEEL

NATIONAL WIRE WORKS

25, Strand Road, 8th Floor, Room No. 801 to 806, Calcutta 700001

Phones :
Office : 22-0163/0371/0918/0948/8615/9487
Shop : 22-7705
Factory : 64-3442
Resi. : 44-5579/6079

Manufacturers :

M. S. Wires, Wire Products, Wire Drawing Machines.

Stockists :

Mild Steel, Tool & Alloy Steel

Associates :

Special Steel & Wire Wings & Steelage India

WIRE PRODUCTS MFRS.

MULTIWELD WIRE COMPANY PRIVATE LIMITED

"Export House", 59, Marol-Maroshi Road, Marol, Post Box No. 7419,
Bombay 400 059.
Phones: 583501-02-03, 583762 & 584682.
Cable: MULTIWELD Telex: 11 2690 MLTI IN.

Branch:

GF-10 Hans Bhavan, Bahadur Shah Zafar Marg, P.B. No 7012, New Delhi-110 002.
Tel: 267193. Cable: "WIREPRODS"

Manufacturers of:

Wire and Wire Products including "Multiweld" Electrically Welded Wire Fabrics. Available in sheets and rolls, suitable for all types of protection and for concrete reinforcement.

INDIA'S LARGEST MANUFACTURERS AND EXPORTERS OF WELDED WIRE MESH

WIRE NETTING

STANDARD METAL COMPANY

Props.: **B. C. Guin & Co. (P) Ltd.,**
101, Netaji Subhas Road, Calcutta 700 001.

Manufacturers & Stockists:

- Industrial Wire Screen Cloth
- Wire Conveyor Belt
- Chainlink Fencing
- Laboratory Test Sieves
- Wire & Wire Rope for all Industries & Mines

Phones : 22-5270 & 22-4542
Cable " PERFOSHEET "

WIRE PRODUCTS & PERFORATED METALS

Dealers : Wire netting of all kinds, wires of all kinds including stitching wire, Plywood, Hardboard, Laminated Sheets, Acrylic & Fibreglass Sheets, Cement Sheets, Corrugated and Plain, Glass wool, Thermocol for insulation.

Contact:

A. A. MORBIWALA & CO.

109-111, Abdul Rehman St.,
Bombay 400 003.
Phones : Office : 323280;
Res.: 531490.
Grams : " VARNISH ".

WIRE ROPES

AMRATLAL CHHAGANLAL & CO.

143, Nagdevi Street, Bombay 400 003.

Stockists of :

Wire ropes, Wire ropes fittings, Wire rope slings, Chains — Chain Pulley Blocks & Chain Slings.

Phone : 326008. Grams : " EKADASHI "

WIRE ROPES

BOMBAY WIRE ROPES LTD.

401/405, Jolly Bhavan No. 1, 4th Floor, 10, New Marine Lines, Bombay 400 020. Phone: 317872. Grams: "SUPERROPES".

Manufacturers of Quality Steel Ropes in Technical Collaboration with KOBE STEEL WORKS LTD. and ASAHI WIRE ROPE MFG. CO. LTD. (JAPAN) for Mining, Drilling, Aerial Rope Ways, Oil Wells, Lifts, Hoists, Elevators, Cranes, Suspension Bridges, Fishing, Dredging, Shipping, Aircraft Control, Automobile Control and Signalling. Also Flattened Strand Rope and Wire for various applications.

CHEMICAL DIVISION

Manufacturers of Textile Detergents,
and Poly Vinyl Acetate Emulsions.

SALES OFFICE: C/o New Great Eastern Spg. & Wvg. Co. Ltd.
25/29, Dr. Ambedkar Road, Byculla, Bombay 400 027.
Phones : 896146, 896198, 896188.

WOOD WOOL

WOOD WOOL PRIVATE LIMITED

Moti Baug, Sion-Trombay Road,
Chembur, Bombay 400 071.
Phones : 521728 & 521862.

Manufacturers :

Wood Wool for hygienic, Shock Absorbing and Lighter Packing, Enhances Products Presentation. Durable for re-use.

WOODEN ARTICLES MFRS.

RAMESHCHANDRA & COMPANY

158, Reay Road, Above R. E. Mody,
Opp. Reay Road Railway Station, Bombay 400 010.
Phones :
Office : 892151 & 893080. *Resi.:* 575789.
Grams : " TIMBERLAND ".

Manufacturers of :

Wooden Packing Cases, Wooden Pallets, Wooden components for Cooling Towers duly treated, Flush Doors, Panel Doors & Furniture.
Also Timber Merchants.

WOOLLEN, TEROOL & TERENE SUITINGS

Contact :

**HAJI ABDUL REHMAN
HAJI SUMAR & CO.**

Latest House in Woollen, Terool & Terene piecegoods.

63, Chakla Street, Bombay 400 003.

Phone : 323011. Grams : " SUMARCO "

X-RAY EQUIPMENT

X-Ray Protective Aprons, Coat Type, (p.b.). 0.25, 0.5, 1.00 mm. Size 39" x 24" X-ray Protective Gloves, Seamless, (pb.). 0.25, 0.5, 1.00 mm., Size 15½ .

Manufactured by:

ASHA RUBBER INDUSTRIES

L. B. Shastri Marg, Mulund,
Bombay 400 080

ZIP FASTENERS

MADHU SNAP FASTENERS MFG. CO. PVT. LTD.

Manufacturers of

Zip Fasteners and Component Parts, Snap Fasteners, and Bifurcated Rivets.

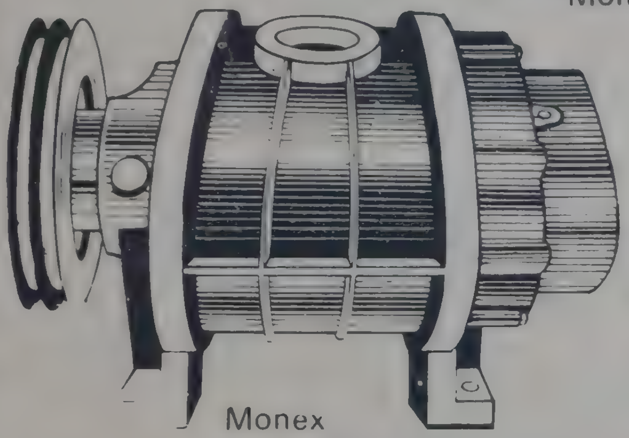
Sanghavi Chambers, 27, Ghoga Street, Fort,
Bombay 400 001.
Phone: 258042. Grams: " VIRVANDAN ".

Factory : Madhu Snap Fasteners Mfg. Co. Pvt. Ltd., Sanghavi Sadan, Plot No. 86, Opp. Western Express Highway, Goregaon (East), Bombay 400063.

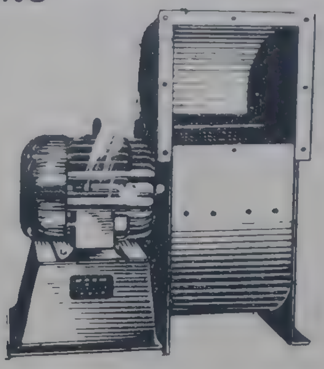
Phone: 686358.

Directors : Mr. M. K. Sanghavi, Mrs. S. M. Sanghavi, Mr. Madhu Sanghavi.

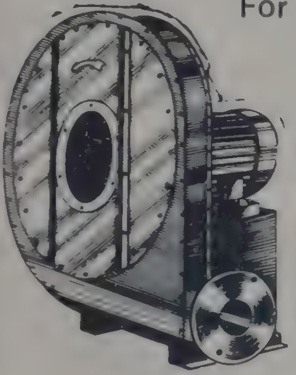
Monex **CENTRIFUGAL FANS**
CORROSION
RESISTANT



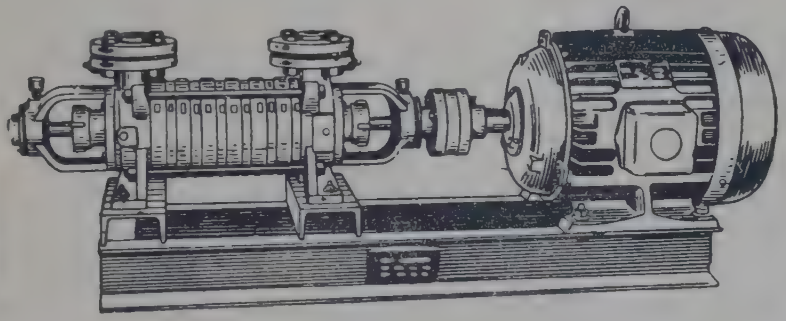
Monex
MY/146-R Rotary Air blowers
For positive Desplacement



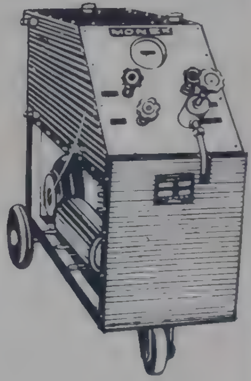
MY-146-E Industrial Fans



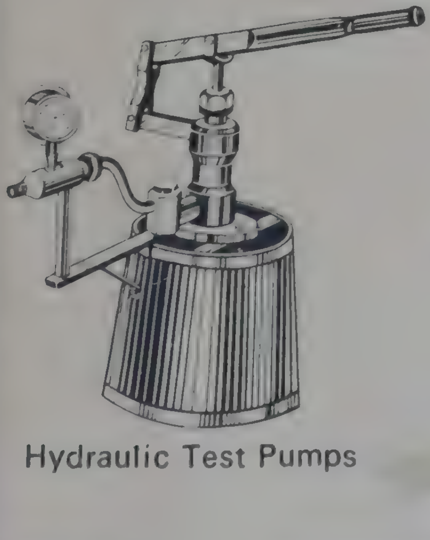
MY-146-E Industrial Fans



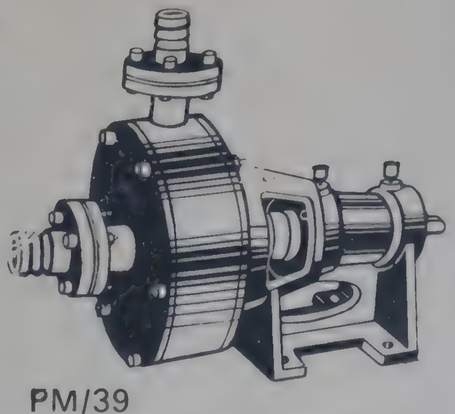
PM/35 Boiler Feed Pumps.
Multistage Pumps.



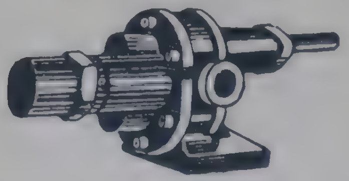
PM/110 Hydraulic Test Pumps
cap. upto10000 lbs. p.s.i
powerised



Hydraulic Test Pumps



PM/39
Chemical Pump made of
Poly pro pylene Stainless Steel



PM/41-S Rotary Gear Pumps
improved model for
Oil & Chemicals

Telegram:
'CIBOLECO'
Telex:
011-4250 BOLE

C. BOLE & CO.
61, NARAYAN DHURU STREET, BOMBAY-400 003.
WORKS: VIKHROLI—BOMBAY-400 083.

Telephones:
Office: 324350
329641
Works: 583400

MFRS: MONEX ENGINEERING WORKS BOMBAY-83. 583400.

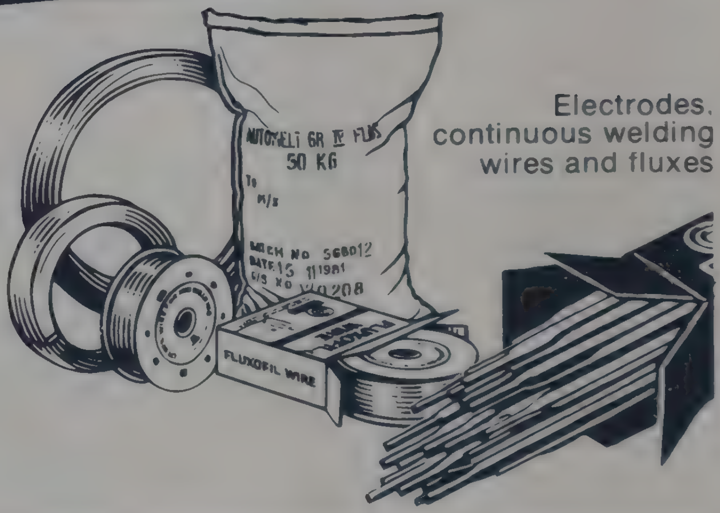
ADVANI-OERLIKON

ADVANI-OERLIKON LIMITED

PRODUCTS & SERVICES

1. METAL JOINING CONSUMABLES

(a) Consumables for Mild Steels ☐ Low Alloy & High Tensile Steels ☐ Hardfacing Applications ☐ Stainless & Heat Resisting Steels ☐ Non-Ferrous Metals ☐ Cast Iron ☐ Thermit Welding (b) Wire/Flux Combinations for Submerged Arc Welding ☐ Solid and Flux-Cored Wires for CO_2 Welding (c) Low Heat Input Welding Alloys (d) Tungsten Electrodes.



Electrodes, continuous welding wires and fluxes

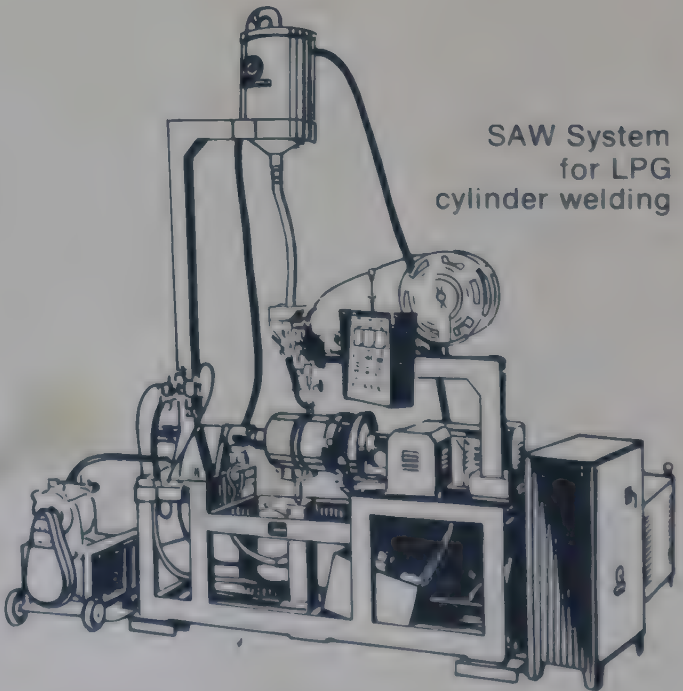
---

2. WELDING EQUIPMENT AND ALLIED PRODUCTS

Air & Oil Cooled Welding Transformers ☐ Motor Generator Welding Sets ☐ Rectifier Type DC Welding Power Sources ☐ Internal Combustion Engine Driven Welding Sets ☐ Resistance Welding Equipment (a) Spot Welders (b) Projection Welders (c) Butt Welders (d) Flash-Butt Welders (e) Capacitor Discharge Welders

Friction Welders

Pulsed TIG Welding Outfits ☐ Gas Tungsten Arc Welding Equipment including AC/DC Composite Outfits ☐ Plasma Arc Cutting-cum-TIG Welding Outfits ☐ Micro-Plasma Arc Welding Equipment ☐ Gas Metal Arc (MIG/MAG) Welding Equipment Submerged Arc Welding Outfits such as Static Welding Heads, Semi & Fully Automatic Submerged Arc Welding Equipment



SAW System for LPG cylinder welding

Welding Aids

(a) Column & Boom (b) Rotators (c) Positioners (d) Automatic Yoke Welding Equipment (e) Weld Seamers (f) Axle Welding Machine (g) Roll Rebuilding Machine, etc.

Custom-built Welding Equipment & Turnkey Systems

Adorheat Preweld & Postweld Heat Treatment Equipment & Services

Welding Electrode Manufacturing Equipment

(a) Vertical & Horizontal Type Hydraulic Welding Electrode Extrusion Presses
(b) Fully Automatic High-Speed Wire Straightening & Cutting Machines
(c) Hydraulically Operated Slug Presses (d) BML Brushing Machines & PCL Pick-Up Conveyors (e) Hydraulically Operated Planetary Wet Mixers (f) Stationary High Temperature Electrode Drying & Baking Oven

Solid State Pulsed TIG Welding Outfit model TPS-200

---

3. INDUSTRIAL ELECTRONICS

Thermometry Instruments

(a) Temperature Indicator (Analog) (b) Blind Temperature Controller (c) Blind Temperature Controller with Error Indicator (d) Temperature Indicating Controller (e) Digital Thermometer (f) Digital Thermometer with Digital Trip (g) Digital Temperature Indicating Controller Type N-1000 (h) Temperature Scanner (Analog Version) (i) Digital Scanner (j) Thermoscan with Printer (k) Mobile Scan (l) Thermocycle (m) Thermophase

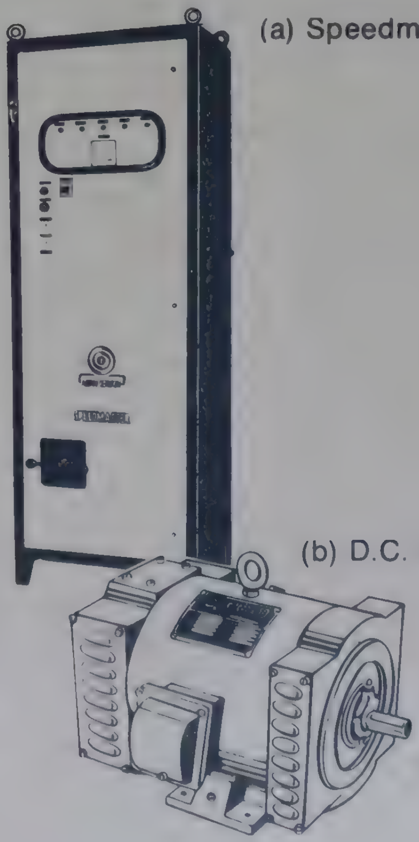
Heat Treatment Control Instruments

(a) Power Scan (b) Semi-Automatic PSR (c) Universal Programme Controller

DC Motors & Power Control Equipment

(a) Mini Speedmaster (Package Drive) (b) Speedmaster (c) CO_2 Controller (d) Tachogenerator (e) HVR Control Panel (f) DC Motors (g) Battery Chargers (h) Float Chargers (i) Custom-built Transformer-Rectifier Equipment (j) Furnace Transformers (k) High Frequency Convertors (l) Electroplating Rectifiers (m) Dry Type Tranformers/Rectifier Units (n) Thyristor Controllers for Automatic Power Factor Correctors (o) DC Generators

Power control equipment



(a) Speedmaster

(b) D.C. Motor

Data Counting Instruments
(a) RPM Counter (b) Speed Switch with Proximity Pick-Up. (c) RPM Counter/Controller (d) Preset Counter (e) Digital Tachogenerator DT-05 & DT-24 (f) Zero Speed Switch

Annunciation Panels
(a) Alarm Annunciator Panel (b) Digital Sequential Alarm Annunciator Panel

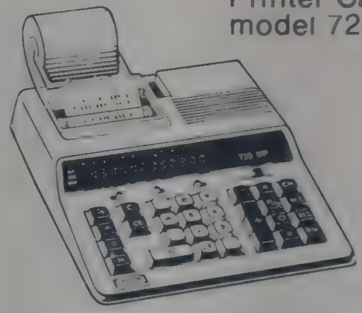
Timing Controllers
(a) Timers (b) Hour Timer (c) 2-Stage Process Timer (d) Traffic Signalling Systems (e) Blinkers (f) Solid State Blinker with Fibre Glass Lamp Head

Miscellaneous Products
(a) Single Phasing Preventors (b) Liquid Level Controller (c) Over/Under Current Relay (d) Laboratory Power Supply (e) Solid State Switch

4. CONSUMER ELECTRONICS

Electronic Clocks
(a) Picture (b) Kukoo (c) Time Age Delux (d) Auto (e) Travellers Clocks

Electronic Calculators
(a) Printer Model 720 MP (b) LC — 805 (Pocket Size) (c) 8S — Pocket Size (d) LC — 15C (Clock Calculator) (e) SR — 8 (Scientific) (f) EC 1212 (Desk Top) (g) 0808S (Scientific)


Printer Calculator model 720 M P

5. ACTIVE AND PASSIVE ELECTRONIC COMPONENTS ETC.

SEM Devices (Manufactured by Semiconductors Limited and marketed by the APEC Division of Advani-Oerlikon Limited.)

(a) Germanium Transistors (b) Germanium Diodes (c) Silicon Transistors (d) Silicon Diodes (e) Silicon Zener Diodes (f) Silicon Photo Diodes (g) Silicon Rectifiers (h) Silicon Controlled Rectifiers, Triac's, Diac's (i) Linear Integrated Circuits (j) Digital Integrated Circuits (k) Electro-Ceramic Products

Unilec — Resistors & Capacitors (Passive Electronic Components marketed by the APEC Division of Advani-Oerlikon Ltd.)

(a) Carbon Film Resistors (b) Polyester Film Capacitors (c) Metallised Polyester Film Capacitors (d) Polystyrene Capacitors (e) Styroflex Capacitors

Plessey (U.K.)–Micro Circuits (Marketed by the APEC Division of Advani-Oerlikon Ltd.)

(a) High Performance Linear Integrated Circuits (b) Radio Communication ICs (c) Telephone Communication Circuits

Industrial Series Rectifiers

(d) Standard ECL III (e) Sub-Nano Second ECL (f) High Speed Comparators (g) Data Conversion Circuits (h) Digital High Speed Dividers (i) Data Communication Circuits (j) N-Channel MOS PCM Circuits (k) C-MUS Telecommunication Circuits (l) Television Circuits (m) Zero Voltage switches/Phase Control Power Switches

Signal Technology (UK) — SAW Devices (**Products & Services** — Marketed by the APEC Division of Advani-Oerlikon Ltd.)

(a) Bandpass Filters (b) Delay Lines (c) Compressor/Expanders (d) Vestigial Sideband Filters (e) Oscillators

6. PANAPRINT

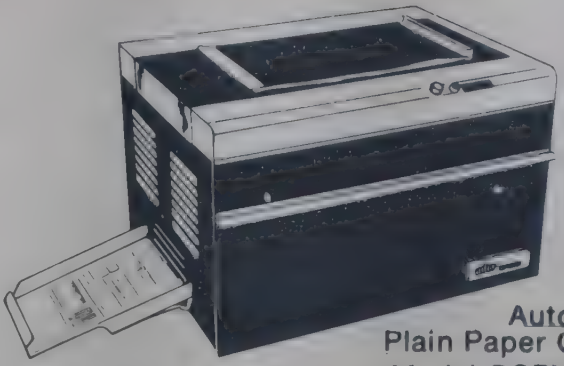
Photocopiers

(a) Economy Mark II (b) Deluxe Mark III (c) Economy 404 (d) Deluxe 404 (e) Corotron Unit (f) Exposure Unit

Suitable for reproducing from object size A0 to A4

Accessories & Consumables

(a) Unitone Toner (b) Selenium-Coated Plate (c) Plate Reconditioner (d) Fixer (e) Cotton Wool (f) Carrier Beads



Automatic
Plain Paper Copier
Model COPYSCAN

7. CARBON PRODUCTS

(a) Cinema Carbons (b) Process Carbons (c) Gouging Carbons (d) Midget Carbons (e) Electrolytic Iron Powder

8. INJECTION MOULDED PLASTIC PRODUCTS

9. SERVICES

Agency

Foreign Agencies from U.K., U.S.A., Japan, West Germany, France, Italy, Switzerland, Belgium, and Netherlands for products to be imported against Actual Users' Licences — Complete range of welding equipment and consumables including Electron Beam Welder, flame and gas cutting machines, machine tools such as precision, heavy duty & N.C., induction heating generators, vacuum furnaces, woodworking, decorative and industrial laminate making machinery, all equipment for shipbuilding/offshore drilling, navigational, communications, shot blasting, etc. Also arranging technical know-how collaborations for manufacture of any product.

"Ador" Consultancy Services.

(a) Computer Services — System Design & Data Processing (b) Conducting Industrial Engineering Studies (c) Preparing Project Reports (d) Providing Technical Know-how (e) Selecting Personnel (f) Conducting Training Programmes, etc.

Welding Technology Centre-imparting education in welding technology
Specialised ship repair services

Advani-Oerlikon — Where R & D is the root of progress

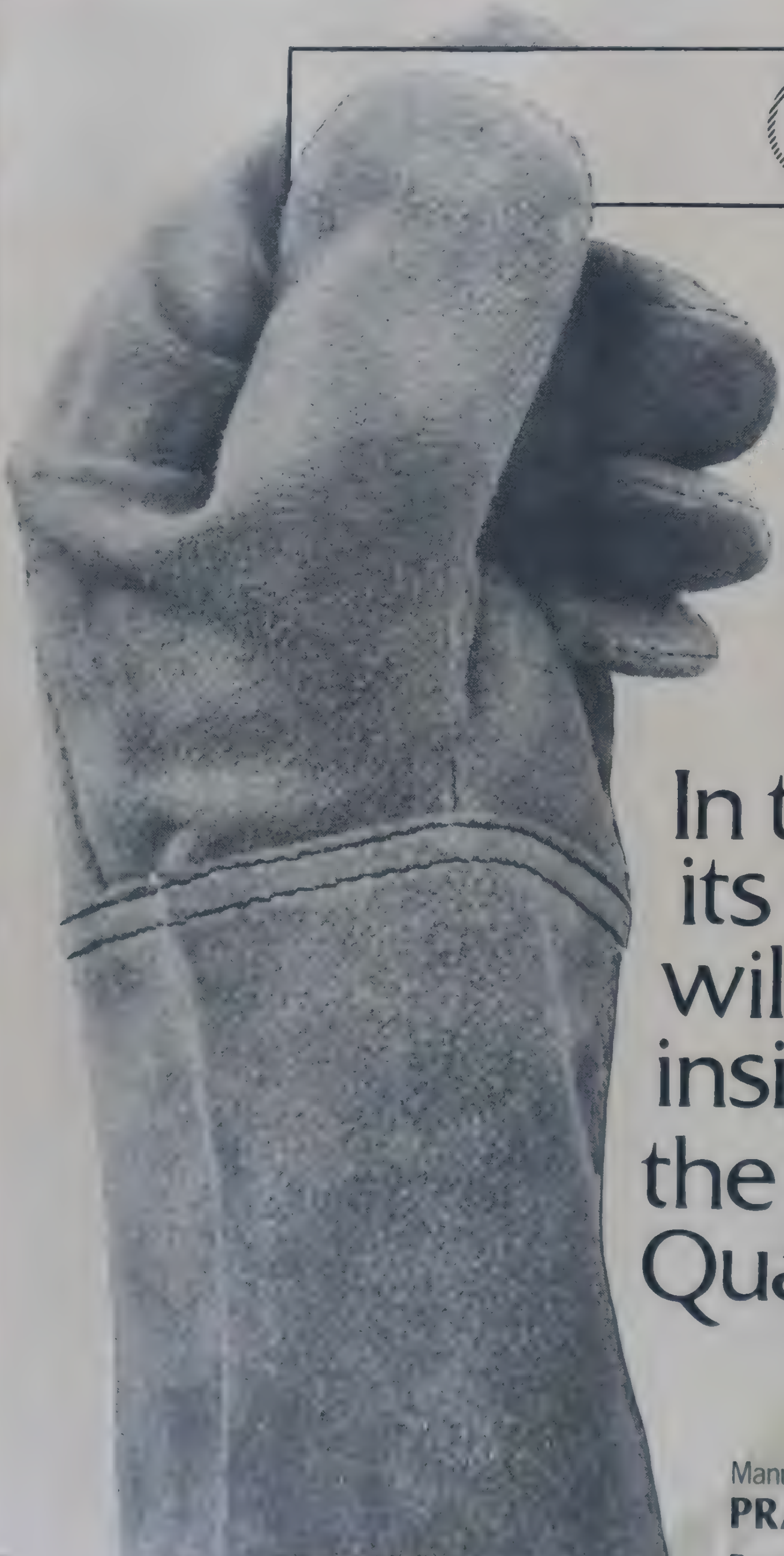
ADVANI-OERLIKON ador

ADVANI-OERLIKON LIMITED

6, K. Dubash Marg, Bombay 400 023.
Bangalore * Baroda * Bhubaneswar * Calcutta
Cochin * Delhi * Hyderabad * Madras * Pune
Raipur * Visakhapatnam.

For enquiries quote key No. A0 430 and write to P.B. 1546, Bombay 400 023

Heros' AO-430



PRATIK©

INDUSTRIAL
WORK
GLOVES

In times
its price
will seem
insignificant in
the face of its
Quality...

Manufacturers
PRATIK INDUSTRIES

Exporters
PRATIK INDEX PRIVATE LTD.
PO Box 121, Baroda 390 001, India
Cable LUCID • Phone 55115/56664

Visual Ad/PI

CONSTITUTION

THE Indian Constitution was adopted by the Constituent Assembly on 26th November, 1949, and came into force on **26th January, 1950**. The preamble embodies the resolve to secure for all citizens: **Justice**—social, economic and political; **Liberty**—of thought, expression, belief, faith and worship; **Equality**—of status and of opportunity; **Fraternity**—the assurance to uphold the dignity of the individual and unity and integrity of the nation.

India is a Sovereign Socialist Secular Democratic Republic with a parliamentary form of government elected on the basis of universal adult franchise.

THE UNION & ITS TERRITORY: India is a union of 22 States and 9 Territories. These are: STATES:— Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttar Pradesh and West Bengal. UNION TERRITORIES — Andaman & Nicobar Islands, Arunachal Pradesh, Chandigarh, Dadra & Nagar Haveli, Delhi, Goa, Daman & Diu, Lakshadweep, Mizoram and Pondicherry.

CITIZENSHIP: (ART. 5-11): Single and uniform citizenship is ensured throughout India. All those who were domiciled in India at the commencement of the Constitution and all those born in India or, either of whose parents were born in India, or, all those who were residing in India for at least five years preceding the commencement of the Constitution became citizens of India.

Special provision, however, had to be made for those who migrated from Pakistan and those of Indian origin who reside abroad.

Further the *Citizenship Act,* 1955, provides for acquisition of citizenship by birth, descent, registration and naturalisation.

FUNDAMENTAL RIGHTS: (ART. 12-35): All citizens, individually and collectively, are guaranteed the following basic freedoms:

1. The right to equality meaning equality before the law; prohibition of discrimination on grounds of religion, race, caste, sex or place of birth; equality of opportunity in matters of employment; and abolition of titles (ART. 14-18).

2. The right to freedom meaning freedom of speech and expression, freedom to assemble peaceably and without arms, freedom to form associations or unions, freedom to move freely throughout the territory of India, freedom to acquire, hold and dispose of property and freedom to practise any profession, or to carry on any occupation, trade or business (ART. 19).

These rights are not absolute and it is open to the State to make laws imposing reasonable restrictions on the exercise of the rights on the ground specified in ART. 19(2)-(6). The rights are enforceable by the courts and the reasonableness of the restriction imposed by the State can be challenged in a Court of Law.

The right to freedom includes the protection of the individual in respect of conviction for offences, except under and in accordance with the law for the time being in force and that no person can be prosecuted and punished for the same offence twice and that no person can be compelled to be a witness against himself (ART. 20).

The right to freedom includes the protection of the life and personal liberty of the individual and also the protection that no person can be arrested and detained except under and in accordance with a laws which conforms to the provisions of the Articles of the Constitution (ART. 21-22).

3. The right against exploitation, prohibiting all forms of forced labour, child labour and traffic in human beings (ART. 23-24).

4. The right to freedom of conscience and free profession, practice and propagation of religion (ART. 25-28).

5. The right of minorities to conserve their culture, language and script and to establish educational institutions of their choice (ART. 29-30).

6. The right to property, subject to the State's right to compulsory acquisition for public use in the manner and for such compensation as is to be provided for or to be determined under the law under which the acquisition is to take place. ART. 31B provides for the validation of certain Acts and Regulations by incorporating them in a Schedule (known as 'the Ninth Schedule') whereby their invalidity on the grounds that they are violation of the Fundamental Rights is removed and the Acts and Regulations, if incorporated prior to a challenge to their validity, cannot be challenged in a court on the ground that they violate the Fundamental Rights. Recourse, in recent years, to this Schedule has been frequent to save legislation which was otherwise held invalid by the Courts (See below: Amendment to the Constitution). (ART. 31).

7. By the 42nd Constitutional Amendment laws giving effect to all the directive principles enumerated in part IV are saved from attack on the ground of infringement of fundamental rights contained in ART. 14, 19, and 31 (ART. 31C).

8. The right to constitutional remedies by moving the Supreme Court of India in appropriate proceedings for the enforcement of fundamental rights. (ART. 32).

DIRECTIVE PRINCIPLES OF STATE POLICY: (ART. 36-51): In Part IV certain directive principles of State policy are laid down for the guidance of the legislatures as well as governmental authorities. They relate to (*a*) Principles of social policy, (*b*) Principles of administrative policy, (*c*) Socio-economic rights. The Directive Principles provide for the organisation of village panchayats, for just and humane conditions of work; for a living wage for all workers; for a uniform civil code; for free and compulsory education for children and for promoting the interests of the weaker sections of the people — the Scheduled Castes and Tribes; for raising the level of nutrition; for prohibition of consumption of alcohol; for organising agriculture; for protecting monuments and places of national importance.

The Directive Principles also provide that the State shall take steps to separate the judiciary from the executive in the public services of the State and also contain a statement of the international policy of the Republic.

FUNDAMENTAL DUTIES: (ART.51A): Part IVA has been added by the 42nd Constitutional Amendment specifying the fundamental duties of citizens, to uphold, abide, and protect the Constitution, the National Flag and National Anthem, and the sovereignty, unity and integrity of India, to defend the country and render national service when called upon to promote common brotherhood, protect the cultural heritage and national environment, safeguard public property and abjure violence.

THE UNION : The Executive: *The President:* The executive head of the Indian Union is the President. He is elected by the elected members of the House of Parliament and the Legislative Assemblies of all the States, in accordance with the system of proportional representation. His term of office is five years, and he is eligible for re-election. Only a person who is a citizen of India and has completed the age of thirty-five years and is qualified for election as a member of the Lok Sabha is qualified to contest the election. The President cannot be a member of Parliament or hold any other office of profit. *Salary :* The President is entitled to the use of an official residence without payment of rent, and a salary of Rs. 10,000 per month and allowances. Provision has also been made by an Act of Parliament for a pension of Rs. 15,000 per annum. He is also entitled to a maximum of Rs. 12,000 per annum for the sake of secretarial staff and other expenses.

Presidential Powers: The President exercises the powers vested in him either directly or through officers of the government. The President acts on the advice of the council of ministers and he is bound by such advice. All executive action of the Government of India shall be expressed to be taken in the name of the President and extend to matters in respect of which Parliament has power to make Laws. The Supreme Command of Defence Forces vests in him. The President summons, prorogues, addresses, sends messages to Parliament and dissolves the House of the People (Lok Sabha); promulgates ordinances when Parliament is not in session; makes recommendations for introducing financial and money bills; and gives assent to bills, grants pardons, reprieves, respites and remissions of punishments or suspends, remits or commutes sentences in certain cases. The President's powers include the power of appointing the judges of the Supreme Court and the High Courts, the Attorney-General of India and the Comptroller and Auditor-General of India. The heads of States, *i.e.*, Governors, are also appointed by the President. The President has the power of appointing ambassadors abroad and receiving diplomatic representatives of foreign States.

The President, may, if satisfied that a grave emergency exists whereby the security of India is threatened by war, external aggression or internal disturbance, make a Proclamation of Emergency (ART. 352). Similarly the President may, if he is satisfied that the financial stability of the country is threatened, make a declaration and in consequence thereof the executive authority of the union is considerably extended under the Constitution (ART. 360) (See below: EMERGENCY).

Council of Ministers and the Prime Minister: The Council of Ministers is headed by the Prime Minister to aid and advise the President in the exercise of his functions. The Prime Minister is appointed by the President who also appoints ministers on the advice of the Prime Minister. The Council holds office during the pleasure of the President and acts on the principles of joint responsibility. The Prime Minister has to communicate to him all decisions of the Council of Ministers and, if the President desires, submit for consideration of the Council of Ministers any proposal of a Minister not yet considered by the Council.

Impeachment: Provision is made for the impeachment of the President, by Parliament, for violation of the Constitution. The President may be impeached and removed from office by a resolution passed by two-thirds of the total membership of a house of Parliament after an investigation of a charge by it on a proposal made by one-fourth of the total membership adopted by a resolution passed by two-thirds of the total membership of the other house of Parliament.

Vice-President: There is a Vice-President of India, who is ex-officio Chairman of the Rajya Sabha (the Upper House). The Vice-President acts as President during a casual vacancy in the office of the President. He is elected by the members of both Houses of Parliament and his term of office is five years.

Election of President, Vice-President: Matters pertaining to the election of the President and the Vice-President, and any doubts or disputes arising out of or in connection with such election are decided by an authority or body specified in a Law that, Parliament may make under the 29th Constitutional Amendment and the Law nor the decision of the authority or body can be challenged in a Court of Law. (ART. 71) (This was abrogated by Parliament in June, 1977.)

THE PARLIAMENT: The Parliament consists of the President and two Houses known as the Lok Sabha and the Rajya Sabha. It must meet at least twice a year. The maximum strength is fixed at 250 (12 nominated) for the Rajya Sabha and 545 for the Lok Sabha.

Elections: The Rajya Sabha is elected by the elected members of the Legislative Assemblies of the States and of the Union Territories, while the Lok Sabha is elected directly by the voters in the country.

The Rajya Sabha is a permanent body with one-third of its members retiring every second year. The Vice-President is its ex-officio Chairman while a member is chosen as Vice-Chairman.

Ordinarily the Lok Sabha has a duration of six years, except during an Emergency when Parliament can extend the time by one year at a time while the Proclamation is in force and a maximum of six months thereafter. (ART.83) There is a Speaker and a Deputy Speaker of the House both of whom are elected by its members.

The Houses are summoned by the President who can prorogue the Houses or either House or dissolve the Lok Sabha.

All these posts carry salary and allowances.

Immunity for M.P.s: Members of Parliament are assured of freedom of speech in Parliament subject to the provisions of the Constitution. They enjoy immunity from proceedings in any court in respect of anything said or a vote given by him in Parliament. By the 42nd Constitutional Amendment, Parliament has now unfettered power to evolve the other privileges, powers and immunities of each House. (ART. 105).

Under certain circumstances, the members can be disqualified and their seats declared vacant but the question of such disqualification shall be decided by the President in consultation with the Election Commission who may make an inquiry, and such decision of the President shall be final. (ART. 101-102).

LEGISLATIVE PROCEDURE: A Bill normally goes through the following stages. It is first published. After introduction there is a general debate. Then, there is a clause-by-clause discussion and voting thereon. A specially important measure may go before a select committee or a joint select committee. A Money Bill has a slightly different passage. After it has been passed in the Lok Sabha it is sent to the Rajya Sabha which has to return it within fourteen days with its recommendations which may be accepted or rejected. (ART. 107-110). All Bills when passed by the Houses must receive the assent of the President and the President may give his assent or withhold assent and return the Bill for reconsideration by the Houses. If the Houses pass the Bill again, with or without the President's recommendations or amendments, then the President must assent to the Bill (ART. 111).

Union Budget : Every year the President shall cause to be laid before both Houses a statement of the estimated receipts and expenditures of the Government of India for that year. This "annual financial statement" is popularly known as the Budget (ART. 112).

Quorum : The quorum is fixed at one-tenth of the membership of the House but this may be regulated by rules framed by each House.

Language : The language used in Parliament is either Hindi or English. (ART. 120).

Distribution of Seats : (Please see chapter on Rajya Sabha and Lok Sabha).

Courts and Parliament : No discussion can take place in Parliament with respect to the conduct of a Judge of the Supreme Court or High Court in the discharge of his duties except on a motion for his removal (ART. 121). The Courts are not to inquire into proceedings in Parliament (ART. 122).

Committees : Parliament's control over the administration is also exercised through a series of committees.

The committees can summon witness or require documents to be produced. There is a **Committee on Privileges** which sees to breaches of Parliamentary privilege, and a **Business Advisory Committee** which helps the Ministry of Parliamentary Affairs in drawing up the programme for a session.

Two very important Committees are the **Public Accounts Committee** and the **Estimates Committee**. They are elected by the House of the People and Ministers are barred from membership. The Public Accounts Committee ensures that money is spent for the purpose for which Parliament has voted it. The Estimates Committee examines possibilities of economy and reform in financial administration and the manner in which estimates may be presented to Parliament.

The Union Judiciary: (See next column: Administration of Justice.)

Comptroller and Auditor-General is appointed by the President to control, on behalf of the Union and the States, all disbursements and to audit all accounts of moneys administered by Parliament and State legislatures. (ART. 148-150).

THE STATES : The Executive : *The Governor :* The executive power of each State vests in a Governor, appointed by the President, and is exercised by him either directly or through officers subordinate to him. All executive business and action is taken in the name of the Governor. The powers of the Governor are similar to that of the President in respect of pardons etc. and to suspend etc. sentences. The Governor appoints the *Chief Minister* and the other Ministers of the Council of Ministers who aid and advise him in the discharge of the executive functions. The duties of the Chief Minister are similar to that of the Prime Minister. The Governor summons the Houses of the Legislature of the States, prorogues them and can dissolve the Legislative Assembly. The Governor can promulgate ordinances when the State Legislature is not in session. The Governor also has the power to give assent to bills passed by the State Legislature and the power to reserve certain bills for consideration by the President. The Governor also makes recommendations for introducing financial bills. The Governor appoints the Advocate-General of the State.

The 22 States have Governors as their heads, the Union Territories of Andaman & Nicobar Islands and Chandigarh have Chief Commissioners, Delhi, Goa, Mizoram and Pondicherry have Lieutenant-Governors, Lakshadweep, and Dadra & Nagar Haveli have Administrators.

The system of Government in the States closely resembles that of the Union.

The State Legislatures : Six States, Andhra Pradesh, Bihar, Karnataka, Maharashtra, Tamil Nadu and Uttar Pradesh have two Houses of Legislature; the others, only one. The two Houses are called the Legislative Assembly (sometimes Vidhan Sabha) and the Legislative Council (sometimes Vidhan Parishad). The former has a duration of six years except during a proclamation of emergency when its duration can be extended one year at a time, while the latter is a permanent body with one-third of the members retiring every second year.

Membership Strength : The minimum strength of an Assembly is 60 and the maximum 500. The minimum strength of a Council is 40, and the maximum one-third of the State Assembly. (ART. 170-171).

Elections : An Assembly is elected directly on the basis of adult franchise with reservation of seats for the Scheduled Castes and Tribes. The composition of a Council is more complicated. About a third are elected by the Assembly, another third by local authorities (municipalities, district boards), about a twelfth by registered teachers in schools not lower than the secondary school standard, and about a twelfth by registered graduates of not less than three years' standing. And the rest are nominated by the Governor from among persons who have distinguished themselves in art, science, literature, co-operation and social service. (ART. 171). Under certain circumstances a person may be disqualified from being a member (ART. 190-193).

Administrative Units: The principal unit of administration in a State is the district under a Collector and Magistrate. A collector is responsible to a Commissioner who heads a Division or to the Board of Revenue depending upon the practice of a particular State. A District Magistrate is responsible for the maintenance of law and order and leads the district police force.

Language : The language by which the business of the State Legislatures is conducted is in the official language of the State or Hindi or English provided that in certain cases the Speaker may allow a member to address the House in his mother-tongue.

Legislative Procedure : The procedure followed is similar to that followed in the Union Parliament in respect of bills except Money Bills which procedure is contained in ART. 198 and 207. Annually a financial statement like the Union Budget is also introduced and passed by the House. (ART. 202).

Immunity of Members : Similar provisions as for the Parliament exist in respect of the State Legislatures and members exercising their rights.

THE UNION TERRITORIES : Special provisions relating to the administration of the Union Territories are provided under Part VIII of the Constitution and the provisions apply specifically to functions named in the Articles (ART. 239-241).

ADMINISTRATION OF JUSTICE

Supreme Court: (ART. 124-147): The Supreme Court of India consists of a Chief Justice and not more than 17 judges appointed by the President.

Retirement: At the age of 65.

Qualifications: For appointment as a judge of the Supreme Court a person has to be a citizen of India and must have been for at least 5 years a judge of a High Court or of two or more such Courts in succession; or an advocate of a High Court or two or more such Courts in succession for at least 10 years; or, he must be in the opinion of the President an eminent jurist.

Removal: A judge of the Supreme Court cannot be removed from office except by an order of the President passed after an address by each House of Parliament, supported by a majority of the total membership of that House voting, has been presented to the President in the same session for such removal on the ground of proved misbehaviour or incapacity.

Original Jurisdiction: The Supreme Court has an exclusive original jurisdiction which extends to all disputes between the Union and one or more States or between two or more States *inter se* (ART. 131). In addition to this and more significantly, Article 32 of the Constitution gives an extensive original jurisdiction to the Supreme Court to enforce fundamental rights guaranteed under Part III of the Constitution, by enabling it to issue writs, directions or orders including writs of *habeas corpus, mandamus,* prohibition, *quo warranto* and *certiorari.* The right guaranteed by ART. 32 cannot be suspended except as provided in the Constitution.

Advisory Jurisdiction: The President may consult the Supreme Court on any question of fact or law of public importance.

Appellate Jurisdiction: The Supreme Court can be invoked by a certificate of the High Court concerned or by special leave granted by the Supreme Court, in respect of any judgement, degree or final order of the High Court in cases involving substantial questions of law as to the interpretation of the Constitution. (ART. 132).

Civil Appeals: An appeal also lies from a judgement of a Division Bench of a High Court in a civil proceeding if the High Court certifies that the case involves a substantial question of general importance and which, in the opinion of the High Court, needs to be decided by the Supreme Court. (ART. 133).

Criminal Appeals: An appeal to the Supreme Court lies if the High Court (*a*) has on appeal reversed an order of acquittal of an accused person and sentenced him to death; (*b*) has withdrawn for trial before itself any case from any court subordinate to its authority and has in such trial convicted the accused person and sentenced him to death; or (*c*) certifies that the case is a fit one for appeal to the Supreme Court. Parliament is authorised to confer on the Supreme Court any further powers to hear and entertain appeals from any judgement, final order of sentence in a criminal proceeding of a High Court in Indian territory. (ART. 134).

Apart from these provision is also made for special leave to appeal to the Supreme Court from any judgement, decree, sentence, determination or order from any cause of any matter passed by a Court or tribunal. But leave is at the discretion of the Supreme Court and is not one as of right. (ART. 136).

By the 42nd Constitutional Amendment where cases involving the same or substantially the same questions of law of general importance are pending before the Supreme Court and one or more High Courts the Attorney General can move the Supreme Court to withdraw the cases pending before the High Court or High Courts to itself and dispose of the same. Further the Supreme Court has been empowered to transfer cases from one High Court to another High Court, if it is expedient for the ends of justice so to do. (ART. 139A).

High Court (ART. 214-231): Every State has a High Court of its own except in the case of Assam and Nagaland and Punjab and Haryana who share one each between them. Delhi has a High Court of its own.

Appointment: High Court judges are appointed by the President after consulting the Chief Justice of India, the Governor of the State and the Chief Justice of the High Court. They retire at the age of 62.

Qualifications: To be appointed a person has to be a citizen of the country who has either held judicial office or practised as an advocate for 10 years in any State; or he must be, in the opinion of the President, an eminent jurist.

Removal: Article 124 (4), which lays down the procedure for the removal of a Supreme Court judge, applies to the High Court judges also.

Jurisdiction: The jurisdiction as well as the laws administered by a High Court can be altered both by the Union and State Legislatures. Certain High Courts, like those at Bombay, Calcutta and Madras, have Original and Appellate jurisdictions. Under the Original jurisdiction suits, where the subject matter is valued at Rs. 25,000 or over, can be filed directly in the High Court. Under the Appellate jurisdiction only appeals from lower courts and appeals from suits, filed on the Original side of the High Court, can be entertained. Most High Courts have only appellate jurisdiction. Two important aspects of this jurisdiction are that the High Courts are also empowered to issue writs, directions, orders like the Supreme Court for enforcing the Fundamental Rights and in cases where the petitioner can satisfy the court that he has no other remedy, and there is a contravention of a statutory provision causing substantial injury to the petitioner or there is an illegality resulting in substantial failure (Art. 226 amended by the 42nd Constitutional Amendment). The other aspect is the power of superintendence over all subordinate Courts except those inferior courts whose judgement is not otherwise subject to appeal or revision. (ART. 227)

Subordinate Courts: (ART. 233-237): Except for minor variations, the structure and functions of the subordinate courts are uniform throughout the country. A State is divided into a number of districts, each under the jurisdiction of a principle civil court presided over by a District Judge. Subordinate to a District Judge is a hierarchy of different grades of civil courts.

The constitution and organisation of criminal courts and their procedure are regulated by the Code of Criminal Procedure 1898, as amended from time to time. In every district there is a District Magistrate and under him a number of subordinate magistrates of various grades sitting at various places. These Magistrates try and dispose the cases involving a sentence not exceeding imprisonment for two years.

Sheriffs and Official Assignees are attached to the High Courts of Bombay, Calcutta and Madras.

There are Official Assignees in three States—Maharashtra, W. Bengal and Tamil Nadu. The appointment is made by the Chief Justice of the High Court concerned

In addition to the Official Assignee, a Deputy Official Assignee may also be appointed. Another officer of the court is the Insolvency Registrar who may be vested with the powers mentioned in section 6 of the Presidency Towns Insolvency Act

Tribunals : Part XIVA has been added by the 42nd Amendment. Parliament may set up Administrative Tribunals for the Union and for each State or for two or more States and define the jurisdiction and powers of such tribunals for determining disputes relating to the recruitment and conditions of service of Union Government servants and servants of the States including the employees of any local or other authority within the territory of India or under the control of the Government of India or of a Corporation owned or controlled by Government. (ART. 323A)

ART. 323B provides for the creation of a hierarchy of Tribunals for the determination of disputes, complaints and offences respectively on various matters specified therein.

RELATIONS BETWEEN THE UNION & THE STATES

Legislative Relations : Under the Constitution, Parliament has the power to make Laws for the whole of or any part of the territory of India and the State Legislatures have the power to make Laws for the State. The subjects on which Legislation can be made are specified in the Seventh Schedule and Parliament has the exclusive right to legislate in respect of items appearing in List I (called the "Union List") and the State Legislatures have the exclusive power to make Laws in relation to items appearing in List II (called the "State List"). Both Parliament and the State Legislatures have the power to legislate in respect of items appearing in List III (called the "Concurrent List"). Provision is made in the constitution in relation to any inconsistency of laws made by the State Legislatures and Laws made by Parliament, as to which will prevail and for how long if both legislate in respect of the same subject. Parliament is also given the power to legislate on items exclusively reserved in the State List during an Emergency (ART. 245-254).

The Union List has 97 items including defence, armed forces, atomic energy, preventive detention, foreign affairs, citizenship, railways, highways, shipping, posts & telegraphs, currency, foreign exchange, incorporation, income tax, excise duty, estate duty etc. The State list has 66 items including public order, police, public health, communications, agriculture, forests, fisheries, markets, money lending, betting and gambling, taxes on lands and buildings, taxes on electricity, octroi, taxes on luxuries, entertainment etc. The concurrent list has 47 items including criminal law, marriage and divorce, transfer of property, contracts, trusts and trustees, contempt of court, prevention of cruelty to animals, trade unions, charities, newspapers, stamp duties, fees, evacuee property, price control etc.

Administrative Relations : The executive power of the State is exercised in compliance with laws made by Parliament and must not impede or prejudice the executive power of the Union. The other aspects of the general relationship are contained in ART. 256-263.

By the 42nd Constitutional Amendment the Union has been empowered to send any armed force or other force of the Union for dealing with any grave situation of law and order in any State. Such force shall act in accordance with the directions of the Union Government and shall not be subject to the control of the State Government. Parliament is also empowered to define by law the powers, functions and the liabilities etc., of the members of such force, when deployed in a State, during the period of deployment. (ART. 257A).

FINANCE, PROPERTY, CONTRACTS & SUITS (ART. 264-300): Under the Constitution no tax can be levied or collected except by authority of law (ART. 265). All revenues of the Union and all Laws in whatever form raised by it, are made part of the "Consolidated Fund of India" and all revenues of the State and Laws raised by it shall form part of the "Consolidated Fund of the State". Parliament is also empowered by law to establish a "Contingency Fund" (ART. 266-267). Under the Constitution provision is made for duties levied by the Union but which are collected and appropriated by the States such as stamp duties and excise duties on medicinal and toilet preparations and also taxes collected by the Union but assigned to the States such as taxes on succession, estate duty, taxes on railway fares and freights etc. and also income tax, which is collected by the Union, but, distributed, in accordance with the constitution between the States and the Union (ART. 268-270). Similarly, provision relate to excise duties collected by the Union but distributed between the States and the Union if a law so provides for their distribution. Provision is also made for grants by the Union to certain States and for the setting up of a Finance Commission.

Under the Constitution the property of the Union is exempt from taxes by the State and vice-versa (ART. 285 and ART. 289). States are restricted from imposing taxes on sales or purchases of goods which are sales or purchases outside the State or in the course of import or export from the territory of India. (ART. 286)

Under the Constitution the executive power of the Union and that of the State Government extends to borrowing on the security of the respective Consolidated Funds to the extent permitted by Parliament and the State Legislatures. (ART. 292-293)

From the commencement of the Constitution all property and assets which vested in His Majesty for the purposes of the Government of the Dominion of India and all property and assets which vested in His Majesty for the purposes of the Government of the Governor's Province vested in the Union and in the States respectively. Similarly all rights, liabilities and obligations were continued as the rights, liabilities and obligations of the Government of India and the Government of the State respectively. (ART. 294-295)

All lands, minerals, etc. underlying the ocean within the territorial waters or the continental shelf of India vest in the Union and are held for the purposes of the Union. (ART. 297)

All contracts, made in the exercise of the executive power of the Union or a State are made in the name of the President or a Governor respectively though no personal liability attaches in respect thereof on the President or the Governor. (ART. 299)

The Government of India may sue or be sued by the name of the Union of India or the Government of the State may sue or be sued by the name of the State. (ART. 300)

TRADE, COMMERCE & INTERCOURSE : (ART. 301-307): Trade, commerce and intercourse throughout the territory of India is free and this applies to both inter-state and intra-state trade, commerce and intercourse. Parliament and the legislatures of the States are empowered, however, to impose such restrictions as may be required in the public interest. (In the case of the States the restrictions must also be reasonable and no Bill making such restrictions could be introduced in the Legislature without the previous sanction of the President.)

SERVICES UNDER THE UNION & THE STATES: (ART. 308-323): Persons who are members of the civil service of the Union or the civil service of a State or are holders of civil posts cannot be removed or dismissed by an authority subordinate to that by which they were appointed. Further no person can be dismissed or removed or reduced in rank except after an inquiry in which the person is informed of the charges and given a reasonable opportunity of being heard in respect of the charges. (ART. 311).

Administrative Tribunals may be set up for determination of disputes and complaints relating to the recruitment and conditions of service of persons in service of the Union or a State (see above *Administration of Justice*).

Public Service : There is a Public Service Commission for the Union and for each of the States. The Commission must be consulted in all matters relating to methods of recruitment, on the principles in making appointments, promotions and transfers, on all disciplinary matters and on any claims or awards. These functions can be extended by law. The Commissions are required to present annually to the President or the Governor of the State a report of the work done by the Commission.

ELECTIONS : (ART. 324-329) : All elections are directed and controlled by an Election Commission whose head is the Chief Election Commissioner appointed by the President. All elections to the Lok Sabha and to the Legislative Assemblies of the States are on the basis of adult suffrage. Seats are reserved in the Lok Sabha and the Legislative Assemblies of the States for the Scheduled Castes and Tribes and provision may be made for seats to be reserved for the Anglo-Indian community. These special provisions are to have effect for thirty years from the commencement of the Constitution (ART. 330-334).

Interference by Courts in Election Matters : The Courts are banned from questioning elections to Parliament or the State Legislatures except by Law made by the appropriate Legislature. By an amendment the elections of the President, the Vice-President, the Prime Minister and the Speaker of the Lok Sabha have been made non-justiciable in a Court of Law and can be called in question only before an authority to be appointed by a Law to be made by Parliament and all decisions of that authority cannot also be questioned in a Court of Law. (39th Constitution Amendment.) (ART. 329A).

OFFICIAL LANGUAGE: (ART. 343-351): The official language of India is Hindi in the Devnagri script and the form of numerals for official purposes shall be the international form of Roman numerals. English, which was originally to continue as the official language till 26th January, 1965, has been, under the Official Languages Act, 1963, continued in addition to Hindi.

The language to be used in the Supreme Court and in the High Courts and for Acts, Bills etc. is English.

EMERGENCY : (ART. 352-360) : If the President is satisfied that a grave emergency exists whereby the security of India or any part of the territory thereof is threatened by war, or external aggression, or internal disturbance he may by proclamation make a declaration to that effect. By the 42nd Constitutional Amendment the President is now enabled to make a proclamation of Emergency not only in respect of the whole of India but also in respect of a part of the Country or, as the case may be, to restrict the proclamation of Emergency made in respect of the whole of India to a part of the Country. A proclamation may be revoked or banned by a subsequent proclamation. The declaration shall operate only for a period of two months unless before that it has been approved by resolution of both Houses of Parliament. The President may also make such declaration before any actual threat and if he is satisfied that there is imminent danger thereof. The President is empowered to make more than one Declarations of Emergency on separate grounds and the declarations can operate simultaneously. The satisfaction of the President is final and conclusive and it cannot be questioned in a Court of Law nor can its validity or its continued operation be questioned in a Court of Law. (ART. 352).

Effect of Proclamation of Emergency: While a proclamation of Emergency is in operation, (1) the executive power of the Union is extended to giving directions to a State or where the proclamation of Emergency is in force only in a part of the Country, to any other State other than the State in which Emergency is in force, if the security of the Country or any part thereof is threatened by activities in or in relation to the part of the Country in which the Emergency is in force; as to the manner in which its executive power is to be exercised and also to make laws with respect to any matter including conferring powers and imposing duties upon the Union or officers and authorities; (2) similarly Parliament is empowered to legislate in respect of items contained in the State List of Schedule Seven of the Constitution; (3) the President may make modifications and exceptions as far as the distribution of revenues under the Constitution are concerned (see above: Finance, Property, Contracts, Suits, ART. 268-279); (4) the Fundamental Rights under ART. 19 shall be suspended and it will be competent for the State to make Laws and to take executive action which the State would have otherwise been incompetent to make or take because of ART. 19 (the Law, to the extent of the incompetency ceasing to have effect after the Proclamation ceases to operate); (5) empower the President by order to declare that the right to move a Court for the enforcement of such of the Fundamental Rights as may be specified in that order as well as all pending proceedings for the enforcement of the rights shall remain suspended for the time the Proclamation operates or for such shorter time as may be specified in the Order and (6) by the 38th Constitution Amendment empower the State to make Laws or to take executive action which the State would have been otherwise incompetent to make or take because of such of the Fundamental Rights which are suspended by the order (the law ceasing to have effect to the extent of its incompetency on the Proclamation ceasing to operate). (ART. 353, ART. 250, ART. 354, ART. 358, ART. 359).

Proclamations of Emergency & Presidential Orders : On 26th Oct., 1962, the President made the first Proclamation of Emergency under ART. 352 on the ground that the security of India was threatened by the Chinese invasion. On 3rd Nov., 1962, a Presidential order was made under ART. 359 suspending the rights conferred by ART. 21 and 22. On 11th Nov., 1962 ART. 14 was added to the Presidential order. The Proclamation of Emergency was revoked on 10th Jan., 1968.

On 3rd Dec., 1971 the President made a second Proclamation of Emergency under ART. 352 on the ground that the security of India was threatened by the war with Pakistan in Dec. 1971. This has since been revoked.

On 25th June, 1975 the President made a third Proclamation of Emergency under ART. 352 on the ground that the security of India is threatened by internal disturbances. On 27th June, 1975 a Presidential Order was made under ART. 359 suspending the rights conferred by ART. 14, 21 and 22 and on 8th Jan., 1976, ART. 19 was added to the order. This order has also been revoked.

Financial Emergency: (ART. 360): If the President is satisfied that the financial stability of the country is threatened, he may, by a Proclamation, make a declaration and in consequence the executive authority of the Union is considerably extended and it is empowered to suitable action.

President's Rule: The President may, on receipt of a report from the Governor of a State or otherwise, if satisfied that a situation has arisen in which the government of the State cannot be carried on in accordance with the Constitution, by Proclamation assume to himself all or any of the functions of the Government of the State and all or any of the powers vested in the Governor, declare that the powers of the Legislature of the State are exercisable by Parliament except that the President cannot assume the powers vested in the High Court. This Proclamation is popularly known as 'President's Rule' and all such Proclamations have to be laid before Parliament within two months and approval obtained to continue the Proclamation. Such a Proclamation approved by the Parliament ceases to be in operation after a period of one year unless revoked earlier and may be renewed for a period of one year at a time but in no case beyond a total period of three years. The satisfaction of the President is final and conclusive and justifiable. Consequential provisions regarding Parliament's authority to legislate on such a declaration are provided under the Constitution. (ART. 356-7).

AMENDMENT OF THE CONSTITUTION: (ART. 368). The extent of the power to amend the Constitution and whether all parts of the Constitution were amendable was the subject of several decisions of the Supreme Court. In the last decision, popularly known as the "Fundamental Rights Case" the Supreme Court has held that the power to amend applies to even the Fundamental Rights (which it had previously held to be not amendable) but that Parliament could not amend the "basic features" of the Constitution. ART. 368 was itself amended by the 24th Constitution Amendment which was challenged in the Fundamental Rights case and that amendment was upheld by the Supreme Court. The new ART. 368 contains the procedure for amendment. The amendment can be done only by the introduction of a Bill for that purpose in either the Lok Sabha or the Rajya Sabha and the Bill has to be passed by each House by a majority of the total membership of that House and by a majority of not less than two-thirds of the members of that House voting and after the President has assented to it the Constitution will stand amended. Certain provisions of the Constitution like the provisions relating to the Union Judiciary, the High Courts, the distribution of Legislative Powers or ART. 54, 55, 73, 162 and 241 or of any of the lists contained in the Seventh Schedule in the representation of the States in Parliament and an amendment to any of the provisions of this Article have in addition to the above to be ratified by the legislatures of at least half the States by resolutions to that effect before the Bill can be presented to the President for his assent.

The 42nd Constitutional Amendment has amended ART. 368 to provide that no amendment of the Constitution made before or after the 42nd Amendment shall be questioned in any court on any ground, and further, that Parliament's power to amend the Constitution under ART. 368 shall be without any limitation.

Section 59 of the Constitution (Forty-second Amendment) Act, 1976 has conferred power on the President to remove by an order, any difficulty that may arise during the period of transition from the old provisions of the Constitution to the new provisions as amended.

Amendments made to the Constitution: Till 1980, 44 amendments had been made to the provisions of the Constitution.

The Constitution (45th Amendment) Bill extending reservation of seats in the State Assemblies and Lok Sabha for Scheduled Castes, Scheduled Tribes and Anglo-Indians for a period of 10 years has been passed by the Lok Sabha on Jan. 24, 1980 and okayed by Rajya Sabha on Jan. 25, 1980.

JUSTICE—PRESENT POSITION

Supreme Court: At the beginning of the year 1977 the number of the Supreme Court Judges was 13 excluding the Chief Justice (under the Supreme Court Amendment Act, 1960). The pendency of cases in 1976 was 14,109 against 2,319 in 1960. Therefore, a Bill was introduced to increase the maximum number of Judges to 17 excluding Chief Justice which was passed by both Houses of Parliament and it received the assent of the President on Dec. 31, 1977. During 1979 the working strength remained 15 excluding the Chief Justice.

POSITION OF CASES

Period	Institution	Disposal	Pendency
1976	8,254	7,734	14,109
1977	14,501	N.A.	18,215
1978	20,840	17,095	21,960
1979	20,754	15,833	26,881

High Courts: The number of High Court Judges in position as on March 31, 1980 was 347 against a total sanctioned strength of 400 (including newly created posts). The position of institution, disposal and pendency of cases in High Courts from 1975 to 30th June, 1979 was as follows:

Year	Institution	Disposal	Pendency at the end of the year
1975	440,520	396,920	510,411
1976	467,154	413,588	564,007
1977*	207,007	183,942	607,918†
1978*	233,036	218,935	613,799†
1979*	252,909	236,986	629,722†

Sessions Courts: The pendency of cases in the Sessions Courts increased from 129,936 to 136,141 at the end of 1978. The disposal of cases also showed marked increase to 221,107 during the year January to December 1978, against 201,601 during the corresponding period in 1977.

Magisterial Courts: The number of cases pending at the end of 1978 was 4,816,420 against 4,354,790 in the previous year. Institution of cases during the years 1977 and 1978 was 7,312,235 and 7,288,901 while disposals were 7,380,414, and 6,832,240 respectively.

---

*From January to June. †At the end of the year

Civil Courts: The pendency of cases on the original side on December 31, 1978 was 2,687,418 against 2,109,986 in 1977. The disposals during 1977 and 1978 on the original side were 2,196,768 and 2,281,166 respectively.

The pendency on the appellete side at the end of 1977 and 1978 was 190,782 and 190,212 while disposals during 1977 and 1978 were 208,725 and 211,068 respectively. The institutions during 1977 and 1978 respectively were 206,967 and 209,551.

Number of courts functioning in the country at District level at the end of December 1978: District/Additional District & Sessions Judge/Asst. Sessions Judge/Subordinate Judge Courts: 2,115; Munsifs/Magistrate Courts: 4,291.

NUMBER OF JUDGES

Supreme Court: At the beginning of 1979, the maximum permissible strength of the Supreme Court was 17 (excluding the Chief Justice).

High Court: On 1-4-1979, 345 judges were in position against a total strength of 384.

PHYSIOGRAPHY

THE vast size of India needs no stressing. Reaching from 8° 4′ to 37° 6′ North latitude, and from 68° 7′ to 97° 25′ East longitude, it measures some 3,220 kms. from south to north and some 2,980 kms. from west to east, and covers an area of 3,276,141 sq. kms. (including Sikkim).

Physical Features : India is built on a grand scale. Its physical features fall into three well-marked regions, each of them vast in dimensions: first, the great Himalayan mountain system; secondly, the Indo-Gangetic plain; and thirdly, the plateaux of peninsular India, the Deccan.

The Himalayan system lies between the plateau of Tibet and the Indo-Gangetic Plain, and consists essentially of a complex series of young fold-mountains arranged in more or less parallel ranges which now combine in a mountain-knot, then divide to leave room for intermont valleys like those of Kashmir and Kulu. The highest range, the Great Himalaya, consists of a whole series of giant peaks like Nanda Devi (24,645 feet), separated by deep chasms cut by rivers and glaciers and, occasionally, by high passes over which run the immemorial trade-routes between India and Tibet. South of the Great Himalaya lie other high ranges, and nearest to the plains there are the Sivaliks, the youngest member of the series geologically, which present a massive rampart to the south, broken only by valleys through which run great snow-fed rivers like the Sutlej (a tributary of the Indus), the Yamuna and Kosi (tributaries of the Ganga) and the Ganga itself. At the eastern-most end of the Indian Himalaya the ranges are breached in a spectacular gorge by the Brahmaputra, which rises in Tibet. East and south of the Brahmaputra gorge, the fold-ranges trend generally southward, and form the wild hilly country of Nagaland and other areas on the frontiers of India and Burma.

The Indo-Gangetic Plain occupies what must once have been a hollow between the Himalayas and the old-rock plateaux of the peninsula; a hollow that has been infilled by alluvium brought down by the great Himalayan rivers and, to a lesser extent, by those flowing into it from the Deccan, like the Chambal and Sone. If one includes the level ground along the Brahmaputra in Assam, the Plain as a whole is over 2,400 kms. long, and generally 200-300 kms. wide (rather narrow in Assam). Here is one of the world's really large Plains. To the casual observer it is one great monotony, but actually it has considerable variety, of two kinds: first, the gradual transition from the dune-covered desert-plain of Rajasthan, through the rich, cultivated alluvium of Uttar Pradesh to the swampy Sundarbans along the weaward edge of the Bengal delta; and, secondly, more intimate local variety — for example, the contrast of deeply-gullied terraces of old alluvium and of low-lying flood-plain where the Chambal runs into the Yamuna below Agra.

The dominant landform in the Deccan (that is, in peninsular India) is the plateau, the great stretch of rolling country at some considerable elevation above sea-level. Such is the Maidan of Kamataka or the black-earth plateau of Malwa (or the detached plateau which forms Meghalaya). Most of these plateaux, indeed, almost all of the Deccan, are built of hard old crystalline rock, with here and there ancient sediments. Here lies most of India's mineral wealth, especially iron and manganese ore (with coal in down-faulted basins in the north-east Deccan). In Maharashtra there was a great outpouring of basalt which overlies the crystalline base and gives rise to characteristic stepped landforms. Across the plateaux roll the great east-flowing Deccan rivers, the Mahanadi, Godavari, Krishna and Kaveri, with their tributaries. Each forms a notable delta where it reaches the sea. The Narmada and Tapti, on the other hand, flow westward to the Gulf of Cambay north of Bombay. The great plateaux end in massive mural scarps like those overlooking the Indo-Gangetic Plains or the even more impressive Western Ghats (the so-called Eastern Ghats are puny, broken things in comparison). There are also scarps with the appearance of mountain ranges where one plateau-level descends to another within the Deccan.

Climate: The vastness of India and the variety of its relief are reflected in the wide range of climatic types to be found within it. In the Plains, the desert of Rajasthan contrasts with the humidity of Bengal. The winter snows of the Himalaya contrast with the nearly equatorial heat of Kerala and Tamil Nadu. The last two contrast with each other, for Kerala is wet, with a short dry season, and Tamil Nadu is dry, with a long dry season when much of India is having rain, during the south-west monsoon.

If one seeks a unifying factor in the climate of India, it is to be found in the dominance of the monsoon : that is, in a great seasonal reversal of wind and weather. For most of India except Tamil Nadu, the south-west monsoon of about June to September is a period of rain, very heavy in Bombay and Calcutta, torrentially heavy in Meghalaya (where Cherrapunji has the reputation of being the earth's wettest spot), light by the time Delhi is reached, even lighter (and highly variable) in the desert. The north-east monsoon of ' winter ' is a period of dry weather over most of India except Tamil Nadu, which then has its rainy season; and of cold weather, becoming hot as the south-west monsoon season approaches, in north India.

Vegetation and Soils: Most of India must once, it is thought, have been covered with forest whose nature reflected principally variations in rainfall (or of altitude in the Himalaya) : forest that ranged from tropical rain forest in Kerala through tropical moist deciduous forest in the eastern Plains and north-east Deccan to thorn scrub in semi-arid interior Maharashtra. Forest reserves to some extent preserve this pristine vegetation, though usually in a form modified by man, acting as a destructive agent (for instance, turning thorn forest to poor savana-jungle) or as a constructive agent (replacing 'natural' vegetation with pure strands of desired species like sal or sandalwood). In the Plains, the east coast deltas and western coastal strips, in Tamil Nadu and much of Maharashtra, little 'natural' vegetation of any sort survives.

Human activity over the centuries (indeed, for millennia) has replaced 'natural' vegetation with crops : the kharif rice and rabi wheat of much of the Plains (and, of course, other crops beside, like sugar-cane and mustard) ; the jowar and bajra of the drier parts of the Deccan, except where irrigation has brought in wheat, or rice, or sugar-cane ; the tea of Assam ; the tea and coffee of Kerala and of the hills north of it ; the coconut of the coastal fringes of the South. So, too, the teeming wild life of India, dependent as it is on forest cover, has been fighting a losing battle against man. There is now concern over the survival of a number of species, notably the lion (confined to the Gir forest in Saurashtra), the tiger, the elephant and the rhinoceros. But a number of species of deer are still relatively common, and bird life is generally abundant.

Population (also see Chapter on Population): India is the world's second most populous country. The 1981 Census indicated the total population was 683·81 million, an increase of 24·75 per cent over 1971 Census, as against 547·9 million in 1971 with 24·8 per cent increase over 1961 Census figures. All the States/Territories north of the Vindhyas account for more than 60 per cent of the entire population. There are great variations between one region and another and pressure of population on the land has become excessive, especially in the Plains, the east coast deltas and Tamil Nadu.

STATES, TERRITORIES

The country is divided into 22 States and 9 Union Territories. These are (with the capital towns in brackets) :

Andhra Pradesh (Hyderabad), Assam (Dispur), Bihar (Patna), Gujarat (Gandhinagar), Haryana (Chandigarh*), Himachal Pradesh (Simla), Jammu and Kashmir (Srinagar), Kerala (Trivandrum), Madhya Pradesh (Bhopal), Maharashtra (Bombay), Manipur (Imphal), Meghalaya (Shillong), Karnataka (Bangalore), Nagaland (Kohima), Orissa (Bhubaneshwar), Punjab (Chandigarh*), Rajasthan (Jaipur), Sikkim (Gangtok), Tamil Nadu (Madras), Tripura (Agartala), Uttar Pradesh (Lucknow), West Bengal (Calcutta).

The Andaman and Nicobar Islands (Port Blair), Arunachal Pradesh (Yachuli), Chandigarh* (Chandigarh), Dadra and Nagar Haveli (Silvasa), Delhi (Delhi), Goa, Diu and Daman (Panaji), Lakshadweep (Kavaratty Island), Mizoram (Aizawl), Pondicherry (Pondicherry).

SOME BASIC FACTS

Date of Independence 15-8-1947.

Became a Republic on 26-1-1950.

Area : 3,276,141 sq. kms.

Length : 3,119 kms. (North-South).

Breadth : 2,977 kms. (East-West).

Land Frontier : 15,168 kms. ; Frontiers with Pakistan : 2,966 kms. ; with Bangla Desh : 3,950 kms. ; with China: 3,862 kms. ; with Nepal : 4,390 kms.

Coastline : 5,686 kms.

Ocean Zone : 200 nautical miles.

Important Rivers : Ganges, Yamuna, Luni, Ghaghara, Kosi, Godavari, Chambal, Betwa, Sone, Brahmaputra, Krishna, Mahanadi, Narmada, Kaveri, Tapti and Pennar.

Minimum Rainfall : Thar Desert 101·60 mm (4 inches).

Maximum Rainfall : Cherrapunji 10,795 mm (425 inches).

Minimum Temperature : Kashmir 9·4°C (49°F).

Maximum Temperature : Rajasthan 48·9°C (120°F).

Population : 683,810·051 (1981 Census).

Growth Rate : 24·75 per cent (1981).

Expectancy of Life at Birth : 54 years.

Death Rate : 14·8 per 1,000.

Birth Rate : 36 per 1,000.

Infant Mortality Rate : Male 120, Female 113.

Most Populated State : Uttar Pradesh 110,858,019.

Largest Populated City : Calcutta 9,165,650.

Literacy Rate : 34·8 per cent.

Most Literate State : Kerala (69·2 per cent).

Largest State : Madhya Pradesh 443,459 sq. kms.

Largest Union Territory : Arunachal Pradesh 83,578 sq. kms.

No. of States : 22.

No. of Union Territories : 9.

No. of Districts : 361.

No. of Villages : 596,000 (approximately).

No. of Village Panchayats : 221,727.

Languages : 15 (provided by the Constitution). Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Malayalam, Marathi, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu.

Dialects Spoken : 1,652.

---

* The Union Government announced on January 29, 1970 its decision to transfer the capital project area of Chandigarh to Punjab within the next five years. Pending the construction of a new capital for Haryana, Chandigarh will remain a Union Territory

METEOROLOGY

AVERAGE MONTHLY TEMPERATURE °C FOR DIFFERENT STATIONS

Name of Station	Altitude in Metres	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Agra	169	14·8	18·0	23·8	29·7	34·5	35·0	30·9	29·3	28·9	26·2	20·6	16·1
Ahmedabad	55	20·3	22·7	27·1	31·3	33·5	32·7	29·5	28·2	28·7	28·4	24·5	21·1
Allahabad	98	16·4	19·1	25·1	30·7	34·7	34·3	30·1	29·1	29·0	26·5	21·1	17·1
Bangalore	921	20·9	23·1	25·7	27·3	26·9	24·3	23·2	23·3	23·3	23·2	21·7	20·5
Bombay	11	24·3	24·9	26·9	28·7	30·1	29·1	27·5	27·1	27·4	28·3	27·5	25·9
Calcutta	6	20·2	23·0	27·9	30·7	31·1	30·4	29·1	29·1	29·2	27·9	23·9	20·6
Cherrapunji	1,313	11·7	13·7	16·7	18·5	19·2	20·1	20·3	20·5	20·5	19·1	15·8	12·9
Darjeeling	2,127	6·1	7·7	11·3	14·4	15·7	17·0	17·6	17·6	17·3	15·1	11·3	8·1
Dehra Dun	682	12·6	14·8	19·4	24·5	28·9	29·5	26·7	26·1	25·5	22·1	17·5	13·9
Gauhati	54	17·5	19·5	23·3	25·9	26·9	28·1	28·9	29·0	28·7	26·3	22·3	18·7
Hyderabad	545	21·6	23·9	27·4	30·3	32·5	29·1	26·1	25·8	25·7	25·1	22·3	20·6
Indore	567	17·9	19·9	24·5	29·1	32·3	30·1	26·1	25·1	25·1	24·1	20·5	18·3
Jaipur	390	15·1	18·1	23·2	28·7	33·2	33·3	29·9	28·1	28·1	25·7	20·5	16·7
Jammu	366	13·3	15·9	20·6	26·8	32·4	34·1	30·7	29·1	28·6	25·4	19·8	15·2
Jamshedpur	129	19·3	21·7	26·7	31·2	33·4	31·7	28·9	28·7	28·7	26·9	22·3	19·2
Kangra						Not available							
Kodaikanal	2,343	12·5	13·3	14·6	15·7	16·5	15·3	14·3	14·5	14·5	13·9	12·9	12·5
Lucknow	111	16·1	18·9	24·6	30·1	33·9	33·7	30·1	29·3	29·1	26·3	21·0	16·9
Madras	16	24·5	25·9	27·9	30·5	32·7	32·5	30·7	30·1	29·7	28·1	25·9	24·6
Mahableshwar	1,382	18·9	20·5	23·1	24·1	23·5	19·4	17·9	17·6	18·0	20·1	19·5	18·7
Matheran						Not available							
Mussoorie	2,042	6·3	7·8	11·7	16·5	19·9	20·3	18·3	17·9	17·1	14·9	11·6	8·5
Mysore	767	22·3	24·7	26·9	27·7	26·9	24·5	23·5	23·7	24·0	24·0	22·9	21·7
New Delhi	216	14·3	16·9	22·7	28·6	33·5	34·3	81·3	29·9	29·3	25·9	20·3	15·7
Ootacamund	2,249	12·5	13·5	15·1	16·1	16·5	14·5	13·7	14·1	14·3	14·3	13·6	13·0
Panaji	57	25·5	25·9	27·5	29·0	29·8	27·5	26·4	26·5	26·5	27·3	27·6	26·9
Patna	53	17·3	19·9	25·7	30·5	32·5	31·9	29·8	29·3	29·3	27·5	22·5	18·3
Pune	559	21·3	23·1	26·5	29·3	29·9	27·5	24·9	24·6	25·0	25·5	22·9	21·1
Ranikhet						Not available							
Shillong	1,500	9·5	11·7	16·0	18·9	19·6	20·5	21·1	20·9	20·1	17·3	13·3	10·5
Simla	2,202	5·2	6·7	10·6	15·2	19·2	20·3	18·3	17·7	16·9	14·3	11·1	7·7
Srinagar	1,586	1·1	3·5	8·5	13·3	17·9	21·7	24·6	23·9	20·5	14·1	7·7	3·5
Trivandrum	64	26·8	27·3	28·3	28·7	28·3	26·5	26·1	26·3	26·6	26·7	26·6	26·7
Udaipur	582	16·0	18·7	23·7	28·1	31·7	30·6	27·3	26·1	26·5	25·5	20·1	17·3
Vadodara	34	20·5	22·5	26·6	30·8	33·4	32·1	28·9	28·1	28·3	27·5	23·9	21·2
Varanasi	76	16·5	19·3	25·3	30·5	34·3	33·7	30·0	29·1	29·1	26·6	21·0	17·1

AVERAGE MONTHLY RAINFALL (MILLIMETRES) FOR DIFFERENT STATIONS

Name of Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.
Agra	16·2	8·8	10·9	5·3	10·0	60·0	210·2	263·2	151·5	23·5	2·1	3·7
Ahmedabad ..	3·9	0·3	0·9	1·9	4·5	100·0	316·3	213·3	162·8	13·1	5·4	0·7
Allahabad ..	20·2	22·2	14·3	4·8	8·2	101·7	274·8	333·1	195·1	39·7	6·9	6·3
Bangalore ..	3·3	10·2	6·1	45·7	116·5	80·1	116·6	147·1	142·7	184·9	54·3	16·2
Bombay ..	2·0	1·1	0·4	2·8	16·0	520·3	709·5	439·3	297·0	88·0	20·6	2·2
Calcutta ..	13·8	24·2	26·5	42·7	120·6	259·1	300·6	306·3	289·7	160·2	34·9	3·2
Cherrapunji ..	19·8	37·3	178·9	605·2	1,705·1	2,921·5	2,456·7	1,827·5	1,167·7	447·4	46·7	4·9
Darjeeling ..	21·7	26·7	52·4	109·0	187·1	522·3	712·9	572·5	418·5	116·1	14·2	5·0
Dehra Dun ..	62·2	59·4	39·7	17·4	41·7	185·9	720·8	764·9	326·7	70·8	5·1	19·1
Gauhati ..	11·4	18·3	53·4	125·9	273·6	293·4	301·5	263·0	190·1	90·1	11·5	5·0
Hyderabad ..	1·7	11·4	13·4	24·1	30·0	107·4	165·0	146·9	163·3	70·8	24·9	5·5
Indore	8·4	1·1	3·5	3·5	13·2	147·1	316·0	266·5	220·9	48·4	22·1	2·7
Jaipur	14·0	8·4	8·6	4·2	10·0	54·0	193·2	239·0	89·8	19·3	3·4	4·2
Jammu ..	71·3	59·4	57·0	25·2	17·0	60·9	320·7	319·1	150·8	29·5	7·9	29·5
Jamshedpur ..	14·1	28·3	23·8	25·4	68·8	217·5	347·2	356·1	215·4	76·2	16·7	1·8
Kangra ..	78·5	73·1	70·6	36·6	39·9	108·2	578·4	692·7	218·4	19·1	8·1	37·1
Kodaikanal ..	62·7	31·6	64·3	166·1	157·4	103·8	117·4	162·8	160·5	250·3	274·0	121·2
Lucknow ..	23·7	17·2	9·2	6·4	11·7	93·9	299·0	301·8	181·7	40·3	1·4	6·1
Madras	23·8	6·8	15·1	24·7	51·7	52·6	83·5	124·3	118·0	267·0	308·7	139·1
Mahableshwar	3·1	1·8	6·8	29·6	55·4	898·3	2,521·3	1,714·7	709·2	179·3	56·7	6·1
Matheran ..	2·0	1·5	2·3	4·1	25·1	773·9	2,035·6	1,461·0	658·6	168·1	31·5	3·8
Mussoorie ..	66·4	66·9	63·5	29·5	45·1	188·5	726·5	754·7	323·2	64·8	7·7	31·8
Mysore	2·8	5·5	12·0	67·6	156·9	60·5	71·9	80·1	116·3	179·9	66·6	14·7
New Delhi ..	24·9	21·8	16·5	6·8	7·9	65·0	211·1	172·9	149·7	31·2	1·2	5·2
Ootacamund ..	25·8	12·0	29·5	108·5	172·6	139·2	176·6	128·2	109·7	213·3	126·5	59·1
Panaji	2·3	0	4·2	16·9	17·6	580·1	892·1	341·1	276·6	122·3	20·4	37·5
Patna	21·1	20·2	6·7	8·2	28·3	139·0	265·8	307·1	242·5	62·8	5·7	2·4
Pune	1·9	0·3	3·1	17·6	34·7	102·8	186·8	106·4	127·3	91·9	37·0	4·9
Ranikhet ..	54·1	62·0	46·2	31·0	50·0	144·0	331·5	344·4	165·9	33·5	7·4	22·9
Shillong ..	15·2	28·5	59·4	136·4	325·4	544·6	394·9	334·6	314·9	220·2	34·9	6·2
Simla	65·2	47·6	58·1	37·6	53·7	147·5	414·5	385·4	195·2	45·4	6·7	23·7
Srinagar ..	72·8	72·3	104·1	78·1	63·4	35·6	61·0	62·8	31·8	28·7	17·5	35·9
Trivandrum ..	20·1	20·3	43·5	122·1	248·6	331·2	215·4	164·0	122·9	271·2	206·9	73·1
Udaipur ..	9·0	4·4	3·5	2·6	4·6	87·0	197·3	206·9	120·4	16·1	5·7	2·5
Vadodara ..	2·0	2·4	0·7	2·9	4·1	114·8	365·8	263·5	185·5	34·5	9·0	0·2
Varanasi ..	25·0	21·9	11·9	3·9	12·3	91·9	306·2	342·2	225·7	59·5	9·6	3·3

Statement of sub-divisional means of rainfall in millimetres during 1978 and 1979

1978 — June to September
1979 — June to September

	Actual	Normal	Dep. from normal	% dep. from normal	Actual	Normal	Dep. from normal	% dep. from normal
Andaman and Nicobar Islands	1,629	1,597	+ 32	+ 2	1,154	1,597	— 443	— 28
Arunachal Pradesh	2,128	2,293	— 165	+ 7	2,007	2,366	— 359	— 15
Assam & Meghalaya	1,439	1,442	— 3	— 0	1,309	1,439	— 130	— 9
Nagaland, Manipur, Mizoram and Tripura	1,186	1,256	— 70	— 5	1,251	1,241	+ 10	+ 1
Sub-Himalayan West Bengal & Sikkim	2,082	2,549	— 467	— 18	1,898	2,161	— 263	— 12
Gangetic West Bengal ..	1,628	1,133	+ 495	+ 44	982	1,105	— 123	— 11
Orissa	1,104	1,145	— 41	— 3	914	1,124	— 210	— 19
Bihar Plateau	1,333	1,105	+ 228	+ 21	808	1,106	— 298	— 27
Bihar Plains	1,036	1,050	— 14	— 1	860	1,046	— 186	— 18
Uttar Pradesh, East	974	905	+ 69	+ 8	448	908	— 460	— 51
Plains of West Uttar Pradesh	1,079	803	+ 276	+ 34	400	804	— 404	— 50
Hills of West Uttar Pradesh ..	1,727	1,579	+ 148	+ 9	850	1,486	— 636	— 43
Haryana, Delhi & Chandigarh	749	518	+ 231	+ 45	333	518	— 185	— 36
Punjab	571	459	+ 112	+ 24	283	459	— 176	— 38
Himachal Pradesh	1,645	1,344	+ 301	+ 22	559	1,046	— 487	— 47
Jammu and Kashmir ..	438	380	+ 58	+ 15	186	276	— 90	— 33
Rajasthan, West	414	295	+ 119	+ 40	259	291	— 32	— 11
Rajasthan, East	835	657	+ 178	+ 27	495	635	— 140	— 22
Madhya Pradesh, West ..	1,032	944	+ 88	+ 9	696	936	— 280	— 30
Madhya Pradesh, East ..	1,151	1,208	— 57	— 5	715	1,181	— 466	— 39
Gujarat Region, Daman, Dadra and Nagar Haveli ..	717	784	— 67	— 9	615	774	— 159	— 21
Saurashtra, Kutch, Diu ..	492	533	— 41	— 8	930	553	+ 377	+ 68
Konkan and Goa	2,591	2,557	+ 34	+ 1	1,908	2,554	— 646	— 25
Madhya Maharashtra ..	477	543	— 66	— 12	592	546	+ 46	+ 8
Marathwada	628	653	— 25	— 4	756	671	+ 85	+ 13
Vidarbha	1,074	977	+ 97	+ 10	955	966	— 11	— 1
Coastal Andhra Pradesh ..	806	555	+ 251	+ 45	391	557	— 166	— 30
Telangana	1,092	778	+ 314	+ 40	619	778	— 159	— 20
Rayalaseema	574	417	+ 157	+ 38	359	420	— 61	— 14
Tamil Nadu and Pondicherry	290	278	+ 12	+ 4	328	278	+ 50	+ 18
Coastal Karnataka	3,486	2,945	+ 541	+ 18	2,595	2,945	— 350	— 12
Interior Karnataka, North ..	673	581	+ 92	+ 16	620	580	+ 40	+ 7
Interior Karnataka, South ..	414	414	0	0	545	426	+ 119	+ 28
Kerala	1,661	1,687	+ 26	— 1	1.743	1,727	+ 16	+ 1
Lakshadweep	1,202	951	+ 251	+ 26	1,154	1,001	+ 153	+ 15

Note :—For calculation of excess and defects and their % rainfall figures are taken correct to 0.1 mm.

A TOURIST'S GUIDE

INDIA has three major seasons: winter, summer and the monsoon.

The winter months (November-February) are pleasant throughout India with bright sunny days. In the northern plains, the minimum temperature at times drops steeply and there is snowfall in the hills. In Maharashtra and the south and in eastern India, however, December and January are pleasantly cool, never really cold.

The summer months (April-June) are hot in most parts of India, and it is during this season that hill resorts such as Simla, Mussoorie, Naini Tal, Kulu, Manali, Dharamsala, Dalhousie, Kangra Valley, Kashmir Valleys, Darjeeling, Shillong, Ootacamund, Kodaikanal, Pachmarhi and Mount Abu provide cool retreats. (See "Meteorology" for average temperatures and rainfalls.)

The south-west monsoon usually breaks about the beginning of June on the west coast and reaches elsewhere later. With the exception of the south-eastern areas, India receives the major share of its rainfall between June and September. The south-eastern areas receive most of the rainfall from the north-east monsoon between November and January.

Clothing: In northern India, where evening and night temperatures drop steeply in winter, woollen clothing is necessary from the middle of November to the middle of February. Winter in other parts of the country is mild and tropical clothing will be sufficient. For those visiting the hill resorts during this time heavy woollens are essential.

During the summer months, only light tropical and cotton clothing are comfortable. Visitors to the hill resorts, however, should carry light woollens.

Medical Facilities: In all the cities and towns there are State-managed and private hospitals and dispensaries. The services of highly qualified specialists and consultants are available in places like Delhi, Bombay, Calcutta, Madras and other large cities. Some of the chemists offer round-the-clock service. (See " Hospitals " in ' Services' for the list.)

Foreign Exchange: The official rates of exchange are as follows: £1 approx. to Rs. 18·95, U.S. $1 equal to Rs. 7·90. To change their money, foreign tourists are requested to deal with authorised money changers and obtain an official receipt to enable them to reconvert their unspent amount on their final departure from India. The actual buying and selling rates, however, differ slightly from these rates.

Indian Currency: No Indian currency can be brought in or taken out of the country except rupee travellers' cheques.

Electric Current: Voltage in most places is 220-240 A.C., 50 cycles, though a few areas have D.C. supply as well. The tourists are advised to check the voltage before using an electric shaver or other electrical gadgets.

TOURIST INFORMATION: The main Govt. of India tourist offices in India are at: (1) 88, Janpath, New Delhi-110001. Tel. 320342; (2) 123, M. Karve Road, Churchgate, Bombay-400020, Tel. 293144; (3) 4, Shakespeare Sarani, Calcutta-700016, Tel. 441402; (4) 154, Annasalai Road, Madras-600002, Tel. 86240; (5) 191, The Mall, Agra, Tel. 72377; (6) Krishna Vilas, Station Rd., Aurangabad, Tel. 4817; (7) Willingdon Island, Cochin 682003, Tel. 66045; (8) State Hotel, Jaipur, Tel. 72200; (9) Khajuraho, Tel. 47; (10) 15-B, The Mall, Varanasi 221002, Tel. 64189.

In addition to the above mentioned Tourist Offices, there are State Govt. Tourist offices in the major cities of the respective States and also at important tourist centres.

GOVERNMENT OF INDIA TOURIST OFFICES ABROAD:

Bangkok: 3F, Singapore Airline Bldg., 62/5, Thaniya Rd., Tel. 2352585.

Brussels: Office National Indian De Tourisme, Rue Revenstein 60, Boite 15, B-1000 Brussels (Belgium); Tel.: 02/511-1796.

Chicago: Govt. of India Tourist Office, 201, North Michigan Avenue, Chicago, Illinois 60601 (USA); Tel.: 312-236-6899

Dallas: 13317, Kit Lane, Dallas, Texas 75240; Tel.: (214) 234-2233.

Detroit: 9267 Pickwiek CR-23 E, Taylar, Michigan 48180.

Frankfurt: Indisches Verkehrsburo Kaiser Strasse 77-III 6, Frankfurt/Main (West Germany); Tel.: 232380, 232396.

Geneva: Office National Indien De Tourisme, 1-3, Rue de Chantepoulet, 1201, Geneva (Switzerland); Tel: 322-321813.

Kuwait: India Tourist Bureau, Sadoun al-Jassim Bldg., Fahd Al-Salem Street, Post Box 4769, Safat, Kuwait; Tel. 426088.

London: Govt. of India Tourist Office, 21, New Bond Street, London WIYODY; Tel.: (01)493-0769; (01)493-2771.

Los Angeles: Govt. of India Tourist Office, 3550, Wilshire Blvd. Suite 204, Los Angeles, California 90010; Tel.: (213)380-8855, 8856 & 8857.

Melbourne: Govt. of India Tourist Office, C/o Air India, 440, Colling St., Melbourne V/C-3000; Tel.: 03-6023933

Miami: 1020 N. E. 165 Terrace Miami, Florida 38162; Tel.: (305)-944-7039.

Milan: Ufficio Nazionale Del Tourisme Indiane, Via-Albricei-9, 20122, Milan (Italy); Tel.: 804952.

New York: Govt. of India Tourist Office, 30, Rockefeller Plaza, North Mezzanine, New York N.Y. 10020, (USA); Tel.: 212-586-4901.

Paris: Office National Indien De Tourism, 8, Boulevard de-la-Madeleine, 75009, Paris 9 (France); Tel.: 525-46-04; 265-83-86.

Perth: First Floor, Elder House, 111, St. Georges Terrace, Perth, WA 6000. Tel. 09-3216-932.

San Francisco: 1995-31 Street, San Francisco, CA 94105; Tel.: (415) 564-2973.

Singapore: Govt. of India Tourist Office, Podium Block, 4th Floor, Ming Court Hotel, Tanglin Road, Singapore-10; Tel.: 235-5737.

Stockholm: Govt. of India Tourist Office, Sveavagen 9-11, First Floor, Stockholm-40; Tel.: 215081.

Sydney: Govt. of India Tourist Office, Carlton Centre, 55, Elizabeth Street, Sydney N.S.W. 2000 (Australia); Tel.: 232-1600.

Teheran: Govt. of India Tourist Office, 18, Kuche Moshiri, Khaiban Moberazan (Roosevelt), Maidan-e-Razaiha (old 25, Shahrivar), 18 Teheran, Iran; Tel.: 827513.

Tokyo: Govt. of India Tourist Office, Pearl Building, No. 9-18, Ginza 7 Chome Chuo-ku, Tokyo (Japan).

Toronto: Govt. of India Tourist Office, Suite 1016, Royal Trust Tower, P.O. Box 342, Toronto-Dominion Centre, Toronto-1, Ontario (Canada); Tel.: (416) 362-3188.

Vienna: Stastliches Indishes Verkehrsburo, Opernring 1 1010 Vienna (Austria); Tel.: 56-17-59.

Washington: 1900 South Eads Street, Apt. 902, Arlington (Virginia 22202); Tel.: (703)-521-8973.

ACCOMMODATION : (See "Hotels" in the chapter '*Services*' for the list.)

There are modern western-style hotels in all large cities as well as at popular tourist centres. These have been classified on the internationally accepted star system. Hotel charges in India are moderate compared to those of many other countries.

At tourist centres where hotel accommodation is not adequate, there are travellers lodges constructed and run by the India Tourism Development Corporation, a Government of India Undertaking, or tourist bungalows run by the State Governments which offer comfortable lodging and meals.

House boats fully furnished and staffed are moored to the banks of the river Jhelum and Dal and Nagin lakes in Kashmir and are known for their comfort and convenience.

Many centres of tourist interest in India are situated in out-of-the way places. At most of these tourist centres there are Government owned rest houses (semi-hotel establishments) where tourists can stay. These are all close to national highways and convenient for tourists travelling by road. There are more than 70 such low-income group rest houses and bungalows which provide cheap hostel facilities to low-income group people. It is advisable to make reservations in these rest houses sufficiently in advance.

Youth Hostel accommodation is generally available in the hostels of schools and colleges in most places of tourist interest during vacations only, in summer from May to July and in winter during December. However, there is a Youth Hostel in Delhi open throughout the year. Organised camping facilities exist in New Delhi at the Bharat Scouts and Guides ground, near Humayun's Tomb, New Delhi.

The Department of Tourism, Government of India have constructed Youth Hostels at: Amritsar, Aurangabad, Bhopal, Dalhousie, Darjeeling, Gandhinagar, Hyderabad, Indiranagar (Madras), Jaipur, Nainital, Panaji, Panchkula (Haryana), Patnitop, Puri, Trivandrum. Youth Hostels under construction will be situated at Hampi and Pondicherry.

Details for all these places can be had from any of the Government of India Tourist offices.

MODE OF TRAVEL TO INDIA: The overland route from Europe to India passes through France, Germany, Yugoslavia, Bulgaria, Turkey, Iran and Pakistan-Hussainiwalla. On the Indo-Pakistan border, 26 kms. from Amritsar, is the only check-post called Attari.

There is also a rail-cum-sea route to India. Rail connections are available from European countries to Turkey and then to Basra (Iraq). From Basra, there are regular sailings to Bombay.

Travel within India: The Indian Airlines network of services connects more than 70 cities including many centres of tourist attraction. (See air route and tourist map at the end of the book.)

Indian Airlines offers concessional fares for foreigners and Indian residents abroad. The rates are: (*a*) Discover India fare: $375 for 15 days for travel on all domestic sectors with unlimited stopovers. (*b*) Youth fare concession: A 25% discount on normal air fare on all domestic sectors is offered to persons below 30 years of age.

The railways in India go almost everywhere and offer concessional **Indrail Pass** which is inclusive of reservation charges. These passes are issued only on payment of U.S. Dollars and Pound Sterling or travellers' cheques from Railway booking offices at Bombay, Delhi, Madras and Calcutta.

With the introduction of the above concession, all other concessions like student and circular ticket concession remain cancelled.

Motoring in India: Tourists who wish to travel by automobile can obtain full information regarding road conditions, driving regulations, driving licences, 'Triptyque' or 'Carnet', from the recognized Automobile Associations listed below. Private taxis or luxury tourist taxis can be hired though self-driven cars are not generally available in India.

(1) The Automobile Association of Upper India (behind Hindustan Times Bldg.), Lilaram Bldg., 14-F, Connaught Place, New Delhi 110001 (Tel. 42063); (2) Western India Automobile Association, Lalji Naranji Memorial Bldg., Churchgate, Bombay 400020 (Tel. 291085); (3) Automobile Association of Eastern India, 13, P. Barua Sarani Rd., Calcutta 700019 (Tel. 479012/474455); (4) Automobile Association of Southern India, 38A, Annasalai Rd., Madras 600006 (Tel. 86121/2/3); (5) U.P. Automobile Association, 32A, M. Gandhi Rd., Allahabad 211001 (Tel. 2445); (6) Automobile Association of Kerala, Collectorate Junction, Kottayam 686001.

Insurance: A third party insurance is compulsory for all motor vehicles which are in use. The insurance must be with a company registered in India.

Traffic circulation is on the left and the price of petrol is Rs. 5·15 per litre (4·5 litres are equivalent to one gallon, approximately) in Bombay, even though the prices vary from place to place, and lubricating oil is approximately Rs. 11 per litre.

Passport/Visa: The Government of India issues three kinds of visas, *viz*. Tourist, Entry and Transit according to the purpose of visit.

Visas are issued by Indian Representatives abroad. In countries where there are no Indian Representatives or Consular Officers, the nearest British Representatives will advise on the obtaining of Indian visas.

South Africans of Indian origin do not require visas but should be in possession of valid passports or certificate of identity endorsed for India.

Citizens of Commonwealth countries (other than citizens of Sri Lanka and Bangladesh) and of the Republic of Ireland and nationals of Nepal (except when coming from Tibet) require a valid passport without visa. However, holders of U.K. and colonies passports ordinarily resident in Kenya and Uganda and holders of British Subject or British Protected Persons passports require visas. Nationals of Commonwealth countries and of the Republic of Ireland proceeding to India for or in connection with missionary work require special endorsements.

Nationals of Sweden, Finland, Norway, Denmark, West Germany, Yugoslavia, Bulgaria and Iceland holding valid national passports can enter India for a stay of a maximum period of 90 days once within six months without a visa.

Nepalese and Bhutanese when proceeding from their respective countries need no passport or visa.

Individuals without nationality or of undermined nationality (stateless persons, IRO refugees, persons receiving legal and political protection, holders of Nansen passports etc.) should have valid passports, identity documents or sworn affidavits with visas for which they should apply at least two months in advance.

Family passports issued by other Governments are recognised without discrimination.

Citizens of all other countries require a valid passport entry, transit or tourist visa. Collective passports are accepted as valid documents only in respect of family groups where the names of minor children are included in the passports of the parents.

Landing Permits: Tourists who arrive without a visa may be allowed by the Immigration Authorities at the port of arrival to land and stay in India for a period of upto 30 days. These permits are available to foreign tourists once in a continuous period of 6 months. However, a foreign tourist who comes on a continuous journey covering neighbouring countries like Sri Lanka, Nepal, Bangladesh, Afghanistan, Maldives and Burma is allowed to re-enter India on Landing Permit provided he holds a round tour ticket covering India and the neighbouring countries and the total of broken periods of stay does not exceed 30 days. Tourists on 30-day Landing Permits are allowed to visit Lumbini (Nepal) via Nautanwa or Naugarh and return to India by the same route within a period of 48 hours without being required to obtain a fresh visa. Such permission, which will be available for air and sea passengers, may also be made valid for departure from India from a port other than the port of entry. Collective landing permits may also be issued to tourists travelling in organised groups. Temporary landing permits are not issued to tourists entering India by road and to nationals of certain countries.

Foreigners who come on visits not exceeding 3 months for recreational or sightseeing purposes or for attending meetings convened by the Government of India or international bodies should, in their own interest, apply for tourist visas. These may be extended for a further period of 3 months. Foreign tourists and Indians resident abroad visiting India are entitled to the grant of Tourist Introduction Cards which helps them in getting accommodation in Rest House, Dak Bungalows, Railways, Indian Airlines, etc. Only foreign tourists are entitled to All India Liquor Permits which entitle them to buy, consume and possess liquor in States where prohibition exists. The Govt. of Gujarat has also relaxed its prohibition policy for foreign experts working with either Private Sector or Govt. organisations who can obtain liquor permits.

Restricted and Protected Areas: Visitors require special permits to visit areas declared as 'Restricted or Prohibited Areas' for security reasons.

Authority to issue the permits: Restricted Areas: Bonafide foreign tourists intending to visit Darjeeling can get necessary permits from the Immigration Authorities at any one of the four international airports of Bombay, Calcutta, Delhi and Madras. Tourists visiting Darjeeling town for the purpose of tourism for a period of 15 days do not require the permit, provided they travel to Bagdogra and back by air. Bonafide tourists intending to visit Darjeeling and Jaldapara for more than 15 days can get the necessary permit from the Foreigners' Regional Registration Offices in Bombay, Calcutta, Delhi and Madras.

Foreign tourists visiting Shillong and Kaziranga Wildlife Sanctuary for touristic purposes for a period of 15 days and 7 days respectively do not require any permit provided they travel upto Gauhati and back by air and travel to Shillong/Kaziranga by the route indicated below: For Shillong: Gauhati-Jorhat-Shillong Road. For Kaziranga: Gauhati-Jhalukbari-N H Diversion-Jorhat-N H 37: Kaziranga.

Permits for visiting Shillong for more than 15 days can be obtained from the Trade Advisor and Director of Monuments, Government of Meghalaya, 12B, Russel Street, Calcutta and for visiting Kaziranga, Manas and Gauhati for more than 15 days can be obtained from the Trade Advisor, Assam House, 8, Russel Street, Calcutta.

For visiting Bhutan visitors require a visa from the Royal Bhutan Government or their Missions in New Delhi and New York. They also require transit permits to pass through the restricted areas of India.

Foreign tourists can visit Gangtok (Sikkim) for a period of 2 days or so. Applications for this permit have to be made to the Deputy Secretary, Ministry of Home Affairs, New Delhi in advance.

Trekking in Phalut and Sandakphu area is allowed provided foreign tourists report to Foreigners' Registration Office, Darjeeling, 24 hours before departure and report at police checkposts at Phalut and Sandakphu. The visit to Darjeeling town, Phalut and Sandakphu must be completed within 15 days.

Other Restricted Areas: Permits are issued by the Ministry of Home Affairs, North Block, New Delhi.

A foreigner resident in India, who wishes to make short trips abroad of not more than 3 months, can obtain "Return Visas" from the Foreigners' Regional Registration Offices or the State Governments. If the visit abroad is of longer duration "No objection to Return" endorsements can be obtained. Such endorsements are valid for one year in the case of missionaries and 6 months in the case of others and within these periods Indian Missions can issue re-entry visas on the strength of such endorsements.

Registration of Foreigners: No registration is required for holders of Transit Visa.

Visitors holding visas for three months or less: No registration. If permission to extend stay beyond 90 days is given, Registration Certificate and Residential Permit should be obtained from the nearest Foreigners' Regional Registration Office.

Visitors holding visas for more than three months: Registration within seven days of arrival and, in any case, before departure if leaving within seven days of arrival in India.

Personal appearance is necessary at the time of initial registration. Tourist Visa holders are exempted from reporting change of address. All others have to report change of address to the registration authorities if they intend to be absent from their registered address for more than 15 days. If this has not been done, visitors have to report to the registration authorities of the town they are visiting unless they stay at a hotel in which case the registration at the hotel is sufficient. Citizens (other than missionaries) of Commonwealth countries and Ireland and nationals of Nepal and Bhutan are exempted from registration formalities.

Departures: Tourists, if they are registered, are exempted from reporting their movements. However, all visitors holding registration certificates have to obtain, before departure exit endorsements from the Registration

Officers of the district in which they were initially registered. The Foreigners' Regional Registration Officers can also grant these endorsements to visitors residing within their jurisdiction. Permits have to be surrendered at the Foreigners' Registration Office in the city and not at the airport. Registration certificates and residential permits are to be surrendered at the port of departure.

Regulations on entry into India: (*a*) Cholera and Smallpox: Inoculation and vaccination recommended. (*b*) Yellow Fever: A valid international certificate of vaccination is required for arrivals from infected areas. Any person (including infants) arriving by air or sea without a valid certificate is detained in isolation for the requisite period or to a maximum of six days counted from the time of last possible exposure to infection. This is enforced if the visitor arrives within six days of departure from an infected area or has been in such an area in transit or has come by an aircraft which has been to an infected area, but has not been disinfected in accordance with the procedure laid down in Schedule VI of the Indian Aircraft (Public Health) Rules, 1954 Act or those recommended by W.H.O. A certificate of vaccination against yellow fever is regarded valid only if the vaccine used has been approved by the W.H.O. and if the vaccinating centre has been designated by the health administration for the territory in which that centre is situated. A vaccination certificate is not regarded as valid until ten days after the date of vaccination. The certificate remains valid for a period of ten years. In the event of re-vaccination within ten years the certificate becomes valid immediately.

The following countries and territories are regarded as yellow fever-infected areas: Angola, Botswana, Burundi, Cameroon, Central African Republic, Chad, Congo (Brazzaville), Congo (Democratic Republic), Dahomey, Equatorial Guinea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Ivory Coast, Kenya, Liberia, Malawi, Mali, Mauritania, Niger, Nigeria, Portuguese Guinea, Rwanda, Sao Tome and Principe, Senegal, Sierra Leone, Somalia, Sudan (South of 15° N), Togo., Uganda, United Republic of Tanzania, Upper Volta, Zaire and Zambia, Bolivia, Brazil, British Honduras, Canal Zone, Colombia, Costa Rica, Equator, French Guiana, Guatemala, Guyana, Honduras, Nicaragua, Panama, Peru, Surinam, Trinidad and Tobago, Venezuela.

Note: When a case of yellow fever is reported from any area of a country, the whole of that country is regarded by the Government of India as infected by yellow fever and is added to the above list.

Visitors leaving for countries which impose health restriction on arrivals from India are required to be in possession of a valid certificate of inoculation and vaccination. There is no health check-up of passengers leaving by air. There is, however, normal health check-up of passengers leaving by sea.

Baggage: All baggage is subject to customs examination. Articles of high value *e.g.* radios, cameras, binoculars, jewellery, type-writers, transistors, etc. are exempted from duty provided they are entered in the re-export declaration from and re-exported within 6 months.

No fire-arms, ammunition for fire-arms and other weapons will be allowed to be carried by passengers without specific authorisation from the Director-General, Civil Aviation. Fire-arms should be declared. Unloaded fire-arms and ammunition may be handed over to Airlines before embarkation for delivery at the destination. Carriage of explosives is prohibited.

Bolt action or semi-automatic rifles of ·303″ or 7·62 mm bore or any other bore which can chamber and fire service ammunition of ·303″ or 7·62 mm calibre; muskets of ·410″ bore or any other bore which can fire ·410″ musket ammunition; pistols, revolvers or carbines of any bore which can chamber and fire ·380″ or ·455″ rimmed cartridges of service 9 mm or ·45″ rimless cartridges.

All visitors importing fire-arms and ammunition of permissible types must obtain a Possession Licence, valid for six months, from the Indian Embassies/Consulates or after arrival from the District Magistrates in India. Temporary licences are also issued at ports of disembarkation to enable tourists to transport fire-arms, etc. to their destination. It may, however, be clarified that this temporary licence authorises the licensee to possess and carry (*and not use*) the arms and ammunition covered by this licence for the duration of the journey. The licensee shall on arrival at his destination apply immediately to the nearest licensing authority for a regular Possession Licence and at the same time deliver this temporary licence *in original* to that authority. The tourist must also deposit his arms and ammunition for safe custody either with an authorised arms dealer or with the nearest Police Station pending issuance of the regular licence. On obtaining the regular licence, he can get back his arms and ammunition from the arms dealer/ police station as the case may be on production of the licence.

If a tourist coming to India wishes to bring with him certain specialised equipment or articles not covered by the Tourist Baggage Rules as explained above, he should apply in writing well in advance to the Chief Controller of Imports and Exports, Udyog Bhawan, New Delhi, giving particulars of all such articles which he intends bringing into the country with him and the special reasons for doing so. The approximate C.I.F. value of the articles should also be indicated.

The import of certain articles such as dangerous drugs, live plants, gold coins, gold and silver bullion and silver coins not in current use, is either totally prohibited or restricted. The law provides heavy penalties for infringement of this restriction.

Tourists are allowed to bring into India travellers' cheques or foreign currency notes of any amount subject to declaration on the Currency Declaration Form issued by the customs at the air/sea port or checkpost on the land border.

Additional concessions for tourists: *Sporting Fire arms:* Not more than three sporting fire-arms brought in by a tourist are allowed free of duty. These must, however, be re-exported.

Cartridges: Each tourist is allowed to bring in 200 (exclusive of 200 allowed duty free) cartridges, on payment of customs duty, but without an Import Licence.

Film: A tourist is allowed to import two still cameras with 25 rolls of film or 48 plates plus 50 rolls on entry in Tourist Baggage Re-export Form and also one miniature cinematograph camera of 8 mm with 10 reels of films plus 20 reels on entry in Tourist Baggage Re-export Form.

TRAVEL AGENCIES: *A list of Govt. approved Travel Agencies appear under " Services ". Please see General Index under " T ".*

PLACES OF TOURIST INTEREST — CENTRAL REGION

Sanchi: It is 45 kms. (28 miles) from Bhopal, the Capital of Madhya Pradesh. Sanchi was not directly associated with the life of Buddha, but grew to be an active centre of Buddhism during the time of Ashoka (3rd Century B.C.). The magnificent and relatively well preserved monuments for which Sanchi is famous are all situated atop a hill overlooking woods where "Flame of the Forest" trees bloom fiery red in the summer. The most imposing of the monuments is the Great Stupa (about 150-100 B.C.) — huge semi-circular structure, surrounded by profusely carved gateways and railings depicting scenes from the Buddha's life. In the history of Indian art, the Sanchi stupa occupies a very important place, for it has influenced Hindu and Buddhist sculpture for many centuries that followed.

Khajuraho: Nearly 402 kms. (250 miles) south east of Delhi (flying time 2 hrs. 15 mts.) are the erotic temples of Khajuraho in Madhya Pradesh, belonging to about 950 to 1150 A.D. They are ranked among the world's topmost tourist attractions, and represent some of the most exquisite specimens of Hindu architecture and sculpture in medieval India. The carving in the temples still seem to breathe a life and passion of their own and their beautiful proportions, the vibrant texture of the carvings which enrich their walls and their impressive size testify to the glories of the master builders of those days.

GAME SANCTUARIES/NATIONAL PARKS

Kanha National Park: In the central highlands of India is one of the finest places for seeing Indian swamp deer, chital, blackbuck, Indian bison, sambar and various carnivores. There are also nearly a hundred species of birds in this park. It can be reached by a motorable road from Nagpur (273 kms. or about 170 miles).

Accommodation: Forest rest houses.

Shivpuri National Park: The game preserve of the former rulers of Gwalior State, this 158 sq. km. (61 sq. miles) park is the natural abode of the sambar, chital, nilgai, chinkara and the Indian tiger. It is about 181 kms. (about 112 miles) south of Gwalior.

Accommodation: Shivpuri Hotel, Circuit House and Dak Bungalow.

EASTERN REGION

Calcutta: Calcutta was born with the beginnings of the British rule in India and thus has no ancient monuments to talk about. Victoria Memorial which houses the relics of British rule in India, the Indian Museum treasuring the relics of ancient civilization and the Ashutosh Museum displaying Bengali folk art are some of the places worth visiting. The impressive Howrah Bridge leads to the Botanical Gardens and to Belur Math, the seat of the Ramakrishna Mission.

Bodh Gaya: It is the most sacred of Buddhist centres because it was here that the Buddha attained enlightenment under the 'Peepal' tree. A number of monuments were raised at this site in the subsequent centuries. The Mahabodhi Temple, a magnificent structure with a pyramidal tower of nine storeys, 48·75 m. (160 feet) high, contains a colossal gilded image of the Buddha in the earth-touching posture symbolising the event of enlightenment. The temple was probably built in the 4th century A.D. and restored several times subsequently. Bodh Gaya is 11·26 kms. (7 miles) by road from Gaya railway station which is connected with Patna by rail (92 kms. or 57 miles).

Darjeeling: Hill station in West Bengal lies on the lower slopes of the Himalayas about 600 kms. (370 miles) north of Calcutta. It is 2,167·12 m. (7,110 feet) above sea level. From here, one can view the Himalayas in all their majesty, range upon range of perpetual snow culminating in Kanchenjunga (8,578·90 m. or 28,146 ft. high). The quaint Buddhist shrines and monasteries, the happy carefree faces of the hill-folk and above all the picturesque scenery all around will abide in the visitor's memory.

The Kanchenjunga can always be seen, while the Everest, the highest peak in the world, is visible only on a clear day. Other favourite walks for the visitor are to Birch Hill and Lebong. The former is a reserve forest with an excellent park. Here the visitor will find oak, chestnut, cherry, maple, birch and alder.

Not far from the Birch Hill Park is the Himalayan Mountaineering Institute which provides training in mountaineering in the Himalayas. Tenzing Norkay, who climbed the Everest along with Sir Edmund Hillary, is associated with the Institute. The Observatory Hill, above the church, is known to the Buddhists as 'Rdo-rje-gling', 'the place of the Dorje', the mystic thunderbolt of the Lamaist religion. It is from this that Darjeeling takes its name. The bazaars of Darjeeling are very exciting. There you will find curios, carved wooden boxes, exotic pieces of jewellery, embroidered shawls and art objects. On Saturdays and Sundays, the picturesque hill-folk — Bhutias, Nepalese, Tibetans, Lepchas — throng the market-place with their wares and look most colourful.

Darjeeling can be reached from Calcutta by air upto Bagdogra and from there by road (88 kms. or 55 miles).

Bhubaneshwar: Orissa's new capital, a metropolis of temples, was built around a sacred lake which was once encircled by some 7,000 shrines. Now only 500 remain in decay, presenting a complete picture of Orissan art and history from the 3rd century B.C. to the 16th century A.D. The great Lingaraj Temple is supposed to be "the finest example of a purely Hindu temple in India". Pilgrims come here for blessings and then take a dip in the sacred lake "Bindu Sagar". This 20th century garden city has many other attractions like the nearby Jain and Buddhist rock cut caves of Khandagiri and Udayagiri. The beautifully preserved Asoka's rock edicts at Dhanli, carved around 260 B.C. narrate the horrors of the Kalinga war and Asoka's acceptance of the path of non-violence.

Puri: About 63 kms. (39 miles) by road from Bhubaneshwar, is the sacred city of Puri dominating Orissa's sea coast in all its secluded splendour. It is one of the 'Char Dham', the four most holy places of pilgrimage in India, the three others being Badrikedarnath in the north, Rameshwaram in the south, and Dwarka in the west. Every year, in the month of June, as many as two hundred thousand visitors and pilgrims flock to Puri to watch the Car Festival, when the images of the Jagannath ('Lord of the Universe') Temple are taken over a distance of one mile to the garden shrine of Gundicha Mandir. The gigantic car 11 m. (35 ft.) long and 14 m. (45 ft.) high with 16 wheels — each 2·13 m. (7 ft.) in diameter — is used for carrying the deities. It is a unique sight to see thousands of devotees vying with each other to pull the chariot.

Modern Puri has been built more or less along the beach which stretches east to west. The sea is shallow for about a mile from the beach, but the surf breaks with a rare violence on the shore. From early morning the beach is thronged with people who sport or bathe in the roaring but harmless waves.

Konarak: The Sun Temple of Konarak, on the seashore, about 66 km. (41 miles) from Bhubaneshwar is stupendous in proportions and truly amazing in its ornamentation. Standing in lonely splendour among the sand dunes, built in 1250 A.D. and dedicated to the Sun God, the temple is in the architectural image of the mythical chariot of the Sun rushing through the blue heavens. The twelve pairs of wheels of the chariot are the last word in sculptural artistry and the seven horses in front, straining to pull the massive weight, are superbly executed. Intensely lovely are the thousand and one figures — musicians, lovers, couples in embrace, floral designs, the enormous horses and elephants flanking the temple, scenes of the battle and the chase — all masterpieces.

Traveller's Lodge at a short distance from the temple is a very comfortable place to stay in, but tourist prefer to visit Konarak in a one-day trip from Bhubaneshwar.

Chilka Lake: About 96 kms. (60 miles) south of Bhubaneshwar is this great lake, famed for its rich bird life and a favourite resort for fishermen. Its scenery is of great natural beauty and many people travel there to watch the everchanging light at dawn, at noon, at sunset, in winter and in summer, in sunshine and in the rains.

Some of the most attractive aborigine tribes live in the neighbourhood of this lake.

Accommodation: P.W.D. Inspection Bungalow at Barkul which overlooks the lake.

Hyderabad-Secunderabad: The twin city linked together by the Hussain-Sagar (lake), is the capital of Andhra Pradesh. It is a centre of Muslim culture and learning and the fifth largest city in India. Standing on the banks of the river Musi, it was till 1948 the capital of Hyderabad State of Nizam, one of the richest men in the world. The Salar Jung Museum crammed with curios from all over the world, old manuscripts, costumes and ancient weapons is a living proof of the riches. Trapezoid in shape the city is surrounded by a stone wall. At the junction of wide avenues stand the Char Minar, a stately rectangular white building with four tall minarets often referred to as the " Arc de Triomphe " of the East. It is the famous landmark of Hyderabad and curiously made more famous by a brand of cigarettes of the same name said to be one of the strongest, cheapest and most satisfying kind on the market. To the south of Charminar lies the Chaumahalla Palace and to the west the Mecca Masjid, the principal mosque of Hyderabad. Built entirely of stone and richly decorated in coloured and polished plaster it boasts of an interior that can hold ten thousand worshippers at a time.

The Falaknuma Palace, the Osmania University and the beautifully laid out river gardens are some of the recent additions to the city that blend well with the old.

The tombs situated 8 kms. (5 miles) out of the city, are of Qutbshahi kings who ruled in the 16th and 17th centuries. Next to it is the massive Golconda Fort. It is surrounded by a strongly built wall of solid blocks of granite, with eighty-seven bastions at the angles, on which there are still some of the old guns. Now in ruins it was once famous as the diamond mart for the nearby mines.

GAME SANCTUARIES/NATIONAL PARKS

Jaldapara Sanctuary: This 93 sq. km. (36 sq. miles) area on the river Torsa in North Bengal is the abode of the famed Indian rhinoceros. Swamp and barking deer, sambar, pig and sometimes wild elephants are also seen here. Best months to visit are December to May. The nearest airport is Cooch Behar 100 kms. (62 miles), which is connected by air with Calcutta.

Accommodation: Tourist Bungalow.

Kaziranga Sanctuary: Famous as the main stronghold of Indian rhinoceros this 430 sq. km. (166 sq. miles) sanctuary also has elephant, wild buffalo, deer, sambar and many species of water birds. Best visited between December and May. It is 218 kms. (135 miles) from Gauhati which can be reached by air from Calcutta.

Accommodation: Forest Inspection Bungalow at Baguri.

Manas Sanctuary: Close to the Himalayas, it is 153 kms. (95 miles) west of Gauhati. Besides wild buffalo, elephant, Indian bison, tiger and deer the added attraction is the scenic beauty. Fishing is also possible here. October to May is a good time to visit.

Accommodation: Forest Department Bungalow at Mothanguri.

Note: A special permit is required to visit Kaziranga and Manas Sanctuaries in Assam State. It can be obtained from Assam House, 8 Russel Street, Calcutta-700016, which would take about five to six days to process. This applies to all regions in Assam and Meghalaya except Shillong.

Hazaribagh National Park: Situated in Bihar State.

Accommodation: Tourist Lodge; Forest Rest House (Kanari); Barodabari Forest Bungalow; Circuit House; and D.V.C. Guest House.

Palamau National Park: In Bihar State.

Accommodation: Tourist Lodge, Tourist Cottages and Forest Rest House (Kechki).

Dalma Wildlife Sanctuary: Near Jamshedpur in Bihar.

Semlipal National Park: Situated in the State of Orissa.

Accommodation: Forest Bungalows and Cottages at Chahala, Nawana, Jonabil and Gudgudea.

NORTHERN REGION

Delhi: Like Rome, the capital of the Indian Republic, is an ' eternal city ', and with a history even more chequered and ancient. In the ancient days, the city shifted its site at least seven times and the ruins of all these townships are still there for anyone to see.

There are today two Delhis — the old city of the Mughals built by Shah Jahan, the Emperor who built the Taj, and the new city built by the British in 1931. While Old Delhi evokes a distinctly oriental atmosphere, New Delhi has wide avenues and imposing office buildings. Both the cities are rich in monuments and mosques; such as the Red Fort, the Jantar Mantar Observatory, Humayun Tomb, the Parliament House, the Rashtrapati Bhavan and many more.

Agra: The city of the world famous Taj Mahal has many other historical sites of interest like the fort of the Mughals, the ruins of Fatehpur Sikri — a city built by Akbar — a Mughal Emperor. It also has numerous and fabulous tombs of eminent personalities. Special tourist bus and trains run from New Delhi for a day's journey.

Chandigarh: Now a Union Territory and also the capital of the Punjab and Haryana, the youngest of the Indian capital cities, it is a striking example of modern town planning conceived by Le Corbusier and Maxwell Fry. Advanced styling is adapted to the local climatic needs making it an unique city in the whole of India.

Amritsar: City in the Punjab, is the religious capital of the Sikhs. It was founded in 1577 around a sacred pool, from which the city takes its name " Pool of Nectar ". The Golden Temple stands in the centre of this pool. The marble based temple has bronze sides and dome which are heavily covered with pure gold leaf. These reflect the tropical sun into the still waters of the pool, illuminating it and creating an atmosphere of awe and respect. There are a few more of the Sikh and Hindu temples worth seeing, but none surpass the peaceful aura of the Golden Temple.

Almora: In U.P. (133 kms. or 83 miles from Kathgodam Railway Station) is the main town in Kumaon Hills. Perched at an elevation of 1,706·88 m. (5,600 ft.) it is about two miles in length like a saddle, and is said to have been founded four hundred years ago by Raja Kalyan Chanda. Almora has moderate rainfall, temperate climate, the temperature seldom rising above 31°C (88°F), even during the summer days, and comparative freedom from fog. Within easy distance of Almora are many Himalayan peaks — Seehee Debi, Bandnee Debi and Binsar being the chief ones. Binsar Hill also known as Jhandi Dhar is only 21 kms. (13 miles) from Almora and the bridle path leading to it, passes through enchanting jungle scenery.

Accommodation: Available at the Government circuit house for which an advance booking has to be made.

Pindari Glacier: Can be reached from Almora at a distance of 120 kms. (75 miles) in eight stages, attaining an altitude of 3,963 m. to 4,267 m. (13,000 to 14,000 ft.). The most suitable time for this trip is either May-June or September-October.

Naini Tal: Hill station also in Kumaon Hills, is attractively situated around a mountain lake 1,935·48 m. (6,350 ft.) above sea level. A shady avenue skirts the lake. On either side of the lake rise lofty hills dotted with beautiful villas and bungalows. There are a number of picnic spots around from where one can have a magnificent view of the snow peaked Himalayan mountain range. Nainital District has a chain of lakes lying close to one another, the prettiest amongst them being lake Naini itself. They are a veritable paradise for the angler. Besides fishing, one could also do swimming, yachting, boating, riding, skating and trekking.

Kashmir: The Great Mughals, who were connoisseurs of the good things of life, described Kashmir as 'the earthly paradise.'

Indeed, it is difficult to imagine anything more lovely. It is a vast, rich, green valley criss-crossed by streams and rivulets and encircled by stupendous snow-clad mountains — 'an emerald set in pearls'. Nature has adorned it with lakes of limpid waters, bubbling springs by hill-sides, upland pastures and springy meadows. Clothing the valley is a vast expanse of paddy fields and forests alive with a variety of birds and animals. To enhance its natural beauty, pleasure gardens were laid out by the Great Mughals at many places in Kashmir.

Here you can stay in luxury in a floating hotel called the 'house-boat'; glide gently on the placid waters of the Dal Lake in a shikara; play golf on perhaps the world's highest golf-course; enjoy a variety of water sports; or, if you are adventurous, go trekking or hunting. Also, you can take back home some of the exquisitely embroidered, carved, chiselled or painted handicrafts for which Kashmir is known the world over.

Srinagar: Is a central place from where excursions and pleasure trips to all parts of the valley can be planned. It is itself a picturesque place with lakes, gardens and monuments along the river Jhelum.

Srinagar is an ancient city believed to have been first built by Emperor Asoka in the third century B.C. The Jhelum flows through the heart of the city, dividing it into two parts which are connected by nine bridges. A trip down the river in a swiftly gliding shikara would give the visitor a feel of the city's picturesque balconies, busy ghats, mosques and temples.

Gulmarg: Is about 46 kms. (29 miles) from Srinagar, a huge grassy bowl, known for its golf-course. The last 6·4 kms. (4 miles) of the journey are covered either by a pony or on foot and, with special permission, by jeep also. At the end of the climb, the visitor is rewarded with a magnificent view of Gulmarg which has numerous walks and picnic spots.

Pahalgam: In the lovely Lidder Valley, about 97 kms. (60 miles) from Srinagar is known for its exquisite scenery, springs and streams. It is also the base for treks to higher points like Amarnath and Sheshnag.

Kulu and Kangra Valleys: Well-known for its picturesque landscapes and historic temples, lies in Himachal Pradesh. 33·7 kms. (21 miles) from Kangra is the famous temple of Jwala-Mukhi, built up against a rocky cliff. An inflammable gas issues forth from a cleft in the cliff, creating an atmosphere of reverence. Kangra has several tea gardens while Kulu is well-known for the fruit orchards. The winding narrow roads flanked and shaded by pink blossomed apricot trees, huge rhododendrons and blue and purple iris in different seasons lead to the hilltops that look down on a gorgeous alpine scenery. These valleys are favourite vacation places as the summer is never uncomfortably hot and offer sports like golf, tennis, swimming, hiking and trout fishing.

Here the simple and unsophisticated people are a contented lot with few needs and fewer worries. These happy-go-lucky people hold fairs and festivals throughout the year and it would be wise to check and be there on a festival.

Allahabad: (Also called Prayag): City in U.P. situated at the confluence of the Ganga, the Jamuna and the unseen Saraswati. The confluence is the holiest bathing place for Hindus. Every 12 years, Kumbha Mela (religious fair) is held attracting over four million pilgrims during the four weeks. The last one was held in February 1965. A smaller fair occurs every six years — Adha Kumbhi. The old Mughal fort contains an underground temple where well carved images are seen and the pilgrims worship at a small tree taking it to be the Eternal Banyan Tree (Akshaya Vata). 104·6 kms. (65 miles) from Allahabad is Kosambi, where the ruins of an ancient capital are being excavated.

Banaras: Now known as Varanasi, is more than a holy city of the Hindus; it represents a way of life. For more than a thousand years this centre of Hindu pilgrimage has lived a rich life haloed by tradition on the banks of the great river Ganga which reaches Varanasi in a graceful curve. For more than a thousand years great masses of people have come here from every corner of the country to receive spiritual sustenance.

The oldest city in the country and perhaps the oldest living city in the world, Varanasi has about 1,500 temples besides countless minor shrines which are thronged with pilgrims all the year round.

Sarnath, a Buddhist centre with many architectural ruins, is about 9·6 kms. (6 miles) from Varanasi. The Buddha preached his first sermon here.

Jaipur: Capital of Rajasthan State, it was planned and built by an astronomer-prince in the 18th century, when there were few planned cities even in Europe. "I have seen Jaipur, and now I can die" was how Max Lerner, a famed traveller, felt after having an eyeful of this beautiful pink city. Comparing it with Venice and Paris, he named Jaipur along with them as the three most beautiful cities of the world. But he found something more in Jaipur — a dream quality about the fabric of its delicate gossamer structure, its lattice work and pink terracotta. This picturesque city — a fantasy in stone — set in the heart of Rajasthan is encircled by rugged hills crowned with medieval fortresses reminiscent of the days when the valiant Rajputs fought fierce battles and long drawn out wars to save their beloved land from invading alien hordes. The city palace in the centre of Jaipur is now a museum of Rajput and Mughal miniature paintings, an armoury and rare manuscripts. The Hawai Mahal Palace of the winds — has so many windows with perforated screens that the breeze sweeps through them. Maharaja Jai Singh who built the city in 1727 was also a great astronomer. He built an observatory with instruments of his own design. About 11·2 kms. (7 miles) away is Amber palace perched on the slopes of a steep hill and surrounded by a lake. A majestic elephant takes the visitor up the slopes and into this mysterious palace that possesses the world's best chamber of mirrors. Jaipur pottery, brassware, sculpture, ivory and sandalwood work and jewellery have enjoyed a great reputation from ancient times.

Udaipur: In Rajasthan, is the romantic city of lakes with island palaces. The sprawling marble palaces with coloured glass of amber and pale jade reflect in the steel blue waters of the lake Pichola. Hundreds of green parrots lend colour to the early morning skies. Surrounded by wooded hills the city is aptly called the ' City of Dreams '. The Jag Nivas palace with fountains and gardens and apartments with courts, has now been turned into the Lake Palace Hotel and offer the visitor a unique and unforgettable stay.

About 112·6 kms. (70 miles) from Udaipur is Chittorgarh. The ruins of this abandoned capital of Mewar speak eloquently of the many grim and glorious deeds of Rajput heroism and sacrifice which have almost become a myth.

Mount Abu: In Rajasthan (3,822 ft. above sea level) is famous for its Dilwara group of Jain temples (11th-13th century A.D.). Having the most intricate and finest marble carvings in India, these beautiful temples nestle among the lush green mango trees. Hills surround them on all sides and the scenic beauty is very enchanting. Abu is known for its variety of birds and the flowering trees in its jungles. It is reached by rail and road from Ahmedabad.

GAME SANCTUARIES

Bankatna Wild Life Sanctuary: In Uttar Pradesh.
Accommodation: 3 Forest Rest Houses.

Bharatpur Wild Life Sanctuary: In Rajasthan State.
Accommodation: India Tourist Development Corporation's Travel Lodge, Bharatpur; Forest Rest House, Shanti Kutir.

Darraha Wild Life Sanctuary: In Rajasthan.
Accommodation: Forest Rest House.

Corbett National Park: In Uttar Pradesh lying in the beautiful foothills of the Himalayas it is the haunt of tigers, leopards, deer and sambars, also hyenas, jackals and wild elephants. It is 294 kms. (183 miles) by road from Delhi. Best time to go there is between January and May.

Accommodation: Forest Rest House.

Chandraprabha Sanctuary: Also in Uttar Pradesh is 72 kms. (45 miles) from Banaras. In 1957, it was selected as a suitable new home for the Indian lion and some of them were brought here from the Gir Forest in Gujarat. Nilgai, pig, chinkara, sambar and chital are also found here. Best time to go there is between December and April.

Accommodation: Tourist Hutments.

Dachigam Sanctuary: In Jammu and Kashmir State, it consists of Lower and Upper Dachigam, about 20 kms. (13 miles) from Srinagar, where one can still spot the famous but now very rare Kashmir stag. Black bear and pig are also found in this beautiful scenic surrounding.
Accommodation: Forest Rest House.

Dudhva National Park: Situated in Uttar Pradesh.
Accommodation: 2 Forest Rest Houses.

Nanda Devi Musk Deer Park: Kedarnath Forest Division has opened a musk deer park in *Nandadevi Wildlife Sanctuary* in Chamoli dist. of U.P. to preserve the rare and valuable musk deer.

Mount Abu Wild Life Sanctuary: In Rajasthan State.
Accommodation: Forest Rest House.

Ranthambore Wild Life Sanctuary: In Rajasthan State.
Accommodation: Jogi Mahal; Forest Rest House.

Sariska Game Sanctuary: In Rajasthan, near Delhi.
Accommodation: Tourist Bungalow.

Sultanpur Lake Bird Sanctuary: In Haryana State, 40 kms. from Delhi on the Gurgaon-Farrukhnagar Road.
Accommodation: Tourist Bungalow.

SOUTHERN REGION

Madras: Capital of Tamil Nadu is the gateway to a pleasant land, the city of an ancient civilization exemplified in its many monuments of the past with a rich heritage of culture. Although being carried along on the stream of progressive development yet remaining largely unspoilt, Madras is one of the more attractive cities of India. Perhaps the first claim to fame for Madras is its wonderful foreshore of fine sandy beach stretching from the harbour to the limits of the city at the Adyar river and then beyond for many miles to the south. It is a source of pride to the people, for it is considered to be the second longest beach in the world. There are delightful gardens along its whole length with many varieties of flowers.

Speaking of culture the visitor instantly feels the difference between the rest of India and the south in this city which can be the starting point for an introduction to the Dravidian culture. The many invasions of the aliens never quite reached upto the south and the pureness of this culture remains intact. The temples, the music and the dance all vibrate in its original form and one should never leave Madras without seeing a Bharat Natya dance performance. Much of the poses and stances of this dance are depicted in the sculptures of the South Indian temples.

Mahabalipuram: 59·5 kms. (37 miles) out of Madras are some of the ruins of the great Pallava Empire. The shore temple, a little gem of a shrine, stands poised on the very shore, the waves beating against it. The cave temples are store-houses of art. The so-called pagodas are carved out of rocks in the form of temple chariots and are the chief glory of Mahabalipuram.

Conjeevaram (Kanchipuram): The city of temples, the Banaras of the South, is about 72 kms. (45 miles) to the south-west of Madras. The place is divided into three parts, Shiva Conjeevaram, Vishnu Conjeevaram and Pillayar Paliyam, a testimony to the part played by all the main Hindu religious sects in the history of the city.

There are over a thousand temples in all, amongst them is the temple of Kailasnath, believed to be 1,200 years old and contains some excellent 7th and 8th century paintings on the walls. More of these wall paintings are seen in the Vaikunthanath Perumal Temple which is also over 1,000 years old.

It is a one-day excursion trip from Madras, but one can stay at the Traveller's Lodge.

Pondicherry: 167 kms. (104 miles) by road from Madras. The atmosphere of a sleepy French provincial town still prevails here. It was returned to India in 1954 after the French rule of 250 years. The main attraction of this place is the ashram of the philosopher Aurobindo Ghose.

Auroville 'the City of Dawn' is being built on the outskirts of Pondicherry. It will be the first 'World City' where any national can have a home.

Kanya Kumari or Cape Comorin: In Tamil Nadu, named from the temple of Kumari (an attribute of Parvati) is at the southern-most tip of the Indian peninsula. Here the Arabian sea and the Bay of Bengal meet the Indian Ocean. According to a legend Siva married the Goddess Parvati, daughter of King Himalaya on the rocks where the temple now stands. Offshore are the two rocks where Swami Vivekananda sat in meditation before he left for the United States. Now on them stands a huge and imposing memorial to the Swami.

Ootacamund: Ooty for short, is a hill station in Tamil Nadu. Over 2,286 m. (7,500 ft.) above sea-level, Ooty has a temperate climate. The rainfall rarely exceeds 1,016 mm. (40 in.) so that Ooty has excellent weather throughout the year, and during the season from April to June, it ranks amongst the gayest resorts in India. It reposes in an amphi-theatre surrounded by four great hills. On the slopes of the hills are residential and office buildings. At the bottom of the valley enclosed by them is Ooty's artificial lake which could pass for a natural one. Conceived by Sullivan in 1823 and meant for irrigation, it turned out to be so lovely that it was preserved for its sheer beauty. The lake provides facilities for boating and fishing. West of this are the Wenlock Downs — an expanse of undulating springy turf embellished with woods and streams. Here are also the golf-links. These downs are the home country of the Ootacamund Hunt.

The terraced Botanical Gardens, a landmark in Ootacamund, were laid out by an expert from London's Kew Gardens, over a century ago. It has many rare trees and flowering plants. Ooty's flower, fruit and vegetable shows are attended by people from all over the Nilgiris, and here the fashionable jostling with the tribal folk present a colourful spectacle.

Kodaikanal: Famous hill station on the Palni Hills in Tamil Nadu, it is about 2,343 m. (7, 688 ft.) above sea-level and has a temperate climate. The place affords plenty of scope for such recreations as walking, hiking, boating, fishing, hill climbing and golf. For the more adventurous there is big game hunting. Kodaikanal is the delight of the gardener and flowers are in bloom all the year round. The long winding road up the hill reminds one of the road up to Sorento in Italy. The greenery on the way is breathtaking. The different waterfalls make Kodaikanal a truly beautiful vacation spot. A man-made lake with a three-mile shady promenade around it is the popular place in the evenings. Kodaikanal has a hint of a place somewhere on the continent with chalet-type houses perched at random on the slopes of the Palni Hills.

Cochin: In Kerala it is one of the important ports on the west coast of India and, yet it is very different than a typical commercial port. Shady lagoons, wooded islands, ancient palaces and churches are encircled by canals of palm fringed shimmering backwaters. In fact Cochin is a cluster of islands and towns linked by bridges.

In Mattancheri is the community of Jews that came to Kerala as early as the 1st Century A.D.

A side trip down the west coast to Alleppey and then on to Quilon on the backwaters, offers breathtaking scenery. Lush vegetation and palm thatched villages are dotted with churches in Portuguese colonial style.

Trivandrum: The sea-side capital of Kerala is built like Rome, on hills. Many parks and lovely buildings with their gabled roofs, stand on low hillocks, while the restful valleys below are adorned with coconut groves. Trivandrum means "the place of the sacred snake Anant". The imposing temple of Sri Padmanabhaswami is dedicated to the Hindu God Vishnu, his image reclining on Sheshnag, the enormous hooded serpent.

A long drive from Alleppey to Trivandrum via Quilon has a very picturesque scenery along the west coast of India.

Mysore: It has a quiet charm so characteristic of a university town. For long the seat of an ancient ruling family, it has a good deal of colour and glamour. Besides palaces and gardens this place is famous for its ivory and sandalwood carvings and cast metal statuettes.

EXCURSIONS OUT OF MYSORE

Srirangapatna: The city of Lord Ranganath — takes its name from the imposing temple of Vishnu. This quiet island-town on river Kaveri 16 kms. (10 miles) from Mysore, is reminiscent of many battles and past glories. On special occasions devout Hindus pass through this place to bathe in the river and to worship in this shrine.

Tipu Sultan, son of Hyder Ali, inherited a large dominion from his father. Srirangapatna was its capital and it became the centre of diplomatic manoeuvres against the rising power of the British. Tipu's summer palace in the midst of an exquisite garden on the river bank has large panels with paintings depicting battle scenes and processions that recall episodes from his and his father's life. The walls, pillars, arches and roofs are covered with an amazing variety of painted designs made gorgeous by a liberal use of gold.

Sravana Belgola: Wedged in between two hills, which rise abruptly from a flat plain, Sravana Belgola dominates the countryside for four miles with its 17·37 m. (57 ft.) high Jain colossus of Lord Gomateswara, shaped out of a single rock. This monolithic statue was carved in 983 A.D.

The town, a flourishing centre of Jain pilgrimage, abounds in monuments that recall the achievements of a bygone age. It is about 100 kms. (62 miles) from Mysore.

Belur: 56·3 kms. (35 miles) from Sravana Belgola is Belur, 800 years ago a flourishing capital of the Hoysala kings. Its chief place of interest is the 12th century temple of Chenna Keshava, a manifestation of Vishnu. Its outer walls are decorated with an amazing variety of carvings. No description can do justice to the infinite patience and skill with which the sculptors fashioned the intricate details of the scroll work, the niches, the elephants, the miniature turrets and human figures and gods. The interior of the temple also displays a profusion of artistic skill lavished on the pillars, ceilings, doorways, and bracket figures.

Halebid: 12·8 kms. (8 miles) from Belur, it was the metropolis of the ancient Hoysala rulers. The Lord Siva temple built about the same time as the Belur Temple has every inch of its outer wall covered with friezes of great variety. Remarkable for artistic skill are the sculptured elephants, horses, mythical beasts and birds, the scroll work of infinite beauty and variety, and the big panels of gods and goddesses of the Hindu pantheon running all round the walls.

Usually all these places are visited from Mysore in a day and a half's trip with a night stop at the comfortable Traveller's Lodge at Hassan.

Bijapur: Town in Karnataka State, capital of the old Adilshahi Sultans of Bijapur, is rich with the remains of palaces, mosques and tombs. Gol Gumaz the vast mausoleum of Mohammed Adil Shah (17th century) has a dome which is the second largest in the world with St. Peter's at Rome bigger by merely 15 feet. The Whispering Gallery inside the dome is so constructed that a soft whisper at one point of the gallery can be heard most distinctly at the opposite point. Jama Masjid of Bijapur is the greatest mosque in the south and also one of the finest in India.

GAME SANCTUARIES

Rangathittoo Bird Sanctuary: It is a mile away from Srirangapatna and 14·4 kms. (9 miles) from Mysore. Consisting of islets in the Kaveri river, it is inhabited by a variety of storks. Primarily it is a breeding place for herons. Also during the months of June to August other birds like white ibis, Indian dartar, cormorant and cattle egret breed here.

Accommodation: Travellers' bungalow at Srirangapatna.

Bandipur Sanctuary: 78·8 kms. (49 miles) from Mysore on the road to Ooty is the game preserve of the former rulers of Karnataka State. This sanctuary now shelters herds of wild elephants, the Indian ' bison ', the spotted deer, tiger, sloth bear and leopard. Tame elephants can be hired for a ride around the sanctuary and it can be visited at any time of the year.

Accommodation: Three forest lodges and one travellers' bungalow.

Mudumalai Sanctuary: Adjacent to Bandipur is this sanctuary of 295 sq. kms. (114 sq. miles). Gaur, sambar, elephant, barking deer, chital, wild boar and occasionally a tiger or a leopard are seen here. A variety of birds are also found here. It is 96·5 kms. (60 miles) from Mysore. *Accommodation:* Kargudi Rest House, Log House at Masinagudi; Log House, Theppakadu.

Nagarhole Sanctuary: It is 228 kms. (142 miles) from Mysore via Mercara. Wild elephant, deer, panther, jackal and if one is lucky, the tiger can be spotted here. One can stay at the Forest Lodge.

Dandeli Sanctuary: It is well-known for elephant, bisons, panther, tiger, sambar and chital. The place abounds in excellent viewpoints and beauty spots. It is about 76 kms. (47 miles) from Dharwar by road which is connected with the nearest airport Belgaum by rail (121 kms. or 75 miles). The sanctuary, which is not accessible during the monsoon months of June to October covers an area of 207 sq. kms. (80 sq. miles).

Accommodation: Four forest bungalows at Dandeli.

Mahavir Abhayaranya: (wild life sanctuary) is situated on Goa-Karnataka border near Belgaum. The denizens include a large variety of big and small game and birds.

Periyar Sanctuary: One of the finest spots in the country, the wild life sanctuary at Thekkady in Kerala consists of an artificial lake of 26 sq. kms. (10 sq. miles), in a sanctuary of 673 sq. kms. (260 sq. miles). It is famous for its wild elephants besides Indian ' bison ', sambar and stray panther and tiger. October to May are the best months for a visit. Motor boats take visitors about on the lake from where all these animals can be watched in comfort.

Accommodation: Lake Palace (Edapalayam), Thekkady; Inspection Bungalow, Thekkady; Forest Rest Houses at Thannikudy and Mannakkavala.

Vedanthangal Bird Sanctuary: 139·8 kms. (54 miles) south of Madras this small sanctuary breeds birds, like white ibis, night heron, spoon bill, open bill stork, Indian darter, grey heron, egret and two species of cormorant. Good months to visit are from November to February. *Accommodation:* Rest House, Vedanthangal.

WESTERN REGION

Bombay: Arriving by sea or by air, one is struck by its natural setting — the far-away blue outlines of the majestic Western Ghats, the calm sea dotted with fishing boats, the palm-fringed beaches and on the outskirts smoke rising from a thousand chimneys in the mill area — a reminder that Bombay is one of the largest industrial cities of the East.

A cosmopolitan city, it owes its prosperity to the industry and enterprise of its population of eight million. Bombay is a city of contrasts where the rich and the poor, the educated and the illiterate, the modern and the ancient co-habit. It is the largest city in India which has grown out of seven islands. Over the years the islands merged into one another by reclamation of land from the sea.

Excursions Around Bombay: About 38·8 kms. (15 miles) to the north of the city is Juhu, the palm-fringed natural beach, ideal for bathing. Juhu has good hotels, while shacks and villas along the beach can also be rented.

Some 15 kms. (6 miles) across the Bombay harbour, on a small island are the famous cave temples of Elephanta. Five in all, these cave temples date back to the eighth century. The main cave, dedicated to Siva, has huge sculptures and panels in relief. The most striking of the images is the Maheshmurti, a 6 m. (19 ft.) high, three headed bust hewn from a single rock representing the triple aspect of the Hindu Divinity.

There are a number of rock-cut monuments around Bombay. The more well-known among them are the Kanheri group of Buddhist caves and the series of shrines and monasteries known as Karla, Bhaja and Bedsa.

Aurangabad: In Maharashtra is where Emperor Aurangzeb built a replica of the Taj, Bibi-ka-Maqbara, a mausoleum for his wife. It has its own splendour and grace quite different than the Taj.

Close to Aurangabad is Daulatabad. " City of Fortune ", built in the 14th century by a Sultan of Delhi, who was mad enough to try to move here the whole population of Delhi, which is some 1,813 kms. (700 miles) away.

Ajanta-Ellora: An hour and a half's flight from Bombay is Aurangabad, the starting point of a journey to two of the world's famous rock-cut temples — Ajanta and Ellora, the most remarkable monuments of their kind in the world. These monasteries and shrines have been hewn out of living rock by generations of sculptors. Ajanta, 170 kms. (66 miles) from Aurangabad, lies in a narrow gorge and contains a breathtaking picture gallery of frescoes. It is believed that these caves were cut in stages between the 2nd century B.C. to about 7th century A.D.

The Ellora caves situated 38·8 kms. (15 miles) from Aurangabad are excavated in the face of a hill and run north to south for a mile and a quarter. The crescent-shape hill has Buddhist, Hindu and Jain cave temples with a unique collection of sculptures. These caves are about a thousand years old.

Ahmedabad: Is the second largest textile centre in India. It contains numerous monuments of the fifteenth and sixteenth centuries, amongst them are the Shaking Minarets which are architectural wonders. Mahatma Gandhi's ashram is situated on the banks of the river Sabarmati. A 45-minute Son-et-Lumiere show brings the ashram alive giving its history and an insight into the life of Mahatma Gandhi.

Goa: Cradled among the picturesque hills of the western ghats, its panoramic beauty, its smiling green valleys and its luxuriant tropical vegetation, its quaint houses and the ruins of old and historic buildings which bring ancient splendour to life, all combine to make it an earthly paradise. Once a Portuguese possession in India, Goa has numerous beautiful beaches, where one can sun-bathe, swim or just laze away in the vast expanse of dazzling white sands fringed with swaying palm trees.

The remnants of the Portuguese civilization can be seen in the old Goa. Among the still surviving ancient Portuguese churches is the Basilica and the Convent of St. Francis Xavier, built in the 16th century, where the body of St. Francis Xavier, patron saint of Goa, is enshrined in an exquisitely carved glass and silver-casket.

Goa is easily reached from Bombay by a 75 minutes flight by the Indian Airlines.

GAME SANCTUARIES/NATIONAL PARKS

Gir Forest: Roaming the dry open shrub land of the Gir Forest is a population of about 200 lions and cubs. The Gir is the last remaining habitat of the Asian lion. The best time to see them is from December to May. Wild bear, panther, sambar, blue bull and deer of different varieties also live in this forest along with a number of varied birds. The nearest airport is Keshod, 86·9 kms. (54 miles) by road from Sassan Gir. Keshod is connected with Bombay by weekly air service during the season. *Accommodation:* Forest Bungalow (Sassan Gir).

Borivli National Park: In Maharashtra State, Bombay. *Accommodation:* Tourist Cabins.

Nal Sarovar Bird Sanctuary: In Gujarat State. *Accommodation:* Holiday Home; Nala Sarovar Gypsy Huts.

Bondla Game Sanctuary: In Goa. *Accommodation:* Forest Rest House.

Mollem Game Sanctuary: In Goa. *Accommodation:* Forest Rest House.

Cottigao Game Sanctuary: In Goa. *Accommodation:* Forest Rest House.

Nagzira Wild Life Sanctuary: In Maharashtra State. *Accommodation:* Rest House.

Tansa Lake Wild Life Sanctuary: In Maharashtra State near Bombay. *Accommodation:* Rest House, Tansa.

TOURIST TRAFFIC

Foreign Tourist Arrivals in India — 1979.

(These statistics relate to foreign tourists excluding nationals of Pakistan, Nepal and Bangladesh.)

A total of 764,781 foreign tourists visited India during 1979 showing an increase of 2·2 per cent over the corresponding figure for 1978 (747,995).

India has earned Rs. 3,380 million in 1979 as against Rs. 3,300 million in the previous year from Tourism.

ARECANUT INDUSTRY

ARECANUT is one of the most important commercial crops of India. It plays an important role in the religious, social and cultural life of our people irrespective of caste, creed or social status. Betelnut (processed arecanut) varieties are numerous in India and can be broadly classified into unboiled, boiled and coloured varieties.

LOCATION OF THE INDUSTRY

Kerala, Karnataka and Assam account for nearly 90 per cent of the total area and production. It is also cultivated to a smaller extent in Meghalaya, West Bengal, Tamil Nadu, Maharashtra, Andhra Pradesh and Goa. The state-wise break-up of the area under arecanut cultivation is given below:

Number of persons employed: About four million.

Ranking in the World Market: India ranks first in the world both in the area and production of arecanut. The main arecanut producing countries in the world are India, Bangladesh, Sri Lanka and Malaysia.

CONSUMPTION

National consumption for the last four years: 1975-76 — 165,540 tonnes; 1976-77 — 164,497 tonnes; 1977-78 — 171,174 tonnes; 1978-79 — 162,494 tonnes.

The overall average per capita consumption of betelnut in India is estimated at 0·33 kg. In Kerala it is 0·67 kg. and in Karnataka 0·66 kg. Among the cities, Delhi and Nagpur are two of the most important consuming markets.

Area under cultivation

(In thousand hectares)

	1976–77	1977–78	1978–79
Kerala	68·4	62·4	62·7
Karnataka	48·9	50·0	50·0
Assam	36·5	40·4	46·4
Meghalaya	6·2	6·5	6·5
Tamil Nadu ..	4·0	4·1	4·2
West Bengal ..	3·1	3·1	3·1
Maharashtra	2·0	2·1	2·1
Goa, Daman & Diu ..	1·4	1·4	1·4
Andhra Pradesh ..	0·2	0·2	0·2
Tripura ..	—	0·6	0·6
Total ..	170·7	170·8	177·2

EXPORTS

Arecanut is exported in small quantities to countries like Nepal, Kenya, Aden, Saudi Arabia. The quantity exported during 1975-76, 560 tonnes valued at Rs. 5·35 million; and during 1976-77, 603 tonnes valued at Rs. 6·63 million and 1977-78, 522 tonnes valued at Rs. 6·81 million.

PRODUCTION

The state-wise break-up of the production is given below:

(In thousand tonnes)

	1976–77	1977–78	1978–79
Kerala	47·8	51·0	51·1
Karnataka	70·4	72·2	61·5
Assam	38·6	42·4	44·5
Maharashtra	2·7	2·9	2·5
Tamil Nadu ..	2·4	2·9	2·9
Goa, Daman & Diu ..	1·4	1·5	1·5
West Bengal ..	0·8	0·8	0·8
Meghalaya	0·8	0·9	0·9
Andhra Pradesh ..	0·2	0·2	0·2
Tripura	—	0·4	0·4
Total ..	165·1	175·2	166·3

GENERAL

Average per hectare yield: 938 kgs. of processed nuts.

RESEARCH

A new high yielding variety '*Mangala*' has been released from the *Central Plantation Crops Research Institute's* Regional Station at Vittal, South Kanara for cultivation. This variety, an introduction from China, gives 70 per cent more yield than that of the best local ones, besides being an early bearer.

Pilot trials conducted have shown that fat, alcohol, etc. can be extracted and products like chewing gum, tooth paste etc. can be prepared from arecanut kernel. The liquid obtained while boiling tender nuts ('Kali') can be utilised for tanning leather. Hard board, wrapping paper, cushioning materials etc. can be made out of arecanut husk. Arecanut leaf-sheath can be used for making gin washers, packing cases, soles and heels in shoe making etc. Arecanut husk is also an excellent poultry litter.

Considering the present trend in production, internal consumption and export no further expansion of area is contemplated for the crop. However, attention is given for increasing returns from the existing plantations through adoption of intensive cultivation practices and intercropping of suitable crops like cocoa, pepper etc.

The Directorate of Cocoa, Arecanut and Spices Development of the Department of Agriculture, Government of India, is situated at 1/500, Cannanore Road, Calicut-673 005, Kerala.

Marketing: Besides the *Central Arecanut Marketing and Processing Co-operative Ltd., Mangalore* an inter-state organisation set up for procurement and marketing of the crops, there are 24 co-operative marketing societies and 37 regulated markets in Kerala, Karnataka, Tamil Nadu, Maharashtra and Goa for better marketing of the commodity.

Publications: 1. Indian Cocoa, Arecanut and Spices Journal (Quarterly) brought out by the Directorate of Cocoa, Arecanut and Spices Development, Calicut-673 005, Kerala. 2. Journal of Plantation Crops (Half Yearly) brought out by Indian Society for Plantation Crops, Central Plantation Crops Research Institute. Kasaragod 670 124.

AUTOMOBILE INDUSTRY

AFTER independence in 1947 the Government of India decided to stop assemblies of foreign cars and to encourage local manufacturers.

The automobile industry depends upon its ancillaries for the manufacture and supply of over 50 per cent of the 5,000 components that go into making an automobile.

LOCATION OF THE INDUSTRY : Of the 32 manufacturers of automobiles, including tractors and two-cum-three wheelers, 12 are in Maharashtra, 5 in New Delhi, 5 in Tamil Nadu, 2 in Karnataka, 2 in Andhra Pradesh, with Gujarat, Haryana, Uttar Pradesh, Rajasthan, Punjab and West Bengal having one each. The location of the 168 automobile ancillary manufacturing units is: 63 in Maharashtra, 37 in Tamil Nadu, 25 in Delhi, 10 in West Bengal, 9 in Haryana, 7 in Gujarat, 7 in Karnataka, 5 in Punjab, 3 in Andhra Pradesh, 1 in Madhya Pradesh and 1 in Rajasthan.

Licensed Capacity at the end of 1980 was 136,950 commercial vehicles, 129,400 passenger cars, 15,000 jeeps and 1,579,378 other vehicles.

Defence Vehicles : The Defence establishments manufacture *Shaktiman* trucks through an agreement with M.A.N. of West Germany and *Nissan* 1-ton trucks and *Nissan* (Jonga) jeep type vehicles. The vehicle factory at Jabalpur was established in 1969 for the manufacture of 6,000 *Shaktiman* 3-tonne trucks and 7,200 *Nissan* trucks and petrol vehicles per annum. From the information available the current rate of production of *Nissan* trucks and *Nissan* petrol vehicles is 200 nos. and 100 nos. per month, respectively.

RANKING IN THE WORLD MARKET

World Production 1979

Countries	Passenger Cars	Trucks & Buses	Total
United States ..	8,112,000	2,976,000	11,088,000
Japan	6,180,000	3,468,000	9,648,000
West Germany	3,936,000	324,000	4,260,000
France	3,732,000	468,000	4,200,000
U.S.S.R. ..	1,314,000	780,000	2,094,000
United Kingdom	1,070,400	408,000	1,478,400
Canada	987,600	644,400	1,632,000
Italy	1,476,000	151,200	1,627,200
Brazil	553,200	574,800	1,128,000
Spain	973,200	165,600	1,138,800
Australia ..	374,400	57,600	432,000
Mexico ..	286,800	121,200	408,000
Poland	349,200	63,600	412,800
Sweden ..	309,600	40,800*	350,400
Yugoslavia ..	206,400	64,800	271,200
Czechoslovakia	182,400	87,600	270,000
Argentina ..	189,600	62,400	252,000
East Germany	171,600	37,200	208,800
Netherlands ..	88,800	15,600	104,400
Rumania ..	67,200	33,600	100,800
India	42,000	58,800	100,800
Austria	2,400	6,000	8,400
Total	30,604,800	10,609,200	41,214,000

* Data refer to 1978.

PRODUCTION IN INDIA

	1979	1980 (Expected)
Passenger Cars	29,299	30,000
Jeeps	13,478	18,000
Commercial vehicles	58,373	64,000
Motorcycles	87,011	100,000
Scooters	153,490	206,000
Three-wheelers	17,117	26,500
Mopeds	65,733	103,000
Tractors	60,239	67,370

Ancillary Products : There are more than 1,800 units in the recognised automobile ancillary sector producing all spare parts, accessories and components required for the assembly of complete vehicles. The production of various categories of spare parts and components during 1979-80 in this sector has been of the order of Rs. 4,041 million, which reflects a 15 per cent growth over 1978-79. The production for 1980-81 is expected at Rs. 5,000 million. The total installed capacity is at Rs. 6,000 million. In the export field, automobile ancillary industry has achieved great progress. The total exports for 1978-79 and 1979-80 were placed at Rs. 490 million and Rs. 600 million respectively.

EXPORTS

The export performance of commercial vehicles continues to show improvements as can be seen from the following information :

Year	Exports (Rs. million)
1977-78	450
1978-79	470
1979-80	570

Export Incentive : Cash assistance of 20 per cent for commercial vehicles.

GENERAL : Almost all vehicles produced in the country are 99 per cent indigenous.

Research Development and Training : Research and testing facilities for automobiles and automobile ancillaries are available at the *Central Mechanical Engineering Research Institute*, Durgapur, the *Indian Institute of Science*, Bangalore 560012, the *National Test House*, Alipore, and the *National Metallurgical Laboratory*, Jamshedpur. *The Automotive Research Association of India*, P.B. No. 832, Deccan Gymkhana P.O., Pune 411004. The ARAI is an Industrial Research Association with the Ministry of Industry, Govt. of India, set up by the Indian Automotive Industry. It provides test facilities for components and complete assembly of engines and vehicles. Presently a U.N.D.P. project is being established with the main object of assisting the small and medium scale units in their design, development and research activities.

Automobile Manufacturers (See classified list of 'Trades & Professions').

Production of Diesel Engines & Earth-moving Equipment

Production in nos.

	1979	1980
Excavators/shovels	207	310
Crawler tractors	361	500
Rear dumpers	469	250
Motorised scrapers	61	75
Motor graders	6	20
Wheeler dozzers	—	—
Diesel engines 0–20 HP Diesel engines 20–100 HP	130,580	140,000
Diesel engines 100–800 HP	5,187	5,500
Power tillers	2,488	2,000

Tractor Industry : Agricultural tractors have played an important role in increasing the agricultural production in the country. There are 14 licensed units out of which 13 are progressively raising their production and the remaining unit is likely to go into production within a year or so.

During 1980, the production of tractors was expected at 67,370 reflecting considerable increase over the 1979 level of 60,239. The demand for tractors is estimated at 85,000 by 1983-84, and no capacity gap is envisaged in this industry in the near future.

The industry is facing severe pressures because of critical supply position in respect of major inputs like power, pig iron, coal, furnace oil etc. Government has allowed the imports of certain critical items at reduced rate of customs duty to ensure the attainment of targeted production level.

Besides meeting domestic demand, the tractor industry is exporting annually around 1,000–1,500 tractors to African and South East Asian countries, Nepal and Afghanistan.

Tractor Manufacturers

(See classified list of 'Trades and Professions').

Associations : 1. *Association of Indian Automobile Manufacturers*, Army & Navy Bldg., M. Gandhi Rd., Bombay 400023. 2. *All India Automobile & Ancillary Industries Association*, 80, A. Besant Rd., Bombay 400018. 3. *Automotive Research Association of India*, P. Box 832, Deccan Gymkhana P.O., Pune 411004.

Publications : (1) *Automobile Ancillaries and Accessories* (Bi-monthly), 20, Noble Chambers, Parsee Bazar St., Bombay 400001. (2) *Automobile News* (Monthly), Arun Chambers, J. Dadajee Rd., Bombay 400034. (3) *Autoguide* (Monthly), 47, Shardhanand Marg, Delhi 110006. (4) *Auto Spark* (Monthly), Vijay Nivas, Juhu Lane, Bombay 400058. (5) *Mobile* (Monthly), 11B, Ramchandra Iyer St., Madras 600017. (6) *Automotive Abstracts* (Monthly), P. Box 832, Deccan Gymkhana P.O., Pune 411004.

Statewise Distribution of Motor Vehicles as on 31st March, 1979

States/U.T.	All Vehicles	Two Wheelers	Three Wheelers		Car	Jeep	Taxi	Bus	Truck	Tractor	Trailer	Others
			Pass.	Goods								
Andhra Pradesh ..	232,098	121,929	8,209	631	26,846	7.796	2,892	3,670	35.615	10.736	6,988	1,786
Assam[1]	66,615	10,717	654	(a)	21,635	(b)	1,405	3,508	13,387	4,680	4,485	6.195
Bihar[2]	141,493	57,231	2,461	(b)	24,383	9,893	3,234	6,728	21,184	9,109	5.801	1,427
Gujarat	299,010	169,394	2,315	4.172	33,819	5,790	1.392	8,612	23,797	18,252	12,048	419
Haryana[3]	62,019	24,096	1,074	541	5,295	1,782	155	2,268	9,922	15,955	348	83
Himachal Pradesh[3] ..	18,503	5,568	—	..	2,053	2,169	101	1,961	4,951	1,020	—	680
Jammu & Kashmir[3] ..	22,662	9,211	64	296	3,212	1,209	1,136	1,946	4,075	754	45	14
Karnataka	339,708	175,276	17,396	879	57,093	11,669	2,663	11,024	29,535	10,047	15,354	2,767
Kerala	154,194	43,686	5,715	565	50,119	6,921	15,195	8,378	17,990	3,844	242	1,539
Madhya Pradesh[4] ..	111,016	49,887	3,128	(b)	17,615	3,490	—	4,184	17,461	8,022	1,750	5,079
Maharashtra	680,745	277,063	20,588	16,073	187,118	20,600	20,199	15,681	78,697	18,916	17,773	2,073
Manipur[3]	8,062	2,134	132	—	807	1,838	2	808	1,964	164	174	39
Meghalaya			—	—	—	—	—	—	—	—	—	..
Nagaland	4,957	991	148	—	589	1,545	70	365	1,148	34	67	—
Orissa	52,818	26,387	373	239	6,467	5,124	362	1,507	9,581	1.211	928	639
Punjab	276,748	114,439	2,827	1,868	21,204	4,059	1,167	4,818	13,371	89.468	22.655	872
Rajasthan	167.238	77,281	3,858	120	11,009	13,744	358	7,339	16,173	28,110	8,659	527
Sikkim	—	—	—	—	—	—	—	—	—	—	—	—
Tamil Nadu	254.453	119.628	6.308	1,238	58,631	3,186	9,239	11,158	27,423	9,820	7.918	504
Tripura	7.326	1.317	105	—	1,707	498	340	433	2,290	49	509	78
Uttar Pradesh ..	306,732	179.247	2,332	1,340	37,899	8,132	2,747	13,078	27.545	25,077	7,954	1,381
West Bengal[5] (d) ..	204,180	44.813	811	446	81.393	7,797	10,231	8,521	37,105	9,060	812	3,199
A. & N. Islands ..	1,988	922	1	—	113	213	53	67	430	79	26	84
Arunachal Pradesh[6] ..	359	68	—	—	18	91	2	13	145	—	—	22
Chandigarh[7]	23,679	16,365	1,075	118	4,500	150	120	107	675	569	—	—
Dadra & Nagar Haveli	510	253	—	4	124	24	—	—	57	31	14	3
Delhi	218,689	128,913	11.471	—	60,463	—	2,984	428	10,640	—	—	—
Goa, Daman & Diu ..	28,751	15,567	256	1	5,912	(b)	39	797	5,142	237	—	—
Lakshadweep	—	—	—	—	—	—	—	—	—	—	—	—
Mizoram[8]	2,003	68	—	—	124	910	—	27	652	(c)	(c)	222
Pondicherry[9]	9,812	5,609	38	3	2,363	84	108	155	655	339	307	151
Grand Total ..	3,696,368	1,678,143	110,339	28.594	722,511	119,414	82,999	126,671	411,610	271,032	115.221	29.843

(a) Included in Passengers, Three Wheelers (b) Included in Cars. (c) Included in others. (d) Except Purulia RTO for which the latest available data for the period 30-3-1975 have been given

[1] As on 31-12-1977 [2] As on 31-3-1978 [3] As on 31-3-1977. [4] As on 31-3-1974. [5] As on 31-3-1976. [6] As on 31-12-1974. [7] As on 31-12-1975. [8] As on 30-6-1975. [9] As on 30-9-1977.

CASHEW-NUT INDUSTRY

BRIEF HISTORY

THE Cashew tree (Anacardium Occidentale), a native of South America was introduced into India by the Portuguese who planted the first saplings on the west coast during the sixteenth or seventeenth century to check soil erosion. Finding a congenial home it grew extensively and is known as 'Feringi Mango' (Feringi meaning Portuguese).

Despite its early introduction the commercial value of the cashew-nut was discovered only in the nineteen twenties when some enterprising processors sent the nut abroad. There was an immediate demand for the cashew kernel in raw or roasted form, which marked the beginning of the cashew industry.

The cashew "apple" when ripe, is juicy and sweet and rich in vitamin C. The juice is used in the preparation of syrup, squash, jam, candy and wine.

The cashew-nut shell liquid is a brown viscous oil and is an important raw material in the manufacture of insulating varnishes, paints, typewriter rolls, oil and acid proof cold setting cements, industrial flooring tiles, automobile brakelinings and also in the plastic industry.

Area Under Cashew: The Kerala State Co-op. Marketing Federation announced in February, 1977, it would extend cashew cultivation to another 28,000 hectares by providing long-term loans through land mortgage banks. At present about 100,000 hectares are under cashew cultivation with an annual yield of about 150,000 tonnes. The federation also announced a proposal to organise cashew apple processing units in Kerala. The State was losing about Rs. 200 million a year by wasting the cashew apple.

LOCATION OF THE INDUSTRY

Out of about 300 processing factories in the country about 200 are in Kerala State and the others in Tamil Nadu, Karnataka, Andhra Pradesh and Maharashtra.

Public Sector: The Kerala State Cashew Development Corpn. Ltd., Quilon, opened its first factory in July, 1970 by taking over a factory owned privately. By the end of 1974, the number of factories taken over increased to 34.

Ranking in the World Market: India accounts for about 60-65 per cent of the world export of cashew kernels.

PRODUCTION AND CONSUMPTION

The yearly local production of raw cashew-nuts, according to the Directorate of Cashew-nut Development, is 140,000 tonnes. The trade estimate of availability of raw nuts for processing is, however, placed at around 100,000 tonnes.

IMPORTS

The domestic supply of raw nuts is inadequate to meet the total requirements of the processing factories. The shortfall is made-up by importing raw nuts. This is being done by the Cashew Corporation of India Ltd., which was set up as a subsidiary of State Trading Corporation.

Import of raw cashew nuts from Tanzania and Madagascar during 1979-80 amounted to 24,326 tonnes valued at Rs. 116·25 million.

EXPORTS

The Cashew Export Promotion Council (Chittoor Rd., Ernakulam South, Cochin 682016, Kerala) was set up in 1955.

India had the monopoly in the exports of processed cashew kernels until Tanzania, Mozambique and Kenya set up their own units.

Export Duty: There is one per cent ad valorem cess on exports of cashew kernels. The tariff value for cashew kernels fixed for the purpose for the year 1980-81 (July-June) was Rs. 2,500 per quintal.

Export of Cashew Kernels: Cashew kernel exports fetched Rs. 1,179 million in 1979-80, an increase of about 47 per cent over the earnings in 1978-79. Quantitatively, the export was higher by about 40 per cent.

(Quantity in Tonnes)

Countries	1977–78	1978–79	1979–80
U.S.A.	7,358	7,841	12,031
U.S.S.R.	22,590	9,416	14,354
U.K.	275	588	635
East Germany ..	..	Neg.	11
Australia	1,780	707	1,452
Canada	977	669	1,144
France..	154	269	203
Japan	3,167	3,762	3,407
Netherlands	992	1,516	1,467
Hong Kong	595	131	530
West Germany ..	422	538	511
Czechoslovakia ..	233	114	214
Lebanon	56	58	71
Belgium	82	7	41
Malaysia & Singapore	257	335	484
New Zealand ..	16	106	254
Iran	104	28	37
Sweden	10	2	—
Italy	4	Neg.	2
Spain	7	19	5
Kuwait	480	454	316
Switzerland	86	18	—
Bahrain	232	67	48
Total exports including other countries..	40,300	26,877	37,848
Value in Rs. million..	1,495	800	1,179

Export of Cashew-nut Shell Liquid

(Tonnes)

Countries	1977–78	1978–79	1979–80
U.K.	834	1,492	2,417
U.S.A.	202	1,524	3,423
Japan	364	1,436	4,927
Australia	214	10	3
Netherlands ..	110	111	354
South Korea	315	715	548
Total exports including other countries ..	2,588	5,922	12,928
Value in Rs. million ..	10·7	49·0	144·6

No... 3.19
15 M... 1986

GENERAL:

According to the study made by GATT, a good average crop from a mature plantation tree is around 10 kgs. in East Africa and 50 kgs. in India.

In Africa, the average yield of kernels is about 21 to 24 per cent of raw nut weight, while in India it is slightly higher. Indian processors claim to be able to get upto 80-90 per cent whole kernels, while the mechanical processing plants in Africa record upto 55 per cent.

The labour intensive technology in the cashew industry in Kerala in which the operations are done manually, accounts for the investment per worker being as low as about Rs. 300. Over 90 per cent of the workers are women.

Publication: 'Cashew Bulletin' (monthly) and 'Indian Cashew Journal' (quarterly), C/o Cashew Export Promotion Council, Chittoor Rd., Ernakulam South, Cochin 682016.

CEMENT INDUSTRY

BRIEF HISTORY

CEMENT, though it may not have been known by that name, is an ancient building material. Evidence of its use is believed to have been found in the Indus civilisation of Mohanjodaro. The Greeks are also known to have made extensive use of it, but it is to the Romans that the credit must go for having evolved concrete from cement.

Although cement was first manufactured in India near Madras in 1904, it was not until 1914 that the foundations of a stable Indian cement industry were really laid. In October 1914, the first bag of cement was packed at Porbandar by the Indian Cement Company Ltd. (Agents: Tata Sons & Co.). This company then had a capacity of only 1,000 tonnes. At the end of 1980, there were 59 units in the country and their aggregate capacity was 24·68 million tonnes.

LOCATION OF THE INDUSTRY

The State-wise break up of the units is as follows: Andhra Pradesh 7, Assam 1, Bihar 6, Gujarat 6, Haryana 2, Himachal Pradesh 1, Jammu & Kashmir 1, Karnataka 6, Kerala 1, Madhya Pradesh 7, Maharashtra 2, Meghalaya 1, Orissa 2, Rajasthan 5, Tamil Nadu 8, Uttar Pradesh 2 and West Bengal 1.

Public Sector: Out of 59 units, 12 are in the public sector. The break-up of these units is as follows:

Assam: Cement Corpn. of India Ltd., Bokajan; *Himachal Pradesh:* Cement Corpn. of India Ltd., Rajban; *Jammu & Kashmir:* J. & K. Minerals Ltd.; *Karnataka:* Visvesvaraya Iron & Steel Ltd., and The Cement Corpn. of India Ltd., Kurkunta; *Madhya Pradesh:* The Cement Corpn. of India Ltd., Mandhar; *Meghalaya:* Mawmluh-Cherra Cements Ltd.; *Orissa:* The Industrial Development Corpn. of Orissa Ltd., Hira Cement Works; *Tamil Nadu:* Tamil Nad Cements Corpn. Ltd., Alangulam and Ariyalur; *Uttar Pradesh:* The U. P. State Cement Corpn. Ltd., Churk and Dalla.

Expansion: Production capacity is expected to increase to 27·86 million tonnes by the end of 1980-81.

Number of Persons Employed: About 90,000 including workers in quarries.

Contribution to Gross National Product: In 1979 it was Rs. 5,658 million (Approx.).

Ranking in the World Market (1978): India is the 7th largest cement producer in the world. The first six countries are the USSR, Japan, USA, Italy, West Germany and France.

PRODUCTION AND CONSUMPTION

In 1979 production was 18·3 million tonnes as against 19·6 million tonnes in 1978. Capacity utilisation in 1979 was 81·7 per cent as against 90·2 per cent in 1978.

Cement factories are largely concentrated in the southern and western regions of the country because high grade limestone is more abundantly available there. This has led to regional imbalances.

Capacity and Production of Cement

(Million tonnes)

		South	West	East	North	Total
1976	a.	7·4	6·2	3·9	3·8	21·3
	b.	7·1	5·8	3·0	2·7	18·6
	c.	4·7	4·3	3·3	5·4	17·7
1977	a.	7·6	6·2	3·9	3·8	21·5
	b.	6·9	6·0	3·0	3·2	19·1
	c.	4·8	4·6	3·2	5·4	18·0
1978	a.	8·0	6·2	4·1	3·8	22·1
	b.	7·3	5·9	3·1	3·3	19·6
	c.	5·6	5·4	3·5	5·9	20·4

a — capacity ; b — production ; c — consumption.

The northern region contributed 16·8 per cent to the total production and consumed 29·0 per cent in 1978. While the eastern region produced 15·7 per cent and consumed 17·2 per cent. The corresponding figures for the western region were 30·3 per cent production and 26·3 per cent consumption. The southern region accounted for 37·2 per cent of production and 27·5 per cent of consumption.

Production of Cement in India & Other Countries in 1977 and 1978 respectively (in million tonnes): U.S.S.R.: 127·00, 129·20; Japan: 75·17, 84·35; USA: 67·97, 72·47: Italy: 38·43, 38·49; Federal Rep. of Germany: 31·87, 32·99; France: 30·40, 31·18; India: 19·08, 19·56; U.K.: 16·05, 16·56; Dem. Rep. of Germany: 12·10, 12·52.

Per Capita Consumption in 1977 & 1978 respectively (in Kgs.): Italy: 669, 656; Bulgaria: 653, 693; Czechoslovakia: 653, 693; Belgium: 608, 588; Japan: 608, 689; Switzerland: 590, 600; France: 525, 506; Fed. Rep. of Germany: 505, 520; Hungary: 484, 504; U.S.S.R.: 480, 483; Norway: 410, 405; Canada: 380, 389; Korea (Rep.): 305, 403; India: 29, 32.

Exports: During 1979 export of cement amounted to 0·05 million tonnes. In view of the shortages of cement in the country, Government has virtually banned export of this commodity from 1978 in order to augment supplies for the domestic market.

Imports: To meet the growing internal demand, the Government imported 1·39 million tonnes of cement in 1979 from South Korea, Poland, North Korea, Japan and Indonesia. Government has taken a decision to stop imports of cement, except where firm commitments have been made. Cement is being imported at a cost of Rs. 820 per tonne.

GENERAL

While the capacity utilisation in the calendar year 1978 was 90 per cent, it dropped to 81·7 per cent in 1979. The utilisation of capacity has been low mainly on account of inadequate infrastructural facilities, namely, poor quality and short supply of coal, inadequate supply of wagons, power cuts and trippings.

Mini Plants: Government has approved schemes for setting up of mini cement plants for a total capacity of nearly 2·35 million tonnes but the response from entrepreneurs to set up such mini plants has not been encouraging despite the package of incentives offered by Government. The Cement Manufacturers' Association offers services to mini cement plants and they are eligible to become members of the Association. The *Cement Research Institute* and the Regional Research Laboratory, Jorhat are offering vertical shaft technology. Indigenous technology for putting up mini cement plants based on Rotary Kiln is also available.

Establishment of mini cement plants has certain advantages such as exploitation of scattered and small size deposits of cement grade limestone, dispersal of manufacturing capacity over the country thereby helping to rectify regional imbalances, reducing burden on railway transportation, and creation of new employment potential especially in rural, hilly and other inaccessible areas.

Additional Capacity and Production: In view of the wide gap between the rising demand and the installed capacity for cement manufacture in the country, Government have issued upto 1-9-1980 industrial licences/letters of intent for installing additional capacity of the order of 30·00 million tonnes, partly by expansion of the existing units and partly by establishment of new ones. Some more applications for industrial licences/letters of intent are under consideration of Government.

Demand: The domestic demand for cement for 1980-81 is estimated at 27 to 28 million tonnes and the demand is likely to increase, even on a conservative estimate, at 8 per cent annually.

Training and Research: Almost all cement factories have well equipped laboratories. The major research for development of the industry is being done by the *Cement Research Institute of India*. The Institute has a well-equipped laboratory with training facilities for scientists, at NH2, Ballabgarh 121004 (Haryana). The *CRI* have undertaken intensive research in specialised fields connected with cement.

Ten Largest Units: The Associated Cement Cos. Ltd., 121, Maharshi Karve Road, Bombay-400020. The Birla Jute Manufacturing Co. Ltd., Birla Building, 9/1, R. N. Mukherji Road, Calcutta-700001. The India Cements Ltd., 'Dhun Building', 175/1, Mount Road, Madras-600001. The Cement Corporation of India Ltd., (Govt. of India Undertaking), Shakuntala Apartment, 59, Nehru Place, New Delhi-110019. Tamil Nadu Cements Corporation Ltd., (A subsidiary of TIDCO), LLA Building, 735, Anna Salai, Madras-600002. The U.P. State Cement Corpn. Ltd. (A U.P. Govt. Undertaking), Churk, Mirzapur Dist. Saurashtra Cement & Chemical Industries Ltd., Ranavav 360560 (Gujarat). The Jaipur Udyog Ltd., P.O. Ram Krishna Lok, Sawaimadhopur-322001, Rajasthan. Shree Digvijay Cement Co. Ltd., Shree Niwas House, Hazarimal Somani Marg, Bombay-400001. J. K. Cement Works, Kamla Tower, Kanpur (U.P.).

Publication: "CEMENT" (Quarterly Journal), C/o Cement Manufacturers' Association, Express Building, Churchgate, Bombay-400020.

COCOA INDUSTRY

BRIEF HISTORY

ORIGINALLY believed to be growing in tropical America, the cocoa tree (*Theobroma cacao*) was planted by the French in their possessions in the 1870s. But it was not commercially exploited in India till the last decade.

Location of Plantations: Cocoa is grown in India over an area of about 18,000 hectares largely as a mixed crop in coconut and arecanut gardens. Cocoa is grown in small areas in Andhra Pradesh, Maharashtra, Orissa, Goa and Andaman and Nicobar Islands. The major cocoa growing state is Kerala followed by Karnataka and Tamil Nadu.

Though there are two popular varieties — Criollo and Forestero—only the latter has been recommended for cultivation in India because of its wider adaptability and better performance.

PRODUCTION

The estimated production of cocoa beans was about 800 tonnes in 1979-80 and about 1,500 tonnes in 1980-81.

Consumption: The maximum grinding capacity of the major industries in India is about 3,000 tonnes, but only slightly more than one third of this is utilised at present.

Exports: Cocoa is exported as cocoa powder, chocolates, cocoa butter etc. to the Middle East, Nepal, U.K., Indonesia and Singapore. During 1977-78 India exported cocoa products weighing 1,208 tonnes valued at Rs. 19·82 millions.

Imports: The demand for cocoa was being met in the past partly by import. The annual import of cocoa beans has been between 400 and 1,100 tonnes. India imported about 808 tonnes of cocoa beans and cocoa products valued at Rs. 30·74 million during 1977-78 and 705 tonnes valued at Rs. 27·33 million during 1978-79.

Marketing: Cocoa is purchased both by Government agencies and manufacturing industries. The existing practice is to procure the produce as wet beans or pods. The beans are then processed.

The Kerala and Karnataka Governments make the purchases through co-operatives viz. Kerala State Co-operative Marketing Federation, Cochin and the Central Arecanut Marketing and Processing Co-operative Ltd., Mangalore respectively. These organisations have a network of primary societies in the major producing centres.

GENERAL

Development: The Government of India has constituted the *Indian Arecanut and Cocoa Development Council*, made up of State and Central Government officials and representatives of growers, traders and farm workers. It periodically reviews the ongoing development programmes and advises the Government of India on future needs. The development programmes are implemented through the *Directorate of Cocoa, Arecanut & Spices Development*, functioning at 1/500, Cannanore Road, Calicut-673005, Kerala.

The important development measures undertaken include establishment and maintenance of progeny orchards of high yielding cocoa trees, training of farmers and extension workers in the scientific cultivation of the crop and primary processing of the produce and production and distribution of quality seedlings.

Research: The agronomic research work on cocoa is undertaken by the Central Plantation Crops Research Institute, Kasaragod, and by the Kerala Agricultural University. The Central Food Technological Research Institute, Mysore, carries out research work on the processing of cocoa beans and finished products.

Processing Firms: The following are the important processing firms: 1. M/s. Cadbury India Ltd., Cadbury House, Bhulabhai Desai Road, Bombay-400026; 2. M/s. Sathe Biscuits and Chocolate Co., Bhavanipeth, Pune 411002; 3. Kaira District Co-operative Milk Producers Union Ltd., Anand 388001; 4. Dr. Writers Chocolates and Canning Co., Bhavanishankar Road, Dadar, Bombay 400028.

Publications : 1. *Indian Cocoa, Arecanut & Spices Journal* (Quarterly), Directorate of Cocoa, Arecanut & Spices Development, Calicut 673005, Kerala.
2. *Journal of Plantation Crops* (Half Yearly), Indian Society for Plantation Crops, Central Plantation Crops Research Institute, Kasaragod, 670124.

COFFEE INDUSTRY

BRIEF HISTORY

ABOUT 400 years ago coffee became established as a beverage in Arabia from where it eventually came to Europe and to London in 1692.

The plant is believed to have been introduced in India by a Muslim saint who came from Mecca and made his home in Karnataka.

The coffee plant usually reaches heights ranging from 4·57 to 6·09 metres. The fruit is red and contains two interlinked seeds which when roasted and ground, produce the coffee powder.

LOCATION OF THE INDUSTRY

Coffee Arabica and coffee Canephora (Robusta) are the two types of coffee grown on a commercial scale in India. The total area under coffee in the country is 192,248 hectares — 103,349 hectares Arabica and 88,899 hectares Robusta.

Statewise hectarage: Karnataka 104,547; Kerala 51,708; Tamil Nadu 32,909; Andhra Pradesh 1,990; Assam 734; Others 360 (Maharashtra, Orissa, Mizoram, Andamans and Madhya Pradesh).

Of 90,772 coffee estates 51,310 are registered and 39,462 un-registered. Of these 88,753 are small holdings of ten hectares and below. Karnataka has in all 28,797 estates.

Number of persons employed: About 250,000.

Ranking in the World Market: Indian coffee contributes about 1·7 to 2 per cent of the World trade in coffee. In 1979, the total World exports were 3,711,420* tonnes of coffee of which India exported 62,215* tonnes valued at Rs. 1,687·87* million. India occupied 14th place in the World Coffee Trade in 1979.

---

* Provisional.

PRODUCTION AND CONSUMPTION

Production and consumption of coffee in India — 1976-77 to 1979-80

Season	National Production (in tonnes)			Calendar Year	Internal Consumption (in tonnes)		
	Arabica	Robusta	Total		Arabica	Robusta	Total
1976–77	64,944	37,304	102,248	1976	20,786	16,916	37,702
1977–78*	58,800	66,200	125,000	1977	25,562	18,526	44,088
1978–79*	65,100	45,400	110,500	1978	23,840	22,188	46,028
1979–80*	71,500	78,500	150,000	1979	28,093	21,555	49,648

* Estimates subject to revision.

Statewise production of coffee — 1976-77 to 1979-80 (in tonnes)

Season	Karnataka			Tamil Nadu			Kerala			All India Total**		
	Arb.	Rob.	Total	Arb.	Rob.	Total	Arb.	Rob.	Total	Arb.	Rob.	Total
1976–77 ..	57,127	23,208	80,335	6,367	1,685	8,052	961	12,342	13,303	64,944	37,304	102,248
1977–78* ..	50,905	36,495	87,400	6,270	2,600	8,870	1,360	27,105	28,465	58,800	66,200	125,000
1978–79* ..	55,790	22,540	78,330	7,295	1,610	8,905	1,695	21,245	22,940	65,100	45,400	110,500
1979–80* ..	61,190	41,100	102,290	7,950	2,930	10,880	2,010	34,465	36,475	71,500	78,500	150,000

* Estimates subject to revision. ** Inclusive of production of other Indian States not mentioned separately.

Per capita consumption (in kg.): 1975: 0·0617; 1976: 0·0619; 1977: 0·0711; 1978: 0·0730; 1979: 0·0774.

EXPORTS

Indian coffee is exported to USA, Canada, Europe, Australia, New Zealand, Japan and Middle Eastern Countries. In addition to raw coffee India is also exporting Instant Coffee to U.S.S.R., U.K. and Australia.

Exports of coffee for fiscal years 1978-79 and 1979-80 (Provisional) based on Certificate of Origin are given below:

Fiscal year	Export Target	Quantity of coffee exported (in tonnes)	Value realised (in Rs. million)
1978-79 ..	70,000	66,428	1,583
1979-80* ..	60,000	61,959	1,789

* Provisional.

Export Duty:—The export duty on coffee per quintal, since March 1979 was as under:

From 18-6-1979 increased from Rs. 400 to Rs. 750 per quintal; from 6-7-1979 increased from Rs. 750 to Rs. 900 per quintal; from 4-8-1979 reduced to Rs. 730 per quintal; from 1-2-1980 reduced to Rs. 570 per quintal; from 28-5-1980 increased to Rs. 700 per quintal; from 17-7-1980 reduced to Rs. 500 per quintal; from 14-8-1980 reduced to Rs. 260 per quintal.

Export Promotion Council: Coffee Board has been recognised as an Export House with effect from 1-1-1975 by the Government of India.

Publication: "Coffee Statistics" is an annual statistical publication brought out by the Market Research and Statistical Bureau of the Marketing Department of the Coffee Board.

COIR INDUSTRY

BRIEF HISTORY

THE word 'coir' has a historical background. The fact that it is derived from the Malayalam word 'kayar' meaning cord, shows that this material first became known as a product of the Malabar coast. As early as the 11th century A.D. Arab writers have mentioned coir and referred to the use of this material for ships, cables and rigging.

However, it was in England that coir was first put to practical use. About 125 years ago three partners of a London carpet firm registered their patents for the manufacture of coir fabrics suitable for floor coverings.

The development of the coir industry in India began in 1859.

LOCATION OF THE INDUSTRY

The coir industry is one of the foremost cottage industries in Kerala employing lakhs of people in all the different processes such as retting of coconut husk, extraction of fibre, spinning of yarn, and manufacture of coir products. Rich with backwaters the facilities for retting of husks are abundant there. While spinning activities extend over the length of the coastal belt of Kerala State, the manufacturing sector is localised mostly in Alleppey, Shertallai and suburbs.

Tamil Nadu and Karnataka are the other major producers of coir in India. In Tamil Nadu the industry is concentrated in Kanyakumari, Salem and Dharmapuri districts. Recently extraction of coir fibre by mechanical process has accelerated the growth of the industry in Tanjore district also. Kanyakumari district is the chief centre of production of *muppiri* coir yarn and Salem and Dharmapuri of coir rope.

In Karnataka a number of units are in operation for the mechanical extraction of fibre, besides two rubberised coir producing units. In West Bengal, production of coir rope is carried on power operated machines. A rubberised coir producing unit is also in existence in this State. In Orissa there is a rubberised coir producing unit and a few defibering units. A few coir producing units are also in existence in other coconut producing States, viz. Andhra Pradesh, Gujarat, Maharashtra, etc.

State-wise breakup of industrial establishments engaged in the production of coir products, viz. coir mats, mattings, rugs, and carpets etc., as per the records available with the Coir Board, is given below:

Kerala: 3,504; Tamil Nadu: 112; Karnataka: 49; West Bengal: 14; Andhra Pradesh: 11; Maharashtra: 6; Orissa: 5; Goa: 8; U.P.: 1; Gujarat: 4; Lakshadweep: 1; Haryana: 1; Pondicherry: 1. Total: 3,717.

No. of persons employed: About 450,000.

Ranking in the world market: The total volume of coir entering the world trade is about 150,000 tonnes. Raw fibre alone accounts for 98,100 tonnes while coir yarn and processed coir goods account for only 51,900 tonnes. India's share is as follows: Coir yarn 95 per cent, coir manufactures 55 per cent, coir cordages and ropes 95 per cent.

PRODUCTION AND CONSUMPTION

India and Sri Lanka are the only two countries where widespread commercial production is undertaken even though coconuts are grown in abundance elsewhere.

Estimated annual output of coir in principal producing countries is as follows:

Country	Thousand tonnes
India	178·0
Sri Lanka	102·9
Tanzania	8·5
Bangladesh	5·8
Thailand	4·0
Philippines	2·5
Burma	2·2
Kenya	2·0
Seychelles	1·9
Malaysia	1·5
Mozambique	1·0
Morocco	0·5
Total	310·8

Of the estimated production of coir fibre at 178,000 tonnes during 1978-79 white fibre (retted fibre) accounted for 146,000 tonnes and brown fibre (unretted fibre) accounted for 32,000 tonnes.

The All-India estimated annual production of coir and coir products of different types is: coir fibre — 178,000 tonnes, coir yarn — 125,600 tonnes, coir products — 28,200 tonnes, ropes — 34,000 tonnes, curled coir — 2,500 tonnes, rubberised coir goods, 1,500 tonnes.

EXPORT OF COIR AND COIR PRODUCTS

Commodity	1978-79		1979-80	
	Q	V	Q	V
Coir fibre	35	0·11	36	0·12
Coir yarn	23,536	101·27	25,873	155·55
Coir mats	10,954	90·48	11,715	119·13
Coir matting & rugs and carpets ..	8,048	64·87	9,276	96·28
Coir rope	72	0·26	81	0·43
Curled coir ..	412	0·84	240	0·55
Rubberised coir goods	7	0·09	2	0·05
Total	43,066	257·92	47,223	372·11

Q = quantity in tonnes. V — value in Rs. million.

CONSUMPTION OF COIR AND COIR GOODS

Commodity	Quantity in tonnes
Coir fibre (*a*) white	3,300
(*b*) brown	11,900
Coir yarn	53,200
Coir products	9,200
Coir ropes	33,900
Curled coir	2,100
Rubberised coir goods	1,490
Total	115,090

GENERAL

Coir Board (Address: Post Box No. 1752, Ernakulam south, COCHIN-682016) established in 1951, assists the development, manufacture, sale, export and technological research.

Training and Research: The Central Coir Research Institute in Kalavoor, Alleppey, Kerala carries out fundamental and applied research to improve existing products and find new uses of coir.

The Board has also set a **National Coir Training and Design Centre** at Alleppey to impart training in techniques of coir production. An extention service covering coir extraction, processing and manufacture especially spinning, dyeing and weaving was also started. Besides Kerala Coir Boards Extention Service Centres are functioning in Karnataka, Tamil Nadu, Orissa and Lakshadweep.

Ten Largest Units: (1) William Goodacre & Sons (I) Ltd., Alleppey-688003, (2) Alleppey Co. Ltd., Alleppey-688001, (3) Indian Coir Manufacturing Co., Alleppey-688001, (4) Aspinwall & Co. (Travancore) Ltd., Alleppey-688001, (5) N. C. John and Sons (Pvt.) Ltd., Alleppey-688001, (6) Kerala Coir Mats & Mattings Co-operative Society Ltd., Alleppey-688001, (7) Shertallai Coir Mats and Mattings Cooperative Society Ltd., Shertallai-688524, (8) Charankattu Coir Manufg. Co. (P) Ltd., Shertallai-688524, (9) Palm Fibres & Yarns Tradg. Co., Cochin-682001, (10) Kerala State Coir Corporation, Alleppey-688001.

Coconuts: India produced 5,837·1 million nuts in 1977-78 on 1·08 million hectares with Kerala alone producing 3,366·5 million coconuts. Tamil Nadu was the second highest with 1,035·5 million followed by Karnataka 815·5 million and Andhra Pradesh 164·6 million.

In India, it is estimated that out of 5,733·6 million husks only 50-55 per cent is utilised by the Industry and the rest is wasted.

Publication: Coir quarterly, Coir News, Monthly Bulletin of Exports of Coir and Coir Products and the annual brochure India's Production, Export and Internal Consumption of Coir are all published by the Coir Board.

COTTON AND COTTON TEXTILE INDUSTRY

COTTON

BRIEF HISTORY: The writings of Marco Polo in the 13th century A.D. and of Tavernier in the 17th century stand testimony to the degree of excellence and perfection achieved by the textile industry in India.

Originally, all cotton cultivated in India grew on the perennial type of plant known as G. Arborium Var Neglectum, which was of Forma Bengalenses in north and western India and of Forma Indicum in central and south India. It is believed that the ' webs of the woven wind ' — the world-famous Dacca muslin was made from Forma Bangalenses.

Until about the middle of the 18th century Indian textiles reigned supreme in foreign markets. But during the Industrial Revolution in the West, Indian cloth began to lose its overseas market. Realising the significance of the revolution the East India Company changed its role of an exporter of cloth to an exporter of cotton and encouraged a wider cultivation of cotton in India. Thus began the cultivation of cotton as a commercial crop.

Area Under Cultivation: India has the largest area in the world under cotton cultivation, which is about one fourth of the total world area.

The area ('000 hectares) under cotton cultivation during last three years was 1976-77: 6,885; 1977-78: 7,866; 1978-79: 8,087.

PRODUCTION

The production of cotton during 1978-79 season amounted to 7·93 million bales. With a carry over of 1·80 million bales and imports amounting to 0·03 million bales, the total supply in the cotton season 1978-79 worked out to 9·76 million bales.

The production ('000 bales of 170 kgs. each) of cotton, during last three years, was 1976-77: 5,839; 1977-78: 7,246; 1978-79: 7,927.

(Refer to the chapter on ' Food & Agriculture ' for the State-wise break-up of production).

GENERAL

Yield per Hectare: In spite of India having the largest area under cotton cultivation, the production accounts for about one tenth of the world cotton output. Indian production has been on an average one bale (170 kgs.) per hectare, against 4 bales produced in Egypt.

The Hybrid-4 is credited with a record yield of 8,700 kgs. of *kapas* per hectare in Bellary district of Karnataka. The

EXPORTS OF COTTON

Year	'000 bales of 170 kgs. each	Value Rs. million
1974–75	97	126·00
1975–76	427	582·30
1976–77	39	657·70
1977–78	10	46·00
1978–79*	120	220·00
1979–80*	450	N.A.

* Figures taken from Data India 1979 and 1980.

IMPORTS & CONSUMPTION

Year*	Imports '000 bales†	Value Rs. Million	Consumption '000 bales†		
			Indian	Foreign	Total
1974–75 ..	115	249·80	6.915	195	7,110
1975-76 ..	166	261·30	7.331	214	7,545
1976–77 ..	622	1,836·50	6.360	392	6,752
1977–78 ..	616	1,544·60	6.070	546	6,616
1978–79 ..	31	N.A.	6.835	146	6,981

* Cotton year ending August 31. † By Mills, in Bales of 170 kgs. each. N.A. Not available.

average yield from this strain in placed at 3,500 to 4,000 kgs. per hectare, while the average yield per hectare of other varieties is 925 kgs. of *kapas* in irrigated areas and 250 kgs. in non-irrigated areas.

Cotton Corporation of India Ltd.: refer to the chapter on ' Govt. of India Undertakings '.

Research: Established in 1924, the Cotton Technological Research Laboratory at Adenwala Road, Matunga, Bombay 400019, offers facilities for fibre testing and spinning quality evolution of cotton with the result that a large number of improved varieties have been evolved and extended for commercial cultivation.

The laboratory also offers training in cotton technology to sponsored candidates from the textile industry.

Regional Cotton Research Station at Coimbatore, Tamil Nadu, of the Indian Agricultural Research Institute does research on the plant breeding aspect of cotton.

Besides this laboratory numerous other agricultural universities conduct research on cotton.

Cotton Yield in Selected Countries: Average Yield 1976-77 to 1978-79 (kgs. per hectare): U.S.A.: 526; U.S.S.R.: 897; Brazil: 259; Mexico: 947; Egypt: 767; Peru: 651; China: 455; Sudan: 374; Syria: 837; Pakistan: 254; India: 161; World Average (including others): 407.

COTTON TEXTILES

Brief History: The cotton textile industry was the base on which Indian industrialisation was built more than a hundred years ago.

The industry was started largely as a spinning enterprise and gradually developed into a full-fledged composite one. The first power-mill in Bombay was set up by a Parsi pioneer, Mr. Kavasji Nanabhai Davar, in 1854.

No. of Persons Employed: It provides direct employment to about 1,150,000 (18 per cent of all factory labour totalling 6·30 million), indirect employment runs into several millions.

Capital Investment: Estimated at Rs. 13,000 million and the annual value of the output amounts to Rs. 36,000 million.

LOCATION OF THE INDUSTRY

State-wise break-up of Mills as on 1st January, 1980.

State/Zone	Number of Mills			Installed Spindles (In thousands)			Installed Looms
	Spinning	Composite	Total	Spinning	Composite	Total	
Andhra Pradesh	28	3	31	573	102	675	1,246
Assam	2	—	2	37	—	37	—
Bihar	4	2	6	69	26	95	596
Gujarat	21	91	112	400	3,557	3,957	63,163
(*a*) Ahmedabad City ..	4	62	66	63	2,607	2,670	47,083
(*b*) Rest of Gujarat ..	17	29	46	337	950	1,287	16,080
Haryana	10	2	12	202	58	260	978
Jammu and Kashmir ..	1	—	1	25	—	25	
Karnataka	20	12	32	341	475	816	6,289
Kerala	21	5	26	449	96	545	1,162
Madhya Pradesh	6	18	24	133	609	742	12,892
Tamil Nadu	163	25	188	3,777	1,303	5,080	9,325
(*a*) Coimbatore ..	74	17	91	1,745	731	2,476	3,972
(*b*) Rest of Tamil Nadu	89	8	97	2,032	572	2,604	5.353
Maharashtra	27	77	104	659	4,215	4,874	77,265
(*a*) Bombay	1	53	54	56	3,373	3,429	61,979
(*b*) Rest of Maharashtra	26	24	50	603	842	1,445	15,286
Orissa	4	1	5	77	51	128	1,014
Punjab	7	2	9	200	62	262	1,240
Rajasthan	7	11	10	158	313	471	2,824
Uttar Pradesh	23	17	40	552	798	1,350	13,261
(*a*) Kanpur	—	10	10	6	504	510	11,115
(*b*) Rest of U.P. ..	23	7	30	546	294	840	2.146
West Bengal	23	18	41	438	587	1,015	9,073
Delhi	—	4	4	—	167	167	3,438
Pondicherry	2	3	5	54	103	157	2,679
Goa	1	—	1	25	—	25	—
Total	370	291	661	8,159	12,522	20,681	206,445

Following table shows the break-up according to ownership and present status of the mills which are not privately owned.

	Number of Mills	Installed Spindles (Million)	Installed Looms (Thousand)
Government Run Mills (N.T.C.) ..	111	3·20	48
Other than N.T.C. ..	22	0·54	6
Co-operative Mills ..	57	1·24	—

Ranking in the World: India occupies second in terms of spindles (after China), fourth in terms of cotton consumption (after China, U.S.S.R. and U.S.A.).

Cotton Textile Export Promotion Council: (Address: Engineering Centre, Mathew Rd., Bombay 400004). It is an autonomous body and a non-profit making organisation and was set up in 1954 for the promotion of exports of mill-made cotton yarn and piece goods, cotton manufactures and all hosiery and readymade garments.

GENERAL

Per Capita Availability: The estimated per capita availability of cotton cloth in 1979 was 10·19 metres as against 10·21 metres in 1978, 9·57 metres in 1977 and 11·26 metres in 1976. The slight fall reflects the growth in population and the fractional decline in production.

Readymade Garments: India's exports of readymade garments had picked up swiftly in recent years. The export value was hardly Rs. 140 million in 1971-72. It rose to Rs. 1,450 million in 1975-76, Rs. 2,571 million in 1976-77 and Rs. 3,384 million in 1979-80.

National Textile Corporation Ltd. (Details in the chapter on 'Govt. of India Undertakings'.) A public sector undertaking. It was set up in 1968 to take over and run 'sick' textile mills in the country. Similar corporations are also set up in the State sector of Gujarat, Kerala, Maharashtra, Madhya Pradesh, Tamil Nadu and Uttar Pradesh.

Indian Cotton Mills' Federation (ICMF): (Address: Textile Centre, 34. P. D'Mello Rd., Poona St., Wadibunder, Bombay 400009). Established in March 1958. It is the apex body representing the cotton mill industry of India. The object of ICMF is to watch over, protect and promote the interests of the industry.

Research: Extensive research on cotton textiles is carried out by the following organisations: (1) Ahmedabad Textile Industry's Research Association (ATITRA), P.O. Polytechnic, Ahmedabad 380015, Gujarat. It also has several regional research stations in Gujarat doing research on cotton. (2) Bombay Textile Research Association, Ghatkopar, Bombay 400077. (3) Shri Ram Institute for Industrial Research, 19 University Road, New Delhi 110007. (4) South India Textile Research Association, Coimbatore 641014, Tamil Nadu. (5) Textile and Allied Industries Research Organisation, Kala Bhavan, Vadodara 390001, Gujarat. (6) Northern India Textile Research Association, 1-119, Himalaya House, Kasturba Gandhi Marg, New Delhi 110001.

Publications: (1) *Texprocil Bulletin* (fortnightly), brought out by the Cotton Textile Export Promotion Council; (2) *Indian Cotton Mills Federation Journal* (monthly), Textile Centre, 34, P. D'Mello Rd., Poona St., Bombay 400009; (3) *Indian Textile Bulletin* brought out by the office of the Textile Commissioner; (4) *Handbook of Statistics on Cotton Textile Industry*, Indian Cotton Mills Federation Textile Centre, P. D'Mello Rd., Bombay 400009.

PRODUCTION

The actual production of cotton yarn and cloth by the mill sector is as follows :—

Year	Yarn in '000 kg.	Cloth in '000 metres					
		Coarse	Medium B	Medium A	Fine	Superfine	Total
1976 ..	1,005,900	553,400	1,130,000	1,788,000	163,000	246,000	3,880,000
1977 ..	846,000	413,000	921,000	1,601,000	95,000	193,000	3,223,000
1978 ..	912,000	442,000	910,000	1,684,000	86,000	129,000	3,251,000
1979 ..	952,000	414,000	954,000	1,651,000	65,000	122,000	3,206,000

EXPORTS

Exports of mill-made Cotton Textiles—Fiscal Year Basis

	Cotton Fabrics		Cotton Yarn		Cotton Apparel	Cotton Hosiery	Other Cotton Manufactures	Total
	Quantity (Million square metres)	Value (Million Rs.)	Quantity (Million Kgs.)	Value (Million Rs.)	Value (Million Rs.)	Value (Million Rs.)	Value (Million Rs.)	Value (Million Rs.)
1976–77 ..	563·31	2,011·80	18·52	310·00	2,571·00	141·10	526·90	5,560·80
1977–78 ..	266·32	1,070·29	10·42	225·30	2,354·10	200·70	561·40	4,416·70
1978–79 ..	332·20	1,411·90	5·70	131·70	3,231·80	164·90	373·60	5,313·90
1979–80 (P)	400·00	1,892·10	6·00	154·80	3,383·90	254·80	471·50	6,157·10

(P) Provisional.

DAIRY INDUSTRY

(See chapter on Animal Husbandry for details on cattle and buffalo breeding programmes)

MILK and milk products contribute about Rs. 8,933 million to the national income. Of the 230 million cattle and buffaloes, only 81 million (35 per cent) are milch animals. Besides, the milk yield is 157 kgs. a year in the case of a cow and 504 kgs. a year in the case of buffalo. The highest average daily milk production per animal in milk, both for cows and buffaloes, is in Punjab which is only 2·28 kgs. and 3·99 kgs. per day respectively. The average annual milk production per cow is 4,154 kgs., in U.S.A., 3,959 kgs. in U.K. and 3,902 kgs. in Denmark.

India now ranks fourth in the world in the matter of milk production with about 29 million tonnes (1979-80). Nearly 60 per cent is marketed and the balance is used for home consumption or feeding calves.

Per Capita Consumption: The per capita consumption of milk and milk products varies from State to State.

The per capita availability of milk (1979-80) was estimated at around 120 gms. (4·2 oz.) per head.

Dairy Plants: The total number of dairy plants in operation during 1979-80 was estimated to be 190 comprising 94 plants handling liquid milk, 30 milk product factories and 66 pilot milk schemes/rural dairy centres with an average throughput of some 6·2 million litres per day. The capacity utilisation has been estimated at 66 per cent. Recently there has been a spurt in milk production particularly in Maharashtra and Gujarat due to the Operation Flood Programme. This project aims at covering a population of 2·0 million milch cattle and buffaloes spread over 18 milk sheds in selected States.

The **Operation Flood 1,** was launched on July 1, 1970, and completed by June 30, 1981. Already 1·3 million rural milk producers and their families benefit from it. Action centres in 18 rural milk sheds in ten States have been created, where the infrastructure for the procurement of rurally produced milk, its processing — its marketing in the four major urban milk markets — has been developed, with facilities for marketing the inputs needed for increased milk production to the milk producers. The two-tier cooperative organisations of the milk producers thus being created, in each of the rural action centres, will own and operate a feeder balancing dairy, a cattle feed compounding factory, the animal health care facilities, the artificial insemination and the extension services, and will be linked to a modern milk transportation system. Simultaneously milk processing and distribution by the modern dairies in the four major cities is being expanded.

Under **Operation Flood II,** in addition to the four major milk markets, modern milk marketing will now be organised in the other 144 cities in the country which had a population of over 100,000 in 1971. It is estimated that in these cities 52·9 million people, on an average, consume 7·8 million litres of milk per day and the equivalent to 2·0 million litres of milk daily in the form of milk products. The demand for milk in these cities is expected to increase to 11·2 million litres per day while that for milk products to 2·8 million litres (milk equivalent) per day by 1985, when the urban population involved will have increased to 65·1 million.

Most of the milk districts identified by the National Commission on Agriculture lie within 25 contiguous milk shed areas of potentially high and economic milk production. Under Operation Flood II, within each of these 25 milkshed areas (155 districts), a Cluster, Federation will be established of Milk Producers' Union; each Union usually will be comprised of 200-600 village cooperative societies. Thus, in all the 25 clusters to be formed (4 districts will have independent action centres) by 1985, some 115 million improved milch animals will be covered. Most of these clusters will be built around the 18 core action centres created under Operation Flood 1. The country's milk production of 68·7 million litres daily in the pre-project period is projected at 103·2 million litres daily in 1985 through the integrated milk production enhancement programmes envisaged in the programme. Average per capita milk consumption would thus rise from the present 107 gms. daily to 144 gms. daily in 1985.

The **Objectives of Operation Flood II:** (*i*) To enable some ten million rural milk producers' families to build self-sustaining dairy industry by mid-1985. (*ii*) To enable the milk producers to rear a National Milch Herd of some 15 million cross-bred cows and upgraded buffaloes by mid-1985. (*iii*) To erect a National Milk Grid which will link the rural milksheds to the major demand centres with urban populations totalling some 150 million. (*iv*) To erect the infrastructure required to support a viable national dairy industry; including a national frozen-semen system; vaccine production and delivery systems; indigenous development of dairy processing and conservation methods with enlarged facilities for indigenous design and manufacture of dairy equipment; provision of manpower development programmes, ad-interim programmes to supply butter-oils as a medium-priced cooking medium and extruded foods as the basis for infant supplementary feeding programmes, and erection of a Management Information System. (*v*) To enable milk and milk products to form a nutritionally adequate diet — currently estimated at an average per capita availability of 180 grams of milk daily, which is to be achieved for a population of 750 million during the 1980's.

During 1976-77 (provisional), 24,000 co-operative dairy societies were operating. State level federation is functioning in Gujarat. Also in certain states, there are State Dairy Development Corporations as in Gujarat, Punjab, Rajasthan, Madhya Pradesh, Karnataka, Tamil Nadu, Andhra Pradesh, Uttar Pradesh and Bihar.

MAIN DAIRY PLANTS

List of main milk plants in operation in Public and Co-operative Sector (1979) giving names of state, town, installed capacity, average procurement and throughput (in litres per day) respectively :—

Andhra Pradesh: Anantapur: 20,000, 7,800, 7,800; Chittoor: 50,000, 44,550, 44,550 ; Kurnool: 25,000, 22,400, 22,440 ; Karim Nagar: 12,000, 3,700, 3,700 ; Mydukur: 25,000, 19,950, 19,950 ; Nellore: 40,000, 20,750, 20,750 : Nizamabad: 12,000, 6,600, 6,600 ; Rajamundry: 25,000, 12,600, 12,600 ; Vishakapatnam: 50,000, 23,450, 23,900; Warangal: 12,000, 5,500, 6,750 ; Khamam: 12,500, 1,450, 3,600.

Assam : Gauhati : 10,000, 11,050, 11,050.

Bihar: Darbhanga: 6,000, 1,150, 1,150; Gaya: 8,000 (not in operation) ; Ranchi : 6,000, 3,350, 3,350 ; Bhagalpur: 2,000, 650, 650.

Chandigarh: Chandigarh: 40,000, 18,900, 53,650.

Delhi: Delhi Milk Scheme : 375,000, 146,400, 237,100 ; Mother Dairy (Delhi): 400,000, 193,050, 336,200.

Gujarat: Ahmedabad : 140,000, 157,100, 175,450 ; Baroda : 100,000, 74,850, 78,050 ; Bhavnagar : 10,000, 7,000, 9,600 ; Surat : 150,000, 138,050, 139,050 ; Junagarh : 25,000, 10,050, 10,050 ; Baroach : 30,000, 22,750, 23,000 ; Jamnagar : 5,000, 5,150, 6,100.

Goa : Ponda : 10,000, 7,450, 8,450.

Haryana : Ambala : 20,000, 12,250, 12,250.

Himachal Pradesh : Mandi : 10,000, 4,300, 4,300 ; Nahan : 1,800, 3,400, 3,400.

Jammu and Kashmir : Jammu : 10,000, 1,800, 2,500 ; Srinagar : 10.000, 2,350, 2,450.

Karnataka : Bangalore : 150,000, 89,601, 43,650 ; Belgaum : 10,000, 8,900, 8,900 ; Bhadravati (Shimoga) : 10,000, 7,550, 7,550 ; Gulbarga : 10,000, 1,900, 2,000 ; Hubli Dharwar : 10,000, 11,000, 12,550 ; Kudigee : 4,500, 16,750, 16,750 ; Mangalore : 10,000, 6,100, 6,100 ; Mysore : 10,000, 24,200, 24,200; Devangere : 6,000, 1,850, 1,850.

Kerala : Alleppey : 2,000, 5,450, 5,450 ; Ernakulam : 10,000, 14,400, 14,400 ; Trivandrum : 20,000, 38,600, 38,600 ; Calicut : 6,700, 6,050, 6,100 ; Palghat : 6,000, 3,150, 3,150 ; Kottayam : 6,000, 5,450, 4,200.

Manipur : Imphal : 6,000, 2,600, 3,500.

Maharashtra : Aurangabad : 35,000, 33,300, 33,300; Bombay Aarey : 250,000, 85,890, 858,950 ; Bombay Worli : 450,000, 85.890, 858.950 ; Bombay Kurla : 400,000, 85,890, 858,950 ; Dhulia : 160,000, 118,500, 118,300 ; Kolhapur : 85,000, 63,400, 63,850 ; Nagpur : 100,000, 55,050, 55,050 ; Nasik : 50,000, 39,250, 42,850 ; Pune : 100,000, 109,350, 116,300 ; Sholapur : 60,000, 58,250, 58,250.

Madhya Pradesh : Bhopal : 20,000, 20,000, 23,350 ; Gwalior : 10,000, 5,600, 5,600 ; Indore : 20,000, 23,600. 23.600 ; Jabalpur : 10,000, 4,250, 5,430.

Orissa : Cuttack : 6,000, 3,450, 3,450.

Pōndicherry : Pondicherry : 10,000, 9,200, 9,750.

Punjab : Jullundur : 50,000, 25,650, 25,650.

Rajasthan : Jaipur : 20,000, 25,650, 25,650 ; Ajmer : 50,000, 32,700, 32,700.

Tamil Nadu : Madras-Madhavaram : 125,000, 85,850, 141,300 ; Madras-Ambattur : 200,000, 57,900, 68,000 ; Erode : 160,000, 68,150, 68,150 ; Chidambaram : 5,000, 1,550, 1,550 ; Coimbatore : 16,000, 15,700, 17,250 ; Kodaikanal : 2,000, 1,900, 1,900 ; Kanya Kumari : 2,000, 11,050, 11,050 ; Thanjavur : 16,000, 5,800, 6,500 ; Trichy-Srirangam : 16,000, 5,850, 5,850.

Tripura : Agartala : 2,000, 1,400, 1,650.

Uttar Pradesh : Agra : 10,000, 10,050, 10,050 ; Allahabad: 10,000, 2,350, 2,350 ; Almora : 3,000, 500, 500 ; Haldwani: 10,000, 3,850, 3,850 ; Mathura : 10,000, 3,600, 3,600 ; Lucknow : 4,000, 11,250, 11,250 ; Dehradun : 20,000, 2,600, 2,600 ; Varanasi : 4,000, 1,260, 1,260 ; Gorakhpur : 10,000, 300, 300; Kanpur : 50,000, 10,500, 10,500 ; Bareilly : 10,000, 1,900, 1,900.

West Bengal : Calcutta-Haringhata : 300,000, 45,750, 222,550 ; Dhankuni : 400,000, 12,250, 23.700 ; Durgapur : 55,000, 4,500, 9,150.

Source : Dairying in India — 1979.

Milk Products:

Following is the list of milk products factories in Public, Co-operative Sectors giving State, town, installed capacity, average procurement and throughput (in litres per day) respectively (1979):

Andhra Pradesh : Hyderabad: 200,000, 133,750, 133,750 ; Vijayawada : 150,000, 81,500, 81,500 ; Sangamjagrelmudi : 150,000, 32,000, 34,150.

Bihar : Barauni : 100,000, 10,450, 10,450 ; Patna : 100,000, 7,260, 8,650.

Gujarat : Anand : 700,000, 469,450, 469,450 ; Banaskantha : 150,000, 113,750, 113,750 ; Rajkot : 45,000, 23,060, 23,060 ; Mehsana : 450,000, 348,950, 348,950 ; Sabarkantha : 150,000, 195,450, 195,450.

Haryana : Bhiwani : 25,000, 9,000, 9,000 ; Jind : 50,000, 19,600, 19,600 ; Rohtak : 100,000, 29,750, 29,750.

Maharashtra : Miraj : 120,000, 85,550, 85,550 ; Jalgaon : 100,000, 70,550, 70,550 ; Warna Nagar : 100,000, 38,200, 38,000 ; Udgir : 120,000, 35,900, 35,900.

Rajasthan : Bikaner : 100,000, 56,050, 56,050 ; Jodhpur : 100,000, 64,700, 64,700.

Punjab : Amritsar : 65,000, 47,250, 47,250 ; Bhatinda : 60,000, 23,150, 23,150 ; Ludhiana : 100,000, 46,350, 46,350; Hoshiarpur : 75,000, 28,450, 28,450.

Uttar Pradesh : Aligarh (Creamery) : 25,000, 31,700, 31,700 ; Moradabad : 55,000, 16,400, 16,400 ; Meerut : 100,000 ; 42,250, 42,250.

West Bengal : Siliguri : 100,000, 11,850, 11,850.

Tamil Nadu : Madurai : 3,150,000, 92,150, 92,150.
Source : Dairy Division (Ministry of Agriculture), Govt. of India.

Expansion Programmes: Following are schemes under expansion/implementation as on January, 1977 :

Arunachal Pradesh : Etah Nagar ; *Andhra Pradesh :* Chittoor, M.P.F. (New) ; *Assam :* Jorhat, Dibrugarh, Tejpur ; *Bihar :* Bokaro, Jamshedpur ; *Gujarat :* Panchmahal (Godhra) ; *Haryana :* Faridabad ; *Himachal Pradesh :* Kangra, Simla ; *Karnataka :* Bijapur, Bangalore (expansion), Mysore (expansion), Tumkur, Hassan ; *Kerala :* Cannanore, Quilon ; *Madhya Pradesh :* Bhopal, Indore, Ratlam, Ujjain, Rajapur ; *Maharashtra :* Udgir ; *Meghalaya :* Shillong ; *Mizoram :* Aizawal ; *Orissa :* Berhampur ; *Punjab :* Gurdaspur, Jullundur, Mohali, Sangrur ; *Rajasthan :* Alwar, Ajmer (expansion), Kota, Jaipur (second dairy) ; *Tripura :* Agartala (second dairy) ; *Uttar Pradesh :* Meerut, Rai Bareilly, Varanasi, Allahabad (second dairy), Faizabad, Azamgarh, Jaunpur, Pratapnagar, Unnao, Sitapur, Shahjahanpur, Farukhabad, Balaun, Bijnor ; *West Bengal :* Burdwan, Calcutta (second dairy), Krishna Nagar, Beldanga.

Milk Powder : The average daily production of milk powder and infant food is about 123 tonnes. The following table indicates the licensed capacity and production of different milk products during 1967 and 1980.

(in tonnes)

Products	1967 Capacity	1967 Production	1980 Capacity	1980 Production
Milk powder ..	22,416	4,050	—	32,600
Infant Milk Food ..	12,398	9,182	—	35,500
Malted Milk Food ..	8,915	6,766	—	22,500
Condensed Milk ..	13,860	6,600	—	5,600
Butter	N.A.	N.A.	—	10,800

Indian Dairy Corporation: Darpan, R. C. Dutt Rd., Vadodara 390005, Gujarat. (See 'Govt. Indl. Undertakings'.)

National Dairy Development Board: (Anand, Gujarat 388001). The National Dairy Development Board (NDDB) was constituted by the Ministry of Agriculture and Irrigation, Government of India, as an autonomous body. NDDB's major objectives are to make available on request, the information, skill and technical services needed to increase production of milk and dairy technical inputs, to speed up development of milk procurement, processing and distribution and to conduct research.

Veterinary Care: During 1975-76 there were 10,346 veterinary hospitals and dispensaries, 149 check-posts, 60 vigilance units and 33 vaccination stations.

Research and Education: (1) *The Indian Veterinary Research Institute*, in Izatnagar (U.P.), Haryana Agricultural Univ., Haryana and Punjabrao Krishi Vidyapeeth, Akola (Maharashtra) are post-graduate institutions for Veterinary Science. (2) *Central Sheep and Wool Research Institute*, Malpura, Rajasthan. (3) *National Dairy Research Institute*, Head Office at Karnal in Haryana.

Veterinary Colleges: There are 21 agricultural universities in the country with Department of Animal Husbandry.

The 24 veterinary colleges are at :— Tirupati, Hyderabad (Andhra Pradesh); Khannapara, Gauhati (Assam); Patna, Kanke-Ranchi (Bihar); Anand (Gujarat); Hissar (Haryana); Hebbal, Bangalore (Karnataka); Mannuthi, Trichur (Kerala); Mhow, Jabalpur (Madhya Pradesh); Madras city (Tamil Nadu); Bombay, Nagpur, Parbhani (Maharashtra); Bhubaneshwar (Orissa); Ludhiana (Punjab); Bikaner (Rajasthan); Mathura, Pantnagar (Uttar Pradesh); Belgachi, Calcutta (West Bengal).

Import of Milk and Milk Products in India

(in '000 tonnes)

Group	Item	1972–73	1973–74	1974–75	1975–76	1976–77
Milk and cream ..	Skimmed milk evaporated	324·2	225·1	446·0	775·1	4·8
Evaporated and condensed	Whole milk evaporated ..	540·2	33·1	19·9	778·8	19·5
	Others	504·0	83·4	136·9	742·9	142·6
	Whole milk air-tight ..	1·7	1·6	2·9	9·0	4,354·9
Milk and Cream dried	Whole milk dried-NES ..	1,190·9	2,851·5	240·3	5,660·3	189·1
	Milk cream dried	725·6	120·2	61·2	61·8	1·4
	Skimmed milk dried ..	37,669·4	26,846·8	27,527·7	32,531·2	27,767·9

Vaccine Plants: Behring Institute, a division of Hoechst Pharmaceuticals Ltd., has set up a factory in Bombay to manufacture vaccine for foot and mouth diseases among cattle. The annual capacity is 3 million doses which can be increased to 10 million doses if necessary. The Bhartiya Agro Industries Foundation, Pune has established a Foot and Mouth Vaccine plant at Vagholi, Pune with a capacity to produce 3·2 million quadrivalent doses expandable to 10 million doses. Indian Veterinary Research Institute has established another Foot and Mouth Vaccine Plant at Bangalore which will go into production in 1980. The Indian Dairy Corporation, Vadodara, is currently in the process of setting up the largest vaccine plant (for Foot and Mouth disease) in India at Hyderabad to have a final capacity of 25 million quadrivalent doses. The technology to be used is most sophisticated BHK cell techniques obtained through technical collaboration with Wellcome Foundation of U.K. The plant is expected to go on stream in 1982.

Publications: 'Indian Dairyman' (monthly) and 'Indian Journal of Dairy Science' (quarterly). Both brought out by the Indian Dairy Association.

DRUGS & PHARMACEUTICAL INDUSTRY

BRIEF HISTORY

THIS industry has grown considerably since 1947 both in the Private and the Public Sectors. In 1947 the Public Sector in the drugs industry was non-existent. In the early fifties the indigenous production of drugs and pharmaceuticals amounted to Rs. 350 million. It is consisted mainly of galenicals produced from medicinal plants and herbs and formulations of imported bulk drugs. On the whole, the industry had to depend largely on import of diverse chemicals, both basic and intermediates.

Present Structure : At present, the industry consists of 137 units in the 'organised sector', 5 'Govt. run units' and about 3,000 units in the 'small scale sector'. There are 26 companies with direct foreign equity above 40 per cent. 20 out of these 26 have a direct foreign equity exceeding 50 per cent. Of the 26 foreign companies with direct foreign equity above 40 per cent, one is a branch of a foreign company and two are companies with cent per cent foreign holding.

Production : Most of the drugs including the important life-saving medicines covering wide range of antibiotics, e.g. Penicillin, Streptomycin, Tetracyclines, Chloramphenicols, Erythromycin, etc., Sulpha drugs including long acting ones, e.g. Sulphasomidine, Sulfamoxole, Sulfadimidine, Phthalyl-Sulphathiazole etc., anti-T.B. drugs e.g. INH, PAS, Thiacetazone, Ethambutol etc., Vitamins, e.g. A, B_1, B_2, B_{12}, C, D, E, P & K, Folic Acid etc. Steroids, e.g. Prednisolone, Hydrocortisone, Betamethasone, Dexamethasone, Nandrolone, Norethisterone, Testosterone, Methyl Testosterone etc., and a host of other synthetics, phyto-chemicals and biological products are now manufactured within the country. The overall production of drugs and pharmaceuticals for the year 1978-79 was Rs. 2,000 million in terms of bulk drugs and Rs. 10,500 million in terms of finished formulations.

Output of other popular drugs (tonnes during 1978) was as follows: Ampicillin: 10. Erythromycin: 46. Analgin: 274. Paracetamol: 157. Phenyl/Oxyphenyl Butazone: 73, Frusemide: 2, Amidopyrin: 16. Prednisolone: 1, Thiacetazone: 13. Chloroquin: 45. Amodiaquin: 25. Quinine: 23. Metronidazole: 55. Halogenated Oxyquinolines: 195. Chlorpropamide: 6. Caffeine: 80. Ephedrine: 31, Procaine: 21. Piparazine aud its salts: 74. Phenobarbitone: 23. D.E.C. Citrate: 23. Pheniramine: 8. Xanthinol Nicotinate: 9, Insulin: 1410 MU.

Production of various important drugs in physical terms during 1952, 1962, 1978 and 1979-80

Name of drugs 1	Units 2	1952 3	1962 4	1978 5	1979–80 6
Penicillin and its salts	MMU	—	85	330	327
Streptomycin and its salts	Tonnes	—	57	240	220
Tetracyclines (including Oxytetracycline & Doxycycline)	,,	—	21	244	257
Chloramphenicols	,,	—	22	95	111
P.A.S.	,,	—	254	752	480
I.N.H.	,,	1·35	60	94	154
Tolbutamide	,,	—	11	26	25
Aspirin	,,	140·00	445	1,303	996
Phenacetin	,,	—	2	90	141
Sulpha drugs	,,	41·87	222	812	1,342
DDS and its salts	,,	0·83	7	18	16
Vitamin A	MMU	—	21	60	59
Other vitamins	Tonnes	0·10	127·050	865	973

Expansion : The indigenous production of bulk drugs during 1979-80 was of the order of Rs. 2,260 million and of formulations Rs. 11,500 million. It has been estimated that the total requirement of bulk drugs by 1982-83 is expected to be Rs. 6,250 million which is likely to result in formulations worth Rs. 18,750 million. Thus additional production of bulk drugs worth Rs. 3,990 million and formulations worth Rs. 7,250 million have to be organised during the period 1980-81 to 1982-83. The investment needed for the above additional production has been estimated at Rs. 3,500 million for bulk drugs and Rs. 500 million for formulations.

New Drug Policy : Government's decisions on the recommendations made in the Report of the (Hathi) Committee on Drugs & Pharmaceutical Industry submitted in April, 1975 were announced in the Parliament on March 29, 1978. The decisions include the allocation of a leading role to the Public Sector, fostering the growth of the Indian (including small-scale) sector and regulation of the activities of foreign drug firms in India, as well as rationalisation of pricing and profitability. Twenty-five drugs have been earmarked for production exclusively by the Public Sector and 23 for production by the Indian sector including the Public Sector while 66 items have been left open for licensing for all sectors.

The New Drug Policy provides that all foreign companies with the exception of those involved in the production of 'high technology' bulk drugs, should reduce their foreign equity holdings to 40 per cent. Sixty-six per cent of the balance of the equity currently held by the foreign companies, not in the 'high technology' category, should be divested in favour of Government financial and public sector institutions and the rest in favour of Indian investors. Under the New Drugs Policy, foreign companies would be entitled to formulation licences only for production linked to 'high technology' bulk drugs and grant of such licences to them is subject to the company concerned agreeing to supply 50 per cent of the production of such bulk drugs to non-associated formulations, simultaneously limiting the value of formulation of five times the value of total bulk drug production.

Bulk Drugs Import & Distribution : In the case of 26 bulk drugs, imports are being made by State Chemicals & Pharmaceuticals Corpn. of India Ltd. on the basis of foreign exchange released by the Government. These are being distributed by the State Chemicals & Pharmaceuticals Corpn. of India Ltd. by IDPL as per the Pricing Policy determined by the Ministry of Petroleum, Chemicals & Fertilizers.

Price Control : Control over the prices of drugs was first introduced in the country in 1963. The retail prices of drugs then prevailing were frozen and it was provided that prior approval of the Government should be obtained for any increase in prices.

Later in June, 1966, an order was promulgated under which approval of government for fixing prices of new drugs had to be taken, and, marking of retail prices on containers of drugs was made compulsory.

A comprehensive order was issued in May, 1970, designed to :

1. bring down the prices of those essential drugs whose prices generally remained very high ;
2. provide sufficient incentives to the industry to maintain and facilitate its growth from the basic stage and to develop research facilities and expansion in a planned manner ;
3. promote diversification of entrepreneurship in the future development of this industry and thereby provide better opportunities for Indian personnel with requisite technical qualifications ; and,
4. curb excessive profits.

In order to give relief to the drug manufacturing units with a turnover not exceeding Rs. 5 million per annum, they were exempted from the requirement of obtaining government approval for the prices of their formulations. This continues under the new drugs policy.

The order was amended effective from May 1, 1975 to provide that no retailer shall sell any formulation to the customer at a price exceeding the retail price of that formulation in the price list approved by the Central Government or the price displayed on the label of the container of the formulation whichever is less, plus local taxes, if any payable.

In order to give effect to the Pricing provisions of the New Drugs Policy, Government of India have issued on 31st March, 1979, the Drugs (Price Control) Order, 1979 (DPCO, 1979) replacing the Drugs (Pricing Control) Order, 1970. As envisaged under the New Drugs Policy, the Order brings under control three categories of formulations clamped as Category I, II and III formulations. The DPCO, 1979 provides that the ceiling on mark-up of Category I formulations shall be 40 per cent, Category II formulations 55 per cent and Category III formulations 100 per cent. Formulations which are not included under any of these three categories have been exempted from price control. In respect of Category I and II formulations, the DPCO, 1979 provides for Leader Prices, based on the prices of efficient major manufacturers, which would be the ceiling prices for all manufacturers of such formulations including those in the small-scale sector. Prices which are lower than the Leader Prices which were frozen and any revision thereof required Government approval, have now been allowed to go up to the Leader Prices Level, by deletion of clause 12(2) of the DPCO, 1979. Prices can go up to leader level only for those formulations which have the same compositions and are marketed in the same packs as those notified as leaders. The DPCO enables leader to be identified in Category III also.

Under the DPCO, 1979 all bulk drugs which are used in the production of price controlled formulations have been placed under price control. In this respect, DPCO, 1979, has improved upon DPCO, 1970 under which firms could declare prices of bulk drugs which had not been categorised as essential under that Order and were obliged to seek Government approval only when they sought to increase these declared prices.

Research and Development : A premier role is played in Research and Development by the laboratories in the public sector. In Indian Drugs and Pharmaceuticals Ltd., the main objectives have been stabilisation and updating of available technologies, development of new processes in drugs and pharmaceuticals, solution of day-to-day problems and import substitution. While the R & D unit of IDPL at Antibiotics Plant, Rishikesh has facilities for conducting R & D work in various disciplines like mycology, microbiology, biochemistry, organic chemistry, pharmacology etc., and also for the development of newer and better formulations, their R & D unit at Synthetic Drugs Plant, Hyderabad has R & D facilities in the disciplines of chemistry, biology and pilot plant divisions etc.

During the year 1977-78, a tetracycline derivative was prepared by IDPL and this was taken up for pharmacological testing after initial tests had shown a promising potential. Five pilot plant projects, viz. Diazepan, Furazolidone, Glybenclamide, Thiamine Mononitrate and Trimethoprim were also successfully completed. During 1978-79, IDPL successfully developed processes for N-Methyl piperazine, Frusemide, Trimethoprim, Aminophylline, Theophylline and Neomycin sulphate.

The Research Laboratory of Hindustan Antibiotics Ltd., was established in 1955 with activities directed towards product development, import substitution etc. Its notable achievement has been the discovery of two new antibiotics namely Hamycin and Aureofungin. It also discovered an Enzymatic process for the production of 6-APA from Penicillin G first crystals.

In the private sector also, there are a number of drug research centres of which those of Bengal Immunity (managed by the Govt. w.e.f. May 18, 1978), Sarabhai, Ciba-Geigy and Hoechst are important. These research units have contributed significantly improving the existing technology, development of new processes and drugs and import substitution of several raw materials and intermediates.

At present, almost all types of instruments required for the production of bulk drugs are available indigenously and in most cases, technologies are also available in India except for some antibiotics where the latest available technologies have to be obtained from international sources.

In spite of these encouraging developments, overall investment in R & D in India is insignificant as compared to the very high order of such investment in certain advanced countries of the world. In order to correct this imbalance, the New Drugs Policy has made it obligatory on the part of foreign drug companies, having a turnover in drugs in excess of Rs. 50 million per annum, to invest on R & D facilities within the country at least 20 per cent of their net block and further to spend at least 4 per cent of their sales turnover as recurring expenditure on R & D facilities. Besides this, the foreign drug companies have also been asked to undertake transfer of technology laterally to public sector units where national interests justify the setting up of additional capacity.

ELECTRONICS INDUSTRY

BRIEF HISTORY

THE Electronics Industry in India is increasingly playing an important role in the national development. This industry in India nucleated during the early 1950's with the manufacture of radio receivers by a few private firms. Since then, it has not only grown in total volume, but also has diversified enormously. In fact, there is hardly any major sector of economy in which electronics does not find some use. The trend has been towards growth of professional electronics and self reliance in many of the high technology sophisticated fields.

Even a brief survey of developments in the country indicates the vital support offered by the electronics industry. More than 80 per cent of India's population is now covered by the mass communication media like radio and television. The defence preparedness is now based on the indigenously manufactured radars and other sophisticated systems, the process control instrumentation is being increasingly used for economic running of different processes and manufacturing industries like fertilizers, petrochemicals, etc. Indigenously produced computers are being used in some cases. Electronics plays a pivotal role in the control of nuclear reactors and optimal distribution of power through the grids. The launching of the first Indian satellite was testimony of our ability to design and implement complex projects involving myriad of electronic systems.

Growth of Electronics: During the last ten years, the production of electronic equipment and components has increased tremendously. Table 1 gives a profile of the production of electronic items over the last five years. During the last few years many technical entrepreneurs have started electronics industry in the small scale sector. The commercial viability of such small scale units was demonstrated through the successful manufacture of items in consumer electronics and instrumentation area. The private sector is also responsible for substantial export of electronic items, and has entered into areas like radio frequency cables, microwave components, digital instruments, control equipment, etc.

Export of electronic items increased from Rs. 396 million in 1978 to Rs. 466 million in 1979.

Consumer Electronics: The main items in this sector are radio, TV, tape recorders, record players and public address systems. The total production in this sector increased from Rs. 1,573 million in 1978 to Rs. 1,790 million in 1979 registering a growth of about 14 per cent. The total production of radio receivers increased from 4·12 million in 1978 to about 5·13 million in 1979. The small-scale sector played an important role in the growth of radio manufacture. In order to encourage the production of low cost radio receivers the government has reserved this item for production in the small-scale sector and exempted them from excise duty. Currently, the ownership of the radio receivers is estimated to be about one set for every 35 persons in the country. The production of TV receivers in 1979 was around 311,000. A wider base for tape recorder industry and cassette radio combinations has been established in the past few years. The production of record players has increased, there has been an increase in the production of amplifiers and PA systems. Production of electronic calculators has also increased, both in quantity and variety.

Production of Electronic Equipment and Components during the last five years

(Rs. million)

Calendar year	Consumer Electronics & Mass Communications	Telecommunication Equipment	Aerospace & Defence Equipment	Computers, Control & Instruments	Equipment Total	Components	SEEPZ Production for Export	Equipment & Components Total
1975 ..	845	970	490	585	2,890	750	5	3,645
1976 ..	1,030	1,100	500	640	3,270	800	30	4,100
1977 ..	1,305	1,260	550	1,025	4,140	905	40	5,085
1978 ..	1,585	1,265	620	1,190	4,660	1,170	75	5,905
1979 ..	1,800	1,275	605	1,310	4,990	1,360	115	6,465

Consumption of Electronic Goods

($ million)

Country	Electronic Equipment	Electronic Components	Consumer End Equipment	Professional End Equipment
India ..	440	110	115	325
U.S.A. ..	49,000	9,000	7,500	41,500
France ..	5,000	1,700	900	4,100
U.K. ..	5,000	1,500	1,000	4,000
Japan ..	11,500	4,600	3,500	8,000

Figures for foreign countries from " Electronics 1985 " published by Electronic Industries Association, Washington DC.

Telecommunication Equipment: During the last few years the demand for sophisticated telecommunication equipment has been rising.

It has become possible to supply indigenously developed microwave equipment for the second satellite earth station at Dehradun. A 6-hop 4 GHz broadband 1,800-channel system, meeting the CCITT specifications has also successfully completed evaluation trials. The 6 GHz equipment meeting similar performance is now in production. Many other equipment such as narrow band and medium capacity systems, microwave instruments, microwave antennae, UHF communication systems, crossbar switching equipment, multiplex equipment, etc., are in continuous development and production in the public sector.

Direct trunk dialling by subscribers (STD) is now in operation between more than 70 pairs of cities. The telex network connects over 12,400 subscribers in about 50 cities. In the area of international communications, the first satellite link was established through **Intelsat IV** in 1971. The second satellite earth station in Dehradun near Delhi was commissioned in February 1977. The overseas service has taken another major step with the installation of a SPG international exchange at Bombay and direct dialling facilities between Bombay-London and Delhi-London.

The development and production activities in the telecommunication field and VHF/UHF communication are continuing in the **Indian Telephone Industries, Bharat Electronics Limited, Hindustan Teleprinter Limited, Hindustan Cables Limited** and **Electronics Corporation of India Limitted** (for details see Government of India undertakings). There are plans to supplement these efforts in some of the newly set up State Electronics Development Corporations. Research and Development in telecommunication is continuously being carried out in the Telecommunication Research Centre under the Ministry of Communications.

Seven satellite earth stations are being planned to establish faster and reliable communication even in remote areas. In the next phase, there will be 32 earth satellite stations to be installed under this plan.

Another noteworthy development is the execution of communication and telemetry systems for offshore oil wells near Bombay.

Computers and Data Processing Equipment: The first computer in India started its operation more than 16 years ago. Since then, there has been a rapid growth in terms of computer installations and throughput. At present there are about 500 computer systems installed in the country, including about 100 systems manufactured by Electronics Corporation of India Limited, Hyderabad. It is estimated that about 15 large size and 250 medium size and 400 mini-computers will be required in the next three to four years. A wide variety of computer peripherals will also be required to support these new installations.

The present indigenous manufacturing programme for peripherals is for low-speed devices. Two public sector companies have undertaken the development work for a variety of peripherals like consol keyboard printers, card readers, dot matrix printers, cassette drives, magnetic tape drives, visual display units and direct entry devices. The production of some of these items will be started shortly.

DETAILS OF PROJECTS (ITEM-WISE) APPROVED DURING 1977-78

Sl. No.	Item	Qty. approved for manufacture (Nos.)	Ex-factory value (Rs. million)	Investment in C.G. proposed (Rs. million)		Employ-ment (persons)	Proposed exports (per cent)
				Imported (cif)	Indigenous		
1	2	3	4	5	6	7	8
1.	Electronic measuring and supervisory systems for industrial applications	500 chains	12·50	0·41	0·25	75	—
2.	Industrial electronic control equipment	—	36·45	0·74	1·28	218	
3.	Electronic instruments including digital instruments ..	1975	22·40	2·43	2·86	270	—
4.	Power electronic equipment	—	31·50	0·40	1·00	520	—
5.	Digital programme timer, etc.	10,000	3·00	—	—	—	—
6.	Two-way communication equipment	4,800	30·00	0·80	0·50	235	—
7.	Transmission equipment ..	—	250·00	30·60	11·80	965	--
8.	Crossbar equipment ..	60,000 lines	205·70	23·20	55·70	2,265	—
9.	Video tape recorders ..	250	3·75	0·05	0·05	30	—
10.	Central despatch system ..	100	6·00	0·12	0·35	45	
11.	(i) Computer peripherals of various kinds .. .. (ii) Computer printer devices (iii) Magnetic cassette devices (iv) Terminal displays ..	15,300 20,000 12,000 75,000	221·10	34·20	33·30	1,200	9
12.	Data logging equipment ..	100	8·00	0·70	0·45	45	—
13.	Data entry systems ..	400	14·00	0·15	0·10	22	—
14.	Performance monitor ..	6	0·86	—	—	—	—
15.	TV cameras	100	0·75	—	—	—	—
16.	Television sets	120,000	80·00	3·90	6·60	1,108	82
17.	Prerecorded cassettes and cartridges & reels	1·55 million	25·00	6·80	1·00	300	75
18.	Magnetic tapes	240 MRM	13·80	8·80	1·70	102	80
19.	DC micromotors	30,000	8·08	1·50	0·60	27	90
20.	Semiconductor devices ..	7·7 million	67·20	15·05	4·84	561	—
21.	Pulse transformers/electromagnetic relay times/ferrite devices	2·25 "	32·40	0·30	—	400	100
22.	(i) Plastic film capacitor (ii) Metallised film ..	20·0 100 MT	42·60	22·00	3·00	150	76
23.	(i) Mica plate parts .. (ii) Mica capacitors ..	150·0 million 15·0 "	21·75	3·15	0·10	454	100
24.	Lighted push button switch ..	0·2	1·60	0·25	0·15	34	—
25.	(i) Computer system .. (ii) Card readers .. .. (iii) Line printers .. .. (iv) Magnetic tape transport	20 100 100 200	71·75	9·40	3·50	1,026	—

In order to gain experience in development and application of computer and related technologies two national centres namely, **National Centre for Software Development and Computing Techniques** (NCSDCT) and **National Informatics Centre** (NIC) have been up with the assistance of UNDP. NCSDCT is functioning at the Tata Institute of Fundamental Research at Bombay. The primary objectives of this centre are to develop software tools and computing techniques to support the growth of a major self-reliant computer and associated semiconductor industry. The National Informatics Centre at Delhi was set up for developing methodologies relating to large data bases and their development. Experiments of data communication are also in progress. The Department of Electronics is also setting up regional computer centres at various locations in the country.

Considering the importance of maintenance and efficient operation of wide variety of computers already installed in the country, and to be installed, the Department of Electronics has set up a **Computer Maintenance Corporation** in the public sector. This corporation is responsible for coordinating and implementing all aspects of system design and maintenance of computers. It will also stock and ensure continuous and fast supply of spares for the systems in operation.

Another notable development is the efforts made to generate computer software for exports. With the highly skilled software personnel available in the country, there is considerable potential for building up this industry, especially for exports. India has started exporting computer software to countries in the West, USSR and Eastern Europe.

Control and Industrial Electronics: With the accelerating progress in technology, industrial processes have become increasingly complex. It is vital to run them with adequate and sophisticated instrumentation and control systems, so that operational cost, efficiency and quality are optimised. In the field of instrument servo components, two of the prominent groups are Servo Control Division at ECIL and Control Guidance & Instruments Division of SSTC. Indigenous production of servo components has been established with the manufacture of servo and hysteresis motors, synchros and rate gyropackages. There are about 70 units engaged in the manufacture of process control instruments. The types of instruments produced cover temperature measurement using mercury, resistance and pyrometric methods, gauges for pressure measurement, strain gauge instrumentation and a variety of analysers. **Instrumentation Limited** (for details see Government of India Undertakings) is producing a wide variety of pneumatic instruments. The items manufactured in the field of industrial electronics cover a wide variety of drives, numerical control machines, dielectric, induction, furnaces, etc. The development in this field has been rapid and the basic components like thyristors and high power silicon diodes are being manufactured. New areas in industrial electronics like pollution monitoring equipment and agro-electronic instruments are growing rapidly.

Instruments: A wide variety of instruments like test and measuring, analytical, nuclear, geoscientific etc. are being manufactured in the small scale sector. The test and measuring instruments manufactured include instruments like digital multimeter, admittance bridge, oscilloscopes, communication test equipment and TV test instruments. The analytical instruments manufactured include pH meters, conductivity meters, spectrophotometers and calorimeters. The production of nuclear instruments like GM counters, phase analysis equipment, reactor control instruments, whole body counters is mainly concentrated at ECIL, Hyderabad. The present manufacturing base for geoscientific and related instruments is quite modest, although the demand for these instruments is growing due to the increasing activity in oil and mineral exploration.

Medical Electronic Equipment: One of the spin-offs due to increasing sophistication in electronics is the emergence of a new area called bio-medical engineering or medical electronics. In India, though the field of medical electronics is still in its infancy, it has made a significant start. New equipments in increasing numbers are currently being used in many hospitals. The production of medical electronics equipment is mainly in the small and medium scale industries both in the public and private sectors. X-ray equipment constitutes the major share of the equipment manufactured. Some of the other equipments currently being manufactured are electro-cardiograph, respirator, foetus heart detector, hearing aid and stimulator.

Components & Materials: In the field of components, the production has risen from mere Rs. 65 million in 1965-66 to Rs. 1,360 million in 1979. However, as compared to consumer grade components, the production of professional components is lagging behind. Consumer grade components in addition to meeting the local demand are also being exported.

In the area of electron tubes, the production includes that of receiving and transmitting tubes, magnetrons, x-ray tubes, TV picture tubes and mixie tubes. In the area of semi-conductor devices, most of the production is of germanium and silicon discrete devices. As regards integrated circuits, Bharat Electronics Limited (BEL) is producing TTL ICs with indigenous know-how. Hybrid microcircuits are made by BEL and ITI. The planned Semiconductor Complex near Chandigarh will be manufacturing MOS LSI, bipolar LSI and LED's.

In the area of passive components, different varieties of resistors and capacitors are manufactured. About a dozen manufacturers are making coaxial, rack and panel and printed circuit connectors. Relays are also being produced in a fairly wide range. ITI Bangalore, makes telephone type relays for its telecommunication equipment switches which include rotary wafer, push button, toggle, snap-action, etc. are also being produced by more than 25 manufacturers. Other components like crystals, transducers, magnetic components, printed circuit boards are also being manufactured. In so far as materials are concerned, the electronic component industry still depends on imports to the tune of over 60 per cent. The production of some ultra-pure materials has been established at Special Materials Plant, Hyderabad. A wide variety of soft and hard ferrites are already under production catering to most of the requirements. Except some special plastics like PTFE, DAP and polycarbonate, etc., others are being locally manufactured.

PUBLIC SECTOR UNDERTAKINGS

Following are the names of the undertakings in the electronics field. Details about their production and addresses are given in the chapter on Government of India Undertakings.

1. Indian Telephone Industries (ITI). 2. Bharat Electronics Limited (BEL). 3. Hindustan Teleprinters Limited (HTL). 4. Electronics Corporation of India Limited (ECIL). 5. Instrumentation Limited (IL). 6. Hindustan Aeronautics Limited (HAL). 7. Central Electronics Limited (CEL). 8. Electronics Trade & Technology Development Corporation (ETTDC). 9. State Electronics Development Corporation (SEDC).

Private Undertakings: There are large number of private undertakings like Philips, Bush, Murphy, Weston, Televista, Continental Devices etc. who are contributing substantially to the growth of the electronics industry.

FERTILISER INDUSTRY

IT was in the Third Plan that the industry received a big boost. As against the allocation of Rs. 11,500 million in the Fifth Plan the actual expenditure on the schemes in the first four years of the Plan was about Rs. 15,000 million. Most of the capacity developed in the fertiliser field is based on naphtha but in view of the increasing pressure on naphtha, Government has decided that new plants would be based either on coal or fuel oil heavy petroleum fractions depending on the suitability of the locations, availability of raw materials, demand considerations, etc. In pursuance of this policy, two large-sized coal-based plants are under implementation at Talcher and Ramagundam each consuming about 1 million tonnes of coal per annum. Following the discovery of oil in the Bombay High Bassein structures and in the context of the availability of quantities of gas for fertiliser production, the Government has revised the entire feedstock policy. The new policy formulated in January 1978, envisages setting up of future fertiliser plants based mainly on gas and coal, preference being given to gas-based plants. Use of fuel oil shall not be permitted, while Naphtha can be allowed if an existing plant at an inland location can be expanded quicker, with lower capital cost.

There are more than 60 fertiliser factories of various sizes in the private and public sectors.

Public sector : Following are the public sector units :-

For effective management the Government has reorganised the *Fertiliser Corporation of India* and *National Fertilisers Ltd.* into five companies with effect from April 1, 1978. The names of the companies with their units respectively are: 1. *Fertiliser Corporation of India:* Sindri Modernisation and Sindri Rationalisation, Sindri Fertiliser, Gorakhpur, Talcher, Ramagundam ; 2. *National Fertilisers Ltd.:* Nangal, Bhatinda, Panipat ; 3. *Hindustan Fertiliser Corpn. Ltd.:* Namrup, Haldia, Barauni, Durgapur ; 4. *Rashtriya Chemicals & Fertiliser Ltd.:* All units at Trombay; 5. *Fertiliser (Planning & Development) India Ltd.*

Fertilisers and Chemicals Travancore Ltd. (FACT). Udyogmandal (Alwaye). Kerala. The first factory in India to manufacture chemical fertilisers on a commercial basis, now a Government of India Enterprise. It consists of: two production units — one at Udyogmandal and the other at Ambala, a design and consultancy division name FACT Engg. and Design Organisation (FEDO); a fabrication and erection division called Fact Engg. Works (FEW); and a marketing division. The Udyogmandal Division produces ammonium sulphate, superphosphate, ammonium phosphate 16:20 and 20:20, ammonium chloride and synthetic cryolite. The Cochin Division produces urea and NPK complex fertilisers.

Madras Fertilisers Ltd., Manali, Madras 600068 (Tamil Nadu), with an annual capacity of 176,000 tonnes of nitrogen and 112,000 tonnes of phosphates commenced production in November, 1971. It is a joint venture in which the Government of India holds 51 per cent of the equity capital while the remaining 49 per cent is equally shared between Amoco India Incorporated of USA and the National Iranian Oil Co. of Iran.

Indian Farmers' Fertilisers Co-operative Ltd. (IFFCO), have ammonia/urea complex at Kalol and NPK at Kandla both in Gujarat. In addition one ammonia/urea complex at Phulpur, U.P. is under construction.

TABLE 1
GROWTH OF FERTILISER INDUSTRY

('000 tonnes)

Year/period	Capacity during the period	
	N	P_2O_5
Before 1947	5 (5)	31 (31)
In 1947	5 (10)	5 (36)
In 1950	5 (15)	8 (44)
1951-1955 (I Plan)	70 (35)	20 (64)
1956-1960 (II Plan) ..	157 (242)	31 (95)
1961-1965 (III Plan)	306 (548)	133 (228)
1966-1968 (Annual Plans) ..	221 (769)	193 (421)
1969-1974 (IV Plan) ..	1,170 (1,939)	79 (500)
(a) 1974-75	42 (1,981)	305 (500)
(b) 1975-76	518 (2,509)	192 (692)
(c) 1976-77	479 (2,988)	109 (801)
(d) 1977-78	40 (3,028)	144 (915)
(e) 1978-79	231 (3,259)	615 (1,080)
(f) 1979-80	(3,891)	(1,230)

Notes : 1. This table gives only large manufacturers of fertiliser.
2. Figures in brackets represent cumulative totals.

Source : Ministry of Chemicals and Fertilisers.

STATE SECTOR: Bihar State Superhosphate Factory, Dhanbad; Associated Industries, Assam; Hyderabad Fertiliser & Chemicals, Hyderabad; Maharashtra Agro Chemicals, Maharashtra.

PRIVATE SECTOR: The major private sector units in production, under implementation and approved in principle are mentioned with their capacity in Table III.

Production & capacity: In terms of production and capacity, fertiliser industry, as a whole, has made rapid strides. Indigenous production in this sector meets about 65-70 per cent of the demand. The Fourth Plan and the first four years of the Fifth Plan recorded a very significant growth in the development of capacity and production. High nutrient fertilisers like urea, DAP urea, ammonium phosphate & NPK complex fertilisers are being produced in large quantities as compared to ammonium sulphate and superphosphate produced at the initial stage.

During 1975-76, India hit the annual production target for fertiliser for the first time in 10 years. Production in 1975-76 of over 1·5 million tonnes of nitrogen represents approximately a 30 per cent increase over that of 1·185 million tonnes in 1974-75. The production of nitrogenous fertilisers (in terms of tonnes) during 1976-77, 1977-78, 1978-79, 1979-80 was 1·9 million, 2 million, 2·170 million and 2·26 million respectively.

The production of phosphatic fertilisers increased from 480,000 tonnes in 1976-77 to 670,000 tonnes in 1977-78, and to 770,000 tonnes in 1978-79. Production in 1979-80 was 7·57 million tonnes. However, the **consumption of fertilisers** has also been increasing during the past few years and imports have been necessary to bridge the gap between demand and production (Table II gives production of N and P_2O_5 fertilisers during the last few years).

The total installed capacity of **nitrogenous fertilisers** at the end of 1979-80 was 3·891 million tonnes of which 2·838 million tonnes was in the Public Sector, 1·294 million tonnes in the Private Sector and 215,000 tonnes in the Co-operative Sector (The unit-wise capacity is given in Table III).

At present total capacity of 2·280 million tonnes of Nitrogen and 208,000 tonnes of P_2O_5 is being installed. By 1985-86 Nitrogen capacity would increase to about 6·85 million tonnes. The capacity of P_2O_5 would increase to about 1·53 million tonnes when the 2 plants under implementation are completed. A few more phosphatic projects are under consideration (The break-up of the capacity under implementation is given in Table III).

TABLE II

Total Production ('000 tonnes)

Year	Nitrogen	P_2O_5
1974–75	1,185	327
1975–76	1,535	320
1976–77	1,900	480
1977–78	2,000	670
1978–79	2,170	770
1979–80	2,226	757

The total installed capacity of nitrogenous fertiliser industry (in terms of plant nutrient N) as at the end of 1976-77 was of the order of 3·028 million tonnes. The share of public sector and co-operative sector units was 1,760,000 tonnes.

The capacity under implementation stage is estimated at 2·070 million tonnes. In addition to this, the capacity approved in principle, amounted to 1·637 million tonnes.

The break-up of the existing capacity in both the sectors as well as that under implementation stage is set out in Table III.

Phosphatic Fertilisers: The total production of both straight and complex phosphatic fertilisers which shows a marginal fall from about 331,000 tonnes in 1974-75 to about 323,000 tonnes in 1975-76, due to high prices in the inputs were covered in the subsequent years and the production increased to about 670,000 tonnes of P_2O_5 in 1977–78, 770,000 tonnes in 1978-79 and 757,000 tonnes in 1979-80. The installed capacity of phosphatic fertilisers in both the sectors is set out in Table III.

TABLE III

(A) PROJECTS IN PRODUCTION

(as on 1–12–80)

('000 tonnes)

Name of Factory	Capacity in terms of nutrient	
	N	P_2O_5
Public Sector		
1. FCI		
(*a*) Sindri	219	150
(*b*) Nangal (NFL)	80	—
(*c*) Nangal (Expansion)	152	—
(*d*) Trombay I (RCF)	90	46
(*e*) Trombay II (RCF)	75	75
(*f*) Gorakhpur (including expansion) (FCI)	131	—
(*g*) Namrup (including expansion) (HFC)	197	—
(*h*) Barauni (HFC)	152	—
(*i*) Durgapur (HFC)	152	—
(*j*) Panipat (NFL)	235	—
(*k*) Bhatinda (NFL)	235	—
(*l*) Talcher (FCI)	228	—
(*m*) Ramagundam (FCI)	228	—
2. FACT:		
(*a*) Alwaye	82	44
(*b*) Cochin I	152	—
(*c*) Cochin II	40	114
3. Neyveli Lignite Corpn., Neyveli	70	—
4. SAIL, Rourkela	120	—
5. Madras Fertilisers Ltd., Manali	176	112
6. H.C.L. Khetri	—	80
7. By products (Nitrogen)	24	—
8. Single Superphosphate-Factories	—	35
TOTAL (Public Sector)	2,838	665
Private Sector		
1. Coromandel Fertilisers, Vizag	84	104
2. EID Parry, Ennore	16	10
3. Gujarat State Fertilizers Co. Ltd., Vadodara	236	50
4. Indian Explosives Ltd., Panki, Kanpur	207	—
5. Mangalore Chemicals & Fertilisers, Mangalore	156	—
6. New Central Jute Mills, Varanasi	10	—
7. Shriram Chemical Industries, Kota	152	—
8. Southern Petrochemical Industries, Tuticorin	258	73
9. Zuari Agro Chemicals Ltd., Sancoale	171	42
10. By-products (Nitrogen)	4	—
11. Single Superphosphate Factories	—	211
TOTAL (Private Sector)	1,294	490
Co-operative Sector		
Indian Farmers' Fertiliser Co-operative Ltd., Kandla & Kalol	215	127
(A) GRAND TOTAL (Projects in production).	4,347	1,282

(B) PROJECTS UNDER IMPLEMENTATION

(As on 1-12-80)

Name of Factory	Capacity in terms of nutrient ('000 tonnes)	
	N	P^20^5
Public Sector		
1. Haldia	152	75
2. Trombay V	152	—
3. Namrup III	152	—
4. (a) Thal Vaishet I (b) Thal Vaishet II	683	—
TOTAL (Public Sector) ..	1,139	75
Private Sector		
1. Gujarat Narmada Valley Fertilisers Co. Ltd., P. O. Narmadanagar, Bharuch	273	—
2. Deepak Nitrite, Taloja ..	50	—
3. Kanpur (Expansion) ..	100	—
4. S.S.P. Plants	—	40
TOTAL (Private Sector) ..	423	40
Co-operative Sector		
1. Indian Farmers' Fertiliser Coop. Ltd. (Being Commissioned), Phulpur	228	—
2. Kandla (Expansion) ..	50	133
3. (a) Hazira I .. (b) Hazira II ..	668	—
TOTAL (Co-operative Sector)	946	133
(B) GRAND TOTAL (Projects under implementation)	2,508	248
GRAND TOTAL (A + B)	6,855	1,530

(C) PROJECTS UNDER CONSIDERATION

Name of Factory	Capacity in terms of nutrient ('000 tonnes)	
	N	P_10_5
1 Kakinada	228	—
(C) GRAND TOTAL (Project under active consideration)	228	—
ALL INDIA CAPACITY (A + B + C)	7,083	—

Fertiliser types: Table IV shows the production of various types of fertilisers with the number of units and their installed capacity.

Manures and Composts : The Ministry of Agriculture has taken up a very comprehensive programme for the development of organic manures in the country in view of its importance in building up of soil fertility and also because of constraints in the availability of fertilisers. The programme is : (*i*) Preparation of rural and urban compost ; (*ii*) distribution of sewage and sullage ; (*iii*) intensification of green manuring programme ; (*iv*) establishment of *gobar* gas plants.

TABLE IV

('000 tonnes)

Types of Fertiliser	1979–80		
	No. of units	Installed capacity	Actual Production
Amm. Sulphate ..	9	938	491
Amm. Phosphate Sulphate	2	236	169
Calcium Amm. Nitrate	2	800	465
Nitro-Phosphate ..	2	661	454
Urea	20	6,448	3,506
Amm. Chloride ..	2	66	11
Di-Ammonium Phosphate	2	219	185
Superphosphate ..	33	1,400	1,007
Triple Superphosphate	1	416	23
Urea Amm. Phosphate	3	401	261
Complex NPK ..	5	1,496	1,192

It is proposed to set up 27 compost plants in cities having a population of more than 0·3 million. An ambitious programme for the establishment of 100,000 *gobar* gas plants had been undertaken.

Energy Equivalent : The energy equivalent of 24 million litres of kerosene can be made available if all the 400 million tonnes of wet cattle dung, now being used as manure, is converted into biogas. Besides conversion of the dung through biogas plants will yield 236 million tonnes of manure of enriched nitrogen quality.

The 1966 census estimated the cattle population in India at 230 million with an estimted 800 million tonnes of wet dung produced annually. However, a recent study by the National Council of Applied Economic Research (NCAER) estimated the availability of wet dung at 1,355 million tonnes. According to NCAER 33 per cent of the total cattle dung — approximately 400 million tonnes — is used as manure and the rest as fuel.

In the rural areas the per capita consumption of cattle dung cake is around 9 kgs. per month. The average rural household therefore consumes 540 kgs. a year. In urban areas the average per capita consumption of dung cakes in 36 kgs. a year.

Urban Compost : Under the technical guidance of the Gujarat Agro-industries Corporation, a compost manure plant has been put up by the Vadodara Municipal Corporation at Atladara. It has an installed capacity to process 125 to 150 tonnes of garbage per day. Such plants are also being put up in various other cities.

TABLE V

CONSUMPTION OF FERTILISERS

('000 tonnes)

	1976-77	1978-79	1979-80
Nitrogen (N)	1,766	2,457	3,498
Phosphatic (P_2O_5) ..	472	635	1,151
Potassic (K_2O) ..	336	319	606

The growth rate in fertiliser consumption during 1979-80 decelerated to just 3·9 per cent from 19·6 per cent in 1978-79. In absolute terms, the consumption of fertilisers during 1979-80 is estimated at 5·32 million tonnes. However, there is no mistaking the fact that the Indian farmer is increasingly resorting to the use of chemical fertilisers. This is evident from the fact that the off-take of fertilisers has risen sharply from a low figure of 2·26 million tonnes in 1970-71 to 5·32 million tonnes, in 1979-80.

As stated in Table IV, the consumption has increased substantially during 1976-77, 1977-78, 1978-79 and 1979-80 due to a series of price reductions and favourable weather conditions.

Five States, namely Andhra Pradesh, Maharashtra, Uttar Pradesh, Tamil Nadu and Punjab account for more than 59·81 per cent of total consumption. The States having very low consumption of fertiliser per agricultural land are Madhya Pradesh, Assam, Rajasthan, Jammu & Kashmir, Himachal Pradesh, Orissa, Tripura and Manipur.

The States which showed a sharp increase in consumption of nitrogenous fertilisers during 1976-77 were Uttar Pradesh, Punjab, Haryana, Rajasthan, Maharashtra, Kerala, Gujarat, Goa, West Bengal and Orissa. Other states like Tamil Nadu, Karnataka, Gujarat, Kerala have also registered increase in consumption from 1977-78 onwards.

Pricing: In order to ensure a reasonable return on the investment and facilitating the development and growth of the industry the Government have introduced a system of retention prices of units in the nitrogenous fertiliser industry with effect from November 1, 1977. The system provides for a fair ex-factory retention price per tonne of urea for each plant based on a capacity utilisation of 80 per cent and a combination of values and actuals in regard to the consumption of raw materials and other imports, etc. The retention price system has been introduced also for phosphatic fertilisers with effect from February 1979.

Imports: Higher production of fertilisers in the country has resulted in the saving of foreign exchange which India would have spent on imports. The trend in imports of fertilisers is given in the table below:

('000 tonnes)

Year	N	P	K	Total
1974-75 ..	884	286	437	1,607
1976-77 ..	750	23	278	1,051
1977-78 ..	758	164	599	1,521
1978-79 ..	1,228	243	517	1,988
1979-80 ..	1,295	237	473	2,005

General: *Potassium Fertilisers:* To substitute potassium sulphate chloride which is being imported at present, the Central Salt and Marine Chemicals Research Institute in Bhavnagar, Gujarat, has developed a process for manufacturing potassium chloride and potassium schoenite from mixed salts.

The Institute has set up a commercial plant at Kandla in the private sector having a capacity of manufacturing 1,000 tonnes of potassium chloride and 2,000 tonnes of potassium schoenite (epsom salt) annually.

Role of F.C.I. (Training): F.C.I. had initiated a number of scientific and technological programmes for popularising the use of fertilisers: (*i*) Fertiliser Promotion and Agricultural Research Centre at Calcutta, to demonstrate the use of fertiliser; (*ii*) a Rice Production Training Centre was set up at Durgapur during 1972-73 to impart right technique of rice cultivation; (*iii*) the F.C.I. had also taken up studies to assess the efficiency of slow release sulphur coated urea fertiliser, at the instance of FAO for plants under different climatic and soil conditions. With a view to producing fertiliser containing micronutrients, Fertiliser Corporation of India started a training institute which provides refresher courses for all categories of employees. The Corporation also implemented the Indo-German Fertiliser Education project to popularise the use of nitro-phosphate complex fertilisers to be manufactured at Haldia.

Research: Fertiliser Association of India near Jawaharlal Nehru University, New Delhi 110057, has set up a Fertiliser Institute (new Technical Division) which does research on the pathological problems of the industry, holds lectures, group discussions and publishes papers on the research done. The institute also holds courses in marketing from time to time. The FPDIL at Sindri is engaged in providing project and engineering consultancy services for the new projects and diversification programmes besides its important role as a research and development organisation. The P. & D. developed their own know-how for the manufacture of catalysts used in the fertiliser industry and many of these catalysts are put to commercial use.

Consultancy & Engineering Services: FPDIL., FEDO of FACT and EIL are the three Indian organisations engaged in the detailed designing & engineering, erection & commissioning of many of the fertiliser projects set up in the country since 1966. These organisations, especially P. & D. has developed enough expertise in this field. There are other consultancy organisations for specific areas.

Many sophisticated equipments, needed for the industry, are locally fabricated. Now the foreign exchange requirement for the installation of fertiliser plants has come down to about 30 per cent.

Some Large Units:

1. Gujarat State Fertilizers Co. Ltd., Fertilizer Nagar 391750, near Vadodara, Gujarat.
2. E.I.D. Parry Ltd., Dare House, P.B. No. 12, Madras 600001.
3. Coromandel Fertilisers Ltd., 126, Sarojini Devi Rd., Secunderabad 500003, Andhra Pradesh.
4. Shriram Chemical Industries, 18, Kanchanjanga, Barakhamba Rd., New Delhi 110001.
5. Indian Explosive Ltd., 17/3, M. G. Marg, Kanpur 208001.
6. Zuari Agro-Chemical Ltd., Goa.
7. Southern Petro-Chemical Industries Corpn., Madras.
8. New Central Jute Mills Co. Ltd., Varanasi 221001, Uttar Pradesh.
9. Andhra Fertilisers Ltd., Tadepalle 534101, Andhra Pradesh.
10. M/s. Shaw Wallace and Co. Ltd., Avadi, Madras 600054.
11. Dharamsi Morarji Chemical Co. Ltd., Prospect Chambers, 317/21, Dr. D. Naoroji Rd., Bombay 400001.
12. Ralli Chemical Works, Magarwara, Uttar Pradesh.
13. D.C.M. Chemical Works, Naaz Building, 1, Jhandewalan. New Delhi 110055.
14. Phosphate Co. Ltd., 14, N. Subhas Rd., Calcutta 700001.
15. Jayshree Chemical and Fertilizer Ltd., Calcutta 700001.
16. West India Chemical Ltd., Pune.
17. Mangalore Chemicals and Fertilisers Ltd., Mangalore.
18. Adarsh Chemicals & Fertilisers, Calcutta.

FILM INDUSTRY

WITH a total of 714 films produced in 1979 and 742 in 1980 the Indian Film Industry has a claim to the first place in the world in the quantitative terms. With almost every other kind of entertainment out of the reach of the common man, films serve to fill a big gap in the social structure of India.

Revenue: The gross annual earning of the years 1979 and 1980 remained more or less steady at approx. Rs. 5,500 million. More than half of it (approx. Rs. 3,000 million) went straight to the State Governments in the form of entertainment tax. Besides this, Central and State Governments impose a lot of other taxes on film industry, such as excise duty on the completed prints, levy on films exceeding a certain prescribed length, customs duty on raw stock and equipment, show tax and municipal tax, etc. The export revenue for 1979 was Rs. 121,464,016 and for 1980 Rs. 150,741,199.

Colour Films: With a natural bias of the audience towards colour films, number of colour films is on the increase every year. Few Black & White Hindi films have been made during the past few years. All the big regional films are made in colour too.

Employment: The industry has a total capital investment of approx. Rs. 6,947 million including approx. Rs. 6,382 million invested in the cinema-halls. Against this the industry provides employment to about 200,000 persons including about 163,000 persons employed by the cinema-halls.

Film Censorship: Film censorship continues to be ruled by the censorship rules laid down in 1918 and amended from time to time. The last amendment (1978) outlined the objectives of censorship as : (*a*) The medium of film remains responsible and sensitive to the values and standards of society ; (*b*) Artistic expression and creative freedom are not unduly curbed and (*c*) Censorship is responsive to social changes. The new guidelines also state that the board should ensure that films are judged in their entirety from the point of view of their overall impact and that they are examined in the light of contemporary standards of the country and the people to which the film relates.

No. of Theatres and Cinema Houses: The number of cinema-houses is pathetically short of the requirements. With 9,551 cinemas in operation in 1979 (including 3,521 touring cinemas) and 10,782 in 1980 (including 4,155 touring cinemas) the number of cinema-houses per million population was about 11·6 in 1979 and about 12·8 in 1980. This ratio, one of the lowest in the world, gives a handful of people the virtual control over the release of all films. This shortage is also responsible for exceptionally heavy theatre rentals which in turn are the cause of exhorbitant ticket rates. Heavy taxation enhances the ticket rates further.

Finance: Finance for film industry is procured from various sources. Since the person producing a film generally has nothing to guarantee against the borrowed money, it is usually lent on the basis of the saleability of project which in turn is judged by the popularity of stars working in it. Popularity of stars is an unstable factor and a project which was highly saleable when started can turn into a non-saleable one by the time it is completed. This forces many of the films to remain incomplete. Among those completed and released, only a small percentage are really successful. Others lose money or just break even. The risk element, therefore, is high and so are the interest rates — upto 60 per cent per annum.

Structure of the Film Industry

(Rs. million)

	1979	1980
Capital investment	6,947	N.A.
Annual output of feature films ..	714	742
Number of studios in operation ..	66	N.A.
Number of theatres	9,551	10,782
Number of producers (approx.) ..	1,000	N.A.
Number of distributors (approx.)	1,000	N.A.
Number of persons employed in the industry	200,000	200,000
Number of laboratories	26	N.A.
Number of cinemas per million population	11·6	12·8
Number of average daily attendance (million)	9·5	9·5
Number of cinemas mostly showing foreign films	100	N.A.
Gross annual earnings (approx.) (million)	5,500	5,500

N.A. — Not available.

Number of Films Produced in India (1971 to 1980)

Year	Black & White	Colour	Total
1971	289	128	417
1972	236	165	401
1973	278	170	448
1974	225	210	435
1975	243	222	465
1976	267	240	507
1977	217	340	557
1978	—	—	600
1979	201	513	714
1980	107	635	742

The production of Hindi feature films which was showing a downward trend since 1973 suddenly picked up from 134 in 1977 to 145 in 1980. Among the regional films Tamil, Marathi, Bengali, Malayalam, Kannada, Gujarati and Punjabi showed a considerable increase in 1980 over the previous year. The production of Tamil films during 1980 was 145.

National Awards: Government of India has instituted 64 awards for excellence in various fields of film making, known as National Awards. These include four 'Swarna Kamals', 60 'Rajat Kamals' and cash prizes totalling Rs. 546,000. The prestigious Dada Saheb Phalke Award, consisting of Rs. 40,000 besides a 'Swarna Kamal' and a shawl, is given every year to a veteran for outstanding contribution to the cause of Indian cinema.

The State governments of Maharashtra, Gujarat, Kerala, Karnataka and Tamil Nadu have also instituted their own annual State awards for films.

Filmfare Awards: These awards were instituted in 1953 and first presented in 1954. These awards are given annually by the 'Filmfare' magazine of Bennett, Coleman &

Co. Ltd., Bombay, publishers of the 'Times of India' and Allied Publications. The total number of these awards is 44 which includes a cash prize of Rs. 5,000. (For list of Award winners see Chapter on "Awards & Prizes".)

Films Division: 24, Dr. Gopalrao Deshmukh Marg, Bombay 400026. The Films Division of the Ministry of Information and Broadcasting produces and distributes newsreels, documentaries and other films for the information, education and instruction of the people. Till the end of 1979–80, the Films Division had produced 2,442 newsreels and 2,846 documentaries. The Division produces more than 200 films a year in English and 14 Indian languages.

Chief Producer : N. S. Thapa.

Film and Television Institute of India, Law College Rd., Pune 411004.

The Institute conducts (*a*) A two year common course in cinema leading to specialisation in third year in Motion Picture Photography or Film Editing or Film Direction; (*b*) A one year course in Sound Recording and Sound Engineering.

Refresher Courses : Short term refresher courses in film appreciation and screen play writing are also organised.

Television Training is imparted in (1) programme production, (2) studio technical operations, (3) TV films and (4) TV graphics and design.

Director : N. V. K. Murthy.

National Film Archive of India, Law College Rd., Pune 411004. The Archive preserves the heritage of national and international cinema for study, research and reference. Its collection in December 1979 consisted of 5,087 films (nearly two thirds Indian and rest foreign), 8,873 books, 214 periodicals, 1,341 disc records, 14,558 photographic stills, 1,103 wall posters, 9,321 scripts, 2,688 song booklets, 3,928 pamphlets and folders on films.

Notable among its acquisitions are several silent films and talkies made in the early days of the Indian film industry as well as recent award winning Indian and foreign films.

The Archive holds regular screenings of classic films and conducts periodical courses in Film Appreciation at Pune, Bombay and other centres for promotion of healthy film culture.

The Archive also makes available film classics and related literature to film students, research workers and film societies for study purposes.

Curator : P. K. Nair.

National Film Development Corporation Ltd. (N.F.D.C.), 13–16, Regent Chambers, Nariman Point, Bombay 400021. On April 11, 1980, the Corpn. took over the activities of the erstwhile Indian Motion Pictures Export Corporation Ltd. (I.M.P.E.C.), Bombay and the Film Finance Corporation Ltd. (F.F.C.), Bombay.

Regional Offices: Film Chamber Building 3/122, Mount Rd., Cathedral P.O., Madras 600006; Shanti Niketan, 3rd Floor, 8, Camac St., Calcutta 700016; Plaza Theatre Building, Connaught Circus, New Delhi 110001. *Other Offices :* Distribution Wing: White House, 91, Walkeshwar Rd., Bombay 400006. Export and Import Wing: D-5, Shivsagar Estate, Dr. Annie Besant Rd., Worli, Bombay 400018. *Activities :* (*a*) Canalising export of Indian feature films and import of foreign films as well as raw films; (*b*) financing production of films and building of cinema houses; (*c*) distribution of foreign and Indian feature films as well as raw films.

Chairman : D. V. S. Raju; *Mg. Director :* Malati Tambay Vaidya; *Secretary :* A. Natarajan.

Children's Film Society, India, Hingorani House, Dr. Annie Besant Road, Bombay-400018, has branches at Delhi and Madras, and new branches are shortly to be opened at Calcutta and Trivandrum. Aided by the Govt. of India, the Society produces and exhibits children's films all over the country. It has so far produced over 100 feature films. It holds Children's Film Festivals in cities and towns at nominal admission rates and International Competitive Children's Film Festivals. It has a film library of 35 mm & 16 mm films in regional languages for school, club, home shows at concessional rentals. For wider coverage, shows are being held in schools in urban and rural areas.

Chairman : Dr. V. Shantaram.

Central Board of Film Censors, 91, Walkeshwar Rd., Bombay 400006: A statutory body set up under the Cinematograph Act, 1952, the Board sanctions films for public exhibition. During 1980 the Board examined 5,141 films. It granted 1,719 'U' and 100 'A' certificates to imported films and 1,952 'U' and 171 'A' certificates to Indian films.

Chairman : Hrishikesh Mukherjee.

Hindusthan Photo Films Manufacturing Co., Ltd. (details in the chapter on the Government of India Undertakings).

EXPORTS:

The export turnover has risen from Rs. 96·6 million in 1977–78 to Rs. 127·5 million in 1978–79. During the period April 1979 to January 1980 exports were of the order of Rs. 99·2 million.

Indian films are exported mainly to countries in which people of Indian origin are settled or which have close cultural ties with India. These countries include the UK, Singapore, Dubai, Indonesia, Morocco, Fiji, Kenya and Sri Lanka. Indian films are also exported to countries in eastern and western Europe, Africa and Latin America.

IMPORTS:

The Government of India have renewed the agreement with the Motion Pictures Export Association of America (MPEAA) in April 1975. American films as well as films from other film producing countries of the world are being imported through the Film Finance Corpn. Ltd., Bombay.

FILM ASSOCIATIONS

Indian Motion Picture Producers' Association, Sandhurst Bldg., Sardar Vallabhbhai Patel Rd., Bombay 400004: All problems connected with film production and disputes arising therefrom are taken care of by IMPPA. The IMPPA also acts as the central agency for registration of film titles, procurement of raw stock, make-up materials, magnetic films and other studio requirements.

President : Shreeram Bohra; *Sr. Vice-President :* Gulshan Rai; *Vice-President :* Brij Sadanah; *Hon. Treasurer :* T. C. Dewan; *Secretary :* S. N. Rau.

Film Producers' Guild of India Ltd., Shantshree, S. S. Rao Rd., Bombay 400012: Established in 1954, the Guild has a membership of over 100 active, regular producers. The organisation looks after all their problems as also difficulties arising out of film production. It makes representations to the Union and State Governments seeking redress of their grievances as also against levies, impositions and taxes. It also ensures regular supplies of materials required in the business of film production.

President : G. P. Sippy; *Vice-Presidents :* Ramanand Sagar, Atma Ram; *Hon. Treasurers :* Amit Khanna, S. D. Narang; *Secretary :* R. V. Ishwar.

Cinematograph Exhibitors' Association of India. Flat No. 22/23B, Vellard View, Tardeo Rd., Bombay

400034 : Established on July 1, 1942, the CEAI is registered under the Indian Companies Act. Its main objectives are to help and develop the exhibition trade in films and to co-operate with distributors and their organisations to ensure smooth exhibition of films. The organisation takes measures conducive to the interests and welfare of members in co-ordination with various interests in the film industry. The CEAI has over 1,600 members on its rolls.

President : U. S. Bhagwat.

Indian Motion Picture Distributors' Association, Vijay Chambers, Opp. Dreamland Cinema, Tribhuvan Rd., Bombay 400004 : The IMPDA ensures co-ordination among exhibitors, producers and distributors of motion pictures and takes care of the interests of distributors, in particular. It has a membership of 700.

President : Gulshan Rai ; *Vice-President :* N. N. Sippy ; *Treasurer :* Sunder F. Rai ; *Hon. Secretaries :* G. L. Naik, Devendra T. Shah.

JUTE INDUSTRY

BRIEF HISTORY

THE Indian Jute mill industry, born in 1855 at Rishra on the Hooghly, 21 kms. upstream from Calcutta, was a natural evolution of the centuries old cottage industry of Lower Bengal based on hand spinning and weaving of jute. By 1885 the Indian industry with its supremacy in the international markets firmly established, had 6,700 looms in production. Loomage shot up to 30,685 in 1909, to 50, 354 in 1927 and to 65,762 in 1949. For a decade or so the industry porduced the simplest constructions of sacking cloth. Product diversification continued with webbings, cotton bagging, linoleum hessian, jute carpets and rugs, carpet backing cloth, and decorative jute fabrics gradually added to the range. The industry has already modernised up to the spinning stages of manufacture. This, coupled with the improved technology and other rationalisation measures adopted by the industry, has helped it to increase production without increasing loomage.

LOCATION OF THE INDUSTRY

Number of jute mill companies in operation on Jan. 1, 1980 : West Bengal 54; Andhra Pradesh 4; Bihar 3; Uttar Pradesh 3; Madhya Pradesh 1 ; Assam 1 ; Orissa 1 ; All India 67.

Area in hectares under raw jute cultivation ; 1973–74 : 792,400 ; 1974–75 : 673,100 ; 1975–76 : 586,800 ; 1976–77 : 737,000 ; 1977–78 : 797,800 ; 1978–79 : 884,000.

The cultivation of raw jute is concentrated in three States — West Bengal, Bihar and Assam (For production refer to the Chapter on " Food & Agriculture ").

Public Sector: Negligible (only one small mill each in Assam and Orissa have gone into production).

No. of Persons Employed: Over 2 million farmers in Jute cultivation and about 400,000 persons in jute industry and trade.

No. of Strikes & Lock-outs: 1974 : 110 ; 1975 : 78 ; 1976 : 24 ; 1977 : 44 ; 1978 : 78 ; 1979 : 6.

No. of Man-days Lost: 1974 : 5·62 million ; 1975 : 8·77 million ; 1976 : 2·56 million ; 1977 : 1·00 million ; 1978 : 1·60 million ; 1979 : 6·51 million.

Capital Investment in the Industry: about Rs. 3,000 million.

Average Annual Sales: about Rs. 5,000 million.

Ranking in the World Market: India is the largest producer of raw jute in the world, followed closely by Bangladesh.

PRODUCTION

Following is the production of jute goods for mills reporting to the Indian Jute Mills Association accounting for about 90 per cent of total industry (in '000 tonnes).

1972–73 : 1,044 ; 1973–74 : 936 ; 1974-75 : 939 ; 1975–76 : 1,136 ; 1976–77 : 1,040 ; 1977–78 : 1,008 ; 1978–79 : 909.

The all India yield per hectare in bales (1 bale = 181·43 kgs.) ; 1972–73 : 7·11 ; 1973–74 : 7·85 ; 1974–75 : 6·73 ; 1975–76 : 7·59 ; 1976–77 : 7·26 ; 1977–78 : 6·73 ; 1978–79 : 7·32.

CONSUMPTION

(Million bales)

	1976–77	1977–78	1978–79
Mills consumption ..	6·80	6·80	6·25
Exports	0·05	0·25	0·30
Domestic consumption	0·25	—	—

EXPORTS: Jute goods are the country's largest foreign exchange earner. The table below gives the exports of jute and the foreign exchange earned in the last three years.

Year July-June	Exports ('000 tonnes)	Value (Rs. in million)
1976–77	428	1,863·5
1977–78	521	2,524·9
1978–79	317	1,701·8

GENERAL

Yield per hectare: The average yield of jute in India is about 1,318 kgs. per hectare during 1978-79.

Loomage: The exact world loomage is not known, but rough estimate puts it at 109,275. The total number of looms in India on January 1, 1978 was 44,200. Bangladesh was last reported to have 25,250 looms.

Directorate of Jute Development (Govt. of India) : MS Bldgs., Nizam Palace Campus, 234/4, Acharya J. B. Road, Calcutta 700020.

Office of the Jute Commissioner (Govt. of India), 20, British Indian St., Calcutta 700001.

Training: The industry has provided for elaborate and scientific technical training in the spinning and weaving of jute, quality control of jute goods, and maintenance of machinery at the **Institute of Jute Technology** at 35, Ballygunge Circular Rd., Calcutta 700019.

Research: The industry's needs for research and development are served by the **Indian Jute Industries' Research Association (IJIRA)**, 17, Taratola Rd., Calcutta 700053, which takes care of (1) Basic research, (2) Applied investigations, (3) Technical Service, (4) Product development, and (5) Raw jute development.

Jute Agricultural Research Institute: Nilganj, Barrackpore, West Bengal also researches into the problems of cultivation of raw jute and allied fibres.

Ten Largest Mill Companies (on the basis of loomage are all situated in West Bengal as on Jan. 1, 1978.

Note Figures for looms actually installed figures of loomage quoted under " Brief History " denote the number of looms registered, indicating the number of loomshifts allowed under the working time, agreement, defunct since 1964. The two sets of figures are therefore, not directly comparable

	Name of Mills	*Address*	*No. of Looms*
1.	New Central Jute Mills Co. Ltd.	Budge Budge, 24 Parganas	1,632
2.	National Co. Ltd.	Sankrail, Howrah	1,481
3.	Hukumchand Jute Mills Ltd.	Hazinagar, 24 Parganas	1,422
4.	Ganges Manufg. Co. Ltd.	Bansberia, Hooghly	1,297
5.	Anglo India Jute Mills Co. Ltd.	Kanknarrah, 24 Parganas	1,195
6.	Fort Gloster Industries Ltd.	Bauriah, Howrah	1,192
7.	Shree Hanuman Jute Mills	Ghusuri, Howrah	1,141
8.	Barnagore Jute Factory Co. Ltd.	Barnagore, Calcutta 700035	1,064
9.	Samnuggur Jute Factory Co. Ltd.	Bhadreswar, Hooghly	1,016
10.	Kamarhatty Co. Ltd.	Kamarhatty, 24 Parganas	924

LAC INDUSTRY

LAC is a resinous substance secreted as a protective coating by an insect known scientifically as "kerria lacca". The insect, about 0·5 m.m. long, belonging to the family of scale insects and mealy-bugs, is a parasite which lives and thrives on the sap of certain trees, bushes, shrubs and creepers which are called the 'lac hosts'.

There are four crops of lac named after the Hindu months in which the collection of each crop commences. These are 'Baisakhi' and 'Katki' from one strain of the insect (Rangeeni) and 'Jethwi' and 'Aghani' from another strain (Kusmi), each Rangeeni female produces 0·03 g. of somewhat dark lac, while each Kusmi female makes about 0·07 g. of a more valueable light-coloured lac.

LOCATION OF THE INDUSTRY

The lac factories are located in the following five States with the number of units in brackets: Bihar (83), West Bengal (87), Madhya Pradesh (16), Maharashtra (6) and Uttar Pradesh (6). (Total 198 units).

No. of Persons Employed: Bihar: 1,979; West Bengal: 2,209; Madhya Pradesh: 127; Maharashtra: 103; Uttar Pradesh: 95 (Total 4,513).

In addition about 4 to 5 million *Adivasis* are gainfully employed in the rearing and collection of lac from forests.

PRODUCTION

The lac insect is found in most of the near and far eastern countries but is commercially exploited only by India and Thailand. India's share in world production is about 50 per cent and Thailand's more than 40 per cent.

The all-India production of lac over the last four years (in tonnes) was as follows: 1976–77: 23,870; 1977–78: 20,000; 1978–79: 9,120; 1979–80: 15,253.

The final report issued by the Directorate of Lac Development, Ranchi, puts the total yield of 'Baisakhi' lac crop in 1979–80 at 10,345 tonnes; of 'Jethwi' lac at 294 tonnes; of 'Katki' lac at 3.930 tonnes; and of 'Kusmi' lac at 684 tonnes.

Bihar has the highest production 9,979 tonnes in 1979–80, followed by Madhya Pradesh 2,197 tonnes, West Bengal 769 tonnes and Uttar Pradesh 2,035 tonnes.

CONSUMPTION

India's consumption (in tonnes) over the last three years was as follows: 1977–78: 929; 1978–79: 1,000; 1979–80: N.A.

IMPORTS:

Imports of lac over the last few years are given below:

Year	Quantity in quintals	Value in Rupees
1974–75	4,578·1	5,953,607
1975–76	nil	nil
1976–77	95	34,446
1977–78	nil	nil
1978–79	nil	nil
1979–80	nil	nil

EXPORTS

Indian lac being indisputably the best in quality is sold to over a hundred countries. Over 85–90 per cent of the total production is exported. The largest buyers are China, U.S.A., U.S.S.R., and U.K. The export figures are as follows:

(In tonnes)

	1978–79	1979–80
China	879·0	821·0
U.S.A.	1,336·0	1,004·0
U.K.	880·0	667·0
U.S.S.R.	1,450·0	1,500·0
West Germany	370·0	383·0
Brazil	269·0	486·0
Italy	236·0	286·0
Australia	119·0	202·0
Japan	66·0	143·0
France	61·0	123·0
Other Countries	3,598·0	5,430·0
Total	9,264·0	11,045·0
Total value in Rupees ..	83,680,000	111,295,000

Shellac Export Promotion Council with headquarters at 14/IB Ezra St., Calcutta 700001.

GENERAL

For the development and marketing of lac, a **Directorate of Lac Development** has been created under the Department of Agriculture, Government of India with headquarters at Circular Road, Ranchi 834001, Bihar. The Government of India has also constituted the **Indian Lac Development Council** to advise it on all matters relating to development of lac cultivation, trade and industry.

The Bihar Co-operative Lac Marketing Federation Ltd., Ranchi, supports prices when they fall below economic levels. It is the only lac factory in Public Sector.

Research: To improve the technique of lac cultivation and to find new uses are the responsibilities of the **Indian Lac Research Institute** at Namkum, Ranchi, Bihar. This institute is under the control of the Indian Council of Agricultural Research and provides training facilities.

Important Uses: Lac is used in the manufacture of French polish, gramophone records, electrical insulating materials, shellac moulded articles, micanite, hats, grinding wheels, adhesives, cements, wood turning, metal enamelling, printing ink etc.

MAN-MADE FIBRE INDUSTRY

BRIEF HISTORY

THE Industry in India is of recent origin. The first unit to manufacture viscose rayon filament yarn, The Travancore Rayons Ltd., was incorporated in 1645. The actual production started in 1950.

In 1664, Robert Hooke predicted the possibility of viscose-fibre, but its reality came into being only in 1884 when the father of rayon industry, Count Hilarie de Chadonnet, produced rayon from nitro-cellulose solution. Commercial production started in France in 1891. But polymer 66 and 6 in nylon was only discovered in Germany in 1938.

In 1941, chemists J. R. Whinfield and J. T. Dickson discovered polyester. I.C.I. developed and produced the fibre commercially in U.K. and became an exclusive licencee for polyester fibre throughout the world except U.S. In the earlier days it was the cellulosic synthetic fibre which made the market, but in the last 20 years the more versatile non-cellulosic synthetic fibres have made tremendous headway.

Position in India

There are about 136,000 authorised powerlooms and 700 knitting machines besides a number of unauthorised powerlooms. The existing textile policy does not encourage further growth as it provides keen competition in cotton industry. Synthetics being durable, reliable and of high quality expanded the market significantly although the prices were 4 to 5 times higher than the cotton textiles. As a result, during the seventies, man-made fibre industry made rapid strides at the cost of cotton textile industry which registered a downward trend.

Rayon Units in India

Sirsilk Ltd., Sirpur, Kagaznagar, Andhra Pradesh ; The Baroda Rayon Corpn. Ltd., Udhna, Surat Dist., Gujarat ; The Indian Rayon Corpn. Ltd., Veraval Rd., Junagadh, Gujarat ; Travancore Rayons, Rayonpuram, Kerala ; Gwalior Rayon Silk Manufg. (Wvg.) Co., Ltd., Birlagram, Nagda, Madhya Pradesh ; Century Rayon, Murbad Rd., Shahad, Kalyan, Thane Dist., Maharashtra ; Shriram Rayons, Shrirampur, Industrial Area, Kota, Rajasthan ; South India Viscose Ltd., Sirumugai, Mettupalayam, Tamil Nadu ; J. K. Rayons, Jaykaypur, Kanpur, Uttar Pradesh ; Kesoram Rayon, Tribeni, Hooghly Dist., West Bengal.

PRODUCTION: There has been a phenomenal rise in man-made fibre production during seventies to 192,000 tonnes in 1979. The particulars of different varieties of the man-made fibres is given in Table 3. Statewise installed capacity of authorised powerlooms and knitting machines is given in Table 2. The major raw material suppliers to this industry are: Gujarat State Fertilizers, producing caprolactum ; I.P.C.L., Bongaigaon Refinery ; J.K. Synthetics producing D.M.T.; I.P.C.L. producing acrylonitrile ; Gwalior Rayon, South India Viscose, Andhra Pradesh Rayon supplying rayon grade wood pulp and Travancore Rayon producing cotton linter pulp.

Among the man-made yarn and viscose filament yarn, polyester filament yarn and nylon tyre yarn are produced above their installed capacity whereas viscose staple fibre, nylon filament yarn, rayon tyre yarn produce utilizing 80 to 90 per cent of their installed capacity (Table 3).

Per Capita Consumption — World

(in kg.)

Country	Population in millions	Synthetics	Total man-made fibres	Natural fibres like cotton, wool etc.	All fibres
Australia ..	14·1	10·1	12·5	11·3	23·8
Brazil ..	112·2	1·4	1·9	3·2	5·1
Canada ..	23·3	8·4	11·7	8·7	20·4
China (Mainland) ..	865·7	0·2	0·3	2·8	3·1
W. Germany	61·4	8·6	11·4	7·0	18·4
India ..	628·0	neg.	0·2	1·9	2·1
Japan ..	113·9	2·5	7·0	7·5	14·5
U.K. ..	55·8	6·7	9·3	5·6	14·9
U.S.A. ..	216·8	12·0	14·4	7·8	23·2
U.S.S.R. ..	258·7	1·5	3·1	9·8	12·9
Total world	4,280 (estimated)	2·0	2·9	3·9	6·8

LOCATION OF INDUSTRY

TABLE 1: Synthetic Fibre Units in India (In million kgs.)

Name of the unit*	Year of commencement	Licensed capacity per annum
Nylon filament yarn		
J.K. Synthetics Ltd., Kanpur, U.P. (Kota, Rajasthan)	1962	5·38
Garware Nylons Ltd., Bombay, Maharashtra (Pimpri, Pune, Maharashtra)	1962	3·35
Nirlon Synthetic Fibres & Chemicals Ltd., Bombay, Maharashtra (Goregaon, Bombay, Maharashtra)	1962	3·53
Modipon Ltd., Modinagar, U.P. (Modinagar, Uttar Pradesh)	1968	4·76
Century Enka Ltd., Bombay, Maharashtra (Bhosari, Pune, Maharashtra)	1969	4·00
Shree Synthetics Ltd., Ujjain, Madhya Pradesh	1972	1·74
Stretch Fibres (India) Ltd., Bombay, Maharashtra (Nagpur, Maharashtra)	1973	4·20
Baroda Rayon Corpn. Ltd., Bombay, Maharashtra (Udhna, Gujarat)	1974	2·44
Arthur Import & Export Co., Bombay, Maharashtra	—	0·80
Guptalon Ltd., Ludhiana, Punjab	[illegible]	1·00
Total ..	—	31·20

---

* Location of the factories is shown in brackets.

TABLE 1: Synthetic Fibre Units in India — *Contd.*

(In million kgs.)

Name of the unit*	Year of commencement	Licensed capacity per annum
Nylon staple fibre		
J.K. Synthetics Ltd., Kanpur, U.P. (Kota, Rajasthan)	1971	0·90
Arthur Import & Export, Bombay, Maharashtra		0·30
Total	—	1·20
Nylon tyre cord		
Nirlon Synthetic Fibres & Chemicals Ltd., Bombay, Maharashtra (Goregaon, Bombay, Maharashtra)	1971	2·19
J.K. Synthetics Ltd., Kanpur, U.P. (Kota, Rajasthan)	1972	3·00
Shriram Fibres Ltd., New Delhi (Madras, Tamil Nadu)	1975	3·00
National Rayon Corpn. Ltd., Bombay, Maharashtra (Kalyan, Maharashtra)	1975	2·20
Baroda Rayon Corpn. Ltd., Bombay (Udhna, Gujarat)	—	3·30
Total	—	13·69
Acrylic staple fibre		
J.K. Synthetics Ltd., Kanpur, U.P. (Kota, Rajasthan)		4·00
Indian Petro-chemical Corpn. Ltd., Vadodara (Gujarat)		12·00
Total	—	16·00
Polyester staple fibre		
Chemicals & Fibres of India Ltd., Bombay, Maharashtra (Thane, Maharashtra)	1965	10·00
The Ahmedabad Manufacturing & Calico Printing Co. Ltd., Vadodara, Gujarat	1967	6·10
J.K. Synthetics Ltd., Kanpur, U.P. (Kota, Rajasthan)	1972	6·00
Swadeshi Polytex Ltd., Ghaziabad (Kavinagar, Ghaziabad, Uttar Pradesh)	1973	6·10
Indian Organic Chemicals Co. Ltd., Bombay, Maharashtra (Manali, Tamil Nadu)	1973	12·20
Total	—	40·40
Polyester filament yarn		
Nirlon Synthetic Fibres & Chemicals Ltd., Bombay, Maharashtra (Goregaon, Bombay, Maharashtra)	1967	0·91
J.K. Synthetics Ltd., Kanpur, U.P. (Kota, Rajasthan)	1967	0·96
Garware Nylons Ltd., Bombay, Maharashtra (Pimpri, Pune, Maharashtra)	1973	0·58
Modipon Ltd., Modinagar, U.P. (Modinagar, U.P.)	1973	0·58
Shree Synthetics Ltd., Ujjain	1973	0·58
Baroda Rayon Corpn. Ltd., Udhna	1976	0·58
Petrofils Co-operative Ltd., Vadodara	1977	3·50
Century Enka Ltd., Bombay	1977	0·36
Total	—	8·05
Polypropylene staple fibre		
Neomer Ltd., Vadodara (Gujarat)	1977	6·00
Total	—	6·00

---

* Location of the factories is shown in brackets

RI LIB
1028(w)

TABLE 2: Licensed and Installed Capacity for the Manufacture of Raw Materials for Man-made Fibre Industry

Name of the unit	Year of commencement of production	Capacity (tonnes per annum) as on	Licensed	Installed
Caprolactum				
Gujarat State Fertilizer Co. Ltd.	1974	31–12–79	20,000	20,000
D.M.T.				
Indian Petrochemicals Corpn. Ltd.	1973	31– 3–80	24,000	24,000
Bongaigaon Refinery & Petrochemical Ltd. ..		31– 3–80	35,000	
J. K. Synthetics Ltd.	1978	31–12–79	4,000	500
Total ..			63,000	24,500
Acrylonitrile				
Indian Petrochemicals Corpn. Ltd.		31– 3–80	24,000	24,000
Rayon grade wood pulp				
Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd. :				
(*i*) Mavoor Plant	1963	31– 8–80	60,000	72,000
(*ii*) Harihar Plant	1972	31– 3–80	48,000	58,000
South India Viscose Ltd.	1969	31–12–79	42,000	42,000
Andhra Pradesh Rayon Ltd., Hyderabad ..		31– 3–80	26,250	—
Total ..			176,250	196,000†
Cotton linter pulp				
Travancore Rayons Ltd.	1963	31–12–79	7,200	7,200

† Figures for A. P. Rayon Ltd. are not available.

TABLE 3 : Man-made Fibre/Yarn Capacity Utilisation and Production (1979)

Item	Installed capacity (tonnes)	Production (tonnes)	Utilisation (%)
Viscose Filament Yarn	40,385	41,970	103·92
Rayon Tyre Yarn ..	20,050	16,359	81·59
Viscose Staple Fibre (regular)	89,000	85,054	95·57
Acetate Filament Yarn	3,200	2,124	66·94
Nylon Filament Yarn ..	19,362	17,964	92·78
Polyester Staple Fibre	28,150	24,856	88·30
Polyester Filament Yarn	7,986	9,306	116·53
Nylon Tyre Yarn ..	10,490	10,890	103·81
Acrylic Staple Fibre ..	16,000	2,966	18·54
Rayon Grade Wood Pulp	172,000	129,402	75·23
Caprolactum	20,000	13,939	69·70
D.M.T.	24,000	26,932	112·22

Per Capita Availability of man-made fibre fabrics (including blends) in India is still very low by international standards. The recent trends in this respect are given below :

Year	Per capita availability (metres)
1960	1·2
1970	1·7
1975	1·4
1976	1·4
1977	1·6

India and the World : India's share in the world production of cellulosic and non-cellulosic fibres is barely two per cent. A brief account of the output of cellulosic and non-cellulosic fibres in India vis-a-vis world production is furnished in the following table :

Combined Production of Cellulosic & Non-cellulosic Fibres

('000 tonnes)

Year	World	India	Per cent share of India in world output
1975	8,480	152	1·8
1976	10,200	165	1·6
1977	10,248	170	1·7
1978	10,476	195	1·9

EXPORTS: Exports of rayon and synthetic textiles rose from Rs. 177 million to only Rs. 310 million between 1975–76 and 1979–80.

Export Promotion Council : The Silk and Rayon Textiles Export Promotion Council (Resham Bhavan, 78, Vir Nariman Road, Bombay 400020).

IMPORTS: The imports of man-made fibres and yarns consistently rose from 5,711 tonnes valued at Rs. 59·9 million in 1973–74 to 177,401 tonnes valued at Rs. 2,103·9 million in 1977–78. This shows the rising dependence of the industry on imported materials.

CELLULOSIC FIBRE INDUSTRY

(A) Viscose Filament Yarn : There are at present 8 units engaged in the production of Viscose filament yarn having a total licensed and installed capacity of 41,190 tonnes and 40,385 tonnes respectively per annum as per details given below :—

Name of the Unit	Location	Licensed capacity per annum (tonnes)	Installed capacity per annum (tonnes)
Baroda Rayon Corporation Ltd.	Udhana (Gujarat State)	4,500	3,000
Century Rayon	Shahad-Kalyan (Maharashtra)	7,000	7,000
Indian Rayon Corporation Ltd.	Veraval (Gujarat State)	4,000	5,800
J. K. Rayon ..	Kanpur (Uttar Pradesh)	4,000	3,650
Kesoram Rayon	Tribeni (West Bengal)	3,650	4,635
National Rayon Corporation Ltd.	Mohone-Kalyan (Maharashtra)	9,000	9,000
South India .. Viscose Ltd.	Sirumugai (Tamil Nadu)	4,000	4,000
Travancore .. Rayons Ltd.	Rayonpuram (Kerala)	5,040	3,300
TOTAL		.. 41,190	40,385

(B) Viscose Staple Fibre : (*i*) At present there are two units having licensed and installed capacity of 40,000 tonnes and 89,000 tonnes respectively per annum as under:—

Name of the Unit	Location	Licensed capacity per annum (tonnes)	Installed capacity per annum (tonnes)
The Gwalior Rayon Silk Mfg. (Wvg). Co. Ltd.	(*i*) Nagda (Madhya Pradesh) (*ii*) Mavoor (Kerala)	22,000	78,000
South India .. Viscose Ltd.	Sirumugai (Tamil Nadu)	18,000	11,000
TOTAL		.. 0,000	89,000

(*ii*) As per latest information the details of Letters of Intent issued for the manufacture of Viscose Staple Fibre are as follows :—

Name of the Unit	Proposed location	Capacity per annum (tonnes)
The Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd.	Harihar (Karnataka)	36,000
Gogate Minerals		27,000
The Ganges Mfg. Co. Ltd.	M.P.	8,000
Karnataka Industrial & Dev. Corpn. Ltd.	Karnataka	10,000
Tamil Nadu Industrial & Dev. Corpn. Ltd... ..	Tamil Nadu	14,000
Andhra Pradesh Rayons Ltd.	A.P.	17,500
U.P. Textile Industrial & Dev. Corpn. Ltd... ..	U.P.	22,500
TOTAL		135,000

(C) Acetate Filament Yarn & Staple Fibre : There is only one unit viz. Messrs. The Sirsilk Ltd., Sirpur-Kaghaznagar, Andhra Pradesh, engaged in the production of acetate filament yarn and staple fibre having licensed and installed capacity as under :—

Item	Licensed capacity per annum (tonnes)	Installed capacity per annum (tonnes)
Acetate filament yarn	3,600	3,200
Acetate staple fibre	500	800
TOTAL	4,100	4,000

(D) Rayon Tyre Yarn : At present there are three units engaged in the production of rayon tyre yarn having licensed and installed capacity of 20,800 tonnes and 20,050 tonnes respectively per annum as under :—

Name of the Unit	Location	Licensed capacity per annum (tonnes)	Installed capacity per annum (tonnes)
Century Rayon	Shahad-Kalyan (Maharashtra)	6,800	6,800
National Rayon Corporation Ltd.	Mohone-Kalyan (Maharashtra)	7,000	7,000
Shriram Rayons	Kota (Rajasthan)	7,000	6,250
TOTAL		.. 20,800	20,050

Production :

Production of cellulosic fibre/filament yarn during 1979 is given in Table 3 above.

EMPLOYMENT

Cellulosic fibre and filament yarn manufacturing industry is directly employing about 35,000 persons.

Research and Training : *The Silk and Art Silk Mills Research Association* (SASMIRA), SASMIRA Marg, Worli, Bombay 400025, conducts research, provides technical services, testing and offers training facilities in the technology of man-made fibres and textiles.

MINES AND MINERALS

THE total value* of mineral production during 1979 was Rs. 17,420 million compared to Rs. 14,632 million in the previous year. Mineral fuels (coal, lignite, petroleum and natural gas) constituted the leading group with Rs. 14,134 million or 81 per cent (solid fuels 55 per cent and liquid fuels 26 per cent), metallic minerals Rs. 2,058 million or 12 per cent and non-metallic minerals Rs. 1,228 million or 7 per cent of the total value of mineral production during 1979.

In terms of value of output, coal including lignite was foremost with 55 per cent followed by petroleum and natural gas 26 per cent, iron ore 6 per cent, limestone 4 per cent, copper ore, manganese ore, gold, phosphorite, zinc concentrates and chromite one per cent each, while all the other minerals together accounted for the remaining 3 per cent.

The index of mineral production (quantum index) with base 1970 = 100 was 149 during 1979 showing an increase of 5 points over the previous year. Among fuels, the index of both coal mining including lignite and petroleum and natural gas increased by 2 and 24 points respectively. The index of metal ore mining increased by 2 points from 147 in 1978 while that of non-metallic mining declined to 137 during 1979 from 141 in the previous year.

Statewise analysis: Statewise analysis indicated that Bihar occupied the leading position accounting for about 26 per cent of the total value of mineral production in 1979 followed by Madhya Pradesh 15 per cent, West Bengal 10 per cent, Assam 9 per cent, Gujarat 8 per cent and Andhra Pradesh 5 per cent, while the rest was accounted by all the other States including Bombay High.

The value of mineral production (Rs. million) in each State for 1979 was: Bihar 4,499, Madhya Pradesh 2,545; West Bengal 1,766; Assam 1,497; Gujarat 1,336; Andhra Pradesh 902; Orissa 761; Rajasthan 548; Maharashtra 506; Karnataka and Tamil Nadu 312 each; others 481; Bombay High off-shore 1,956.

MINERAL FUELS

Coal and Lignite: The most important coalfields are Raniganj in West Bengal and Jharia and Bokaro in Bihar. The best coking coal comes from Giridih, Jharia nd Raniganj. Other States in which coal is found are Madhya Pradesh, Orissa, Andhra Pradesh, Maharashtra, Assam, Uttar Pradesh and Jammu & Kashmir.

The total all-India proved, indicated and inferred eserves of all types of coal, including lignite, stand at 5,773 million tonnes with seams of 1·2 metres and above n thickness and generally up to a depth of 609 metres from the surface. Out of this the reserves of coking coal is placed at 19,396 million tonnes.

India continued to be the sixth largest producer of coal in the world with nearly 104 million tonnes during 1979. The output of coal in million tonnes: 1977: (100·3); 1978: (101·9); 1979: (104·0). The value of coal production during 1979 was Rs. 9,324 million.

The output of lignite in million tonnes: 1977: (3·6); 1978: (3·6); 1979: (3·2). The value of lignite production during 1979 was Rs. 179 million.

The "Integrated Neyveli Project" at Neyveli, S. Arcot district of Tamil Nadu is planned to increase the mine output to 6·6 million tonnes per annum. Output of lignite was 3·3 million tonnes during 1979 which was lower by 10 per cent compared to previous year. Nearly 93 per cent of output was reported from Tamil Nadu and the rest was from Gujarat.

Lignite also occurs at Palana and Khari in Bikaner district of Rajasthan; Nichahom in Jammu & Kashmir; Kutch and Bharuch districts in Gujarat.

METALLIC MINERALS (FERROUS GROUP)

Chromite is an important strategic mineral of which India has moderate supplies.

The chief deposits of chromite ore are in Cuttack and Keonjhar districts of Orissa; Bhandara and Ratnagiri districts of Maharashtra; Singhbhum district of Bihar; Mysore and Hassan districts of Karnataka; Krishna district of Andhra Pradesh; and Salem district of Tamil Nadu.

Production and exports respectively in '000 tonnes of chromite: 1977: (353; 167); 1978: (266, 59); 1979: 309; N.A.). Production of ferro-chrome during 1978 was 21,545 tonnes as against 18,068 tonnes in 1977.

Iron ore: The production of iron ore in India during 1979 totalled 40 million tonnes as against 38·16 million tonnes in the previous year.

India is one among the few countries endowed with large reserves of good quality iron ores which can meet the growing demands of the indigenous iron and steel industry and also sustain considerable export trade.

The production from Goa during 1979 was 13 million tonnes as against 9·3 million tonnes during 1978. During 1979, Madhya Pradesh produced 9·5 million tonnes; Orissa 6·4 million tonnes; Bihar 5·9 million tonnes and Karnataka 3·2 million tonnes.

A large deposit of iron ore was recently discovered in Chiria, Singhbhum district of Bihar. Mineral Exploration Corporation Ltd. is carrying out exploratory mining in this area to strengthen the reliability of reserves established earlier.

Production and value ('000 tonnes & Rs. '000) respectively of iron ore: 1977: (42,597: 915,925); 1978: (38,837: 1,011,993); 1979: (39,534: 1,024,510).

Manganese ore: Extensive deposits of manganese ore occur in Madhya Pradesh, Maharashtra, Orissa, Andhra Pradesh, Karnataka, Bihar, Rajasthan and Goa.

The total recoverable reserves of manganese ore as on 1-1-1975 in the country are placed at 79·5 million tonnes. It is estimated that the deposits in the main belt of Nagpur and Bhandara in Maharashtra and Balaghat in Madhya Pradesh alone contain reserves of the order of 20·6 million tonnes.

Yearly output and exports respectively of manganese ore in tonnes: 1977: (1,865,000; 554,375); 1978: (1,619,000; 577,292); 1979: (1,755,079; N.A.).

A new unit with a capacity of 50,000 tonnes of ferro-manganese per annum of Maharashtra Electrosmelt, Chandrapur commenced production in March 1977. With this, there are at present 8 major ferro-manganese plants in the country with total installed capacity of 237,400 tonnes per annum. Of these 3 units are located in Maharashtra, two each in Orissa and Karnataka and one in Andhra Pradesh.

During 1978 the total production of ferro-manganese was 219,993 tonnes as against 193,908 tonnes in 1977.

NON-FERROUS GROUP

Bauxite: India is self sufficient in respect of bauxite which is the chief raw material for aluminium metal. A sizeable quantity also finds an outlet in export market after meeting the indigenous requirements. The all India reserves of bauxite of all grades are placed at 2,190 million tonnes as on 1-1-1975. This enhanced reserve of bauxite is due to the recent discovery of bauxite deposits on the east coast of Andhra Pradesh and Orissa.

---

* Excluding the value of minor and atomic minerals.

The important deposits of bauxite occur in Palamau and Ranchi districts of Bihar; Mopa and Pernem area in Goa; Surguja, Shahdol, Mandla and Bilaspur districts of Madhya Pradesh; Kolaba, Kolhapur and Ratnagiri districts of Maharashtra; Madurai, Nilgiri and Salem districts of Tamil Nadu; Jamnagar and Kutch districts of Gujarat; Belgaum and South Kanara districts of Karnataka; Kalahandi, Koraput and Sambalpur districts of Orissa and Barda district of Uttar Pradesh. Besides, recently India has made a big headway in discovering huge deposits of bauxite in the east coast covering 25,000 sq. km. area in Koraput district of Orissa and Visakhapatnam district of Andhra Pradesh.

Yearly production and export respectively of bauxite in tonnes are: 1977: (1,519,000; 48,735); 1978: (1,663,000; 1,900); 1979: (1.934,000; N.A.)

Aluminium: There are 7 aluminium smelters owned by five companies of which one is in the public sector at Korba in Madhya Pradesh with an installed capacity of 25,000 tonnes; six in private sector located in Hirakund (Orissa), Alwaye (Kerala), Belgaum (Karnataka), Renukoot (U.P.), Mettur (Tamil Nadu) and Jayakanagar (West Bengal). The recent discovery of bauxite on the east coast of Orissa and Andhra Pradesh has enhanced the prospect of setting up of new alumina/aluminium plants in these areas and there are proposals to set up such export oriented plants. The total capacity of all the aluminium plants in the country is placed at 300,000 tonnes per annum.

Copper: In India at present, there are two copper smelters both in public sector located at Ghatshila in Bihar and Khetri in Rajasthan. The total installed capacity of copper metal is 47,500 tonnes per annum against which the production of electrolytic copper metal during 1978 was 11,682 tonnes.

Production of copper ore during 1979 was 2,173,000 tonnes valued at Rs. 238,702,000.

Malanjkhand Copper Project: The project is being implemented by Hindustan Copper Ltd. at Malanjkhand in Balaghat district of Madhya Pradesh. This will be the country's first large size open-cast mine in hard rock and has been planned for ultimate production of 2 million tonnes of ore, equivalent to about 23,000 tonnes of copper metal per annum. The project will comprise the mine and a matching concentrator plant. The concentrates to be produced at Malanjkhand will be smelted at the Khetri smelter.

Lead and Zinc: Hindustan Zinc Ltd. is actively producing lead zinc ore from its Mochia mine in Udaipur district of Rajasthan. Besides, five projects namely Balaria, Zawarmala, Baroi, Rajpura-Dariba all in Rajasthan and Sargipalli in Orissa are being implemented by HZL. Hindusthan Copper Ltd. was mining in one deposit viz. Bandalmottu in Guntur district of Andhra Pradesh. The production of lead concentrates from these two areas during 1978 was 16,833 tonnes. The concentrates from Rajasthan are sent to Tundoo Lead Smelter while those from Andhra Pradesh are sent to Visakhapatnam.

With the commissioning of Vizag smelter during 1977, there are at present three zinc smelters, the other two being located at Debari in Rajasthan and Alwaye in Kerala. The capacity of Vizag smelter is 30,000 tonnes of the zinc metal and that of Debari smelter has been expanded from 18,000 to 45,000 tonnes during 1977 while that of smelter at Alwaye is 20,000 tonnes. Thus making total capacity of 95,000 tonnes per annum.

Production and value of lead concentrates during 1979 in tonnes and value in Rs. '000 respectively was 20,938 and 48,612; and that of the zinc concentrates 71,677 and 140,280.

Gold: The production of gold during 1979 was 2,636 kgs. valued at Rs. 170 million.

NON-METALLIC MINERALS

Apatite and Rock Phosphate: These constitute the principal raw material for production of commercial phosphatic fertilizers. Requirements of rock phosphate were entirely met by imports till 1968. In view of their short supply intensive exploratory programme for the search of phosphate minerals was launched upon by the Government and as a result several workable deposits of phosphorites were discovered in Rajasthan, Uttar Pradesh and Madhya Pradesh. Production of phosphorite has already commenced at Jhamarkotra and Maton in Udaipur district of Rajasthan, Maldeota in Dehra Dun district of Uttar Pradesh and Jhabua district of Madhya Pradesh. The production of phosphorite during 1979 was 644,684 tonnes valued at Rs. 155,481,000 as against 759,500 tonnes valued at Rs. 188,489,000 in 1978.

Asbestos: Naturally occurring fibrous minerals are called asbestos. The commercial varieties fall into two groups viz., the serpentine group found extensively in the serpentine rocks and is commonly called chrysolite variety and the other amphibole group comprised of tremolite, actinolite, anthophyllite, crocidolite and amosite varieties. The chrysolite variety is the most important one from the industrial point of view and is mainly limited to Pulivendla taluk of Cuddapah district of Andhra Pradesh and Singhbhum district of Bihar.

In all there were 12 asbestos cement product manufacturing units in 1978 with a total installed capacity of 673,000 tonnes per annum against which the production was 550,639 tonnes in 1978.

The bulk of the asbestos requirements of the country is met by imports. The trend in the production and imports of asbestos for the last three years is shown in the table below:

(In tonnes and value Rs. '000)

Year	Output	Imports
1977	22,177	67,068
1978	24,623	46,219
1979	37,816	N.A.

Gypsum: Gypsum is mainly used in the manufacture of Portland cement, ammonium sulphate fertilizer, plaster of Paris and as a soil conditioner of alkaline soils where pulverised low grade gypsum is directly applied. However, due to implementation of 'Rationalisation scheme' of the Sindri Unit of F.C.I. the use of gypsum is gradually being eliminated in the manufacture of ammonium sulphate fertilizer and will be totally eliminated when the scheme is fully implemented.

India has abundant reserves of gypsum in the State of Rajasthan. Other States where gypsum occurs are Andhra Pradesh, Gujarat, Himachal Pradesh, Jammu and Kashmir, Karnataka, Madhya Pradesh, Tamil Nadu and Uttar Pradesh. However, production of natural gypsum is reported from Gujarat, Jammu & Kashmir, Rajasthan, Tamil Nadu and Uttar Pradesh.

The total all India reserves of gypsum as on 1-1-1975 were placed at 1,205 million tonnes, of which Rajasthan's share was 89 per cent.

Production of gypsum in tonnes: 1977: 778,000; 1978: 883,858; 1979: 860,605.

The value of gypsum produced in Rs. million: 1977: 16·8; 1978: 19·8; 1979: 18·2.

Kyanite and Sillimanite: Are the important refractory minerals having the same chemical composition (Al_2O_3 SiO_2) but differs in physical and crystallographic properties. Singhbhum Kyanite deposits are well known the world over and were at one time the chief source of massive kyanite. The known productive deposits of kyanite are Lapsa Buru deposits in Singhbhum district, Bihar and the Dahegaon-Pimpalgaon deposits in Bhandara district of Maharashtra.

The Indian sillimanite can be used as a refractory without calcination since it shows very little expansion. The occurrences of sillimanite are reported from several States, however, the production comes from only Meghalaya, Maharashtra, Kerala, Tamil Nadu and Madhya Pradesh. Major production of sillimanite is from the famous Sonapahar mines of Khasi Hills district of Meghalaya. Sillimanite sand is recovered as a by-product from ilmenite processing in Kerala and Tamil Nadu.

India occupies an important position both as a producer and as an exporter of kyanite and sillimanite. The trend of their output and exports for the three years are shown in the following table :

(In tonnes)

Year	Kyanite		Sillimanite	
	Output	Export	Output	Export
1977	42,123	8,830	15,023	550
1978	30,897	3,575	13,471	151
1979	39,016	N.A.	15,736	N.A.

Limestone: Is an important industrial mineral used in the manufacture of cement, iron and steel, chemicals and a host of other major industries such as paper, sugar, fertilizer, glass, etc.

Limestone occurs in almost all the States of India. From the reserves of various limestone deposits, it is apparent that sufficient resources of flux and cement grade limestone are available.

The production of limestone in thousand tonnes and value in thousand Rupees respectively : 1977 : (30,380 : 626,035) ; 1978 : (30,915 : 674,627); 1979 : (30,586 : 653,818).

Magnesite: Is the chief mineral used in the manufacture of basic refractory bricks for steel making. It is mined in the States of Tamil Nadu, Uttar Pradesh, Karnataka and Rajasthan.

In India major deposits are in Karnataka, Tamil Nadu and Uttar Pradesh. Deposits in Rajasthan and Bihar are also of some importance. The Chalk Hills deposits of Salem district, Tamil Nadu are the largest in India and have been under active production for a number of years. Magnesite deposits in Almora and Pithorgarh districts of Uttar Pradesh are now under exploitation.

Production and export, (in tonnes) respectively : 1977 : (402,007 ; 13,078) ; 1978 : (414,166 ; 6,888) : 1979 : (384,665 ; N.A.).

Mica: Mica is treated as a strategic mineral and India accounts for a big slice of the world trade in it.

The principal mica deposits are concentrated in Bihar, Rajasthan and Andhra Pradesh. During 1979 Bihar accounted for 60 per cent of all India output followed by Andhra Pradesh 30 per cent and Rajasthan 10 per cent. Small output was reported from Tamil Nadu.

The production of crude mica (excluding waste mica) and export of all grades of mica respectively in tonnes are : 1977 : (9,352 ; 23,216) ; 1978 : (9,593 ; 23,582) ; 1979 : (8,896 ; N.A.).

Sulphur: India is practically devoid of deposits of elemental sulphur. Three alternative sources of recovering sulphur and sulphuric acid for reducing the dependence on imports have been adopted. These are : (*i*) recovery of elemental sulphur from petroleum refinery, (*ii*) production of by-product sulphuric acid from zinc and copper smelters and (*iii*) production of sulphuric acid from pyrites. The Madras Refinery Limited is the only plant from where elemental sulphur is recovered during the refining of crude petroleum. The production of by-product of sulphuric acid was reported from 4 smelters of non-ferrous metals — two zinc smelters — each operated by HZL at Debari and Cominco Binani Ltd., at Alwaye and two copper smelters operated by HCL at Khetri and Ghatsila. There was one sulphuric acid plant based on pyrites located at Sindri, owned by FCI.

Production of pyrites was reported only from Amjhore in Rohtas district, Bihar by Pyrites and Phosphates and Chemicals Ltd. The production of pyrites during 1977, 1978 and 1979 was 31,085 tonnes, 63,781 tonnes and 73,536 tonnes respectively. The pyrites produced at the mine is supplied to FCI's Simon-Carve's sulphuric acid plant at Sindri. Another pyrites based sulphuric acid plant with Bulgarian aid was being set up at Sindri. With a view to meeting fully the requirements of the two pyrites based sulphuric acid plants, the PPCL was progressing with a scheme of mine production from the level of 400 tonnes to 900 tonnes per day. A feasibility report for exploitation of Saladipura pyrites deposits in Sikar district of Rajasthan was submitted by Messrs. RTZ Ltd. of U.K. The country's requirements of sulphur are met from imports.

Imports of sulphur in tonnes during 1977 : 767,346 ; 1978 : 818,191 ; 1979 : N.A.

Salt: The total production of Common Salt in the country during 1978 and 1979 was 6,693,500 and 7,037,000 tonnes respectively.

Iodised Salt: Out of the above quantities, a quantity of 165,782 and 209,734 tonnes were iodised during the year 1978 and 1979 respectively at Sambhar Lake in Rajasthan, Kharaghoda in Gujarat and Calcutta in West Bengal for supply to the goitre endemic areas under the National Goitre Control Scheme.

PRODUCTION AND VALUE OF MINERALS

(Value in Rs. '000)

	Unit	TOTAL PRODUCTION			
		1978		1979	
		Quantity	Value	Quantity	Value
All Minerals			**15,403,399**		**18,192,135**
Fuels			11,325,842		14,133,932
Coal	'000 tonnes	101,973	7,177,517	103,845	9,324,496
Lignite	,,	3,613	197,799	3,264	178,652
Natural gas	million cu.m.	1,731	60,616 (e)	1,929	65,574 (e)
Petroleum (crude)	'000 tonnes	11,270	3,889,910 (e)	12,839	4,565,210 (e)

---

e = estimated.

PRODUCTION AND VALUE OF MINERALS — *(Contd.)*

(Value in Rs. '000)

	Unit	TOTAL PRODUCTION			
		1978		1979	
		Quantity	Value	Quantity	Value
Metallic Minerals			2,012,695		2,058,240
Bauxite	'000 tonnes	1,663	60,201	1,934	61,202
Chromite	tonne	266,293	119,120	309,142	134,576
Copper ore	'000 tonnes	2,126	256,842	2,173	238,702 (e)
Diaspore	tonne	5,746	1,566	6,155	1,260
Gold (*a*)	Kg.	2,774	186,611	2,636	170,364
Iron ore (total)	'000 tonnes	38,838	1,011,993	39,534	1,024,510
Lumps	,,	23,780	664,344	21,151	610,755
Fines (*b*)	,,	15,058	347,649	18,383	413,755
Lead concentrates	,,	16,833	37,032	20,938	48,612
Manganese ore	'000 tonnes	1,619	193,591	1,755	214,177
Silver (*a*)	Kg.	12,083	15,705	11,502	21,033
Tungsten concentrates	,,	40,749	3,784	38,547	3,524
Zinc concentrates	tonne	66,019	126,250	71,677	140,280 (e)
Non-metallic Minerals			1,293,046		1,228,147
Agate	tonne	2,268	548	1,687	290
Apatite	,,	29,770	5,427	20,548	4,001
Phosphorite	,,	759,500	188,489	644,684	155,481
Asbestos	,,	24,623	10,057	37,816	10,563
Ball clay	,,	96,552	3,845	126,802	4,655
Barytes	,,	388,582	26,635	387,815	19,039
Calcite	,,	27,983	1,098	29,501	1,331
Chalk	,,	74,813	4,939	80,273	4,038 (d)
Clay (others)	,,	71,460	728	67,825	696
Corundum	,,	1,082	501	534	394
Diamond	carat	15,942	8,448	14,956	9,504
Dolomite	'000 tonnes	1,969	79,475	1,988	80,423
Emerald (crude)	carat	35,085	N.D.	3,760	N.D.
Emerald (dressed)	,,	N.A.	N.A.	N.A.	N.A.
Felspar	tonne	51,675	1,694	50,157	1,592
Fireclay (*c*)	'000 tonnes	725	13,088	741	12,839
Fluorite (concentrates)	tonne	14,027	21,435	17,092	26,069
Fluorite (graded)	,,	3,519	4,792	4,081	5,003
Garnet (abrasive)	,,	2,467	300	6,806	875
Garnet (gem variety)	Kg.	4,912	43	4,303	42
Graphite	tonne	63,784	5,896	50,933	5,044
Gypsum	'000 tonnes	884	19,833	861	18,200
Jaspar	tonne	2,631	158	3,325	203
Kaolin (total)	'000 tonnes	418	35,115	471	34,523
Natural*	,,	304	5,409	361	6,355
Processed**	,,	114	29,706	110	28,168
Kyanite	tonne	30,897	9,335	39,016	10,866
Sillimanite	,,	13,471	4,505	15,736	4,833
Andalusite	,,	225	73	—	—

N.A. = Not Available. N.D. = Not Determined.

(*a*) = Relates to metal. (*b*) = Figure relates to despatches from mines for internal consumption/export.

(*c*) = Excludes the output of fireclay, if any, recovered incidental to coal mining. (*d*) Under reference. (*e*) = estimated

* Kaolin (natural) refers to the mineral produced and consumed as such.

** Kaolin (processed)refers to the kaolin obtained after processing the run of mine materials

PRODUCTION AND VALUE OF MINERALS — *(Contd.)*

(Value in Rs. '000)

	Unit	TOTAL PRODUCTION			
		1978		1979	
		Quantity	Value	Quantity	Value
Non-metallic Minerals — *(Contd.)*					
Limestone	'000 tonnes	30,915	674,627	30,586	653,818
Limekankar	,,	224	2,482	100	1,111
Limeshell	,,	124	6,085	119	6,108
Calcareous sand	,,	932	8,266	768	6,456
Magnesite	tonne	414,166	57,236	384,665	53,930
Mica (crude (p)	,,	9,592	26,603	8,896	24,033
Mica (mine waste, scrap, etc.)	,,	4,681	N.A.	4,926	N.A.
Ochre	,,	77,950	2,127	84,673	1,855
Pyrites	,,	63,781	13,826	73,536	18,678
Pyrophyllite	,,	38,883	1,306	31,865	1,087
Quartz	'000 tonnes	193	4,402	191	4,969
Quartzite	,,	197	5,349	131	2,269
Silica sand	,,	658	14,786	613	12,749
Moulding sand	,,	90	662	94	655
Sand (others)	,,	944	4,009	859	3,352
Fuchsite quartzite	tonne	261	96	38	29
Salt (rock)	,,	4,281	769	4,363	843
Sapphire (raw/unwashed) ..	Kg.	—	—	—	—
Slate	tonne	14,319	2,022	13,938	1,782
Staurolite	,,	2	1	—	—
Steatite	'000 tonnes	298	16,982	330	20,064
Sulphur	tonne	8,101	4,662	3,665	3,480
Vermiculite	,,	1,886	216	3,063	230
Wollastonite	,,	1,928	75 (u)	3,729	145 (d)
MINOR MINERALS ..	—	—	771,816 (e)	—	771,816 (e)

N.A. = Not Available. N.D. = Not Determined. (p) = Provisional.

(*a*) = Relates to metal. (*b*) = Figure relates to despatches from mines for internal consumption/export.

(*c*) = Excludes the output of fireclay, if any, recovered incidental to coal mining. (*d*) = under/reference. (*e*) = estimated.

* Kaolin (natural) refers to the mineral produced and consumed as such.

** Kaolin (processed) refers to the kaolin obtained after processing the run of mine materials.

Rare Minerals: Investigations carried out by the Department of Atomic Energy have revealed a number of radioactive mineral deposits in India.

The beach sands of Kerala and Tamil Nadu contain a useful radioactive mineral — monazite, which contains thoria, uranium oxide, phosphate and a large percentage of rare earth oxides. Thorium can be converted into an important atomic fuel of the future. The total reserves of rare earth oxides in the beach sands have been estimated at approximately one million tonnes.

Ilmenite is also recovered from the beach sands of Kerala State and the Mahavalakurichi area in Tamil Nadu. It is now mainly exported to Japan. The present estimated resources of ilmenite in the country are placed at 100 to 150 million tonnes. During 1976, 120,727 tonnes of ilmenite, valued at Rs. 29·94 million, were exported.

India's present overall indicated and inferred reserves of uranium are estimated at about 76,000 tonnes, and of thorium at 500,000 tonnes.

Uranium bearing ores have been discovered in the Singhbhum Thrust Belt of Bihar, and in the Himalayan regions of Himachal Pradesh and Uttar Pradesh. The uranium mine at Jaduguda in the Singhbhum district, worked by the Uranium Corporation of India Ltd., a Govt. of India undertaking, treats about 1,000 tonnes of ore per day in the uranium mill.

Investigation for uranium and other atomic minerals in Andaman and Nicobar group of islands is currently in progress.

It has been estimated that the resources of uranium in India can support about 5 to 10 million KWs of electricity generating capacity.

EXPORTS OF MINERALS

(Value in Rs. '000)

Mineral	Unit of quantity	1977		1978	
		Quantity	Value	Quantity	Value
All Minerals			**7,847,715**		**8,860,598**
Asphalt & Bitumen	Tonne	924	919	284	232
Barytes	,,	177,188	92,276	201,042	103,541
Bauxite	,,	48,735	12,275	1,900	747
Bentonite	,,	18,588	8,884	19,781	9,991
Chromite	,,	167,057	167,049	59,116 †	49,155 †
Coal	'000 tonnes	623	124,879	446 †	83,262 †
Coke	Tonne	14,818	3,780	4,985	3,382
Diamond (cut)	N.A.	N.A.	4,138,979	N.A.	5,445,589
Dolomite	Tonne	7,506	1,091	5,834	975
Emerald (uncut)	N.A.	N.A.	3,911	N.A.	1,578
Felspar	Tonne	13,585	3,645	12,241	3,012
Ilmenite[1]	,,	76,699	14,761	96,728	15,254
Iron ore	'000 tonnes	23,190	2,521,200	19,778	2,189,156
Kaolin	Tonne	5,265	4,186	4,064	3,139
Kyanite	,,	8,830	8,065	3,575	2,794
Limestone	,,	139,063	3,329	161,375	4,169
Magnesite (calcined, non-calcined and dead burnt)	,,	13,078	9,555	6,888	5,065
Manganese ore	,,	554,375	132,296	577,292	149,973
Mica	,,	23,216	237,651	23,582	256,741
Precious and semi-precious stones	N.A.*	N.A.	219,033	N.A.	373,118
Quartz (Natural)	Tonnes	9,121	2,879	12,327	3,870
Sillimanite	,,	550	620	151	170
Steatite	,,	18,077	12,316	12,459	9,428
Stones (Building and monumental granite etc.)	,,	186,616	97,623	163,280	107,941
Sulphur	,,	725	2,080	995	2,556
Other minerals (value)			24,433		35,760

[1] Includes Beneficiated Ilmenite. * Excluding pearls and synthetic gem stones. † Under reference.

IMPORTS OF MINERALS

(Value in Rs. '000)

Mineral	Unit of quantity	1977		1978	
		Quantity	Value	Quantity	Value
All Minerals			**16,883,830***		**18,114,364**
Antimony ore and concentrates	Tonne	1,453	21,577	106	1,416
Asbestos	,,	67,068	284,993	46,219*	208,615*
Borax	,,	10,446	15,811	11,242	19,684
Copper ore and concentrates	,,	—	—	—	—
Cryolite & Chiolite	,,	2,571	11,185	605	2,572
Diamond (uncut)	,,	N.A.	2,876,102	N.A.	4,376,090
Diamond — Industrial (incl. bort)	Kgs.	155	17,314	666*	19,396*
Emerald (uncut)	Tonne	N.A.	78,479	N.A.	61,262
Fluorspar	,,	4,752	3,598	5,000	3,983
Graphite Natural	,,	698	3,299	540	3,335
Lead ore and concentrates	,,	20	262	101	1,325
Manganese ore (milled for dry-cell battery)	,,	5,048[1]	8,933[1]	4,045[1]	7,735[1]
Petroleum (Crude)	'000 tonne	14,548	12,589,259	14,892	12,438,903
Rock phosphate (Apatite)	Tonne	951,053	427,133	820,578	342,052
Precious and semi-precious stones (uncut) †	—	N.A.	3,564	N.A.	6,404
Sulphur	Tonne	767,346	381,828	818,191	400,880
Tungsten ore and concentrates	,,	428	42,191	347*	34,174
Zinc ore and concentrates	,,	19,001	31,675	83,212	110,244
Others (value)			86,627		76,294

* Under reference. N.A. Not Available. [1] Relates to first grade Manganese ore and others. † Excluding pearls and synthetic stones.

MISCELLANEOUS MANUFACTURES

FOLLOWING table gives installed capacity and production of selected items manufactured in India during 1979.

Industry	Accounting Units	Installed Capacity	Production	Production as Percentage of Capacity
ACSR/AAC conductors	Th. Tonnes	137·70	55·00	39·9
Agricultural tractors	Th. Nos.	61·50	60·14	97·8
Air conditioners (room)	Th. Nos.	44·78	25·88	57·8
Air/gas compressors	Th. Nos.	15·35	12·29	80·1
Aluminium collapsible tubes	Mill. Nos.	264	270	102·3
Ball and roller bearing	Mill. Nos.	31·40	31·20	99·4
Beer	Th. KL	119·24	120·00	100·6
Bicycles	Th. Nos.	4,600	3,900	84·8
Biscuits	Th. Tonnes	107·45	92·00	85·6
Boilers (industrial & power)	Rs. Mill.	2,700	2,463	91·2
Bread	Th. Tonnes	83·20	120·00	144·2
C. I. spun pipes	Th. Tonnes	494	173	35·0
Cameras	Th. Nos.	668	645	96·6
Carbon black	Tonnes	105,700	69,823	66·0
Ceramic colours	Tonnes	60	60	100·0
Chocolates	Tonnes	4,410	1,050	23·8
Cigarettes	Mill. Pcs.	96,488	78,000	80·8
Clocks	Th. Nos.	602	276	45·8
Coaxial cables	KM	4,200	2,400	57·1
Commercial vehicles	Th. Nos.	89·50	58·37	65·2
Confectionery	Tonnes	35,928	21,500	59·8
Contraceptive rubber	Mill. Nos.	325·0	352·0	108·3
Conveyor belts	Tonnes	6,780	4,990	73·6
Cranes	Th. Tonnes	640	18·2	28
Cranes (other than mobile cranker and truck mounted)	Th. Tonnes	64·00	18·20	28·4
Crockery	Th. Tonnes	35·37	18·35	51·9
Cutlery	Tonnes	520	160	30·8
Diesel engines—stationary	Th. Nos.	313·00	144·93	46·3
Domestic refrigerators	Th. Nos.	339·40	209·68	61·8
Drinking chocolates	M.T.	1,500	110	7·3
Drums and barrels	Th. Tonnes	171·8	15·0	8·7
Dry cells	Mill. Nos.	1,159	870	75·1
Electric fans	Mill. Nos.	3·52	3·68	104·5
Electric motors	Mill. H.P.	6·72	3·80	56·5
Electro-medical equipment	Rs. Mill.	50·8	250	49·2
Electronic calculators	Nos.	90,000	466	0·5
Enamelware	Th. Pcs.	30,000	14,550	48·5
Excavators	Nos.	305	207	67·9
Face cream	Tonnes	1,133	1,400	123·6
Face powder (including talcum)	Tonnes	6,428	5,940	92·4
Fan & V. belts	Mill. Nos.	8·57	8·75	102·3
Fibre board	Tonnes	53,000	20,000	37·7
Fibre glass	M.T.	3,000	1,000	33·3
Filter rods for cigarettes	Mill. Nos.	3,800	3,060	80·5
Fluorescent tubes	Mill. Nos.	25·70	23·40	91·1
Frits	Tonnes	4,530	650	14·3

Industry	Accounting Units	Installed Capacity	Production	Production as Percentage of Capacity
GLS lamps	Mill. Nos.	206·5	210·0	101·7
Gas cylinders	Rs. Mill.	88·0	58·7	66·6
Gelatine	Tonnes	2,700	2,600	96·3
Glass sheet	Mill. Sq. Mtrs.	31·54	25·50	80·8
Glass shells	Mill. Pcs.	239	189	79·1
Glassware (Laboratory)	Tonnes	7,200	3,000	41·7
Glazed tiles	Tonnes	49,020	43,800	89·4
Glue	Tonnes	4,520	2,700	59·7
Guar gum	Tonnes	41,500	31,000	74·7
H. T. fasteners & M. S. fasteners	Th. Tonnes	66·8	37·5	56·1
H. T. insulators	Tonnes	26,420	27,000	102·2
Hacksaw blades	Th. Nos.	49,699	21,239	42·7
Hoses	Mill. Mtrs.	6·89	4·00	58·1
House service meters	Th. Nos.	2,307	4,826	122·5
Hurricane lanterns	Th. Nos.	3,823	850	22·2
Industrial coil springs	Tonnes	3,860	1,200	31·1
Industrial knives	Nos.	1,120	505	45·1
Industrial process control	Rs. Mill.	213·8	210·0	98·2
Jeeps	Th. Nos.	13·0	12·3	94·6
L. T. circuit breakers	Th. Nos.	37·02	21·0	56·7
L. T. insulators	Tonnes	8,960	3,250	36·3
Leather belting	Tonnes	162·00	70·00	43·2
Lifts	Nos.	1,380	888	64·3
M. S. bolts & nuts, rivets	Th. Tonnes	47·6	27·0	56·7
Machine tools & accessories	Rs. Mill.	1,900	1,560	82·1
Medical and surgical instruments	Rs. Mill.	142·5	40·0	28·1
Mopeds & scooterettes	Th. Nos.	98·0	65·7	67·0
Motor starters	Th. Nos.	792	151	19·1
Myrobalan extracts	Tonnes	3,000	2,000	66·7
Oil pressure stoves	Th. Nos.	35	0·6	1·7
Ossein	Tonnes	2,700	2,600	96·3
Oxygen gas	Mill. Cu. Mtrs.	119·00	88·00	73·9
PVC/PIL power cable	Km.	37,238	15,000	40·3
PVC/VIR cables	Mill. Cu. Mtrs.	1,348	500	37·1
PVC conveyor belts	Th. Mtrs.	176·7	82·1	46·5
Paints & varnishes	Th. Tonnes	108·5	90·0	82·9
Particle boards	Th. Tonnes	44·9	13·0	28·9
Passenger cars	Th. Nos.	53·0	29·3	55·3
Permanent magnets	Mill. Tonnes	741·6	240·2	32·4
Pipes & fittings	Tonnes	21·720	6,000	27·6
Plywood	Mill. Sq. Mtrs.	63·33	45·00	71·1
Power capacitors	MVAR	1,333	1,200	90·1
Precision measuring tools	Rs. Mill.	57·5	47·3	82·3
Press tools, dies, moulds etc.	Rs. Mill.	80·0	65·6	82·0
Pressure cookers	Th. Nos.	825	984	119·3
Printing machinery	Rs. Mill.	87·0	73·1	8·4
Pumps	Th. Nos.	624	359	57·5
Radio receivers	Th. Nos.	2,945	2,139	72·6
Railway wagons	Th. Nos.	30·6	12·5	40·8
Razor blades	Mill. Nos.	1,195	1,350	112·9
Reamers	Th. Nos.	470	250	53·2

Industry	Accounting Units	Installed Capacity	Production	Production as Percentage of Capacity
Record players	Th. Nos.	1,893	1,339	70·7
Refractories	Th. Tonnes	164	900	54·9
Road rollers	Nos.	1,500	820	54·7
Safety matches	Mill. Boxes	5,000	4,100	82·0
Sanitaryware	Tonnes	21,490	23,850	N.A.
Scooters	Th. Nos.	278	153	55·2
Sewing machines	Th. Nos.	555	336	60·5
Soap	Th. Tonnes	226	275	121·7
Soft drinks	Mill. Bottles	1,756	700	39·9
Spark plugs	Th. Nos.	9,200	2,972	32·3
Steel castings	Th. Tonnes	170	74	43·5
Steel files	Rs. Mill.	110·0	103·9	94·5
Steel furniture & security equipments	Tonnes	43·8	45·0	102·7
Steel pipes, tubes	Th. Tonnes	1,849	593·4	32·1
Storage batteries	Mill. Nos.	2·82	1·69	59·9
Synthetic detergents	Th. Tonnes	200·0	142	71·0
T.V. picture tubes	Th. Nos.	242	199	82·2
Tape recorders	Nos.	40,000	36,009	90·0
Teleprinters	Nos.	8,500	437	5·1
Television receivers	Nos.	90,000	76,241	84·7
Time pieces	Th. Nos.	1,550	1,098	70·8
Tin containers	Th. Tonnes	115	80	69·6
Tooth-paste	Th. Tonnes	4·2	10·0	238·5
Tooth powder	Tonnes	1,124	2,500	222·4
Trailers	Nos.	8,916	2,473	27·7
Transformers	Mill. KVA	31·0	28·7	92·6
Twist drills	Mill. Nos.	18·7	15·2	81·3
Typewriters	Th. Nos.	135·4	93·5	69·1
Vacuum flasks	Mill. Pcs.	4·8	3·4	70·8
Watches	Mill. Nos.	5·5	5·0	90·9
Water coolers	Th. Nos.	12·3	10·6	86·2
Welding electrodes	Th. Running Mtrs.	742·0	550	74·1
Winding wires	Th. Tonnes	47·5	23·4	49·3
Wire ropes	Th. Tonnes	46·2	32·0	69·3
Wood screws	Mill. Nos.	1,509	1,500	99·4
Water metres	Lakh Nos.	2·75	1·56	54·9
X-Ray equipments	Mill. Rs.	50·8	25·0	49·2
Zip fasteners	Th. Km.	1·37	1·33	97·1

N.A. = Not available.

OILSEEDS AND VANASPATI

OILSEEDS occupy an important place in the Indian economy and rank second (after foodgrains) as a farm commodity group. India is a major oilseeds growing country in the world, accounting for 10 per cent of the total output of vegetable oils and fats.

India is the largest producer of groundnut, rape and mustard and sesamum. It is second in respect of castorseed production, third in coconut production, fourth in cotton-seed and fifth in linseed.

India has a highly developed oil based industry employing more than 10 million persons. However, it is essentially a food-oil industry which accounts for as much as 83 per cent of the total supply of vegetable oils. Among the non-food uses, the bulk is consumed by the soaps and paints and varnishes industry.

Demand & Supply: The area and production of major oilseeds have more or less remained stagnant during the last decade.

This is evident from the fact that in 1962-63, major oilseeds were cultivated in 15·3 million hectares, in 1976-77. the area covered fell to 14·8 million hectares but improved to 15·5 million hectares in 1977–78. In 1978–79 area has gone up to 16 million hectares.

Area and Production of Oilseeds: 1978-79

Item	Area (Million hectares)	Production (Million tonnes)
Major Oilseeds		
Groundnut (in Shell)	7·548	6·387
Castorseed	0·446	0·236
Sesamum	2·441	0·540
Rape & mustard	3·557	1·877
Linseed	2·025	0·514
Total for 5 major oilseeds	16·017	9·554
Others		
Coconut	1·067	5·471*
Nigerseed	0·620	0·151
Safflower	0·717	0·216
Cottonseed	8·087	2·714

* Production in million nuts.

The production of major oilseeds showed sharp fluctuations—from 10·2 million tonnes in 1975–76 to 7·9 million tonnes in 1976–77. However, in 1977–78, the output improved to 9·0 million tonnes. During 1978–79 production further picked up to 9·5 million tonnes.

The Sixth Plan production target for oilseeds is 12·5 million tonnes.

Imports: With demand for oilseeds running ahead of supplies — the production trends have been unsatisfactory — shortages and soaring prices have become a fixed feature of the oilseeds economy of India. The gap has been partly met by imports.

During 1976–77, imports of edible oils amounted to 170,000 tonnes valued at Rs. 1,006 million. In 1977–78, the quantity of imports rose to 1·288 million tonnes valued at Rs. 7,116 million. However, in 1978–79 both quantity as well as value imported declined to 1·043 million tonnes and Rs. 5,371 million respectively.

Consumption : The per capita consumption of edible oils stood at 3·8 kgs. in 1978–79 indicating no change over the level obtained in 1977–78.

This is considerably less than the nutritional norm of 20 kgs. per annum. The recent trend in per capita consumption of edible oils (kgs.) is as under : 1955–56 : 2·5 ; 1960–61 : 3·2 ; 1965–66 : 2·7 ; 1970–71 : 3·5 ; 1975–76 : 3·5 ; 1977–78 : 3·8 ; 1978–79 : 3·8.

Exports: India's exports of vegetable oils and oilcakes are considerable, though the underlying trend is mixed. The export earnings from vegetable oils (essential and non-essential) and oilcakes are presented below :

Exports of Vegetable Oils and Oilcakes

(Rs. million)

Year	Vegetable oils	Oilcakes
1973–74	379	1,782
1974–75	430	960
1975–76	395	965
1976–77	546	2,344
1977–78	261	1,333
1978–79	189	1,158

COCONUT: is one of the important oilseeds produced in the country mainly in South India.

Production : Copra : Latest figures of copra production are given below : Production of Copra 371,000 tonnes ; Milling Copra : 322,700 tonnes ; Edible copra : 48,300 tonnes.

No. of crushing units : 1,439 ; Total installed capacity : 1,055 tonnes per shift of 8 hours a day.

GROUNDNUT: Groundnut (shelled) Production in India during 1978–79 stood at 6·4 million tonnes, indicating a rise over the 1977–78 level of 6·1 million tonnes. However in 1979–80 production received a setback and is placed at 5·8 million tonnes.

Exports of groundnut extractions form a lion's share of the total exports of oilseed meals from India, and contribute more than 50 per cent of total world exports. The exports which touched a record figure of 1,248,389 tonnes valued at Rs. 1,648 million during 1976–77 were much lower during 1977–78 (operating under a ceiling prescribed by the Government) at 565,000 tonnes valued at Rs. 872 million.

During 1979–80, 564,000 tonnes valued at Rs. 736 million were exported as against 523,061 tonnes worth Rs. 697 million in the preceding year.

These exports are however, subject to quota restrictions. The ceiling is fixed and relaxed keeping in view the domestic needs. The overall quota for 1977 and 1978 was 750,000 and 800,000 tonnes respectively. From January 1979, the exports of groundnut extractions have been canalised through the State Trading Corporation.

Per Hectare Yield in kgs. of groundnut-in-shell : 1974–75 : 723 ; 1975–76 : 935 ; 1976–77 : 747 ; 1977–78 : 846 ; 1978–79 : 835 ; 1979–80 : 797.

COTTONSEED : Until about the beginning of the sixties cottonseed was used almost entirely as a cattle-feed, but now 65 to 70 per cent of the total production is available for crushing.

Cottonseed production during 1979–80 was placed at 2,400,000 tonnes, marginally lower than the 1978–79 level of 2,500,000 tonnes. Actual crushing of the seed stood at 1,400,000 tonnes in 1979–80 and in 1978–79 it was slightly higher at 1,450,000 tonnes. Cottonseed oil production fell marginally to 170,000 tonnes in 1979-80 from 180,000 tonnes in the preceding year.

Exports : Decorticated cottonseed extractions/expellers, a by-product of scientific processing, have no market in India and have to be exported. The quantum exported during 1978–79 was 214,480 tonnes valued at Rs. 248 million, the corresponding figures for 1979–80 being 194,095 tonnes and Rs. 230 million respectively.

There was considerable decline in the exports during 1979–80 at 194,095 tonnes valued at Rs. 231 million over 1978–79 level of 214,480 tonnes valued at Rs. 248 million.

SOYABEAN: The soyabean crop is steadily catching popular acceptance from farmers in the States of M.P. and U.P. The area increased to about 280,000 hectares during 1978-79 from the 1976–77 level of 125,000 hectares. The production of soyabean with the modest crop of 50 to 60 thousand tonnes in 1976-77 has reached a level of 250,000 tonnes in the current crop year 1978-79. The steady development became possible by sustained efforts made by various institutes, encouragement given by State and Central Governments from time to time, and the interest shown by industry by way of offering best price to the farmers in order to make this crop most economical to them.

With all these efforts it is estimated that its cultivation could be stepped up to about 1 million hectares during the next few years.

Sunflower Oil : With proper techniques of cultivation. yields up to 2 tonnes per hectare can be obtained. The success of sunflower cultivation depends on the availability of high-yielding fresh varieties of seeds as the crop is highly cross polinated. The Government has sanctioned a scheme for producing such seeds.

Under a Central Government programme sunflower has been grown in Andhra Pradesh, Tamil Nadu and Karnataka.

NON-EDIBLE OILS : In 1959 as much as 75 per cent edible oils were used in the manufacture of soap. By 1972 the use of edible oils had dropped to 25 per cent. Efforts have been stepped up to use indigenous sources of non-edible oils such as rice bran oil, mowrah oil, linseed oil, castor oil and solvent oil of groundnuts and minor oils from forest tree seeds. This has not only generated employment in rural India but has saved Rs. 200 million in foreign exchange which would have been spent on the import of 60,000 tonnes per annum of tallow or edible oils.

Castor Oil : Export of castor oil during 1979–80 amounted to Rs. 521 million.

Inedible castor oil has two significant potentials :

(1) With suitable processing castor oil can be used in the manufacture of soaps to the extent of over 25 per cent thereby relieving to that extent the pressure on other edible oils

(2) Castor oil has great export potential as it is used for conversion and in the lubricant industry. India and Brazil are the only major sources of castor oil in the free world. If India can export the oil-based chemical equivalent of 20,000 tonnes of castor oil, instead of exporting crude castor oil, the additional foreign exchange earnings would be about Rs. 30 million.

Oil-palm : Grown under expert guidance and suitable conditions oil-palm can give higher output of oil per hectare than any other oil-seed crop. For instance, whilst groundnut gives 200 kgs. of oil per hectare in India and 600 kgs. per hectare in most efficient countries, sunflower gives 360 kgs. of oil per hectare and oil-palm gives 1,800 kgs. of oil per hectare in plantations in Malaysia.

Under a State Government scheme in Kerala saplings germinated from the Malaysian red palm oil-seeds have been planted up to 1976 in an area of 2,500 hectares. The yield will be of the following order (*i*) Red palm oil 4,446 tonnes, (*ii*) Kernel oil 616 tonnes, (*iii*) Oil cake 616 tonnes.

A similar project has also been sanctioned by the Central Government for Andaman and Nicobar islands on an area of 2,400 hectares.

Lemon-grass Oil: It is chiefly grown in Kerala. India exports more than Rs. 10 million worth of lemon-grass oil annually. It is mainly used as a base for some perfumes for the soap-making industry.

Mentha Oil: Mentha farming has been encouraged in the country to save foreign exchange used in the import of mentha oil, an important ingredient in most medicines.

The Kumaon region has been found to be the most suitable area for the cultivation of mentha. The present production of mentha oil is about 200 tonnes valued at Rs. 16 million. This has resulted in the saving of Rs. 10 million in foreign exchange.

Palmarosa Oil: India ranks first among nations producing palmarosa oil, and is the chief supplier of this important raw material for perfumery manufacture, earning foreign exchange worth Rs. 3 million annually.

Pine Oil: The first pine oil factory in the country was started at Hoshiarpur in the Punjab. Three others were set up thereafter. It produces pine oil, dipentine and pine tar. This factory is claimed to have resulted in the saving of foreign exchange to the tune of Rs. 3 to 4 million annually. Another factory to produce high quality pine oil is being set up in Jammu.

RESEARCH : The Central Government has sanctioned Rs. 38 million for a comprehensive all India co-ordinated research project on oil-seeds to be conducted under the Indian Council of Agricultural Research.

The centres for conducting research for different oil-seeds are as follows :

Groundnut : The main centres are at Ludhiana in Punjab for northern region, Tindivanam in Tamil Nadu for south-eastern region, and Rajendranagar in Andhra Pradesh for southern region. The sub-centres are located at Mainpuri in Uttar Pradesh, Pollachi in Tamil Nadu, Kadria and Sambalpur in Madhya Pradesh, and Raichur and Dharwar in Karnataka.

Castor: Rajendranagar in Andhra Pradesh is the main centre and Salem in Tamil Nadu and Raichur in Karnataka are the sub-centres.

Sesamum: The main centres are at Coimbatore, Tamil Nadu for southern region ; Jabalpur, Madhya Pradesh for central region; and Sumerpur, Rajasthan for northern region. The sub-centres are at Karimnagar and Visakhapatnam in Andhra Pradesh ; Bhubaneshwar, Orissa ; Urmala, Maharashtra ; and Jhansi, Madhya Pradesh.

Linseed: Kanpur, Uttar Pradesh is the main centre and Patna, Bihar, and Jhansi and Jabalpur in Madhya Pradesh are the sub-centres.

Rapeseed and Mustard: The main centres are at Berhampore, West Bengal ; Kanpur, Uttar Pradesh ; and Hissar, Haryana. The sub-centres are at Purnea, Bihar, Pantnagar, Uttar Pradesh and Gurgaon, Haryana.

VANASPATI

There are 85 vanaspati units in the country with an annual installed capacity of 1·291 million tonnes (based on groundnut oil usage). Taking into account other types of oil being used presently, the effective capacity is 823,000 tonnes. Part of this capacity is utilised by the industry for manufacture of other refined vegetable oils. The production of vanaspati (in tonnes) for the last three years is as follows : 1978 : 657,000 ; 1979 : 638,000 ; 1980 : 505,002.

Government Policy: In order to reduce the regional imbalances in vanaspati capacity, Government has permitted the setting up of new, economically viable units in States which do not have any unit and have a reasonable demand for vanaspati like Himachal Pradesh, Jammu & Kashmir, Assam and Orissa. Encouragement is also given to ensure that uneconomic units are brought to economically viable capacities.

The quantum of imported edible oils for use in vanaspati is fixed at 95 per cent of the industry's requirement so as to conserve the indigenous edible oils for direct consumption.

Public Sector : Government Hydrogenation Factory at Kozhikode, Kerala, Ganesh Flour Mills Co., Delhi and Kanpur, Amritsar Oil Works, Amritsar and Bhavnagar Vegetable Products, Bhavnagar are the factories in the public sector. They have an installed capacity of 105,000 tonnes per annum.

No. of Persons Employed: About 15,000 directly and about 60,000 indirectly.

Publications: 'Oil and Oil-seeds Journal', a monthly brought out by the Bombay Oil-seeds and Oils Exchange Ltd., Jenabai Bldg., M. Bunder Rd., Bombay 400003 'Oil-seeds Market Review', a weekly market report, 51-A Mittal Chambers, Nariman Point, Bombay 400021.

PAPER INDUSTRY

BRIEF HISTORY

THE word paper comes from Papyrus a reed growing on the banks of River Nile in Egypt, yet the art of paper making is popularly known to have been invented by the Chinese as early as the third or second century before the Christian era. In India the tradition of making paper by hand can be traced only to the 8th Century A.D. Paper making was considered to be one of the premier domestic cottage industries before the commencement of the British rule. In India the first paper factory was started in Bengal in the latter half of the 18th century by a Christian missionary. The hundred years that followed never saw the laying of a firm foundation for the industry. It was only in 1967 that a real beginning was made when a modern paper mill was established at Bali in Bengal.

Private Sector: There has been a steady growth in the paper and paper board industry over the last four years. During the year 1979–80, 11 more units including two large mills at Kurnool and Bhadrachalam (Andhra Pradesh) commenced production and as on 1–1–1980, the actual number of units was 117 with a capacity of 1·51 million tonnes.

There are three rayon grade pulp units and one paper grade pulp factory all in the private sector. The total installed capacity of the three rayon grade pulp units till 1979–80 was 129,600 tonnes per year. During 1976–77, production was 118,000 tonnes and during 1977-78 it was 127,000 tonnes. It declined to 100,000 tonnes during 1978–79. The estimated production in 1979–80 was 125,000 tonnes. Output of pulp grade paper was 22,000 tonnes during 1976–77 and was 24,676 tonnes during 1977–78. During 1978–79 this was around 35,456 tonnes. The estimated production of pulp during 1979–80 was 35,000 tonnes.

Public Sector: National Newsprint and Paper Mills Ltd. (NEPA) at Nepanagar, Madhya Pradesh is the only unit that produces newsprint in the country and is able to meet only 15 per cent of the demand.

Security Paper Mill: At Hoshangabad, 45 miles from Bhopal (Madhya Pradesh), set up in 1968 in collaboration with a British firm manufactures annually 28,000 tonnes of special quality paper for currency and bank notes.

No. of Persons Employed: About 65,000.

Ranking in the World Market: India ranks 20th among the paper producing countries in the world.

Production: Total production of all varieties of paper and paper board during 1979 was 1,009,200 tonnes against 1,005,600 tonnes in 1978.

(In tonnes)

Type	1978	1979	1980 (Jan.-Apr.)
Writing and printing paper	596,400	598,800	199,600
Wrapping and packing paper	234,000	235,200	78,500
Paper board	171,600	171,600	57,300
Special varieties ..	3,600	3,600	1,200

Per capita Consumption: (in kgs.) U.S.A. — 227·25; Canada — 140·62; Japan — 73·48; Australia — 56·24; India — 1·58.

Projected Consumption

('000 tonnes)

Year	Cultural Paper	Industrial Paper	Newsprint	Total
1980-81 ..	644·4	477·9	287·9	1,410·2
1985-86 ..	747·6	565·7	335·5	1,648·8
1990-91 ..	850·7	653·5	383·5	1,887·7

Export & Re-exports of Paper

(Rs. million)

Year	Paper & paper board	Articles made of paper pulp, etc.	Total
1970-71	39·40	14·70	54·10
1971-72	14·30	15·10	29·40
1972-73	21·40	20·20	41·60
1973-74	43·20	25·90	69·10
1974-75	38·80	36·20	75·00
1975-76	16·20	38·40	54·60
1976-77	15·18	49·07	64·25
1977-78	37·86	32·15	70·01
1978–79	N.A.	N.A.	72·00

N.A. = Not Available.

Import of Paper

(Rs. million)

Year	Paper, paper board and manufactures	Newsprint
1970-71	250·7	187·3
1971-72	349·2	275·9
1972-73	313·6	205·2
1973-74	292·4	178·1
1974-75	595·2	449·9
1975-76	576·8	383·2
1976-77	621·8	472·0
1977-78	816·9	608·6
1978–79	1,048·3	N.A.
1979–80	1,547·0	N.A.

N.A. = Not available.

Newsprint: The country's total requirement of newsprint is estimated at 0·3 to 0·4 million tonnes per annum. So far there is only one public sector company — National Newsprint and Paper Mills in Nepanagar, Madhya Pradesh. Production of newsprint during 1979 was 48,744 tonnes compared to 48,864 tonnes in the previous year. The annual capacity is 75,000 tonnes.

The Hindustan Paper Corporation Ltd. and Messrs. Mysore Paper Mills are implementing newsprint projects for a capacity of 80,000 tonnes and 75,000 tonnes per annum in Kerala and Karnataka States respectively. The project of Messrs. Hindustan Corporation Ltd. is expected to materialise by 1980-81 and that of Messrs. Mysore Paper Mills Ltd. may go into production by 1981–82.

The Government spends over Rs. 650 million every year to import about 0·3 million tonnes of newsprint to meet the demand.

The Central Budget for 1981–82 imposed 15 per cent customs levy on imported newsprint.

Co-op. Paper Mill: The first co-operative paper mill began production in May, 1976, at Pravaranagar near Shrirampur.

The *Pravara Pulp and Paper Mills* makes paper from bagasse, wheat chaff and old gunny bags. It has a capacity of 25 tonnes a day.

GENERAL

One of the three rayon grade pulp units is likely to substantially expand the capacity by 20,400 tonnes per annum during 1979–80.

Hindustan Paper Corporation (HPC) is engaged in the implementation of following projects :

(*i*) Kerala Newsprint Project (80,000 tonnes of newsprint per annum). (*ii*) Nagaland Pulp and Paper Project (33,000 tonnes per annum). (*iii*) Expansion of Mandya National Paper Mills Ltd. (39,600 tonnes per annum). (*iv*) Nowgong Pulp and Paper Project (100,000 tonnes). (*v*) Cachar Pulp and Paper Project (100,000 tonnes per annum).

Training: Paper technology is taught at (1) *Birla Institute of Technology and Science*, Pilani, Rajasthan (Degree); (2) *Forest Research Institute*, Dehra Dun, Uttar Pradesh (Diploma); (3) *Institute of Paper Technology*, Saharanpur, Uttar Pradesh (Diploma and Certificate).

Research: *Forest Research Institute*, Dehra Dun, Uttar Pradesh, was the only well-equipped research body uptill now. Recently *Parkhe Research Institute* at 1183, Shivajinagar, Fergusson College Rd., Pune 411005 was started to study the various problems of paper industry and to design sophisticated machines for paper manufacture. However, many large mills conduct research for their own requirements.

Control: Under the paper control order promulgated on June 30, 1979, the Government announced a package of measures to ensure the availability of cultural varieties of papers at fair prices.

In early 1980, the Government conceded a big increase of 25 per cent in the price of white printing paper from Rs. 3,000 to Rs. 3,750 a tonne and that of cream wave paper from Rs. 3,785 to Rs. 4,781 a tonne.

Some Large Units*:

Andhra Pradesh: Sirpur Paper Mills Ltd. (Sirpur-Kaghaznagar), 40,000 ; Andhra Pradesh Pulp & Paper Mills Ltd. (Rajamundry) 60,000 ; *Bihar:* Rohtas Industries Ltd. (Dalmianagar) 60,000 ; *Haryana:* Ballarpur Inds. (Yamunanagar), 46,000 ; *Karnataka:* West Coast Paper Mills Ltd., Shreenivas House, Waudby Road, Bombay 400001 (Dandeli), 45,000 ; *Madhya Pradesh:* Orient Paper Mills Ltd., 15, India Exchange Place, Calcutta 700001 (Amlai, Sahdol), 75,000 ; *Maharashtra:* Ballarpur Inds. (Ballarpur), 69,000 ; *Orissa:* Orient Paper Mills Ltd., Brajrajnagar 768246 (Sambalpur Dist.), 161,000 ; *Tamil Nadu:* Seshasayee Paper & Board Ltd., P.O. Cauvery, Salem Dist. (Pallipalayam, Erode), 35,000 ; *Uttar Pradesh:* Star Paper Mills Ltd. (Saharanpur), 46,200 ; *West Bengal:* Bengal Paper Mills Ltd., 14, N. Subhas Road, Calcutta 700001 (Raniganj), 65,000 ; Titaghur Paper Mills Co. Ltd., Chartered Bank Bldgs., Calcutta 700001, (1. Titaghur, 2. Kakinada), 83,000.

(As additional capacity of paper and paperboard has been proposed to be commissioned, the capacity of some of the above units will undergo change.)

Pulp: 1. *Rayon Grade:* Gwalior Rayon Silk Manufg. Co. Ltd., P.B. No. 37, Kozhikode, Kerala (Mavoor), 60,000 ; South India Viscose Ltd., Race Course, Coimbatore 641018, Tamil Nadu (Coimbatore), 22,500 ; Harihar Polyfibres Ltd., Harihar, Karnataka (Harihar), 36,000.

2. *Paper Grade Pulp:* Central Pulp Mills, 1183, Shivaji Nagar, Fergusson College Road, Pune 411005, Maharashtra (Songadh, Gujarat). The existing capacity was recently expanded to 40,000 tonnes per year.

---

* Location of the factory is indicated in brackets and figure following shows the capacity in tonnes per year.

PETRO-CHEMICAL INDUSTRY

PETRO-CHEMICAL industry is comparatively of recent origin, but is characterised by spectacular growth during the last three decades, because of its wide application in various fields. The products from petro-chemical industries have entered every aspect of human activity, contributing in a remarkable way to improvement of the quality of life.

Growth: The petro-chemical industry can be mainly grouped into plastics (polyethylene, PVC, polystyrene, polypropylene), synthetic fibres (polyester, nylon and acrylic), synthetic rubber (styrene, butadiene and polybutadiene) and synthetic organic chemicals as raw materials for plastics, synthetic fibres, dyestuffs, pesticides, synthetic detergents and pharmaceuticals. With the development of process technology using petroleum distillates as the main ingredient, the petro-chemical industry emerged to supply all the basic chemicals that were once derived from coal, alcohol and vegetable oils, and a large number of new chemicals were produced on a commercial scale.

RAW MATERIALS: The raw materials constituting the source for chemicals from petroleum may be divided into three categories : (*i*) gaseous, (*ii*) liquid and (*iii*) solid. Following are some of the important raw materials:

Natural gas: Natural gas is composed mainly of methane, ethane, propane, butane, pentane, hexane and higher hydrocarbons. The quantities of pentane and hexane determine what is known as wetness of the gas. Natural gas is found either associated with crude oil or non-associated. The non-associated gas may contain very small quantity of butane and higher hydrocarbons and as such it is called dry gas. Besides the hydrocarbons, natural gas may contain a certain amount of nitrogen, hydrogen sulphide, carbon-dioxide and helium.

Derivatives: Natural gases can be used for the manufacture of olefins which are the important building block feedstocks for a large number of petro-chemicals, ammonia, methanol and also carbon black.

Sources: The established fields of natural gas are in Naharkatiya and Moran oil fields in Assam and Ankleshwar, Kalol and Cambay oil fields in Gujarat and the offshore oil fields known as Bombay High and Bassein. Whilst the gases in the Ankleshwar and Kalol oil fields are wet with a high percentage of higher hydrocarbons, the

Cambay gas is dry consisting mainly of methane, ethane and small quantities of propane and butane. The gas from Bombay High and Bassein fields is rich in ethane and propane making it an ideal raw material for the production of petro-chemicals. Natural gas is, therefore, a precious raw material and government has decided to use it mainly for the manufacture of fertiliser and petro-chemicals.

Refinery gas: This gas is produced at various stages in refinery operations mainly from the straight distillation units and the thermal and catalytic cracking and reforming processes. The cracked gases are generally very rich in olefins and can be co-polymerised to get high octane gasoline or used to produce petro-chemicals. The distillation gases are generally parafins and are normally used as fuels in the refinery itself. The refinery gases being rich in butane and propane have found extensive use as domestic and industrial fuel in liquefied form.

Naphtha: The most popular petro-chemical raw material from the liquid petroleum group is naphtha. A great deal of research and development effort is being made to use higher liquid fractions to manufacture petro-chemicals. It is considered more advisable to produce goods from the high-priced crude rather than use it as fuel.

The international oil crisis has had a decisive impact on the feedstocks for the petro-chemical industry. In India the petro-chemical and fertiliser industries have been planned on the basis of increasing availability of naphtha with the increasing demand for petroleum products. Till the sixties this valuable petroleum product was exported. Its utility as a feedstock for the production of organic chemical and plastics was appreciated in the mid-sixties.

Demand : The demand for naphtha in 1977–78 was about 2·34 million tonnes against a production of about 2·19 million tonnes requiring an import of 0·15 million tonnes. If the programmed production for fertiliser and petro-chemicals materialises the demand for naphtha would be 3·8 million tonnes by 1984-85.

Uses of Naphtha : Nitrogenous fertiliser is a rapidly growing item in developing countries. Naphtha reforming yields hydrogen, which is required for the synthesis of ammonia, a basic material in fertiliser production. To produce one tonne of ammonia less than a tonne of naphtha is required.

Olefins are the base for the bulk of petro-chemicals produced. Ethylene is the most important followed by propylene and butadiene. The cracking of naphtha to produce olefins is a major commercial process. Naphtha crackers are generally so designed as to give variable ratios of olefins according to market requirements of their end products.

Production of aromatics (*e.g.* benzene, toluene, xylenes, etc.) is another major use of naphtha. Aromatics are used for the production of synthetic fibres, high quality gasoline, etc.

Naphtha-based Industries : Four fertiliser plants — Trombay in Maharashtra, Gorakhpur in Uttar Pradesh, Kota in Rajasthan and Madras in Tamil Nadu — use naphtha. Three other fertiliser plants — at Goa, Cochin in Kerala and Durgapur in West Bengal — were operating at half capacity since 1973. At full capacity they will consume 500,000 tonnes of naphtha a year. During 1974–75 three more naphtha consuming fertiliser plants were to be erected at Tuticorin in Tamil Nadu, Mangalore in Karnataka and Barauni in Bihar which would need another 600,000 tonnes.

In India the industry has developed only during the last fifteen years. A beginning was made in mid-sixties by setting up a relatively small complex (20,000 tonnes/annum ethylene production) by M/s. Union Carbide near Bombay, using naphtha from the local refinery as the basic raw material. This was followed by M/s. Nocil's 60,000 tonnes/ annum ethylene complex, also near Bombay. Subsequently, a large petro-chemicals complex has been put up near Vadodara in Gujarat, by the Indian Petro-chemicals Corporation Limited, a Govt. of India enterprise.

With the availability of Petro-chemical Intermediates from the above petro-chemical complexes, particularly IPCL, the down stream industries *e.g.* Plastic processing Industries, Synthetic Fibre industry are set to develop in a big way. The present application of petro-chemicals in India are quite diversified. They are used in a host of products from simple shirt buttons to complex communication systems for aviation and rocket propulsion. They are also used in a variety of consumer products from packaging and insulating materials to staple fibre, filament yarn, electronic components, pipes and fittings, substitute for wool etc. The greatest impact of petro-chemicals is in vital areas like water-management, health-care, transport, housing and clothing etc.

Naphtha requirement for the petro-chemical industries in Bombay and Gujarat is around 990,000 tonnes.

Perspective Plans

(in '000 tonnes)

Category	Capacity in operation and potential capacity in 1978–82	Demands envisaged during	
		1982–83	1987–88
Plastics			
1. LDPE	112	124	244
2. HDPE	30	71	118
3. PVC	103·4	150	315
4. Polypropylene	30	41	65
5. Polystyrene	23·5	31	43
Synthetic Fibres			
1. Polyester Filament Yarn	7·9	15·5	30
2. Polyester Staple Fibre	25·3	106	138
3. Nylon Filament Yarn and Tyre Cord	38·6	59	108
4. Acrylic Fibre	16	20	26
Synthetic Rubber			
1. SER	30	49	93
2. PBR	20	20	50
Olefins			
1. Ethylene	214	334	633
2. Propylene	20	147	247
3. Butadiene	54·5	47	164
Aromatics			
1. Benzene	151·2	265	441
2. O-Xylene	210	51·6	91
3. P-Xylene	17	119	162
Intermediates			
1. Caprolactam	20·5	569	125
2. DMT	30	131	134
3. Formaldehyde	155·8	75	120
4. Methanol	99	85	150
5. Phthalic Anhydride	30·6	39·7	70·9
6. Phenol	20·9	34·5	56
7. Ethylene Oxide	28	76	106
8. Ethylene Glycol	30	59	80

SOME IMPORTANT COMPANIES

Private Sector

Union Carbide India Ltd., Trombay, Bombay, established the first integrated petro-chemical complex in 1966. Its present licensed capacity is 20,000 tpa low density polyethylene and 10,890 tpa chemicals.

National Organic Chemical Industries Ltd. (Regd. Office : Mafatlal Centre, Nariman Point, Bombay 400021), Thane, Bombay, constructed in 1968 with a naphtha cracker of 225,000 tpa naphtha capacity (from Bharat Petroleum Corpn.), to produce 60,000 tpa of ethylene, 35,000 tpa of propylene, 7,200 tpa of butadiene and 14,000 tpa of benzene. From these a variety of organic chemicals are produced.

Polyolefins Industries Ltd., which produces 24,000 tpa of HDPE is an associate company of NOCIL and uses ethylene from NOCIL as feedstock. Polyolefins Industries have been permitted to expand to 30,000 tonnes per annum capacity for HDPE.

Public Sector

Indian Petro-Chemicals Corpn. Ltd., near Vadodara, Gujarat (Authorised Capital : Rs. 2,000 million ; Paid-up Capital : Rs. 1,860 million). The aromatics project has been in operation since 1973 and consists of two units namely Dimethyl Terephthalate (DMT) and Xylenes with the capacity of producing — DMT: 24,000 tpa ; Para-Xylene (for captive conversion into DMT): 17,000 tpa; and Ortho and Mixed Xylene : 25,500 tpa respectively.

Gujarat Olefins Project which was commissioned in 1979 consists of Naphtha cracker, Benzene/Butadiene extraction units and Pyrolysis Gasoline Hydrogenation unit. The products with their respective capacities will be : Ethylene (Polymer grade) 130,000 tpa ; Propylene (Polymer grade) 35,000 tpa ; Propylene (Chemical grade) 43,300 tpa ; Butadiene 22,000 tpa; Benzene 23,600 tpa ; Light Pyrolysis Gasoline 29,300 tpa ; Heavy Pyrolysis Gasoline 34,600 tpa ; Raffinate 8,200 tpa ; Carbon black feedstock 17,900 tpa.

Downstream Units : Low Density Polyethylene (using ethylene stream) 80,000 tpa ; Ethylene Glycol unit (using ethylene stream) 20,000 tpa ; Polypropylene unit (using propylene stream) 30,000 tpa ; Actylonitrile unit (using propylene stream) 24,000 tpa; Acrylic Fibre unit (using acrylonitrile) 12,000 tpa ; Polybutadiene Rubber (using butadiene stream) 20,000 tpa; Linear Alkyl Benzene (detergent alkylate) 30,000 tpa.

The second petro-chemical complex, **The Bongaigaon Petro-chemicals Ltd.,** is being set up at Bongaigaon in Assam, as an adjunct to the one million tonne Bongaigaon Refinery to manufacture 30,000 tpa of polyester fibre and 6,000 tpa of orthoxylene. It will require 80,000 tonnes of a special cut naphtha — 46,000 tonnes will be available from Bongaigaon Refinery while the rest will come from Gauhati Refinery.

These two petro-chemical complexes are estimated to cost about Rs. 5,500 million.

The IPCL's Research and Development Centre was opened in October 1973, near Vadodara at an estimated cost of Rs. 70 million.

The Union Govt. has allocated Rs. 290 million for the refinery and petro-chemicals complex of Bongaigaon Refinery and Petro-chemicals Ltd., and the project is expected to be commissioned in 1981-82.

Caprolactam Plant, near Vadodara, Gujarat, was commissioned in December 1973, by Gujarat State Fertiliser Corporation to produce 20,500 tpa of caprolactam and 85,000 tonnes of sulphur dioxide and 85 tonnes of oleum daily.

Assam Petro-chemicals Ltd. (G. N. B. Road, Ambari, Gauhati 781001 ; factory at Namrup, Parbhatpur 786623, Assam) was commissioned on 25th June, 1976, and commercial production started in August 1976. After overcoming the initial production and quality problems, regular production of the quality products with trade names PETROLITE R-50, for plywood industries, PETROLITE R-65 for furniture and toy industries (both Urea Formaldehyde Resins) and PETROLITE-M, a U. F. moulding powder for electrical and tablewares industries, is going on.

Petrofils: The Rs. 413 million polyester filament yarn project in the co-operative sector at Vadodara has begun production. It has a capacity of 3,500 tonnes of polyester filament yarn per year. The capacity of the plant is likely to be doubled shortly.

PETROLEUM INDUSTRY

BRIEF HISTORY

REAL foundation of oil industry in the public sector was laid only during the Second Plan period (1956–61) when the Government of India launched a planned programme of exploration, production, refining and distribution. The Oil and Natural Gas Commission was set up in 1956 and the Ministry of Petroleum and Chemicals in 1963.

Oil exploration had been started by Assam Oil Company / Burmah Oil Company and their associates in the 19th Century confined to the Upper Assam region. From 1949 to 1960 the Standard Vaccum Oil Company explored the West Bengal Basin first alone and then with the Government of India as the Indo-Stanvac Petroleum Project. The project, however, did not succeed, though it produced valuable data which has since been made the subject of very detailed studies. Till May 1976, crude in commercial quantities was produced only in Assam and Gujarat. Since then commercial production has begun in the offshore region of 'Bombay High'. Currently, Bombay High crude production is 5 million tonnes per annum and is expected to increase to 8·4 million tonnes per annum by 1981-82. In addition, crude and gas reserves have also been established in the associated Bassein, Tapti structures.

Production : ONGC, Oil India Ltd. (OIL) and Assam Oil Company Ltd. (AOC) are the only three agencies engaged in the production of crude oil. The production in Gujarat, which is exclusively by ONGC, is about 4·2 million tonnes per annum. The production from offshore areas is 5·0 million tonnes. The production in Assam is about 4·5 million tonnes per annum, of which the contribution from OIL is 3·12 million tonnes.

During 1977, about 1,250 million cubic metres of associated and non-associated gas were supplied to various customers in Gujarat and Assam. Associated gas from the Bombay High field is also available.

Crude Demand : The estimated demand for crude in 1981-82 is about 32·22 million tonnes, of which indigenous production is estimated at approx. 17·12 million tonnes.

IMPORT BILL : In 1979-80, it was about Rs. 32,119·0 million for about 20·5 million tonnes of crude and petroleum products. Of this expenditure Rs. 21,869·3 million were for importing 16·1 million tonnes of crude. On present estimates, based on current costs of imported crude the likely import bill is estimated at Rs. 60,000 million for 1981-82.

Price of Imported Crude : In January 1979 the price was $13·45 for Iran crude. After the O.P.E.C. meeting at Bali the price of crude varies between $36 to $41 per barrel.

Pipelines : A crude pipeline intended for the pumping of imported and Bombay High crudes from Salaya in the Gulf of Kutch to Mathura refinery a distance of about 1,222 kms. has been completed and will be commissioned shortly. A branch from this pipeline to Koyali refinery to supply Bombay High as well as imported crude to its expansion units was commissioned on 5th September 1980. A product line from Mathura to Jullundur *via* Delhi and Ambala, a distance of 513 kms. is under construction.

OIL COMPANIES : There are four oil companies engaged in the refining and marketing of petroleum products. These are Indian Oil Corporation Ltd. (IOC), Bharat Petroleum Corpn. Ltd., Hindustan Petroleum Corporation Ltd. (HPC) and Assam Oil Company Ltd. (AOC). Of these only the last still remains in the private sector. Full ownership of Esso interests in HPC were acquired by Government in October 1976, Burmah Shell interests in India were fully acquired in January, 1976, under the name of Bharat Refineries Ltd. (later renamed Bharat Petroleum Corpn. Ltd.). Similarly, Caltex interests were fully acquired by the Government in December, 1976, under the name of Caltex Oil Refining (India) Ltd. till it was merged into Hindustan Petroleum Corpn. Ltd. in May, 1978.

In addition to these companies, there are two public sector companies (each with a minority foreign collaboration) — Cochin Refineries Ltd. (CRL) and Madras Refineries Ltd. (MRL) which are engaged only in the refining of petroleum products and one public sector company, Indo-Burma Petroleum Company Ltd. (IBP) which is engaged in the marketing of petroleum products.

Refineries in Operation : There are eleven refineries in operation.

Refinery	Capacity (1980) M.M.T.	Crude run (1979–80)
Assam Oil Co. (Digboi) ..	0·50	0·41
HPCL, Bombay	3·50	3·13
BPCL, Bombay	5·25	4·82
CORIL, Vizag	1·50	1·10
IOC, Gauhati	0·85	0·65
IOC, Barauni	3·30	2·28
IOC, Koyali	7·30	6·71
IOC, Haldia	2·50	2·49
CRL, Cochin	3·30	2·87
MRL, Madras	2·80	2·82
B.R.P.L., Assam	1·00	0·19
	31·80	27·47

Of the total refining capacity of 31·80 million tonnes per annum, 31·30 million tonnes per annum are in the public sector. Only 0·5 million tonnes per annum (AOC, Digboi) still remains in the private sector.

Refineries under construction : There is only one refinery presently under construction at Mathura (U.P.). The Mathura refinery will have a capacity of 6 million tonnes per annum and will be the biggest in the country. It is expected to cost Rs. 2,297 million and to go on stream in the second half of 1981.

OIL AND NATURAL GAS COMMISSION (Tel Bhavan, Dehra Dun 248001, U.P.).

ONGC is the only public sector undertaking engaged in exploration for and exploitation of crude oil and natural gas resources in various sedimentary basins of the country both onland and offshore. Its operations do not cover certain areas in the North East which have been leased out to Oil India Ltd. and Assam Oil Company. It has also undertaken oil exploration in foreign countries.

ONGC has extended its exploration operations to all sedimentary basins (about 1·41 million sq. kms.) of India. It has at present 9 geological, 26 seismic, 4 gravity magnetic, 2 shallow drilling, 22 electrologging parties and 32 deep drilling rigs in operation in various onland sedimentary basins in the country. Besides 4 offshore drilling units — one is acquired and three on charter hire — are conducting drilling and production testing operations in the offshore areas. ONGC's seismic vessel 'Anweshak' continues to conduct geophysical surveys in the various offshore areas. This vessel has been in operation since August 1975.

ONGC has undertaken (upto the end of March, 1980) drilling on 230 structures (186 onland and 44 offshore), of which 190 structures had been fully tested and the remaining were under testing or drilling. Of the 211 tested structures, 72 had been found to be oil or gas bearing — 44 in Gujarat, 8 in Assam, one each in Himachal Pradesh, Rajasthan and Tripura and 17 offshore areas. This gives a success ratio of 1 : 3.

ONGC had by the end of March, 1980 completed drilling of 1,718 wells on these structures with a total hole depth of 3·57 million metres. Of the 1,718 completed wells, 951 had proved oil bearing, 123 gas bearing, 32 water injection wells, 487 wells were dry and the remaining 125 wells were either under test or to be tested fully or to be repaired.

As a result of drilling, ONGC has been able to discover (as on 1-1-1980) 399·12 million tonnes of initial recoverable reserves of crude oil (onshore—142·18, offshore 240·00) and 301,716 million cubic metres of natural gas from onshore areas and the Bombay offshore areas.

Offshore drilling : The country has 385,000 sq. km. of offshore shelf area (where water depth is within 200 metres). ONGC has carried out surveys in the Gulf of Cambay, Arabian Sea, Gulf of Kutch, Coromandel Coast, the Krishna-Godavari Delta and the south of Sunderbans extending westwards and have discovered 17 structural features which are favourable for oil accumulation. Commission began drilling for oil in the Bombay High Structure in 1973. By the end of March, 1980, of the 44 structures drilled, 41 structures were tested and 17 were oil/gas bearing.

In order to speed up exploration Govt. of India had leased, on production sharing contract, two promising areas to two American companies one off the Kutch Coast to Messrs. Reading and Bates Oil and Gas Co. and the other in the Bay of Bengal to Messrs. Carlsburg Petroleum Corporation. Messrs. Reading and Bates drilled one well in the Kutch area and Messrs. Carlsburg drilled two wells in the Bay of Bengal and since February, 1976 and May, 1976 respectively. Messrs. Asmera Group of Companies of

Canada, a joint venture between three Canadian oil companies and ONGC, took up exploration work in the Gulf of Mannar, under a production sharing contract. After conducting seismic surveys the group drilled one well and found it to be dry.

PRODUCTION — ONSHORE: Beginning with production of 100 tonnes of oil per day in September, 1961, ONGC has reached 16,000 tonnes per day which has however, now come down to 14,000 tonnes per day in view of disturbed conditions in Assam. Besides about 2 million cubic metres per day of associated gas is supplied to consumers in Gujarat and Assam. By the end of March, 1980 ONGC had produced and sold 62·49 million tonnes of crude oil and condensate at 6,710 million cubic metres of natural gas and saved the country over Rs. 23,325 million in foreign exchange. During the year 1980-81 ONGC expected to produce 6·00 million tonnes of crude oil from the onland fields in Assam and Gujarat.

PRODUCTION — OFFSHORE : Offshore production began on May 21, 1976, from two wells at an initial rate of 4,000 bbls. per day which was gradually stepped up, after completion of the fourth production platform, to 80,000 bbls. (about 3·83 million tonnes per annum) by January 16, 1978. After certain modifications to the two well-cum-production platforms (A&C) the production rate was expected to be stepped up to 100,000 bbls. per day by the end of December, 1978. By the end of March, 1980, ONGC had produced a total of 10·22 million tonnes of crude oil from the Bombay Offshore field. During 1980–81 the production expected from Bombay High is around 5·9 million tonnes.

Production of Crude Oil ('000 tonnes)

	1977	1978	1979
Quantity	10,185	11,271	12,841
Percentage increase over previous year ..	+17·6	+10·7	+13·9
Refinery Crude throughput :			
Quantity	24,430	25,626	28,153
Percentage increase over previous year ..	+7·3	+4·9	+9·9

Consumption : All India consumption of petroleum products.

('000 tonnes)

Product	1977	1978	1979 (Provisional)
Light Distillates ..	4,229	4,419	4,592
Middle Distillates ..	13,458	14,791	16,075
Heavy Ends			
Furnace Oil	4,034	4,202	4,543
L.S.H.S.	1,784	2,079	2,373
H.H.S.	27	89	19
Total Fuel Oils ..	5,845	6,372	6,935
Lube Oils	—	—	—
Greases	—	—	—
Total Lube Greases	462	518	564
Bitumen	878	986	1,026
Petroleum Coke ..	149	145	182
Wax	48	54	75
Others	110	127	142
TOTAL (Products) ..	25,179	27,412	29,592
Refinery Fuel* ..	1,391	1,482	1,484
GRAND TOTAL ..	26,570	28,894	31,076

* Refinery fuel includes refinery boiler fuel, lube refinery fuel and fuel consumed by thermal power Stations.

Overseas Operations — Iraq : ONGC is presently operating one Rig 3D-67 under a contract for a period of two years effective from 29-1-1979. During the year 1979-80 four complete wells and two part wells, with a total metreage of 14,474 were drilled. ONGC has also submitted a bid to Iraqi National Oil Company for undertaking drilling in Iraq for a period of three years with a new E-2000 diesel electric Rig.

Tanzania : Workover and testing operations at well SS-3 of Songo-Songo island were completed on 10-8-1979 under a contract signed with Tanzanian Petroleum Development Corpn. on Dec. 20, 1978. This contract was further extended to cover drilling of SS-3 and SS-4 wells on the same terms and conditions.

Exports of Petroleum Products for the year 1977 to 1979 (Quantity : In '000 tonnes. Value : In Rs. million)

Products	1977		1978		1979	
	Quantity	Value	Quantity	Value	Quantity	Value
Light distillates	—	—	36·2	33·0	54·6	144·4
Middle distillates	—	—	—	—	—	—
Others	59·0	65·0	6·8	9·0	4·7	5·0
Total (petroleum products)	59·0	65·0	43·0	42·0	58·7	149·4
Crude oil	—	—	—	—	—	—
GRAND TOTAL	59·0	65·0	43·0	42·0	58·7	149·4

Imports of Crude Oil and Petroleum Products during 1977 to 1979 (Quantity : In '000 tonnes. Value : In Rs. million)

Products	1977		1978		1979	
	Quantity	Value	Quantity	Value	Quantity	Value
1. Crude oil	14,548	12,589	14,892	12,439	15,380	17,868
2. Petroleum products. Light distillates.	259	314	369	410	171	375
Middle distillates	1,640	1,848	2,693	3,092	2,813	5,505
3. Others	765	568	854	639	942	1,177
TOTAL (petroleum products) ..	2,664	2,730	3,916	4,141	3,926	7,057
GRAND TOTAL	17,212	15,319	18,808	16,580	19,306	24,925

Algeria : A team of ONGC officers visited Algeria during January 1980 to examine the possibility of entering into the joint venture of exploration and exploitation in the recently thrown open 120 blocks in Algeria. Based on the recommendations of the team, bids have been submitted, with the approval of Govt. of India for undertaking such ventures in two blocks in Algeria. So far no response has been received.

Research and Development : The Geoscience group makes an overall evaluation of all Indian Offshore and Onshore basins, fixes priorities for exploration and draws up broad based exploratory strategy. A new Institute is being set up at Ahmedabad for the study of Reservoir Engineering. It will play an important role in maximising recovery of hydrocarbons from proven oil fields. An Institute of drilling technology is being set up at Dehra Dun. The Institute will tackle drilling problems in difficult areas where high pressures and high temperatures are encountered. The commissioning of a Computer Centre at Dehra Dun in 1976 helped to process seismic data at a rapid date and also do mathematical modelling of all the reservoirs.

Chairman : S. P. Wahi.

OIL INDIA LTD. (H.O. Duliajan, Upper Assam) : With its equity held in equal proportion by the Government of India and The Burmah Oil Company, this private sector enterprise is concerned with exploration and production of crude oil and natural gas from its leases in Assam and its transportation to refineries in Gauhati (Assam), Bongaigaon (Assam) and Barauni (Bihar) through its 1,157 km. long oil pipeline system. A limited quantity of crude is also supplied to the Digboi refinery of the Assam Oil Company. The capacity of its pipeline system has been expanded from 3·1 mtpa gross to over 5·1 mtpa to carry additional crude to be supplied by the ONGC to meet the requirements of the refineries in North East. Natural Gas, mostly associated, is supplied to the Fertiliser Corporation of India (Namrup), the Assam Electricity Board, Assam Petrochemicals Limited, various tea gardens besides injecting the same in the fields for pressure maintenance. Oil India (O.I.L.) ended the year 1979, by producing a little under 3 million tonnes of crude oil from its limited concessions of 1,990·02 sq. km. of mining leases which constitute one per cent of the total sedimentary basin available in the country for exploration and development. Cumulative crude oil production as on 1st January 1979 was 44 million tonnes, roughly 40 per cent of the crude produced from offshore sources since the dawn of the petroleum era.

The "discovery" well NHK-1 was drilled in 1952-53. As on 1st January 1980, over 422 exploration/semi-exploration/extension/developmental wells had been drilled with a cumulative meterage of over 1·3 million. Out of these wells 275 are oil bearing and 26 are gas producing.

Crude oil production during the calendar year 1979 was a little under 3 million tonnes. Gas sales to the market approximated 565 million cubic metres. An outlay of Rs. 4,000 million has been proposed for 1980-85.

INDIAN OIL CORPORATION LTD. : (Regd. Office : 254–C, Dr. Annie Besant Rd., Prabhadevi, Bombay 400025). The Indian Oil Corporation comprises two divisions viz. Refineries Division and Marketing Division.

Refineries & Pipelines Division (Indianoil Bhavan, Janpath, New Delhi 110001) builds and manages oil refineries of the Corpn. At present, IOC has four refineries at Gauhati (Assam), Barauni (Bihar), Koyali (Gujarat) and Haldia (West Bengal).

Indian Oil is constructing its fifth refinery at Mathura (Uttar Pradesh) with a capacity of 6·0 million tonnes.

This Division also lays oil pipelines and manages Gauhati—Siliguri, Haldia—Barauni—Kanpur, Haldia—Rajbandh, Koyali — Ahmedabad and Salaya-Koyali pipelines.

Marketing Division with its headquarters in Bombay is responsible for distribution of petroleum products produced by the four refineries of IOC and two other public sector refineries at Cochin and Madras. This Division also handles crude imports as well as import of finished products.

Started in 1960, its marketing participation in 1979-80 stood at 60·8 per cent. The sales were 16·80 million tonnes.

Indian Oil has put up its own lube blending plant and also its own drum plant at Madras.

Research & Development Centre : IOC has its own Research & Development Centre at Faridabad near New Delhi. Various engines, rigs, analytical instruments have been imported and commissioned for evaluation and testing of lubricants and other petroleum products. The Centre gives formulations to Indian Oil Blending Limited, a subsidiary of Indian Oil Corporation, for blending all lubricants, specialities etc. Some meligenous lubricants under the brand name 'Servo' have been developed by the Centre for defence, railways, power houses and steel plants etc. The Centre has also developed 'Servoprime', a high grade turbine oil from indigenous base stocks and the same has been introduced as initial charge in turbo-generator sets at various power houses.

The Centre has obtained international approvals for some of IOC lubricants and is working on getting approval for other grades. With a view to conserving kerosene, the Centre has designed and developed a high efficiency wick stove (Nutan).

INDIAN OIL BLENDING LTD. : A fully-owned subsidiary of Indian Oil Corporation Ltd., has two lube blending plants in Bombay and Calcutta and a grease manufacturing plant in Bombay.

INDO-BURMA PETROLEUM CO. LTD. : (Regd. Off. : Gillander House, N. Subhas Rd., Calcutta 700001). It became a subsidiary of the IOC on 12th January, 1970, and the controlling interest was acquired by the President of India from IOC on 16th September 1972. The major business of the company is marketing of petrol and petroleum products.

The company has also diversified into manufacture of electronic equipments, bottling machinery, freeze driers, space simulation chambers, high vacuum equipment, liquid Nitrogen containers, slurry type of industrial explosives. In 1972 the Company took over the management of Balmer Lawrie Group of Companies. Balmer Lawrie and its associates have established a plant in Dubai for manufacture of barrels and cans, and propose to build freight containers in Cochin and Howrah. The Group is also implementing civil construction jobs abroad as well as turn-key projects. The Group's other activities, like civil construction, structural fabrication, manufacture of barrels and grease and electrical equipment like switch-gears and motors are being expanded gradually.

BHARAT PETROLEUM CORPORATION LIMITED : (Regd. Off. : Bharat Bhavan, Ballard Estate, Bombay 400038). A 100% public sector enterprise, Bharat Petroleum has acquired complete ownership of Burmah-Shell's interests in India including the second largest refinery (5·25 million tonnes per annum) and a nationwide marketing organisation.

The refinery has made substantial technological improvement over the years. In 1979-80, eleven different crudes were processed. The refinery was also the first to process offshore Bombay High crude in 1976, and the share of Bombay High crude in the crude mix has risen from 61% (2·87 million tonnes) in 1978-79 to 73% (3·52 million tonnes) in 1979-80.

On the marketing side, total sales increased by 8% to 4·97 million tonnes in 1979-80 compared to 4·60 million tonnes in the previous year, while the turnover increased to Rs. 9,361·8 million as against Rs. 7,771·2 million in the previous year.

At present, BPCL has 5 Port Installations, 2 Lubricating Oil Blending Plants, and 65 Depots besides a countrywide network of 3,302 retail outlets. The throughput of products handled rose from 15·646 million kls. in 1978-79 to 16·478 million kls. in 1979-80, while 30 new Company-owned and operated tanklorries were added to the fleet for use at Depots and Installations.

As regards the expansion and diversification plans of the Corporation, the Government has approved the following projects which are likely to be completed by 1984.

(*a*) Debottlenecking of primary crude distillation unit to raise the crude distilling capacity to 6 million tonnes per annum for any combination of Bombay High & Middle East crudes, and for providing matching secondary processing facilities with the necessary auxiliaries at a total estimated cost of Rs. 360·5 million ; (*b*) Manufacture of 61,000 tonnes per annum of benzene and 16,000 tonnes per annum of toluene estimated to cost Rs. 131·2 million ; (*c*) Installation of a plant at the Refinery to recover 5,700 tonnes per annum of sulphur from sulphur dioxide (estimated cost Rs. 31·9 million) with a view to improving the environment.

Chairman & Mg. Director : U. M. Kini.

HINDUSTAN PETROLEUM CORPORATION LTD. became fully Indian-owned on October 1, 1976, when the ESSO company's share was bought off by paying 3·1 million U.S. dollars for its 26 per cent share. Subsequently, Caltex Oil Refining (India) Ltd. merged with Hindustan Petroleum in May, 1978. The Corporation's main operations are petroleum refining, manufacture of lubricating oil base stocks and marketing of petroleum products. The Corporation has over 6,000 employees in its four operations.

FUELS REFINERY : Situated at Trombay near Bombay, the Fuels Refinery went on stream in 1954. It was built at a cost of Rs. 175 million. During 26 years of operations, it has increased its capacity from 1·25 million tonnes/year to 3·5 million tonnes/year.

The secondary processing facilities at the Fuels Refinery were expanded in 1978 at a cost of Rs. 47 million to bring them in line with the crude processing facilities of 3·5 million tonnes per year. These facilities will result in an increased yield of LPG and light and middle distillates, enabling the Corporation to save an additional amount of Rs. 12 million in foreign exchange annually.

LUBE REFINERY : The lube refinery originally known as Lube India Ltd., a joint sector enterprise between the Government of India and Esso, started operations in late 1969 adjacent to the fuel refinery. Original investment was Rs. 170 million. The refinery uses, as raw material, the reduced crude from the fuel refinery. It has been operating at 200,000 tonnes per annum higher than the original designed capacity of 164,000 tonnes per annum.

VISAKH REFINERY : Located at Visakhapatnam, has an installed capacity of 1·5 million tonnes of crude per annum. The Refinery produces liquid petroleum gas, naphtha, two grades of motor gasoline, aviation turbine fuel, mineral turpentine, kerosene, Hi-speed diesel oil, light diesel oil, furnace oil and asphalt.

Marketing Division : In addition to two lube blending plants at Bombay and Calcutta, it has 15 regional offices, 15 bulk plants, 100 depots and nearly 3,200 retail outlets. Since 1976, the Corporation has launched 108 multi-purpose distribution centres and 32 farm fuel centres to meet the fuel and servicing needs in rural areas. The Corporation markets 4·8 million metric tonnes of petroleum products, constituting about 17 per cent of the overall market share.

Chairman & Mg. Director : R. M. Bhandari.

BONGAIGAON (ASSAM) : With a capacity of one million tonnes per annum, this refinery went on stream in February 1979. Commercial production commenced from 1st April 1979. Since December 1979, this refinery has been closed due to agitations in Assam.

MATHURA (UTTAR PRADESH) : With capacity of 6 million tonnes this refinery is expected to cost Rs. 2,170 million, and is expected to go on stream by 1980–81 and will be the biggest in the country.

COCHIN REFINERIES LTD. : (P. Bag 2, Ambalamugal 682302, Ernakulam Dist., Kerala). This is a participatory refinery project in the public sector, the principal collaborators with the Government being Messrs. Phillips Petroleum Co., U.S.A. It was commissioned on 19th September, 1966.

The Refinery was originally designed to produce annually 2·5 million tonnes of petroleum products and the capacity has now been expanded to enable it to process 70,000 barrels of crude per day or 3·3 million tonnes annually. The present investment including expansion is Rs. 330 million.

A Secondary Processing Scheme has been approved by Centre for installation of one million tonne Fluid Catalytic Cracking Unit with all associated facilities at an estimated capital outlay of Rs. 522·5 million at 1980 cost.

Chairman : P. K. J. Menon (I.A.S., Retd.) ; *Managing Director :* C. Abraham.

MADRAS REFINERIES LTD. : (Regd. Office and Refinery : Manali, Madras 600 068). The Refinery was incorporated in December, 1965. After completion of process engineering design by Bechtel Corporation, U.S.A., the engineering design and construction contract was awarded to Snam Progetti, Italy. The construction was started from January, 1967 and completed by March, 1969. The plant was commissioned in June, 1969. A joint venture of the Government of India (major share-holder), National Iranian Oil Company, Amoco India Incorporated, U.S.A., the Madras Refinery is designed to process 2·5 million tonnes per annum of Darius Crude Oil from Persian Gulf, Iran (50,000 barrels per calendar day and subsequently debottlenecked to process 2·8 million tonnes/year of crude. Products : LPG, motor gasoline, naphtha, superior kerosene, jet fuel, high speed diesel oil, light diesel oil, lube base stocks, furnace oil, asphalt and sulphur.

Capacity : 2·8 million tonnes per annum.

Production : 2·822 million tonnes valued at Rs. 4,350 million.

No. of Employees : 506 as on 31-3-1980.

Capital : Rs. 128·7 million.

Refinery Manager : SL. K. T. Krishnamurti.

PRIVATE SECTOR : Assam Oil Company Ltd. (Digboi, Assam). The Assam Oil Company is a wholly owned subsidiary of The Burmah Oil Company and has drilled 1,001 wells, out of which around 400 are on production with an annual throughput of 49,000 tonnes of crude oil. The ACC Refinery at Digboi processes 0·33 million tonnes of crude oil annually, the balance crude oil being supplied by Oil India Ltd., Duliajan. It is the only refinery in India which produces paraffin wax, other major products are motor spirit, kerosene, diesel oil, lubricants and bitumen.

Digboi oilfield is the oldest in India and one of the oldest in the world. It continues to produce crude oil, though at a declining rate. The Assam Oil Company, formed by the Assam Railways and Trading Company Limited in 1898, took over the lease concession granted to both the parent company and the Assam Oil Syndicate in 1899. The Burmah Oil Company acquired control of the company in 1921.

Chairman : Alastair Fredrick Down ; *Chief Exec. and Mg. Director :* Stanley J. Wilson.

OIL INDUSTRY DEVELOPMENT BOARD : It was set up on January 13, 1975, to give financial and other assistance for the development of the oil industry (See also Ministry of Petroleum and Chemicals).

RESEARCH

The ONGC has set up the Institute of Petroleum Exploration at Dehra Dun for research and training in the exploration and production phases of the industry. The Indian Institute of Petroleum in Dehra Dun was set up under the control of the Council of Scientific and Industrial Research to conduct research and training in the refining and marketing phases of the industry. The Indian Oil Corporation has set up a Research and Development Centre at Faridabad for conducting research in the formulation of lubricants and greases.

ALLIED COMPANIES

Engineers India Ltd. : (See chapter on "Government of India Undertakings").

Lubrizol India Ltd. : (Thane-Belapur Road, Turbhe, Thane, Maharashtra). A 60 : 40 equity holding of the Government of India and the Lubrizol Corporation, U.S.A. for the manufacture of antioxidant, dispersant and detergent intermediate components from the basic raw materials. Entire automotive lubricant additives demand is met through indigenous production.

Chairman : Dr. B. D. Tilak ; *Managing Director :* Dr. J. P. Dalal.

Tide Water Oil Co. (India) Ltd. : (8, Clive Row, Calcutta 700001). A public limited marketing company with Government interest, has branch offices at Bombay, Delhi and Madras. Its activities are blending and marketing of all kinds of lubricants, including specialities and manufacturing of greases.

Chairman : R. Lall ; *Chief Executive :* K. S. B. Sanyal.

PLASTICS INDUSTRY

BRIEF HISTORY

THE Indian plastic industry made a modest start around 1926 with the manufacture of combs, soap boxes, ash trays, etc., from imported materials.

In India, the first plant to be established in the plastics and petrochemicals sector was in 1958 by the Imperial Chemical Industries (ICI).

Location of the Industry : There are about 10,000 manufacturing units spread all over the country, 90 per cent of which are in the small-scale sector. Their individual capital investment varies from Rs. 5,000 to Rs. 500,000, providing employment to nearly 900,000 people directly and indirectly.

Capital Investment : The current total capital investment in plastics industry is about Rs. 4,000 million. For the development of the industry and to make it sufficiently strong, an annual investment of Rs. 2,500 million over the next ten years is needed.

Public Sector : The public sector made its debut with the incorporation of *The Indian Petrochemicals Corpn. Ltd. (IPCL)* at Vadodara in March, 1969, to develop petrochemical projects based on feedstock available from refineries. (See also chapter on Petro-Chemical Industry).

Per Capita Consumption : The per capita consumption of plastic goods in the country at present is estimated to be just 1 kg. In 1970, the per capita consumption in selected other countries was as follows : West Germany 59 kg , the U.S.A. 45·7 kg., Japan 36·9 kg., India 0·25 kg.

Agricultural use : Plastic appliances are increasingly used for agricultural operations by preventing seepage losses of water and thus raise irrigation potential.

Production of Raw Materials

(in tonnes)

Raw Material	Installed capacity in tonnes	1977-78	1978-79	1979-80
THERMOSETS :				
M.F. Moulding Powder ..	1,490	180	178	190
P.F. Moulding Powder ..	6,200	4,379	4,236	4,639
U.F. Moulding Powder ..	5,150	2,226	2,497	2,923
THERMOPLASTICS :				
Polyethylene L.D.	30,000	18,451	56,010	71,716
Polyethylene H.D.	30,000	25,585	28,073	24,748
Polystyrene ..	23,500	13,569	14,474	12,036
P.V.C. Resins ..	64,700	59,023	62,643	51,575
C.A. Moulding Powder ..	7,200	990	765	828

The estimated requirement of plastics for these applications is as follows :

(Tonnes)

Item	1983	1988
LDPE	16,800	36,600
HDPE	3,200	5,400
PVC	6,000	11,000
EPS	400	700
Total	26,400	53,700

Imports of Plastic Raw Materials

(Qty. — Tonnes ; Value — Rs. in million)

Products	1976-77		1977-78		1978-79	
	Qty.	Value	Qty.	Value	Qty.	Value
P.F. Moulding Powder	6	0·06	302	1·70	81	0·50
U.F. Moulding Powder	2	0·04	35	0·30	10	0·20
Polyethylene L.D.	8,193	44·55	35,287	185·20	27,742	129·10
Polyethylene H.D.	8,544	46·96	22,997	132·00	26,178	137·80
Polystyrene	254	1·82	536	3·10	1,062	6·30
P.V.C. Resins	309	2·32	8,207	39·40	6,093	34·00
C.A. Moulding Powder	42	0·32	245	1·60	328	1·40

Exports: Exports of plastics during last five years (in Rs. million) : 1975-76 : 180·8 ; 1976–77 : 260·4 ; 1977–78 : 273·0 : 1978–79 : 301·9 ; 1979–80 : 356·6.

The export target for 1980–81 was Rs. 450·0 million, which is likely to be achieved.

Duties: In October 1980, the Government raised the basic duties of customs on Polyethylene L.D. (LDPE) to 100 per cent, on Polypropylene to 90 per cent, on Polyethylene H.D. (HDPE) to 65 per cent and on PVC resins to 40 per cent on an ad valorem basis.

The auxiliary duties of customs on these items have been re-fixed at 15 per cent for LDPE, Polypropylene and HDPE ; and at 5 per cent for PVC resins.

RUBBER INDUSTRY

RUBBER is obtained from the milky juice called latex of various tropical plants of which only a few like Castilloa, Manihotglaziovii, Ficus Elastica, Funtumia Elastica, Parthenium Argentatum and Hevea Braziliensis are of commercial importance. Hevea Brasiliensis (known as Para rubber) tree accounts for over 95 per cent of the world production of natural rubber.

BRIEF HISTORY

Columbus is credited with the discovery of rubber during his second voyage to America towards the end of the fifteenth century. He reported the existence of a gum which was used by the natives of America as balls for games. An Englishman used the term 'rubber' in 1770 when he found that the substance could be used for removing pencil marks. With the discovery of the process known as vulcanisation in 1836 by Goodyear, rubber came to be commercially used.

In India rubber was first planted in Travancore and Malabar in around 1880. Plantation on a commercial scale commenced in 1902.

No. of persons employed: More than 170,000.

Ranking in the world market: India is the fifth largest natural rubber producing country in the world after Malaysia, Indonesia, Thailand and Sri Lanka.

Location of Rubber Plantations: Kerala State accounts for about 91 per cent of the total area under rubber and the Kanyakumari District in Tamil Nadu for about 5 per cent with Karnataka, Andaman and Nicobar Islands, Goa, Maharashtra and the North Eastern States contributing the rest. Table I gives a pattern of hectareage under rubber in 1979.

Production and Consumption: Production of natural rubber which was 147,758 tonnes in 1976 went up to 151,609 tonnes in 1977. The production during 1978 was 132,991 tonnes. Fall in production was due to adverse climatic conditions, and strike of plantation workers. Consumption of natural rubber went up from 133,494 tonnes in 1976 to 142,763 tonnes in 1977 and to 158,168 tonnes in 1978. Table II gives the trend in production and consumption since 1976.

Per Capita Consumption: In 1976 the per capita consumption of rubber in USA was 13·5 kgs., Canada 12·5 kgs., Germany (FR) 10·3 kgs., UK 8·9 kgs., France 8·6 kgs., Australia 7·8 kgs., Italy 7·1 kgs., and Japan 3·5 kgs. In India per capita consumption is as low as 0·27 kg.

The average yield per hectare in Indian plantation which was 806 kgs. in 1976–77, fell to 770 kgs. in 1977–78. In 1978–79, the yield was 710 kgs. per hectare. The yield was estimated at 710 kgs. per hectare in 1979–80.

Imports: As a result of the steady increase in consumption and fall in production, export of rubber was stopped and imports allowed from 1978-79 onwards. Quantity of natural rubber import was 14,750 tonnes in 1978 and 32,200 tonnes in 1979. The imports are effected through STC. Besides natural rubber, the industry is allowed to import synthetic rubber directly. The trend in imports of natural rubber and synthetic rubber, since 1975 are given in Table IV.

Rubber Goods: The total number of rubber goods manufacturing units in India is around 2,000, of which over 100 units are fairly well organised. The annual turnover of the industry is over Rs. 7,500 million and the number of persons employed over 100,000.

The industry's contribution to national income is expected to exceed Rs. 25,000 million per year during the next ten years creating additional employment to 20,000 people.

The industry is spread almost all over the country, though heavily concentrated in the States of West Bengal, Maharashtra and Tamil Nadu. With the exception of Haryana, Uttar Pradesh and Kerala, the industry has made comparatively little progress in other States. Natural and synthetic rubbers are the basic raw materials. Other important raw materials include carbon black, rubber chemicals, reclaim rubber, tyre fabrics (nylon, rayon/cotton), bead wire, tyre tube valves and miscellaneous chemicals. The automotive tyres and tubes industry constitutes the largest sector of the rubber goods manufacturing industry. About 52 per cent of the rubber consumed in the country is used by the automotive tyres and tubes industry including camelback. Cycle tyres and tubes account for about 14 per cent consumption, footwear about 11 per cent, belts and hoses about 6 per cent and the balance is accounted for by other products.

Export of Rubber Goods: There has been a steady decline in the value of rubber goods exports in recent years. From Rs. 272·3 million in 1976–77, the value of rubber goods exports fell to Rs. 269·9 in 1977–78 and to Rs. 222·8 million in 1978–79.

In 1979–80, the value of rubber goods exports totalled Rs. 216·0 million.

Synthetic Rubber: Production of synthetic rubber was started in India in 1963 when the factory of Synthetic & Chemicals Ltd., at Bareilly (U.P.) started producing synthetic rubber. Built with an initial rated capacity of 30,000 tonnes per annum, the varieties of rubber produced by this factory are styrene butadiene rubber and nitrile rubber called Chemaprene. Another synthetic rubber factory with a licensed capacity of 20,000 tonnes of poly-butadiene rubber has been established recently by Indian Petro-Chemicals Corpn. at Vadodara (Gujarat) and commenced production in 1978. The trend in production, consumption and import of synthetic rubbers since 1976 is given in Tables II & IV. The consumption of synthetic rubber is about 20 per cent of total rubber consumption. The tyre industry uses more than 60 per cent of the total synthetic rubber output.

Rubber Development Schemes: The Rubber Board is implementing various schemes for the development of rubber plantations in India. These include grant of subsidy for replantation, grant of loans and aids for new planting and maintenance of small holdings, distribution of high yielding varieties of planting materials, grant of subsidy on the cost of fungicides and fertilisers used by the small holders, grant of subsidy for construction of smoke-house by small holders, distribution of plant protection equipments, grant of financial assistance to co-operative societies for establishing processing centres and undertaking marketing of rubber. The Board also operates an extension and advisory service among rubber growers. Labour welfare measures also form part of the work of the Board.

In 1977 an agreement was signed by the Govt. of India and the World Bank which provided for financial and technical assistance to establish 9 block rubber processing factories in the co-operative sector and expansion of the existing factory in the sector. The project is to be implemented in a phased manner and is to be completed by1985.

TABLE I

Pattern of Hectareage under Rubber

Group Size	No. of Units	Area in hectares
A. Small Holdings		
Below 0·4 hectares	25,575	6,214
Above 0·4 & upto 2	96,815	82,187
Above 2 & upto 4	11,517	30,091
Above 4 & upto 6	3,182	14,912
Above 6 & upto 10	1,816	13,486
Above 10 & upto 20	1,288	18,283
Total	140,193	165,173
B. Estates		
Above 20 & upto 40 ..	274	7,792
Above 40 & upto 200 ..	243	19,736
Above 200 & upto 400 ..	25	7,391
Above 400 & upto 600 ..	16	7,887
Above 600 & upto 800 ..	10	6,936
Above 800	16	18,524
Total	584	68,186
Grand Total	140,777	233,359

TABLE II

Production and Consumption

(Figures in tonnes)

Year		Production				Consumption			
		Natural	Synthetic	Reclaim	Total	Natural	Synthetic	Reclaim	Total
1976	..	147,758	23,370	20,275	191,403	133,494	33,296	20,811	187,601
1977	..	151,609	27,090	22,389	201,088	142,763	34,543	21,325	198,631
1978	..	132,991	24,569	23,655	181,215	158,168	26,306	23,761	208,235
1979	..	147,200	31,122	22,943	201,265	167,310	37,358	22,948	227,616
1980	..	155,880	22,316	23,151	201,347	172,810	45,905	22,241	240,956

Rubber Board: With Headquarters at Kottayam—686001, Kerala, it looks after development of the industry.

Research: The **Rubber Research Institute** established by the Board has five divisions namely, botany, agronomy, plant pathology, chemistry/rubber technology and plant physiology and exploitation.

The facilities at the Rubber Research Institute have been made available to the Cochin University to conduct a two-year post-graduate course in Rubber Processing and Technology leading to a B-Tech degree. The Institute maintains two experimental stations of 20 hectares and 250 hectares each.

Publications: The following are the publications of the Rubber Board: 'Rubber' (Monthly), 'Rubber Statistical News' (Monthly), 'Rubber Board Bulletin' (Quarterly), 'Indian Rubber Statistics' (Annual).

TABLE III

World Production and Consumption of Natural and Synthetic Rubber

(in '000 tonnes)

Year		Production		Consumption	
		A	B	A	B
1975	..	3,315	6,855	3,367	7,027
1976	..	3,565	8,030	3,505	7,915
1977	..	3,625	8,465	3,715	8,420
1978	..	3,755	8,850	3,725	8,755
1979	..	3,855	9,290	3,870	9,050

A: Natural Rubber. B: Synthetic Rubber. *Source:* 'Rubber Statistical Bulletin of the International Rubber Study Group'.

TABLE IV

Import of natural and synthetic rubber

(in tonnes)

Year	Natural	Synthetic
1975	Nil	6,448
1976	Nil	6,469
1977	Nil	6,804
1978	14,750	9,269
1979	32,200	14,906

TABLE V

Production: Tyres & Tubes

(Million Nos.)

Year	Automobile		Cycle	
	Tyres	Tubes	Tyres	Tubes
1971 ..	4·660	4·510	20·664	13·455
1972 ..	4·978	4·776	21·650	14·100
1973 ..	5·043	4·724	21·766	14·195
1974 ..	5·395	4·711	25·236	18·820
1975 ..	5·564	5·138	24·525	16·882
1976 ..	5·853	5·379	23·607	16·523
1977 ..	6·182	5·425	27·003	14·923
1978 ..	7·051	6·091	29·198	16·790
1979 ..	7·091	5·698	28·049	11·006

SHIPPING INDUSTRY

BRIEF HISTORY

THE earliest evidence of shipping and ship-building activity is found in the archaeological remains of the Mohen-jo-daro, in the Indus valley, dating back to some 2500–1500 B.C. Ever since, the shipping and shipbuilding industries have passed through various vicissitudes of fortune.

On the eve of the country's Independence, in August 1947, India had only 48 coastal vessels of 119,000 GRT and 11 foreign-going vessels of 73,000 GRT.

Position Today: On January 1, 1980, there were 5·63 million GRT in operation and 0·39 million GRT on order. According to reports, the shipping tonnage target set in the Sixth Five-Year Plan (1980–85) is around 9·3 million GRT (8·3 million GRT in operation and 1 million GRT on order).

Ranking in the World: India in terms of GRT occupies the 15th position among the world maritime countries owning a total of 5·85 million GRT as on July 1, 1979.

Among the principal world merchant fleets (as on July 1, 1979), Liberia ranks first owning about (80·53 million GRT) followed by Japan (38·99 million GRT), Greece (37·35 million GRT), the UK (27·95 million GRT), USSR (22·90 million GRT) and Norway (22·34 million GRT).

National Maritime Day and Merchant Marine Flag Day: 5th April every year.

Indian Register of Shipping: Inaugurated on April 4, 1975 with its head office in Bombay. The National Classification Society supervises shipbuilding and ensures that in operation ships are properly maintained at the requisite standard of seaworthiness. The society has signed collaboration agreements with the American Bureau of Shipping, Det Norske veritas and Lloyd's Register of Shipping on the basis of dual class.

Chairman : Capt. J. C. Anand ; *Chief Executive :* H. S. Rao.

National Shipping Board: Statutory Advisory Board on Shipping on which all the interests concerned, including shipowners are represented.

Chairman : Daulat Sinhji Jadeja.

SHIPBUILDING INDUSTRY

(See chapter on Government of India Undertakings where details of Hindustan Shipyard, Mazagon Dock, and Garden Reach Workshops are given.)

A new public sector Cochin Shipyard is being built and will have the capacity to build 2 ships a year of the size of 85,000 dwt. each. The first series of ships to be built at the yard are 75,000 dwt, "PANAMAX" type bulk carriers. Production capacity of Hindustan Shipyard Ltd., and Cochin Shipyard Ltd. is expected to rise from 64,000 GRT in 1977–78 to 238,000 GRT in 1982–85. At present, India has the facility for building ships up to 80,000 DWT.

The tonnage on order at the beginning of this year was 0·39 million GRT, out of which 0·23 million tonnes were on order in India and 0·16 million tonnes in foreign shipyards. The public sector shipyards Mazagon Dock Ltd., Bombay and Garden Reach Shipbuilders and Engineers Ltd., Calcutta are intended mainly to cater to defence requirements but their capacity is also available for the construction of merchant ships. The Goa Shipyard is also engaged in shipbuilding activities in addition to other general engineering works. The Rajabagan Dockyard is engaged in building inland vessels and harbour crafts such as barges, launches, trawlers, tugs and dredgers upto 2,000 GRT. Two more public sector shipyards are proposed to be constructed at Hazira (Gujarat) and Paradip (Orissa).

There are several small shipyards under private sector spread over the country which are capable of constructing harbour crafts and inland vessels such as tugs, barges, launches, dredgers, trawlers etc.

Research Body: The Government of India has decided to establish a research organisation for designing ships. At present India has to purchase designs.

Merchant Fleet in Operation

	COASTAL		OVERSEAS		TOTAL	
	No. of ships	GRT	No. of ships	GRT	No. of ships	GRT
As on January 1, 1979 ..	72	399,347	312	5,180,446	384	5,579,793
Acquisitions in 1979 ..	4	7,819	8	130,440	12	138,259
Deletions in 1979 ..	6	13,006	10	75,568	16	88,574
As on January 1, 1980* ..	57	255,615	323	5,373,863	380	5,629,478

* Revised tonnage on the basis of actual licences granted to the vessels.

Freight Earnings: The Indian Shipping Industry has been earning considerable foreign exchange by way of freight earnings. On a rough estimate the freight and passage earnings of Indian Shipping Companies during 1978–79 totalled Rs. 5,250 million. The net foreign exchange earning at 50 per cent of gross overseas earnings during 1978–79 comes to Rs. 2,620 million.

TRAINING INSTITUTIONS

Merchant Navy Training Board: At Jahaz Bhavan, Walchand Hirachand Marg, Bombay 400038, advises Government on all matters pertaining to the training of merchant navy personnel.

(For other training institutes see chapter on "Education".)

Recruitment of Seamen: The number of seamen registered with the Seamen's Employment offices as on Oct. 1. 1979, for employment on foreign going ships was 27,280 at Bombay and 10,884 at Calcutta. The number of jobs available were 16,630 in Bombay and 5,120 in Calcutta.

On home trade ships the number of seamen registered were 658 at Bombay for 410 jobs and 198 at Calcutta for 123 jobs.

Seamen's Welfare: The seamen's welfare offices at the ports of Bombay, Calcutta, Madras and overseas at Sydney, London, Liverpool and Glasgow take care of the welfare of Indian Seamen. The Principal Seamen's Welfare Officer at London has the additional duties of finding jobs for Indian seamen on foreign owned ships. His jurisdiction is entire Europe.

INSA: The Indian National Shipowners' Association (Scindia House, Ballard Estate, Bombay 400038) is the national shipowners' organisation founded in 1930. Its objectives are : (1) to promote development of national shipping commensurate with the national needs ; (2) to take active measures for the all round development of the maritime industries in all their aspects ; (3) to co-ordinate its activities and to co-operate with various national and international organisations on shipping and allied matters ; (4) to disseminate information on shipping and allied industries in the domestic and international perspective.

The membership of INSA covers over 97 per cent of national tonnage.

Board of Directors/Office-Bearers : Shri T. M. Goculdas—*President ;* Rear Admiral Krishan Dev—*Vice-President ;* Capt. J. C. Anand, Shri N. H. Dhunjibhoy, Shri F. G. Dastur, Shri K. M. Sheth, Shri Ramesh B. Garware, Shri Salmaan Moloobhoy, Capt. G. B. S. Bhalla—*Executives ;* Shri B. V. Nilkund, *Secretary ;* Shri T. S. Narayan, *Special Officer* (*Maritime Law & Industrial Relations*).

Indian Coastal Conference: It regulates the coastal shipping operations and freight rates on a voluntary basis. *Chairman :* Smt. Sumati Morarjee.

Directorate General of Shipping (Jahaz Bhavan, Walchand Hirachand Marg, Bombay 400038) is a Central Government organisation under the Ministry of Shipping and Transport. It is an executive agency of the Government on all matters relating to coastal and overseas shipping.

Inland Water Transport: The Shipping Ministry is assisted by a Directorate headed by a Chief Engineer-cum-Administrator in the formulation and implementation of the policy on Inland Water Transport. A regional office of this Directorate is located at Patna. The directorate also renders technical advice to State Governments on various problems concerning development.

SILK INDUSTRY

BRIEF HISTORY

SERICULTURE in India falls into two sectors, mulberry and non-mulberry. Mulberry silk industry is better organised and accounts for nearly 87 per cent of the natural silk production. The non-mulberry sector comprises of *tasar*, *eri* and *muga* silk. India is the only country in the world which produces all the four commercially known varieties of natural silk.

LOCATION OF THE INDUSTRY: Andhra Pradesh: Produces mulberry and *tasar* raw silk. Mulberry in the Anantapur and Chittoor districts, and *tasar* in the forest regions along the banks of the river Godavari in Karimnagar, Warangal, Khammam and Adilabad districts. New areas in Srikakulam, Vizag, Medak and Hyderabad districts have also been selected for silk production. The State plans to increase mulberry production over 57,000 hectares by the end of 1984-85 from the present level of 8,271 hectares.

Assam: Produces *muga*, *eri* and mulberry raw silk mostly in Lakhimpur, Dibrugarh, Kamrup and Nowgong districts. Sibsagar is prominent for mulberry production. Recent investigations show possibilities for producing oak *tasar* silk in Garampani area.

Due to the formation of Meghalaya, most of the sericultural centres were bifurcated.

Bihar: Bihar ranks first in the production of *tasar* with nearly 80 per cent of production mainly in the districts of Hazaribagh, Ranchi, Singhbhum, Palamau, Bhagalpur, Begusarai, Monghyr and Santhal Parganas.

Jammu & Kashmir: The univoltine mulberry silk industry is mainly located in Anantnag, Baramulla and Srinagar in Kashmir valley and Udhampur, Doda, Rajouri and Jammu in Jammu province.

Karnataka: It is the biggest multivoltine mulberry silk producing State in India contributing over three-fourths of the total production. Bivoltine rearings have been introduced of late, during all seasons of the year. Production of this high grade bivoltine silk in 1977–78 was 100 tonnes. The industry is concentrated in the districts of Bangalore, Kolar, Tumkur, Mysore and Mandya and to a small extent in Dharwar, Belgaum and Raichur. It is found feasible to have *tasar* production in Belgaum, Karwar, Shimoga, Chickmagalur, South Canara, Mysore, Coorg, Dharwar and Bellary districts. Ericulture has also been introduced at Koila and Gerukatte, both in South Canara district. The State Government have initiated a World Bank aided sericulture development project involving an outlay of Rs. 800 million, which aims at doubling the production of raw silk over the levels existing before initiation of the project, to 4,500 tons during the next 5 years, and generating additional employment to 250,000-man years per annum at the end of 5-year period.

Madhya Pradesh: Is the second largest producer of *tasar* silk in the country. It is largely based in the districts of Bastar, Bilaspur, Raigarh and Surguja and to a small extent in Ambikapur, Raipur and Mandla districts. Mulberry is also cultivated to a small extent in Dhar, Indore and Sehore districts.

Maharashtra: Bhandara and Chandrapur districts have traditional *tasar* culture and there is one *tasar* seed farm at Armori. Mulberry (*Tuti*) has been successfully experimented at Bhagawati, Kolhar, Shrirampur taluk. Vast areas on either bank of the river Pravara now lying fallow also hold scope for development of mulberry sericulture.

North Eastern Council States: The north-eastern States comprising of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram and Nagaland hold out scope for large-scale development of the non-mulberry sector, more particularly oak *tasar* in Manipur, Mizoram, Nagaland and Garampani area of Assam. Ericulture is also largely practised in Assam, Arunachal Pradesh, Meghalaya, Mizoram and Tripura. Mugaculture is confined to Assam and parts of Meghalaya. Mulberry sericulture is confined to certain pockets of Assam, Manipur, Mizoram and Tripura. Under the plan programme, expansion of mulberry silk industry in these States has been taken up.

Orissa: *Tasar* is concentrated in Mayurbhanj and Keonjhar districts. Besides ericulture, mulberry sericulture is also practised to a limited extent.

Punjab: Mulberry silk is produced mainly in the districts of Amritsar, Gurdaspur, Hoshiarpur and to some extent in Ferozepur, Patiala, Ropar and Ludhiana.

Tamil Nadu: The sericultural industry is practised in the districts of Dharmapuri, North Arcot, Salem, Tirunelveli, Periyar, Madurai, Tanjore, Coimbatore and South Arcot. The State Government has a programme to increase mulberry production over about 41,000 hectares by the end of 1984–85 from the existing level of about 8,670 hectares.

Uttar Pradesh: Sericulture industry has been organised on co-operative lines both in the rearing and reeling sectors. The industry is extensively practised in the districts of Dehra Dun, Saharanpur, Nainital, Almora, Bahraich, Tehri Garhwal, Paurigarhwal and to a small extent in the districts of Etawah, Gorakhpur, Bijnore, Moradabad, Gonda, Rampur, Deoria, Meerut, Chamoli, Pithorgarh and Uttarkashi. Seasonal conditions permit raising of two bivoltine cocoon crops and one multivoltine cocoon crop per annum, the latter being raised mainly in the foothills. The State also holds scope for large-scale introduction of oak *tasar* culture in the hill districts fringing the Himalayas. Already a beginning has been made for systematic development of the industry in the State in collaboration with the Board's Regional Research Station functioning at Bhimtal. Development of tropical *tasar* in Mirzapur district for the benefit of tribal inhabitants has been programmed.

West Bengal: West Bengal occupies a prestigious position as a producer of both mulberry and *tasar* silks. It is the second largest producer of mulberry raw silk in the country accounting for nearly 12 per cent of the total output. The industry is practised mainly in the districts of Malda, Murshidabad, Birbhum, Midnapore and Bankura and to some extent in Nadia and West Dinajpur districts. Total area under mulberry is around 10,314 hectares.

Production of *tasar* silk is confined to the districts of Purulia, Midnapore and Birbhum. Ericulture is practised in Jalpaiguri and Cooch-Behar districts. Production of *tasar* and *eri* silk yarn is presently around 9,000 and 8,000 kgs. respectively.

Himachal Pradesh: Rears univoltine mulberry silkworms in Kangra and Mandi districts. The other regions where sericulture is practised are Una/Hamirpur and Nahan districts. Oak *tasar* rearing is also practised in the forests around Bir.

Manipur: Has both mulberry and *eri* silk cultivation and a potential for *tasar* culture. The Government have launched a project for large-scale development of oak *tasar* for the economic emancipation of tribal inhabitants. A quantity of 15,000 kg. oak *tasar* has been produced during 1979-80 and it is targetted to produce 50,000 kg. oak *tasar* silk by the end of VI plan (1984–85).

Production & Consumption of Raw Silk

(in '000 kgs.)

Year	Mulberry	Non-Mulberry	Total	Imports	Consumption
1975–76 ..	2,540	555	3,095	19	3,114
1976–77 ..	2,686	582	3,268	83	3,351
1977–78 ..	3,186	525	3,711	107	3,819
1978–79 ..	3,752	423	4,175	123	4,298
1979–80*..	4,193	612	4,805	175	4,980

* Provisional.

Tripura: Sericulture has been recently introduced. The State holds promise for large-scale development of mulberry silk industry.

Ranking in the World Market: With a production of 4,193 tonnes of mulberry silk and 612 tonnes of wild silk in 1979–80, India ranked third among the silk producing countries of the world. However, India is the only country in the world which produces the famed golden "*muga* silk" and is also the second largest producer of *tasar* silk, next only to the People's Republic of China.

SPUN SILK INDUSTRY: India also produces silkwaste — by-product of reeling sector, which constitutes the basic raw material for the spun silk industry. The total production of silkwaste during 1979–80 was 1,352 tonnes mulberry and 202 tonnes non-mulberry.

There are three spun silk mills, located at Channapatna in Karnataka, Jagi Road in Assam and Bhagalpur in Bihar having an installed spindleage of 7,500, 3,000 and 3,000 respectively.

Tariff Protection: Sericulture industry has been under tariff protection since 1934 which has been extended upto 31st December, 1979. The current rate of protective duty on raw silk is 30 per cent ad valorem plus 5 per cent auxiliary duty.

EXPORTS: Foreign exchange earnings from silk industry (in million Rs.) for the last six years: 1974 — 135·132; 1975 — 157·551; 1976 — 220·504; 1977 — 301·871; 1978 — 419·117; 1979 — 473·378.

IMPORTS of raw silk over the last six years (in million Rs.): 1974 — 4·57; 1975 — 3·76; 1976 — 7·69; 1977 — 19·58; 1978 — 14·25; 1979 — 21·80.

Central Silk Board: Central Silk Board is a statutory body, presently under the administrative control of the Ministry of Commerce. It has been entrusted with the overall responsibility of developing silk industry.

Sericulture is a cottage industry *par excellence*. With an agricultural base, industrial superstructure and an essentially labour intensive set up, sericulture is an effective tool for generating gainful employment. Presently, it provides whole-time and part-time employment to more than 3·8 million persons in the rural areas of the country.

The headquarters of the Board are located in Bombay. The Board has set up 4 regional offices to ensure close coordination of Central and State efforts to develop the sericulture industry. *Head Office:* Central Silk Board, 'Meghdoot', 95-B, N. Subhash Rd., Bombay 400002. Tele. Add.: 'SILKBOARD'. BOMBAY. Telex: 0114238 CSB IN.

Regional Offices: (1) 16(42), Vanivilas Road, Opp. Lalbaug West Gate, Basavanagudi, Bangalore 560004. Tele: 'SILKBOARD'. (2) Chatterjee International Centre, Room Nos. A-9 & A-10, 33-A, Chowringhee Rd., Calcutta 700071. Tele.: 'SILKBOARD'. (3) A-66, Naraina Indl. Area, Phase-1, New Delhi 110028. Tele.: 'SILKBOARD'. (4) 8, Polo View, Srinagar 190001. Tele.: 'SILKBOARD'.

Inspection Centres: The Board is in charge of preshipment inspection for which facilities are available at the Headquarters, the Regional Offices and the three centres listed below: (1) 44, D. N. Singh Rd., Bhagalpur 812001 (Bihar). Tele.: 'SILK BOARD'; (2) 58H, Burkit Rd., T. Nagar, Madras 600017. Tele.: 'SILKBOARD'; (3) K61/158B, Rajdevi Katra, Bulanala, Varanasi 221001. Tele.: 'SILKBOARD'.

RESEARCH AND SERVICE STATIONS: Mulberry silk sector: Central Sericultural Research & Training Institute, Srirampuram, Manandavadi Rd., Mysore South, Mysore-570 008 (Karnataka); Central Sericultural Research & Training Institute, Berhampore-742 101 (West Bengal); Regional Sericultural Research Station, P.O. Kalimpong-734 301 (West Bengal); Regional Sericultural Research Station, Coonoor-643 101 (Tamil Nadu); Research Sub-Station, Mugur-571 124 (Karnataka); Univoltine Research Sub-Station, Majra-248 171, Via Dehra Dun (U.P.); Regional Sericultural Research Station, Pampore-192 121 (Kashmir).

***Tasar* Silk Sector:** Central Tasar Research & Training Institute, Nirvan No. 1, West End Park, Hehal Post, Ranchi-834 005 (Bihar); Regional Tasar Research Station, Bhimtal-263 136 (U.P.); Regional Tasar Research Station, Batote-182 143 (Jammu & Kashmir); Regional Tasar Research Station, Imphal 795 001 (Manipur).

***Eri* and *Muga* Silk Sector:** Central Muga & Eri Research Station, Titabar 785632 (Assam).

Price Stability Measures: The Board has established a raw material bank for *tasar* cocoons and raw silk at Chaibasa in Bihar. A similar Raw Material Bank for *muga* cocoons has since been set up at Sibsagar in Assam. For stabilisation of mulberry cocoons and raw silk, the Board has been implementing a Price Stabilisation Scheme under which a Central Raw Material Bank for mulberry has been set up at Bangalore with Regional Raw Material Banks in other major mulberry silk producing states like West Bengal.

Testing: A Central Silk Conditioning and Testing House has been established by CSB at Srinagar at the same address as its regional office.

Training: A fifteen-month post-graduate course is offered at the Central Sericultural Research and Training Institute, Mysore 570008, Central Tasar Research and Training Institute, Ranchi (Bihar), and Central Sericultural Research and Training Institute, Berhampore (West Bengal). The academic session commences in July every year. The course includes 3 months' intensive training in the practice of sericulture both in the mulberry and non-mulberry sectors. The capacity of the Institute is to train 25 students every year. It also caters to foreign students.

International Centre for Training & Research in Tropical Sericulture: Under the Indo-Swiss Co-operation Programme, the Central Silk Board has set up an International Centre for Training & Research in Tropical Sericulture at Mysore. The Institute has facilities for imparting advance training in sericulture to 25 candidates from various developing countries in Asia including 10 candidates from Indian States. The duration of the course is 12 months and it has commenced functioning from 1st October, 1980.

SMALL-SCALE INDUSTRY

DEFINITION: Small-scale industries are the "Undertakings having investment in fixed assets in plant and machinery not exceeding two million rupees."

Production in small-scale units registered with State Directorates of Industries increased to Rs. 113,900 million in 1979-80 as compared to 85,900 million in the previous year.

The number of registered small-scale units in the country rose to 383,636 in 1979 compared to 333,837 in 1978.

The total value of production of small-scale units both registered and unregistered is estimated to have increased from Rs. 168,900 million during 1978-79 to about Rs. 209,300 million during 1979-80.

Exports: The value of exports from small-scale sector is expected to increase from Rs. 9.960 million in 1978-79 to Rs. 11,000 million in 1979-80.

District Industrial Centres: In pursuance of the statement on Industrial Policy (December 1977), the Government of India had decided to set up about 380 District Industrial Centres to promote small industries especially in non-metropolitan areas and to provide under one roof all the support services required by small and village entrepreneurs. By December 1979, 372 DICs had been sanctioned.

During 1978-79, at least 228 DICs had identified 96,013 entrepreneurs, and credit to the tune of about Rs. 865·8 million had been provided to them by financial institutions. About 275,000 persons were expected to have been employed by these assisted entrepreneurs/artisans. During 1979-80, as many as 137,000 units (including over 98,000 artisan-based ones) were expected to be set up, thus providing employment to 542,000 persons. The anticipated flow of funds to the small and decentralised sector assisted by DICs would be about Rs. 3,600 million out of which Rs. 2,356 million would be provided by financial institutions.

However, in the statement on industrial policy in 1980, Government had decided to review the scheme of District Industrial Centres, which apparently has not produced benefits commensurate with the expenditure incurred. Government, therefore, proposes to initiate more effective alternatives.

Ancillary Industries: Ancillary industries are supportive industries to other major industries, services and those manufacturing end products. Ancillary industries have bright scope for development as suppliers of both original equipments and auxiliary supplies to industrial markets and replacement markets. With rapid industrial development and increasing degree of integration of all markets taking place in the country an impetus is set in motion to strengthen forward and backward linkages between all industrial units. Accordingly Government in its new industrial policy statement of July 1980 have recognised setting up of nucleus plants and industries around major organisations to strengthen ancillary development and other allied industrial operations of common procurement, manufacturing and marketing of products. To facilitate the above process of industrial development the Government has also enhanced the ceiling of fixed investment of plant and machinery of a small ancillary undertaking from Rs. 1·5 to Rs. 2·5 million. While the Government will not allow concentration of economic power and monopoly development, it will encourage within the existing regulatory powers and the registering authorities, broadbased industrial development with formal linkages fostered between small units and large units amongst all industries and regions.

Major priority industries like power, transport, communication, electrical and electronics equipment, machine building, consumer durables, chemicals and drugs, rubber and plastics are likely to register higher annual growth and therefore the associated ancillary industries also will register higher growth rate between 10 per cent to 15 per cent annually.

Small Industries Development Organisation have set up Sub-contracting Exchanges in 16 major Small Industries Service Institutes in the country to assist small units to secure short and long term manufacturing service orders from other undertakings.

This service to small units can eventually transform them to become efficient ancillary units and undertake marketing abroad. Government is also extending technical testing and training facilities and assistance to small ancillary units. Fiscal and financial concessions are also periodically announced and extended to these units. Small-scale ancillary units can be promoted and registered for manufacture of any items in the small-scale sector where normally ban exists for other sectors of industries. However, the marketing restrictions and other constraints imposed by the Government for other reasons should be taken note of by the small entrepreneurs.

RESERVED INDUSTRIES

Following is the list of industries reserved exclusively for development in the small-scale sector :

Food and Allied Industries: Ice cream, dehydrated vegetables, pickles & chutneys, vinegar, rice milling, dal milling, bread, biscuits, confectionery, rape seed oil except solvent extracted, mustard oil except solvent extracted, sesamum oil except solvent extracted, groundnut oil except solvent extracted, sweetened cashewnut products, poultry feed & ground and processed spices.

Textile Products including Hosiery: Cotton cloth knitted, cotton vests knitted, cotton socks knitted, cotton undergarments knitted, cotton shawls knitted, other cotton knitted wares, woollen cloth knitted, woollen vests knitted, woollen socks knitted, woollen scarves knitted, woollen undergarments knitted, woollen caps knitted, woollen shawls knitted, woollen gloves, woollen mufflers knitted, other woollen knitted wares, stove wicks, readymade garments, cotton belting, belt lacing and measuring tapes — cotton.

Wood and Wood Products: Wooden crates, tea chest plywood, seasoned wood, wooden sewing machine covers, cable drums for AA & ACSR conductors, tent poles, wooden plugs, handles — wooden and bamboo, teak fabricated round block, wooden furniture and fixtures wooden storage cupboards, wooden storage shelves & racks and wood wool slabs.

Paper Products: Waxed paper, bituminised waterproof paper, decorative papers, corrugated paper & boards paper bags, composite containers, paper board cartons, paper cups/plates, paper envelopes, corrugated fibre board containers, paper twines, strings and ropes, paper cones, paper tubes, drinking straws, paper napkins including facial tissue napkins, gummed tape, teleprinter rolls, stencil paper, tele-tape rolls, slitting of ordinary paper into rolls & sheets, toilet paper rolls and sheets, paper straps, stickers, labels of gummed paper etc., treated tracing paper, gummed paper for stamps, gummed paper other than for stamps, sanitary towels, transfer labels, exercise books and registers, letter pads and file covers and file board.

Leather and Leather Products including Footwear: Sole leather, kattai and bunwar leather, picking band leather, leather pickers and other leather accessories for textile industry, vegetable tanned hides and skins — semi-finished, chrome tanned hides & skins — semi-finished, lining leather from goat & sheep skins, laminated leather belting, harness leather, leather shoes, leather shoe upper-closed, leather sandals and chappals, leather garments, leather suit-cases and travel goods, leather purses & hand bags, fancy leather goods & other novelty items, watch straps — leather, leather cases and covers of all types, industrial leather gloves & leather washers and laces.

Rubber Products: Rubberised cloth—by doctor's blade technique, canvas hose, tyres — cycle & cycle rickshaw, tubes — cycle and cycle rickshaw, tyre retreading, camel back-tyre retreading materials, surgical gloves — latex, hot water bags — rubber, ice bags — rubber, rubber balloons, rubber hose pipes excluding braided hoses, rubberised canvas hose pipes, excepting wire-braided high-pressure hydraulic hoses, rubber tubes, rubber washers, oil seals — rubber, rubber thread, rubber eraser, hard rubber battery containers, rubber to metal bonded parts, O rings — rubber, latex foam & latex foam products, microcellular sheets, other dipped latex products except contraceptives & rubber blowing agents — hexamine based.

Plastic Products: Full PVC Footwear—chappals, sandals & shoes, Blow moulded plastic — HD PE/PVC containers — upto 5 litre capacity, Acrylic sheets, Fibreglass reinforced plastic products, Hessian, Paper and cloth to polythelene laminations straight and sandwitched excluding paper polythene laminates by extrusions coating process for hygienic and sanitary packing of liquid milk and other liquid food, HD polyethylene mono filament, Polypropylene mono filament, Polyethylene films except co-extruded with thickness less than 0·10 mm., Products of polyethylene film as coloured, printed film & bags, Spectacle frames by fabrication or by injection moulding, Polypropylene tubular films except biaxially oriented, Industrial items from engg. plastics, Plastic collapsible tubes, Polypropylene box strapping, Polyethylene and PVC flexible hoses, Polyurethane foam, Polyurethane foam products, Polystyrene foam products, Plastic buttons, Other fabricated plastic products, Plastic combs, PVC pipes and fittings including conduits—upto 100 mm Dia, Zip fasteners—non-metallic, Compression moulded plastic products excluding decorative and industrial laminates, plastic rain-coats, plastic bottle caps, Flash-light torch cases—plastic, Polyester sheets, other thermo-welded plastic products, Contact-lenses and Watch straps PVC

CHEMICALS AND CHEMICAL PRODUCTS

Laboratory Chemicals and Re-Agents: Ammonium sulphate-Lab, Ammonium fluoride-Lab, Ammonium Carbonate-Lab, Antimony potassium tartrate-Lab, Aluminium sulphate-Lab, Ammonia solution-Lab, Cadmium acetate-Lab, Cadmium carbonate-Lab, Calcium Chloride-Lab, Chromic acid-Lab, Cobalt sulphate-Lab, Cobalt nitrate-Lab, Cupric nitrate-Lab, Cupric sulphate-Lab. Dimethyl sulphate-Lab, Ferrous sulphate-Lab, Lead acetate-Lab, Lead nitrate-Lab, Magnesium trisilicate-Lab, Nickel carbonate-Lab, Nickel formate-Lab, Nitric acid-Lab, Potassium nitrate-Lab, Potassium chloride-Lab, Hydrochloric acid-Lab, Potassium iodide-Lab, Potassium sulphate-Lab, Sodium nitrate-Lab, Sodium oxalate-Lab, Sodium sulphate anhydrous-Lab, Silica gel-Lab, Silver nitrate-Lab, Sulphuric acid-Lab, Acetic acid glacial-Lab, Acetone-Lab, Iso-Amyl acetate-Lab, Amyl alcohol-Lab, Benzene-Lab, Butyl alcohol-Lab, Chloroform-Lab, Diethyl ether-Lab, Ethyl alcohol-Lab, Ethyl acetate-Lab, Iso amyl alcohol—for milk testing-Lab, Iso-Propyl alcohol-Lab, Methyl alcohol-Lab, Petroleum ether—different distillation ranges-Lab, Petroleum ether—for chromatography-Lab, Toluene-Lab, Nickel sulphate-Lab, Zinc oxide-Lab, Para-Aminophenol-Lab, Potassium citrate-Lab & Cadmium chloride-Lab.

Dye-stuff: Basic dyes, Optical whitening agents for cotton textiles, Azo dyes—direct and acid, Naphthols-AD, ASD, AS-E, AS-G, AS-LC, AS-LRG, AS-BS etc., Phthalocyanine-blue & green, Reactive dyes-cyanuric chloride group, Fast colour bases & Indigo.

Natural Essential Oils: Cashew shell oil, Sandal wood oil, Pine oil—except for composite schemes, Eucalyptus oil, Geranium oil, Lemongrass oil, Palm oil & other natural essential oils.

Organic Chemicals, Drugs and Drug Intermediates: Para-aminophenol-Indl. grade, Para-dichlorobenzene-balls, Cubes etc., Tartaric acid—from maleic anhydride, Dimethyl sulphate—based on methyl alcohol, Pyrazolones. Potassium citrate—Indl. grade, Other citrates, Tartrates. Diethyl phthalate, Dioctyl phthalate, dibutyl phthalate. Dimethyl phthalate, Benzyl chloride, Benzyl benzoate, Paint driers-naphthenates, Octoates, Linoleates, etc. of Lead, Cobalt, Manganese, Zinc, Calcium etc., Chlorinated paraffin wax, Fumaric acid, Paracetamol, Glycerophosphates, Glycerophosphoric acid, Lanolin anhydrous, Xanthates, Dichlorophenol, Polyester resins, PVC compounds & Alkyd resins, Stearate of aluminium, Stearate of magnesium, Stearate of Calcium, Stearate of zinc, Methyl & salicylate (Based on purchased salicylic acid).

Other Chemicals & Chemical Products: Wax candles, Naphthalene balls, Potassium meta bi-sulphate, Barium carbonate, Barium sulphate, Barium sulphide, Sodium sulphide, Sodium thio sulphate, Calcium chloride—Indl. grade, Zinc oxide—Indl. grade, Aluminium hydroxide gel, Zinc nitrate, Nickel sulphate, Nickel chloride, Nickel carbonate, Nickel formate, Copper sulphate, Copper nitrate, Copper chloride, Cadmium oxide, Cadmium iodide, Cadmium nitrate, Cadmium phosphate. Barium chloride, Barium nitrate, Zinc chloride, Zinc sulphate. Copper oxy-chloride, Copper carbonate, Potassium iodide, Sodium iodide, Precipitated silica, Sulphur powder—other than insoluble, for rubber vulcanisation, Sodium chromate, Sodium thiocynate, Magnesium sulphate, Electroplating salts—compounded, Zinc cyanide, Cadmium cyanide, Sodium bichromate, Potassium bichromate, Ammonium bichromate, Artists colours—oils, water and wax based, Red lead paints, Red oxide paints, Wagon black paints. Graphite paints, Paste paints, Shoe polish, Wood polish/French polish, Metal polish, Aluminium paints, Bitumen based paints, Floor polishes, Dry distempers, Halogenated Hydroxy-Quinolines (starting from 8-Hydroxy Quinolines) except for integrated schemes for the manufacture of 8-Hydroxy Quinolines. Laundry soap. Fomulated perfumery compound. Tooth paste, Tooth powder, Hair oils, Safety matches, Fire works, Blue print papers—all types, Guar gum, Animal glue, Office gum paste, Agarbathies, Sodium silicate, Sealing wax, Industrial adhesives based on starch, gum, dextrin and silicates, Alums including aluminium sulphate—Ind. grade, Potassium silicate, calcium silicate & Synthetic adhesives—rubber latex PF and PVA based.

Glass and Ceramics: Fire clay, Bricks & Blocks, Roofing tiles, Flooring tiles, Ceramic tablewares and allied items in stonewares, semivitreous wares and earthwares, namely:—Dinner sets, Tea sets, Cups and saucers, Jars and other containers, Vases, Ash trays, Mugs and bowls, Simple glass mirrors excluding specialised glass mirror such as those meant for optical instruments etc., Glass tubings (excepting machine drawn), Scientific laboratory glassware (excluding Boro-silicate types), Micro-cover glasses and slides for microscopes, Glass bangles, Glass hollow ware by mouth blown and/Glass marbles (all types), Low tension insulators, Chemical porcelain, Lime (other than captive consumption), Hydrated lime (other than captive consumption), Plaster of paris, Chalk crayons including tailors chalk, Plaster boards, Stoneware jars and bowls—kundies, Salt glazed sewer pipes, Asbestos pipes & fittings—for household purposes only and according to ISI specification, Glazed tiles upto 10 cms. × 10 cms., Reinforced cement concrete pipes upto 100 cms. dia, Graphite crucibles—upto 500 nos. & Silicon carbide crucibles upto 100 nos.

Mechanical Engineering excluding Transport Equipment: Manhole covers — CI, Weights, Circlips, Bright bars, Pressure die casting — upto 4 kg., MS and CI flanges, Conduit pipes metallic, Flexible metallic pipe upto 35 mm dia — for non-pressure applications, stranded wires (excluding high tensile prestressed concrete wires), Street light fittings, steel almirah, steel vaults, safes and cash boxes, Meat and food safes — metallic, Metal cabinets — all types, Steel trunks, Tin containers unprinted — other than OTS and cans upto 18 litres capacity, G. I. Buckets, Barrels upto 60 litre cap., Drums upto 60 litre cap., Tin trays, G.I. Bath tubs, Dust bins, Sanitary fixtures — metallic, cocks and valves used as domestic pipe fittings, M.S. Pipes fittings — upto 100 mm. dia, Pressure stove, Wick stoves, Hurricane lanterns, Signal lamps, Hand lamps, Shoe tacks, Shoe eyelets. Umbrella ribs and fittings, fasteners — metallic. Tin cutters. Belt fasteners. Snap fasteners, Pilferproof caps, Gun cases, Doors, windows and ventilators metallic, Rolling shutters, Lantern posts and bodies, Aluminium furniture, Adjustable beds — hospital, Iron and steel cots — all types, Storage cupboards — iron and steel, Racks — all types including angular racks — iron & steel, Wheel chairs for invalids, Steel chairs – all types steel tables — Hospitals, Steel tables — all other types, Trolleys — railway platform drinking water. Trolleys — iron and steel — Hospital Stretchers — iron and steel, Storage bins — steel, furniture — all other types, Hacksaw frames, Pliers, Screwdrivers, Spanners, Hammers, Anvils, Wood-working saws, Wrenches, Knives and shearing blades (all types including those of metal paper, bamboo and wood for manual operations), Nail pullers, Chisels, Pincers, Wire cutters. Other hand tools for blacksmithy, carpentry, handforging, foundry, etc., Bolts and nuts — except high tensile and other special types, Rivets of all types including bifurcated Wire adjusting screws, Tumbler locks, Padlocks, Safe/cabinet locks, Door locks, Locks — bicycles, Other locks — except for Automobiles, Chains lashing. Persian wheels. Chaff cutters. Chaff cutter blades. Animal driven implements, Crow-bars, Plough shears Iron ploughs. Cultivators. Disc harrows. Insecticide dusters — manual. Insecticide sprayers — manual, Forks, Hoes. Levellers. Mowers, Pickers — metallic, Handpumps. Seed treaters, Hand shovels, Sickles, Seed bins, Water lifters, Kudali, Other agricultural implements, Wire nails Panel pins, Wood screws, Machine screws — except socket head and special types, Gate-hooks, Shoe nails — animal, Hob nails, Builders hardware, Nail cutters, Metallic washers, Barbed wire, Spoons — cutlery, Fork — cutlery, Table knives/household knives, Bread cutters. Other cutlery items, Domestic utensils — brass, Domestic utensils — aluminium, Domestic utensils — bell metal, Domestic utensils — copper, Domestic utensils — iron, Domestic utensils — silver, Domestic utensils — bronze, Domestic utensils — German silver, Pressure cookers, Gas appliances such as cooking ranges, ovens, etc., Gas lighters — mechanical, Razors, Safety pins, Watch straps — metallic, Beam scales, Postal weighing scales, Expanded metal, Welded wire mesh — except for expansion of existing units, Wire gauze and wire netting — metallic — thicker than 100 mesh size, Steel wool, Hair pins, Metal fittings for leather goods and garments, Ghamelas, Blacksmith hearths, Brass dampers, Measuring tapes — steel, Lamp holders, Winnowers upto 5 HP motive power, Wheat and rice threshers upto 5 HP motive power, Seed cleaners upto 5 HP motive power, Grain driers upto 5 HP motive power, Shell huskers upto 5 HP motive power, Reapers upto 5 HP motive power, Cotton delinting machine upto 5 HP motive power, Seed drills upto 5 HP motive power, Other agricultural machinery upto 5 HP motive power, Low speed gear for use in agricultural machines, threshers — made of cast iron/mild steel — non-heat treated, Diesel engines upto 15 HP — show speed, Rice and dal mill machinery, Oil crushers, Oil crusher parts, Cotton ginning knives, Tea cutting knives, Three knives trimmer and envelope cutters clicking knives for leather industry, Chopping knives and lancets for match industry, Plastic shredding and granulating knives, Knives and shearing blades (all types, including those for metal paper, bamboo and wood for hand operated machines), Doctor blades, Stainless steel refiner/bar knives, Concrete mixers upto 3 cubic metres capacity, Band saw blades for cutting wooden logs, Room cooler — desert type, Airconditioning ducting, louvres, grills and other sheet fabrication in airconditioning, Centrifugal pumps upto size 10 cm × 10 cm, Air compressors upto 5 HP for spray painting repair shops, Electro formed screens/liners used in the chemicals and sugar industries, Simple cone pulley driven lathe upto 2000 mm bed length, Turning, boring and threading — addas — small single or multiple operation devices, Bench grinder upto 300 mm diameter, Power hacksaw — mechanical — 300 mm blade size, Coolant pumps, etc., Steadies, Dog plates, Machine vices — machine tool, Carbide-tipped tools single point brazed — carbide bits purchased from manufacturers. Weighing machines/weighbridges (ordinary), File mechanism, Sewing machines — domestic, hand operated — conventional type, Household knitting machine, Absolute filters for biological and airconditioning application, Duplicating machines — other than special type, Bottle washers, Satchet filling machines for pouches, Sheep shearing machine, Double can mixer — dairy equipment, Micro pulveriser — dairy equipment, Rotary driers — dairy equipment, basket type centrifuges — dairy equipment, Milk cooling and ghee settling equipment — dairy equipment, Evaporating pans — dairy equipment, Butter churn — dairy equipment, Curd mills — dairy equipment, Agitators — dairy equipment, Storage tanks for dairies and all poultry equipments.

ELECTRICAL MACHINES, APPLIANCES & APPARATUS INCLUDING ELECTRONICS

Electrical: Potential transformers 11 kV except for captive consumption, Current transformers 11 kV except for captive consumption, Boosters, Voltage stabilizers (domestic), Electric motor 1 HP to 10 HP — AC except special types, F HP Motor — AC — excluding special types, PVC wires — domestic type, VIR wires — domestic type, Table fans, Exhaust fan upto 460 mm, Miniature vacuum bulbs, Torch bulbs, Radio panel bulbs, Cycle dynamo bulbs, Decoration bulbs, Electric irons — ordinary/autosteam upto 3·63 kg., Electric stoves upto 3 kW, Hot plates/boiler plates upto 3 nos/upto 4 kW, Cooking ranges upto 4 hot plates/boiler plates with/without baking oven hot cases upto 4 kW, Storage water heaters/geysers upto 100 litres capacity/upto 3 kW, Electric kettles/sauce pan — ring types upto 1·70 litres, Mixers/grinders such as meat mincer, juice extractor, cap. of jar 1 litre max./upto 500 watts 30 minutes rating, Hair driers — all types, Hot cases upto 113·2 litres, Hot air blowers/heat convector upto 2 kW upto fan size 26 cm/20 cm × 6 cm, Room heaters upto 3 kW, Egg boilers upto ½ dozen eggs, Water boilers upto 100 litres capacity, Espresso coffee makers upto 1·70 litres capacity, Coffee percolators upto 1·70 litres, Immersion water heaters upto 3 kW, Food warmer trays upto 500 watts, Electric auto tandoors, Bread toasters ordinary/auto/semi-auto upto cap. 6 slices, Ice cream makers cap. 1 litre for use with domestic refrigerators, Washing machine with/without spin driers upto 3·63 kg. cap./upto 3 kW, Baking ovens with/without provision for roasting/grilling upto 56·6/litres & 1 kW, Electrical light fittings — reflectors, Electrical wiring accessories, Electrical light fittings—chokes, Electrical light fittings — starters, A.A. conductors upto and including 19 strands, A.C.S.R. conductors upto and including 19 strands, Air break offload isolators upto 11 kW including gang operated, Carbon brushes manufactured from carbon block, Black adhesive insulating tape — electrical use, Emergency lamps, Electrical transmission line, Hardware and conductor accessories (other than those manufactured in malleable casting and preformed types), Metal clad switches upto 100 AMPS/miniature circuit breakers.

Electronic Equipment and Components: Radio/Car Radio — low cost upto Rs. 250 each, T.V. Antennas, T.V. tuners, T.V. Games, T.V. deflection components, pick up cartridges, T.V. Booster amplifiers, Radio & T.V. Coils, Amplifiers for entertainment and public address system, Assembly of loudspeakers, Electronic cigarette lighters, Inventors & Convertors upto 500 volts amperes, Regulated D.C. power supplies upto 0·01% regulation, Electronic fan regulators, Dimmers & twilight switches, Digital clocks, Wire-wound resistors other than professional types, I.F. Transformers, Air trimmers for professional use, Transistor headers, Telescopic aerials for radio receivers, Battery eliminators, Electronic flashgun and hearing aids.

TRANSPORT EQUIPMENT

Boats and Truck Body Building: Wooden boats — body building, Truck body-building — wooden structure and seats for buses and trucks.

Auto Parts Components and Ancillaries and Garage Equipment: Window channels — auto, Wiring harness, Arms and blades of wind shield wipers, Grease nipples, Gun metal bushes, Bulb horns, Hub caps — auto, Hose pipes and radiator hoses — auto, Horn buttons, King pins/shackle pins — automobile use, Auto leaf springs, Luggage carrier, Ornamental fittings — auto, brake and pedal pads auto, Automobile radiators except for expansion on merits, Radiator grills — auto, Rear view mirrors — auto, Seat cushion, Steering wheels — auto, Sun shades — auto, Side lamp assembly — auto, Stop lamp assembly — auto, Tail lamp assembly — auto, Ash trays — car fittings, Battery cables and fittings, battery cell tester, electrical fuse boxes — auto, electrical fuses — auto, exhaust mufflers — auto, fan belts, fuel tank caps — auto, fuel lines — auto, handles & locks — auto, armature tester, battery terminal lifters, condensors and resistance testers, fenders spoons and hammers, feeler gauges, flaring tools, gear flushers, puller of all types, ring expanders, ring compressors, screw extractors, spark plug tester & cleaners, stud removers — extractors, toe in gauges, tyre valve pullout tools, tube cutters, flanging tools, valve lifters, valve replacing & resetting tools, camber testing equipment, painting equipments like spray guns, etc., grease guns, tyre inflator — both hand and foot operated, electric horns — auto, other auto rubber components, spokes and nipples — auto cycle & sun visors — auto.

Bicycle Parts, Tricycles & Perambulators: Cycle frames, B. B. axles, B. B. cups, B. B. shells, bicycle tube valves, handles bicycle, bolts & studs and screw—all types-bicycle, bells-bicycles, carrier-bicycle, chains-cycle, chain wheels & adjusters-bicycle, lamps-bicycle, chain covers, cones-hub cones-bicycle, cotter pins-cycles, crankshafts-cycles, crank forgings-cycle, crown outer cover-cycle, cycle dynamos, D-nuts-cycles, eye bolt cups-cycle, fork blade crown cover-cycle, fork handles-cycles, frame collars-cycle, guide pins-cycle, handle bar grips, hub oil clips-bicycle, hub axle nuts-bicycle, lock nuts & ring-bicycle, lugs-all types-bicycle, mudguards-bicycle, lamp brackets-bicycle, pedal assembly-cycle, saddle-cycle, shackle rivets-cycle, stands-cycle, spokes & nipples-cycle, hubs and cups-bicycle, rims cycle, other cycle parts and accessories except free wheel, tricycles, tricycles-parts & accessories, perambulator & perambulator parts and accessories.

Miscellaneous Transport Equipment: Hand & animal drawn carriage fittings, *tonga* parts and wheel rings, wheel barrows, animal-drawn vehicles & hand-drawn carts of all types.

MISCELLANEOUS

Mathematical and Survey Instruments: Alidades, chain line base measuring apparatus, cross staff, compass prismatic, dividers, drawing boards, dumpy levels, drawing instruments — engg., diagonal scales, engineers level, engineering scales, French corners, ghat & reed tracers, measuring chain, optical square, protractors, plane meters, plane table equipment, ranging rod, flat rule, set square, slide rule, sextant, triangular scales, tee, T-squares, callipers, drafting machine for designing & drawing offices and other drawing mathematical and survey instruments excluding theodolites.

Sports Goods: All types of sports nets, shuttle cocks, hockey sticks, protective equipments for sports like pads, gloves, etc. soft leather goods, dumbells and chest expanders, cricket & hockey balls & football, volley ball and basketball covers.

Stationery Items: Writing inks & fountain pen inks, ball point pens, Pen nibs, fountain pens & ball pens components excluding metallic tips, pencils, hand stapling machine, paper pins, carbon paper, typewriter ribbon, hand numbering machines, pencil sharpeners & pen holders.

Clocks and Watches: Clocks — wall clocks, pendulum type both with mech. movement, transistorised movement, except lever type clocks, time-pieces mechanical winding with alarm conventional & watch dials except ornamental high priced dials — simple dials, cast brass watch cases-polished & plated.

Others: Umbrellas, hypodermic needles, sterilisers—stainless steel & aluminium, microscope student and medical use, water meters, pressure gauge — upto 3·52 kg. per sq. cm., revolution counters, mech., liquid level controller, thermometers — upto 150C, photographic enlargers, projectors including slide and overhead projectors but excluding profile projectors, wire brushes, paint brushes, hair brushes, fibre brushes, tooth brushes, brushes-natural bristles, other brushes, mechanical toys, non-mechanical toys, bone meal (except captive consumption for 100 per cent export), crushed bones (except captive consumption for 100 per cent export), cufflings, tie-pins, metallic dress buttons & buckles, spectacle hinges, absorbent cotton, cigarette lighters.

The Government has reserved 27 more items for exclusive production in the small-scale sector:

Simple glass mirrors, excluding specialised glass mirrors meant for optical instruments, glass marbles of all types, stainless steel utensils, lime and hydrated lime (other than captive consumption), harvestor, grader, baler and other earthmoving blades used in agricultural machines, cotton ginning knives, tea-cutting knives, three knives trimmer and envelope cutters, clicking knives for leather industry, chopping knives and lancets for match industry, plastic shredding and granulating knives.

Knives and shearing blades of all types, including those meant for metal, paper, bamboo and wood for hand-operated machine, doctor blades, stainless steel refiner and bar knives, elector formed screens and liners used in the chemicals and sugar industries, TV deflection components, pick-up cartridges, polished and plated cast brass watch cases, bone meal and crushed bones (except captive consumption for 100 per cent export), stearates of aluminium, magnesium, calcium and zinc, methyl salicylate and halogenated hydroxy-quinolines.

Banned Items: From time to time, the office of Development Commissioner, Small Scale Industries issues a list of items for which registration of new units and expansion of existing units is not to be encouraged. The position obtaining on 1st January 1981 is as follows :—

Items for which no registration is to be done at all: 1. Pesticides Formulations ; 2. Flexible Polyurethane foam ; 3. Transformer oil ; 4. Baby Food ; 5. Malted Milk Food ; 6. Stainless Steel Wires in thicker gauges ; 7. Cold Rolled Steel Strips ; 8. Recovery of Zinc Metal from Zinc ash, dross, waste etc. ; 9. Re-rolling of Steel including Stainless Steel ; 10. Ammonium Nitrate from Calcium Ammonium Nitrate (fertilizer grade) ; 11. Non-power operated Acid slurry/detergent formulations ; 12. Wire Drawing of Steel and items requiring wire rods as an essential raw material ; 13. Items requiring Commr. Grade Aluminium as Raw Material.

Items for which registration is to be restricted to the units to be set up in backward districts eligible for concessional finance only: 1. *Manufacture of Stainless Steel products* :— (*a*) Domestic Utensils ; (*b*) Wiper Blades made of Stainless Steel Strips ; (*c*) Hospital Equipment Wares and Furniture made of Stainless Steel Sheets and Strips ; 2. Plastic products made from H.D. Polythelene (excluding HDPE woven sacks) ; 3. Cork Stoppers ; 4. Wires and Cables (Aluminium) ; 5. Tin Containers and similar products using tin sheets ; 6. Stainless Steel/Watch Straps ; 7. Bright Bars (subject to capacity assessment of the unit) ; 8. Zinc Oxide.

Items for which registration is to be restricted to the units to be set up in States where there are no such unit in the line: 1. AAC and ACSR Conductors (subject to capacity assessment of the unit).

Registration and Magnitude of Small Scale Sector: Registration of small-scale units with the State Industries Departments is purely on a voluntary basis.

According to the annual report of the Small Industries Development Organisation (SIDO) the small-scale sector accounted for 62 per cent of the production by village and small industries in terms of value added or 23 per cent of the total industrial production in the country.

Employment doubled during the period (1973-74 to 1979-80) from three million to 6·46 million. Exports from this sector totalled Rs. 10,500 million or 16 per cent of the total exports in 1979-80.

In 1980-81, the production in the small-scale sector was estimated at Rs. 280,800 million at current prices.

The Sixth Five-Year plan aims at an 8·7 per cent annual growth in production by the small-scale sector. It is expected that by the end of 1984-85, a production level of Rs. 328,730 million would be achieved. The value of exports from this sector is expected to rise to Rs. 18,500 million and employment to 8·9 million.

The number of items reserved for the small-scale sector has gone up to 834. A total of 379 items have been reserved for exclusive purchase from this sector by Government and Public Sector organisations.

State Financial Corporations: (See chapter on 'State Govt. Undertakings' for names and addresses).

Specialised Services: Technical advisory service; workshop and laboratory services; economic services; management consultancy services; marketing advisory service; managerial and technical training service and other general services which are far too expensive to be privately obtained are given free by the Central Small Industries Organisation. (Now called Small Industries Development Organisation — SIDO for short.)

Small Industries Service Institutes: Addresses are as follows:—

Andhra Pradesh: No. 3-4-812, Swaran Vilas, Barkatpura, Hyderabad 500027; **Assam:** Ind. Estate, P.O. Bamunimaidan, Gauhati 781021; **Bihar:** Prasad Mansion, Indl. Estate, Patna 800013; SISI Indl. Estate, Kokar, Ranchi; SISI Bela Indl. Estate, PORK Ashram, Muzaffarpur; **Gujarat:** Harsiddh Chambers, 4th Floor, Ashram Rd., Ahmedabad 380014; 1/5, Jaganath Plot, Rajkot 360001 (branch institute); **Jammu & Kashmir:** (Winter) Indl. Estate, Digtana Pathankot Rd., Jammu Tawi 180001, (Summer) School of Design Bldg., Karan Nagar, Srinagar 190001; **Karnataka:** Rajaji Nagar, Bangalore 560044; SISI Bachi Lodge, Club Rd., Hubli 560020; **Kerala:** Kerala Varma College Rd., Trichur 680011; **Madhya Pradesh:** 10, Indl. Estate, Polo Ground, Indore 452003; **Maharashtra:** Kurla-Andheri Rd., Saki Naka, Bombay 400072; **Orissa:** Kanika Rd., Tulsipur, Cuttack 753008; **Punjab:** Indl. Area, 'B', Ludhiana 141001; **Rajasthan:** Mirza Ismail Rd., Jaipur 302001; **Sikkim:** Tandong, Gangtok; **Tamil Nadu:** 65/1, Grand Southern Trunk Rd., Madras 600032; **Uttar Pradesh:** 107, Indl. Estate, Kalpi Rd., Kanpur 208012; SISI, 21/3, Jatnika Bagh, Jeonimandi, Agra 282004; E-17/18, Indl. Estate, Naini, Allahabad 211001; **West Bengal:** 111 & 112, B. T. Rd., Calcutta 700035; **Delhi:** Okhla Indl. Estate, Okhla, New Delhi 110020; **Goa:** Mapari Building, Post Box No. 334, Margao 403601.

Backward Areas: Following is the list of industrially backward districts (247) selected to qualify for concessional finance from the financial institutions.

Andhra Pradesh: Anantapur, Chittoor, Cuddapah, Karimnagar, Khammam, Kurnool, Mehbubnagar, Medak, Nalgonde, Nellore, Nizamabad, Ongole, Srikakulam and Warangal. **Assam:** Cachar, Goalpara, Kamrup, Mikir Hills, North Cachar Hill, Nowgong and new Lakhimpur district. **Bihar:** Bhagalpur, Champaran*, Darbhanga*, Muzaffarpur*, Palamau, Purnea, Saharsa, Santhal Parganas, Saran* and new districts of Nalanda, Aurangabad, Nawadah, Gaya, Bhojpur, Begusarai and Monghyr. **Gujarat:** Amreli, Banaskantha, Bhavnagar, Broach, Junagadh, Kutch, Mehsana, Panchmahal, Sabarkantha and Surendernagar. **Haryana:** Bhiwani, Hissar**, Jind and Mohindergarh**. **Himachal Pradesh:** Chamba, Kangra*, Kinnaur, Kulu, Lahaul and Spiti, Solan and Sirmur. **Jammu & Kashmir:** Anantnag, Baramula, Doda, Jammu, Kathua, Ladakh, Poonch, Rajori, Srinagar and Udhampur. **Karnataka:** Belgaum, Bidar, Bijapur, Dharwar, Gulbarga, Hasan, Mysore, North Kanara, Raichur, South Kanara and Tumkur. **Kerala:** Alleppey, Cannanore, Malapuram, Trichur and Trivandrum. **Madhya Pradesh:** Balaghat, Bastar, Betul, Bilaspur, Bhind, Chhatarpur, Chindwara, Damoh, Datia, Dhar, Dewas, Guna, Hoshangabad, Jhabua, Khargone, Mandla, Mandsaur, Morena, Narsimhapur, Panna, Raigarh, Raipur, Rajnandgaon, Rajgarh, Raisen, Ratlam, Rewa, Sagar, Seoni, Shajapur, Shivpuri, Sidhi, Surguja, Tikamgarh, Vidisha and new Sehore district. **Maharashtra:** Aurangabad, Bhandara, Bhir, Buldana, Chanda, Kulaba, Dhulia, Jalgaon, Nanded, Osmanabad, Parbhani, Ratnagiri and Yavatmal. **Manipur:** All the 5 districts. **Meghalaya:** Garo Hills and United Khasi & Jaintia Hills*. **Nagaland:** Kohima, Mokokchung and Tuensang. **Orissa:** Balasore, Bolangir, Dhenkanal, Kalahandi, Keonjhar, Koraput, Mayurbhanj and Phulbani. **Punjab:** Bhatinda*, Ferozpur**, Gurdaspur, Hoshiarpur and Sangrur. **Rajasthan:** Alwar, Banswara, Barmer, Bhilwara, Churu, Dungarpur, Jaisalmer, Jalore, Jhunjhunu, Jhalawar, Jodhpur, Nagaur, Sikar, Sirohi, Tonk and Udaipur. **Sikkim:** All the 4 districts of Gangtok, Mangan, Gyalshing and Namchii. **Tamil Nadu:** Dharampuri, Kanyakumari, Madurai, North Arcot, Ramanathapuram, South Arcot, Thanjavur, Tiruchirapalli and new Pudukottai district. **Tripura:** All the 3 districts. **Uttar Pradesh:** Almora, Azamgarh, Badaun, Bahraich, Ballia, Banda, Barabanki, Basti, Bulandshahr, Chamoli, Deoria, Etah, Etawah, Faizabad, Farrukhabad, Fatehpur, Garhwal, Ghazipur, Gonda, Hamirpur, Hardoi, Jalaun, Jaunpur, Jhansi, Kanpur-Dehat, Mainpuri, Mathura, Moradabad, Pilibhit, Pithorgarh, Pratapgarh, Rai Bareli, Rampur, Shahjahanpur, Sitapur, Sultanpur, Tehri Garhwal, Unnao and Uttar Kashi. **West Bengal:** Bankura, Birbhum, Burdwan, Cooch-Behar, Darjeeling, Hooghly, Jalpaiguri, Malda, Midnapur, Murshidabad, Nadia, Purulia and West Dinajpur. Entire area of: **Andaman & Nicobar, Arunachal Pradesh, Dadra & Nagar Haveli, Goa, Daman & Diu, Lakshadweep, Mizoram, Pondicherry.**

---

* District as it existed prior to its recent re-organisation. ** District as re-organised recently.

SPICES INDUSTRY

INDIA has always been the traditional home of spices and throughout history been associated with their trade. It was for spices that men from strange lands came to the shores of India and bartered their wares. Spices figure in the country's exports from ancient times.

Indian spices are of the finest quality and today the demand for them has considerably increased in all countries

PEPPER

Pepper, known as the 'King of Spices', is the most important foreign exchange earner. The Indian black pepper is considered to be superior in quality and fetches a better export price.

Pepper production in India accounts for about 20 per cent of the total world production of about 130,000 tonnes. More than 80 per cent of Indian production is exported every year.

State-wise break up of area and production for the year 1978–79 is given in Table II.

Export of black pepper during 1978-79 was estimated at 15,168 tonnes valued at Rs. 276·36 millions and during 1979–80, 21,381 tonnes valued at Rs. 332·29 millions.

A quantity of 326 tonnes of green pepper in brine valued at Rs. 4·897 million, 41·93 tonnes of dehydrated green pepper valued at Rs. 2·14 million and 6·15 tonnes of white pepper valued at Rs. 0·20 million were also estimated to be exported during the year 1979–80.

Average per hectare yield of pepper is about 233 kg.

CARDAMOM

Cardamom, known as the ‘Queen of Spices’ usually earns the second highest amount of foreign exchange among spices. Indian exports amount to 90 per cent of total world exports. State wise break up of area and production during 1979-80 :

State	Area ('000 hectares)	Production ('000 tonnes)
Kerala	52·7	3·0
Karnataka	31·4	1·9
Tamil Nadu	4·9	0·4
Total	89·0	5·3

Exports of green cardamom (small) during 1978–79 were estimated at 2,875·7 tonnes valued at Rs. 583·54 million and during 1979–80, 2,671·2 tonnes valued at Rs. 498·05 million.

Exports of cardamom (big) during 1978–79 were estimated at 74·3 tonnes valued at Rs. 2·04 million and during 1979–80 at 62·14 tonnes valued at Rs. 1·73 million.

Average per hectare yield was 62 kg. during 1979–80 against 60 kg. during 1978–79.

GINGER

India is the leading ginger producing country and accounts for about 50 per cent of dry ginger output in the world. Cochin ginger produced in Kerala State is regarded as second only to Jamaican ginger which is considered to be the best variety in the world.

Area and production of ginger during 1978–79 is given in Table II.

Exports during 1978–79 were estimated at 11,796 tonnes valued at Rs. 128·36 million and during 1979–80 10,068 tonnes valued at Rs. 63·57 million.

Average per hectare yield of ginger was 1,957 kg. during 1978–79.

CHILLIES

The cultivation of chillies is widely scattered throughout the country. Its annual consumption varies from region to region, ranging from about 3·5 kg. per adult in Andhra Pradesh to around 5 kg. per adult in Maharashtra. In Punjab, Bihar, Uttar Pradesh and Orissa consumption is lower. State-wise break up of area and production for 1978–79 is given in the Table II.

Exports during 1978–79 were estimated at 30,259 tonnes valued at Rs. 292·52 million and during 1979–80 at 2,181 tonnes valued at Rs. 20·1 million.

Average per hectare yield of chillies during 1978–79 was 792 kg.

TURMERIC

The major turmeric growing States in India are Andhra Pradesh, Maharashtra, Bihar, Tamil Nadu and Orissa. State-wise break up of area and production during 1978-79 is given in the Table II on p. 86.

Exports during 1978-79 were estimated at 10,299 tonnes valued at Rs. 110·49 million and during 1979-80 at 21,514 tonnes valued at Rs. 162·37 million.

Average per hectare yield of turmeric was 1,786 kg. during 1978–79.

SAFFRON

The major State in India cultivating saffron is Jammu and Kashmir. Area under saffron during 1977-78 was estimated at 3,185 hectares and production 1,164 kg. During 1978-79 it was 3,257 hectares and production 767 kg.

Average per hectare yield was 240 grm. during 1978–79.

OTHER SPICES

Exports during 1977–78 were estimated at 21,857 tonnes valued at Rs. 148·98 million; during 1978–79 at 54,976 tonnes valued at Rs. 320·84 million; and 1979–80 at 51,983 tonnes valued at Rs. 448·99 million.

Spice Oils and Oleoresins : India has recently emerged as a potential major producer and exporter of spice oils and oleoresins.

The following quantities of spice oils and oleoresins were exported during 1978–79 and 1979–80.

Exports of Spice Oils and Oleoresins

(Quantity in Kg. and value in '000 Rupees)

Item	1978–79 Quantity	1978–79 Value	1979–80 Quantity	1979–80 Value
Spice oils				
Pepper ..	5,320	846·1	6,700	997·7
Ginger ..	7,684	487·4	11,392	5,415·8
Cardamom ..	1,374	3,250·0	652	1,439·7
Turmeric ..	—	—	21	6·4
Celery seed ..	2,966	1,466·0	869	386·4
Cummin ..	—	—	25	12·8
Total ..	17,344	6,049·5	19,659	8,258·8
Spice oleoresins				
Black pepper ..	93,846	13,245·1	124,276	17,450·9
Capsicum ..	1,757	278·0	7,435	1,500·4
Ginger ..	7,183	1,469·7	5,044	1,024·2
Turmeric ..	19,371	2,179·3	32,670	3,604·8
Annato ..	—	—	111	87·3
Celery	3,627	253·0	12,074	757·1
Total ..	125,784	17,425·1	181,610	24,424·7

Sources : Custom copies — provisional.

USA, West Germany, Canada, UK, Australia, Holland, France, Belgium, Yugoslavia, Japan are major importers of spice oils and oleoresins.

Export Duty: The export duty levied on pepper has been lifted. Export duty of Rs. 1,500 per tonne on turmeric powder and Rs. 2,000 per tonne on other types of turmeric has been levied recently.

GENERAL

Grading of spice commodities according to Agmark specifications has been made compulsory under the Sea Customs Act for export trade. Indian spices exports have increased from 166 million in 1960–61 to Rs. 729·60 millions in 1976–77 (56,000 tonnes) and to Rs. 1,358 millions in 1977–78 (73,000 tonnes). Exports during 1978–79 are estimated at Rs. 1,602 million (99,945 tonnes) and during 1979-80 Rs. 1,354 million (85,898 tonnes).

Regulated Market: With a view to preventing exploitation of producers and getting better prices for their produce several markets have been regulated under Agricultural Produce Market Act. About 644 markets for chillies, 331 for turmeric, 283 for garlic, 129 for ginger, 183 for cummin and 345 for other spices have already been regulated in different States of India.

Research : The agricultural research on spices is being carried out at the **Central Plantation Crops Research Institute** (I.C.A.R.), Kasaragod and its regional and sub-stations. The research on these post harvest technology and processing is being done at Central Food Technological Research Institute, Mysore and its regional centres.

Development : The Central Government has constituted an **Indian Spices Development Council** consisting of Government officials and non-officials representing the growers and the traders. It reviews the work of development already in progress and recommends further development programmes. These programmes are implemented through the **Directorate of Cocoa, Arecanut and Spices Development** functioning at 1/500, Cannanore Road, Calicut-673005, Kerala.

Development programme now under implementation are (*i*) large scale multiplication and distribution of rooted cuttings of hybrid pepper 'Panniyur-I' by establishing nurseries, (*ii*) production and distribution of seedlings of clove and nutmeg and seed rhizomes of high yielding varieties of ginger and (*iii*) implementation of a package scheme providing for field demonstrations to promote cultivation of the hybrid pepper and adoption of scientific package of practices etc.

Publications: (1) 'Spices Newsletter' (Monthly) and 'Indian Spices' (Quarterly) brought out by the Spices Export Promotion Council, Cochin; (2) 'Indian Cocoa, Arecanut and Spices Journal' (Quarterly), Directorate of Cocoa, Arecanut and Spices Development, Calicut; (3) 'Journal of Plantation Crops' (Half yearly), Indian Society for Plantation Crops, Central Plantation Crops Research Institute, Kasaragod.

Table II

State-wise area and production of Spices during 1978-79

(Area : '000 hect., production : '000 tonnes)

State	Pepper		Cardamom		Ginger		Chillies		Turmeric	
	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.	Area	Prod.
Andhra Pradesh ..	—	—	—	—	2·00	2·00	140·2	175·0	22·4	56·8
Assam	—	—	—	—	—	—	10·6	6·3	7·2	4·3
Bihar	—	—	—	—	0·69	0·62	19·2	21·0	5·6	11·2
Gujarat	—	—	—	—	0·26	0·20	13·5	8·9	—	—
Haryana	—	—	—	—	0·06	0·09	12·6	13·1	—	—
Himachal Pradesh	—	—	—	—	2·49	1·35	0·8	0·2	—	—
Jammu & Kashmir	—	—	—	—	—	—	1·3	0·7	—	—
Karnataka	3·40	0.92	24·9	1·6	1·53	1·99	138·7	43·8	1·5	4·7
Kerala	108·26	25.12	52·3	3·1	10·66	28·06	2·8	2·5	3·7	3·6
Madhya Pradesh ..	—	—	—	—	1·78	2·21	54·0	11·0	0·4	0·4
Maharashtra ..	—	—	—	—	0·75	0·65	149·6	76·1	9·2	15·3
Manipur	—	—	—	—	1·47	2·94	2·6	1·6	—	—
Meghalaya	—	—	—	—	4·27	16·80	1·2	0·8	1·4	1·4
Nagaland	—	—	—	—	0·31	0·28	1·5	1·0	—	—
Orissa	—	—	—	—	3·55	2·55	66·7	33·2	20·7	15·2
Punjab	—	—	—	—	—	—	13·0	11·1	—	—
Rajasthan	—	—	—	—	0·19	0·22	44·1	26·2	0·1	0·2
Tamil Nadu ..	0·30	0.06	4·7	0·4	1·04	0·92	91·3	185·2	8·5	31·7
Tripura	—	—	—	—	0·50	0·64	1·1	0·3	0·9	1·3
Uttar Pradesh ..	—	—	—	—	0·32	2·08	19·6	7·0	0·5	0·7
West Bengal ..	—	—	—	—	2·39	3·45	20·6	18·3	—	—
Delhi	—	—	—	—	—	—	0·1	0·3	—	—
Mizoram	—	—	—	—	0·07	0·12	0·3	0·1	0·1	—
Pondicherry ..	0·01	Neg.	—		—	—	0·2	0·2	—	—
All India	111·97	26.10	81·9	5·1	34·33	67·17	805·6	637·9	82·2	146·8

Source : Directorate of Economics & Statistics, New Delhi.

STEEL INDUSTRY

BRIEF HISTORY

ALTHOUGH India occupied a pre-eminent position in iron and steel making in the ancient world, the industry on modern lines is about seventy years old. It came into existence with the launching of the Tata Iron and Steel Works at Jamshedpur, Bihar, in 1907. Before this, a number of attempts were made in different parts of India to start the industry by both private companies and the Government. Kulti Iron Works near Asansol (West Bengal) was one such venture which later became a part of Indian Iron and Steel Company (IISCO).

The Jamshedpur steel works went into operation by stages in 1911–12. In 1919 Indian Iron and Steel Company established a unit near Asansol, West Bengal. Meanwhile the first unit in the public sector was put up in Karnataka on the banks of river Bhadra. Production in Mysore Iron and Steel Works began in 1923.

Upto the end of World War II, these three were the only main units in India producing 1·7 million tonnes of pig iron and a million tonnes of steel ingots annually.

The development of modern steel industry began during the Second Five Year Plan with the setting up of three integrated steel plants in the public sector, each with 1 million tonnes ingot steel capacity at Bhilai, Durgapur and Rourkela. These plants came into operation in stages between 1956 and 1962. During this period capacity of TISCO at Jamshedpur and IISCO at Burnpur was doubled. The total ingot steel capacity thus rose to 6 million tonnes. With the expansion of Bhilai to 2·5 million tonnes ingots, Durgapur to 1·6 million tonnes ingots and Rourkela to 1·8 million tonnes ingots, the total capacity of the integrated steel plants was raised to 8·9 million tonnes between 1962–73. With the establishment of Bokaro Steel Plant in Bihar, ingot capacity within plants has now gone up to 11·4 million tonnes. Bokaro and Bhilai Plants are being further expanded from their present 2·5 million tonnes ingots each to 6 million tonnes ingots steel annually.

Private Sector:

Tata Iron and Steel Company Ltd. (*Tisco*) (Head Office: Bombay House, Homi Mody St., Bombay 400023) owns, in addition to the integrated steel plant at Jamshedpur, captive collieries at Sijua, Jamadoba and West Bokaro and an iron ore mine at Noamundi all in Bihar State and iron ore, manganese ore, limestone, dolomite and other mines in Orissa. The steel plant at Jamshedpur is the oldest integrated steel plant in the country. The installed capacity of the plant is 2 million tonnes of steel ingots per annum equivalent to about 1·5 million tonnes of saleable steel. The company produces a variety of steel items like bars, structurals, strips, plates, black and galvanised sheets, electrical steel sheets, railway materials and rolled rings, besides ferro-manganese, agricultural tools, sulphate of ammonia and benzol products.

The Steel Authority of India Ltd. (SAIL) was set up under the Companies Act on 24th January 1973, to provide co-ordinated development of both the private and the public sectors — as a holding company. It was restructured with the passing of "the Public Sector Iron and Steel Companies (Restructuring) & Miscellaneous Provisions Act, 1978". The Bill came into force from May 1, 1978. The restructured SAIL has two subsidiaries namely, IISCO and MSTC. The erstwhile subsidiaries of SAIL, MECON, HSCL, NMDC, Mandovi Pallet Ltd., MOIL were put under the direct charge of Ministry of Steel and Mines. The erstwhile Hindustan Steel Limited which controlled the steel plants at Bhilai, Durgapur and Rourkela was merged into SAIL. As such the integrated company of SAIL has its integrated plants at Rourkela, Bhilai, Durgapur, Bokaro and Burnpur. During the financial year 1979-80 SAIL plants produced 6,249,000 tonnes of ingot steel.

Steel Authority of India Ltd. is one of the largest industrial organisations in the world, representing an investment of over Rs. 40,000 million. The company controls all the Public Sector integrated steel plants in India including an alloy steels plant. SAIL also holds shares in the Visvesvaraya Iron & Steel Ltd. SAIL also represents the interests of the public financial institutions' investments in the iron and steel and allied industries. Besides controlling and directing operations of the public sector steel plants and marketing steel, SAIL is also charged with the responsibility of assisting the Government of India in bringing about integrated planning and development of the steel industry in India.

THE ORGANISATION

Integrated Steel Plants:

1. Bhilai Steel Plant, Bhilai, Madhya Pradesh.
2. Bokaro Steel Plant, Bokaro, Bihar.
3. Durgapur Steel Plant, Durgapur, West Bengal.
4. Rourkela Steel Plant (including a fertiliser plant), Rourkela, Orissa.
5. Alloy Steels Plant, Durgapur, West Bengal.

Divisions:

Central Sales and Marketing Organisation, Calcutta.
Research and Development Centre, Ranchi, Bihar.

Subsidiaries:

1. IISCO — Indian Iron & Steel Co., Burnpur, West Bengal.
2. Metal Scrap Trade Corporation, Calcutta, West Bengal.

New Projects:

1. Salem Steel Plant, Salem, Tamil Nadu.
2. Visakhapatnam Steel Project, Visakhapatnam, Andhra Pradesh.
3. Vijayanagar Steel Project, Vijayanagar, Karnataka.

Registered Office: Hindustan Times House, Kasturba Gandhi Marg, New Delhi 110001.

There is also the Visvesvaraya (Mysore) Iron and Steel Ltd. (VISL) at Bhadravati, Karnataka. It was started in 1923 as a small blast furnace and was expanded from time to time and is now one of the main producers of alloy and special steels in the country. In addition, it also manufactures ferro-silicon cement, castings, etc. It is now a joint undertaking of the Government of Karnataka and Government of India through SAIL.

New Steel Plants: The **Salem Steel Plant** is estimated to cost Rs. 5,868 million. The plant will come up in two stages. First stage is estimated to cost Rs. 1,270 million. In this stage a cold rolling mill complex is coming up to roll stainless steel sheets. The plant is in final stages of construction and is scheduled to go into operation by the end of 1981.

Vishakhapatnam Steel Plant: Work on the plant has begun recently. Preliminary surveys and site levelling is almost complete and civil work for foundations has begun

This plant will come up in two stages to have an ultimate capacity of 3 million tonnes of hot metal. Final stage hot metal availability will be 1·62 million tonnes. The plant will have the largest coke ovens among Indian plants (7 metres high), largest blast furnaces 3,200 cu. metres volume and complete continuous casting route. Saleable products will have light and medium merchant products, wire rods, universal beams, billets, etc. Work on first stage is scheduled to be over by 1984–85.

Ranking in the World Market : India which ranked only 30th in the world ranking (non-Communist bloc) of steel producers during 1974 moved up to 16th position in 1979.

Production : Production of saleable steel in the six integrated steel plants, during 12 months, ended March 31, 1981, reached 6·283 million tonnes. This does not include 1·76 million tonnes of steel ingots produced by mini-plants.

BHILAI STEEL PLANT

Equipment : Seven batteries with 455 coke ovens and associated by-product recovery plants, four sintering machines, six blast furnaces, 10 open hearth furnaces, two Hi-reversing, blooming and slabbing mills, continuous billet mill, rail and heavy structural mill, merchant mill and wire rod mill. Additional units under the 4 million tonnes expansion stage are : one battery of coke ovens and by-products plant, four sintering machines, one blast furnace, three oxygen blown converters, continuous casting machines and one 3,600 mm wide heavy plate mill.

Capacity : After expansion, the capacity will be 3,948,000 tonnes of hot metal, 4,000,000 tonnes of ingots, 500,000 tonnes of pig iron for sale, 653,000 tonnes of billets, 400,000 tonnes of heavy rails, 250,000 tonnes of heavy structurals, 500,000 tonnes of merchant products, 400,000 tonnes of wire rods, 950,000 tonnes of plates, 3,950,000 tonnes of granulated slag, 35,890 tonnes of tar products, 29,250 tonnes of benzol products and 48,100 tonnes of ammonium sulphate. Total saleable steel capacity is 1,965 million tonnes at present to go up to 3·16 million tonnes after expansion.

DURGAPUR STEEL PLANT

Equipment : Coal washery, five batteries with 351 coke ovens and a by-products plant, two sintering machines, four blast furnaces, eight 220-tonne and one 120-tonne basic open hearth furnace, blooming mill, an intermediate mill, a continuous billet mill, medium section mill, a fish plate plant, a merchant mill, sleeper plant, wheel and axle plant and skelp mill.

Capacity : 1,700,000 tonnes of hot metal, 1,600,000 tonnes of ingots, 300,000 tonnes of pig iron for foundries, 28,000 tonnes of forging blooms, 300,000 tonnes of billets for re-rolling, 42,000 tonnes of forging billets, 11,000 tonnes of fish plates, 75,000 tonnes of sleepers, 200,000 tonnes of light and medium sections, 240,000 tonnes of merchant sections, 93,000 tonnes of wheels and axles, 250,000 tonnes of skelp, 35,000 tonnes of tar products. 13,650 tonnes of benzol products and 26,200 tonnes of ammonium sulphate. Total saleable steel capacity is 1,239 million tonnes.

ROURKELA STEEL PLANT

Equipment : Five batteries with 330 coke ovens and a by-products plant, two sintering machines, four blast furnaces, three 50-tonne LD converters, two 60-tonne LD converters, four 80-tonne basic open hearth furnaces, reversing, blooming and slabbing mill, heavy plate mill, semi-continuous hot strip mill, hot rolled electrical steel mill, cold reducing mills consisting of two reversing mills and one five-stand tandem mill, two reversing skin pass mills, a 2-stand skin pass mill, hood annealing furnace and continuous annealing line, electrolytic tinning line, two coil galvanising lines, one ERW pipe plant, producing pipes of OD 8 5/8″–18″ and one spiral weld pipe plant producing pipes of OD 14″–64″.

Production of Steel Ingots

(in million tonnes)

Plants	Annual rated capacity	1977–78	Production 1978–79	Production 1979–80
A. INGOT STEEL				
Bhilai ..	2·500	2·371	2·2	2·108
Durgapur ..	1·600	1·092	0·945	0·802
Rourkela ..	1·800	1·409	1·319	1·268
Bokaro ..	—	0·933	1·195	1·426
†IISCO ..	1·000	0·651	0·628	0·565
SUB TOTAL SAIL ..	6·900	6·456	6·287	6·249
TISCO.. ..	2·000	1·968	1·866	1·779
TOTAL ..	8·900*	8·424	8·153	8·028
ASP ..	100·0	0·097	0·097	0·076
VISL ..	182·0	0·103	0·113	0·118
B. SALEABLE STEEL				
Bhilai ..	1·965	1·930	1·846	1·706
Durgapur ..	1·239	0·864	0·776	0·604
Rourkela ..	1·225	1·178	1·042	1·045
Bokaro ..	—	0·815	—	0·849
IISCO ..	0·800	0·506	0·481	0·430
SUB TOTAL SAIL ..	5·929*	5·293	5·076	4·592@
TISCO ..	1·500	1·601	1·516	1·447
TOTAL ..	6·729	6·894	6·592	6·039
ASP ..	0·060	0·049	0·048	0·046
VISL ..	0·119	0·073	0·073	0·928
C. SALEABLE PIG IRON				
Bhilai ..	0·905	0·699	0·606	0·519
Durgapur ..	0·300	0·102	0·146	0·117
Rourkela ..	—	0·016	0·040	0·040
Bokaro ..	0·880	0·512	0·608	0·280
IISCO ..	—	—	0·123	0·052
TOTAL ..	2·085	1·329	1·487	0·972

* Excluding Bokaro under construction gestation.

† IISCO being one of the plants under SAIL, production statistics are compiled with all SAIL plants together.

@ Allowing for transfer of oils from Bokaro to Rourkela.

Capacity : 1,600,000 tonnes of hot metal, 1,800,000 tonnes of ingots, 280,000 tonnes of wide plates, 195,000 tonnes of hot rolled sheets, strips and narrow plates, 260,000 tonnes of cold rolled sheets, strips and narrow plates, 160,000 tonnes of galvanised plain and corrugated sheets, 50,000 tonnes of electric steel sheets, 150,000 tonnes of tin plates, 75,000 tonnes of ERW large size pipes and 55,000 tonnes of spiral weld pipes, 48,000 tonnes of tar products, 16,650 tonnes of benzol products, 24,200 tonnes of ammonium sulphate and 459,000 tonnes of calcium ammonium nitrate (25 per cent nitrogen). Total saleable steel capacity is 1·225 million tonnes.

BOKARO STEEL PLANT

Equipment : Under 4 million tonnes stage — seven batteries of 483 coke ovens and associated by-products plant, three sintering machines. five blast furnaces, five LD converters each of 100-tonne capacity and two LD converters each of 300-tonne capacity, one 1,250 mm Universal slabbing mill, one continuous 2,000 mm hot strip mill and two cold rolling mills comprising one four-stand 2,000 mm tandem mill and one five-stand 1,400 mm tandem mill and one 1,250 mm continuous hot dip galvanising line.

Capacity : 4,585,000 tonnes of hot metal, 4,000,000 tonnes of ingots, 714,000 tonnes of pig iron for sale, 1,496,000 tonnes of hot rolled sheets and slit coils, 1,560,000 tonnes of cold rolled sheets and slit coils, 100,000 tonnes of galvanised sheets, 33,300 tonnes of tar products, 41,500 tonnes of benzol products and 36,300 tonnes of ammonium sulphate. Total saleable steel capacity is 3·14 million tonnes.

INDIAN IRON & STEEL CO. LTD. (IISCO)

Equipment: Three coke oven batteries of 228 ovens, four blast furnaces, seven open hearth furnaces — five of 225-tonne capacity, one of 300-tonne capacity and one of 100-tonne capacity. One blooming mill, one sheet bar and billet mill, two structural mills, one merchant mill and one sheet mill.

Capacity: 1,300,000 tonnes of hot metal, 1,000,000 tonnes of ingots, 150,000 tonnes of saleable billets, 100,000 tonnes of rails, 270,000 tonnes of structurals, 160,000 tonnes of bars, 60,000 tonnes of hot rolled sheets, 60,000 tonnes of galvanised sheets and 17,000 tonnes of ammonium sulphate. Total saleable steel capacity is 800,000 tonnes.

EXPORTS

Due to continuing increased domestic demands during 1978-79, exports of iron and steel products were restricted. Total exports amounted to 788,000 tonnes valued at Rs. 1,270 million as compared to exports worth Rs. 2,272·9 million in 1977-78 and Rs. 3,318·5 million in 1976-77.

IMPORTS

The final figures regarding total imports of steel actually made were not available for 1980-81. However, shipment against SAIL orders were placed around one million tonnes valued at Rs. 3,582 million.

Research : The National Metallurgical Laboratory at Jamshedpur. Bihar, since its inception in 1950, has been orienting its research and development programme to suit the needs of the metal and mineral based industries.

The Research & Development Centre of the Steel Authority of India Ltd. plans and co-ordinates the research and development activities for the steel industry. The centre is situated at Ranchi. The R & D plan for iron and steel industry has been drawn in consultation with the National Committee on Science & Technology, Deptt. of Science & Technology and the Planning Commission.

Training: Graduate courses in metallurgy are available at several universities. (For details, see the chapter on Education.)

All the integrated steel plants in the country have well staffed and well equipped training institutes in which training is imparted in various branches to the graduate engineers recruited by the steel plants for their executive cadre. These institutes also impart short-term vocational training to promising engineering students as well as to apprentices in various trades.

Publication : 'Statistics for Iron and Steel Industry in India — 1974', SAIL, New Delhi ; 'Iron & Steel Control Monthly Bulletin', Iron & Steel Controller, 33, N. Subhas Rd., Calcutta 700001 ; 'Iron & Steel Review', a monthly, 10, Chowringhee Rd., Calcutta 700013.

SUGAR INDUSTRY

HISTORY

SUGAR manufacture in India got a spurt after the Government granted it protection in 1932. From dependence on imports the country became self-sufficient within four years thereafter.

In 1931-32 there were an estimated 32 working units. By 1935-36 the number rose to 130. The volume of sugar production which was 162,000 tonnes in 1931–32 increased to 947,000 tonnes by 1935–36.

Location of the Industry: Area under sugarcane cultivation in major producing States in 1979–80 was as follows ('000 hectares): Andhra Pradesh 115: Bihar 120 : Haryana 127 : Karnataka 149 : Maharashtra 222 : Punjab 77 : Tamil Nadu 165 : Uttar Pradesh 1,365 : Total (All India) : 2,666.

State-wise break-up of the sugar factories in 1978-79 given in brackets :

Andhra Pradesh (27) : Assam (2) : Bihar (28) ; Goa (1) : Gujarat (13) : Haryana (5) ; Karnataka (21) : Kerala (3) : Madhya Pradesh (6) ; Maharashtra (69) ; Nagaland (1) : Orissa (3) : Pondicherry (1) : Punjab (6) ; Rajasthan (3) ; Tamil Nadu (20) : Uttar Pradesh (88) ; West Bengal (2) ; Total (299).

Total installed capacity in 1978–79 season was 5·9 million tonnes.

Public Sector: There are 37 sugar factories in the public sector at the end of 1978–79 season. The State-wise break up is as follows :

Uttar Pradesh 17 : Andhra Pradesh 4 : Karnataka 1 ; Tamil Nadu 2 ; Rajasthan 1 : Nagaland 1 ; West Bengal 1 ; Bihar 9 : Assam 1.

No. of Persons Employed: The industry employs about 300,000 workers and millions of agriculturists are connected with it. The annual wage bill works out to about Rs. 1,500 million.

Capital Investment: A total of about Rs. 12,500 million is invested in this industry.

Ranking in the World Market: India is the fourth major sugar producing country in the world, the first three being USSR, Brazil, and Cuba in that order

Production and Consumption: Comparative figures of production and consumption of sugar for the last three years are :

(In million tonnes)

	1976–77	1977–78	1978–79
Production	4·84	6·46	5·86
Consumption	3·75	4·49	6·21

State-wise Production of sugar for the years 1977–78 and 1978–79 respectively was as follows (figures in tonnes): Andhra Pradesh 404,884, 310,767 ; Assam 6,787, 10,570 ; Bihar 285,546, 258,139 ; Goa 9,051, 7,967 ; Gujarat 309,488, 297,280 ; Haryana 148,086, 133,117 ; Karnataka 570,919, 487,087 ; Kerala 22,653, 22,669 ; Madhya Pradesh 68,526, 61,602 ; Maharashtra 2,095,548, 2,105,396 ; Nagaland 7,506, 8,600 ; Orissa 16,919, 20,034 ; Pondicherry 22,522, 26,141 ; Punjab 99,309, 93,719 ; Rajasthan 45,062, 33,706 ; Tamil Nadu 467,530, 491,514 ; Uttar Pradesh 1,862,168, 1,463,217 ; West U.P. 623,642, 457,692; Central U.P. 763,327, 628,444 ; East U.P. 475,199, 377,081 ; West Bengal 14,331, 9,780 ; All India 6,456,835, 5,841,295.

Sugarcane and *Gur*: State-wise production of sugarcane and *gur* ('000 tonnes) respectively for 1978–79 was as follows : Andhra Pradesh 9,044 and 945·2 ; Bihar 3,570 and 357·0 ; Haryana 6,890 and 689·0 ; Maharashtra 22,482 and 2,464·0 ; Karnataka 10,973 and 1,097·3 ; Tamil Nadu 15,431 and 1,860·9 ; Punjab 6,240 and 624·0 ; Uttar Pradesh 62,324 and 6,232·4 ; All India 151,655 and 15,559·8.

Main By-Products: Production of the two main by-products over the last three years is given below :

(In million tonnes)

Year	Molasses	Bagasse
1976–77	2·06	15·50*
1977–78	2·96	21·50*
1978–79	2·56	19·40*

* Estimated.

There are about 115 distilleries in the country with an annual installed production capacity of 669,388 kilolitres. There are also 7 paper factories which supplement their raw material with bagasse.

Per Capita Consumption: Per capita consumption of sugar in India and abroad during the year 1971, 1976 and 1979.

(Figures in kgs.)

COUNTRY	1971	1976	1979
India	8·1	6·6	10·2
Sri Lanka	3·4	5·3	15·1
Japan	29·4	27·9	27·6
Indonesia	7·3	9·9	11·1
Malaysia	36·3	30·9	36·1
Pakistan	4·8	8·3	9·9
Asia	8·7	8·6	9·8
Europe	39·2	41·5	41·4
C. America	38·4	42·0	41·7
N. America	50·0	45·2	43·5
S. America	36·8	40·6	43·6
Africa	12·4	12·8	14·1
World Average ..	20·3	20·4	21·1

Exports: In 1973 : 248,000 tonnes valued at Rs. 422 million : in 1974 : 500,000 tonnes valued at Rs. 2,144 million ; in 1975 : 1·3 million tonnes valued at Rs. 4,750 million ; in 1976 ; 843,000 tonnes valued at Rs. 2,686 million ; in 1977 : 254,802 tonnes valued at Rs. 682 million ; in 1978 : 636,297 tonnes valued at Rs. 1,164 million ; and in 1979 : 656,054 tonnes valued at Rs. 1.393 million.

GENERAL

On 25th May, 1971, Government decontrolled sugar. A partial control was reimposed with effect from 1st July, 1972, the proportion between levy and free being 60 : 40. However, for the season 1972–73 Government reduced the share of free sugar to 30 leaving the balance 70 per cent for levy. The same position was maintained for the season 1973–74 but for 1974–75 the proportion between levy and free was changed to 65 : 35 respectively. The Government allowed 5 per cent free sugar to sugar industry to cover various cost increases with effect from January, 1975. The same proportions have been extended to 1976–77 and 1977–78 seasons. On 16th August, 1978, sugar was once again decontrolled by the Government of India. With effect from March 1, 1979, the industry adopted a voluntary scheme of regulation of monthly releases and the Government reinstated the monthly release system in the month of June, 1979. The Government imposed complete control on sugar with effect from 17th September, 1979. The policy was revised on 17th December 1979 to that of partial decontrol with 65 per cent for levy and 35 per cent for free sale.

Beet Sugar: Beet sugar has been produced for the first time in India by the State-owned Sri Ganganagar Sugar Mills in Rajasthan. During 1978–79 the plant diffused 191,034 quintals of beet and produced 21,613 quintals of

Ten Largest Units:

Name	Address	Capacity (in tonnes)
The K. C. P. Sugar Factory Ltd.	Vuyyuru, Andhra Pradesh	6,000
Saraswati Sugar Mills ..	Yamunanagar, Haryana	5,200
Shetkari Sahakari Sakhar Karkhana Ltd.	Sangli, Maharashtra	5,000
Krishna Sahakari Sakhar Karkhana Ltd., Rethare Budruk	Shivnagar, Satara	5,000
Shree Panchganga Sahakari Sakhar Karkhana Ltd.	Ichalkaranji, Maharashtra	5,000
Shri Khedut Sahakari Khand Udyog Mandali Ltd., Sardar Baug, Bardoli 394602	Surat, Gujarat	5,000
The Mysore Sugar Co. Ltd.	Mandya, Karnataka	4,500
Sakthi Sugars Ltd. ..	Sakthinagar, Erode, Madras	4,000
E.I.D. Parry Ltd. ..	Nellikuppam, Tamil Nadu	4,000
Aruna Sugars Ltd. ..	Pennadam, Tamil Nadu	4,000

sugar. The recovery percentage gone up to 11·32 against the earlier average recovery of 9·10 per cent.

TRAINING: The Sugar Industry gives practical training facilities to students of sugar technology and also trains a number of apprentices, as required under the Apprentices Act.

National Sugar Institute: At Grand Trunk Road, Kanpur 208001, Uttar Pradesh, conducts courses in sugar technology, besides many other agricultural universities which have this as a subsidiary subject.

Research: is conducted at the **Indian Institute of Sugarcane Research** at Coimbatore, Tamil Nadu, Lucknow and Uttar Pradesh.

Deccan Sugar Institute: Near Naigaon in Maharashtra is being set up at a cost of Rs. 100 million to provide technical expertise to the sugar industry.

National Federation of Co-operative Sugar Factories Ltd.: Vaikunt, 82-83, Nehru Place, New Delhi 110019 was set up in December, 1960 with the object of co-ordinating and facilitating the working of co-operative sugar factories, State and zonal federations and to assist in the promotion of new co-operative sugar factories

So far licences/letters of intent have been issued for establishment of 167 co-operative sugar factories. Of these 140 sugar factories are in operation. Others are in various stages of establishment. In the year 1979–80, the co-operative sugar factories produced 2·03 million tonnes of sugar which was about 53 per cent of the total production in the country in that year.

The Indian Sugar Mills Association, Sugar House, 39, Nehru Place, New Delhi 110019, brings out the following **Publications:** (1) 'Indian Sugar', Monthly Magazine, (2) 'Indian Sugar Year Book', Annual Publication, (3) 'List of Sugar Mills in India and Bangladesh and Pakistan', Annual Publication.

The National Federation of Co-operative Sugar factories Ltd. also brings out the following publications: (1) 'Co-operative Sugar' (2) 'Co-operative Directory & Year Book'.

'Shakara', a quarterly bulletin, is brought out by the National Sugar Institute.

TEA INDUSTRY

BRIEF HISTORY

CHINA is believed to be the original home of the tea plant where it was first introduced as a medicine.

In 1823 the tea plant was discovered growing wild in Assam. It was then that China lost its monopoly of tea trade. The East India Company sent the first shipment of eight chests of Assam tea which were sold in London in May, 1834.

LOCATION OF THE INDUSTRY

The two main tea-growing regions in India are North-East India and South India the break up of which is given in Table I.

TABLE I

States	Area in hectares as on 31st March 1978	No. of tea gardens as on 31st March 1978
Assam	192.427	763
West Bengal	89.954	299
Bihar	459	3
Tripura	5,631	56
Uttar Pradesh ..	1,799	31
Himachal Pradesh ..	4.183	1.385
Total North India ..	294,453	2,537
Tamil Nadu	36,593	6.611
Kerala	36.150	4.093
Karnataka	1.837	15
Total South India ..	74.580	10,719
Total All India ..	369.033	13.256

No. of Persons Employed: The estimated daily average labour employed during 1977 was as follows: North India: 633.987 : South India: 154,686. All India: 788,673.

PRODUCTION

India's tea production is the largest in the world, Table II gives the State-wise break-up of the production.

TABLE II

(In '000 kgs.)

State	1978*	1979*
Assam	299,155	278,418
West Bengal	136.029	123,078
Bihar	54	+
Tripura	4.458	+
Uttar Pradesh ..	464	+
Himachal Pradesh ..	717	+
Total North India ..	440.877	408.242
Tamil Nadu	75,800	77,147
Kerala	51,287	57,432
Karnataka	3,359	3,504
Total South India ..	130,446	138.083
Total All India	571.323	546.325

* Provisional.

The total world production of tea: 1970: 1.314 m. kgs.: 1971: 1.324 m. kgs.; 1972: 1.402 m. kgs.; 1973: 1,450 m. kgs.; 1974: 1.463 m. kgs.; 1975: 1,502 m. kgs.; 1976: 1,532 m. kgs.; 1977: 1,653 m. kgs.; 1978: 1,714 m. kgs.

CONSUMPTION

The estimated consumption of tea in India: 1971-72: 224·7 m. kgs.: 1972-73: 236·9 m. kgs.; 1973-74: 248·0 m. kgs.; 1974-75: 260·0 m. kgs.; 1975-76: 272·0 m. kgs.; 1976-77*: 286·0 m. kgs.; 1977-78*: 300·0 m. kgs.; 1978-79*: 318 m. kgs.

---

* Provisional.

There are 33 countries in the world which produce tea. Production of tea in selected principal producing countries is given in the table below :

(In '000 kgs.)

Country	1977	1978
India	556,267	571,323
China	205,000	214,000
Sri Lanka	208,572	198,981
Japan	102,301	104,737
U.S.S.R.	106,400	111,200
Kenya	86,291	93,373
Indonesia	78,000	86,000
Turkey	100,532	103,630
Argentina	21,630	26,250
Taiwan	26,303	25,854
Bangladesh	38,041	37,993
Uganda	15,179	10,910
Malawi	31,734	31,690
Mozambique	17,000	18,069

Per Capita Consumption of Tea in Selected Countries:

Countries	1975–77 Total in '000 tonnes	1975–77 Per head in kgs.	1976–78 Total in '000 tonnes	1976–78 Per head in kgs.
United Kingdom ..	193·75	3·46	184·66	3·30
France ..	5·99	0·11	6·28	0·12
West Germany	1·56	0·09	N.A.	N.A.
Ireland ..	12·62	3·91	11·35	3·47
U.S.S.R. ..	139·61	0·54	140·94	0·54
Canada ..	21·47	0·94	21·13	0·91
U.S.A. ..	81·94	0·38	80·92	0·37
Iraq	23·78	2·07	N.A.	N.A.
Jordan ..	2·71	0·97	2·85	0·99
Morocco ..	12·44	0·70	14·42	0·79
Tunisia ..	7·13	1·24	7·22	1·23
Australia ..	25·66	1·84	24·27	1·73
New Zealand ..	7·78	2·52	7·42	2·39
India	286·00	0·47	301·33	0·48
Sri Lanka ..	21·06	1·53	21·19	1·52
Japan	115·08	1·02	112·91	0·91

Note : N.A. Not Available.

EXPORTS

Tea is the seventh largest foreign exchange earner of the country. India exports tea to over eighty different countries of the world of which United Kingdom buys almost one-third of the total exports. U.S.S.R., A.R.E., U.S.A. and Afghanistan are some of the other big buyers of Indian tea.

Export of tea during 1978–79 was to the order of 177 million kgs. valued at Rs. 3,591 million against 221 million kgs. valued at Rs. 5,637 in 1977–78.

Export Production : Names and Addresses of Tea Councils entrusted with the promotion of tea.

1. *The Council of U.S.A. Inc.*, 230, Park Avenue, New York City, U.S.A. **2.** *Comite Francais Du The*, Rue De Stockholm, 75008-Paris, France. **3.** *The Gessells chaft-fur Teewerbung, M.B.H.*, Hamburg 1, Steindamm 9, Federal Republic of Germany. **4.** *The Tea Council Ltd., U.K.*, Sir John Lyon House (Middle Block), 5, High Timber St., Upper Thames St., London EC4V 3NJ., U.K. **5.** *Tea Council of Australia*, 38th Floor, AMP Centre, 50, Bridge St., Sydney, Australia. **6.** *Tea Council at New Zealand*, U.E.B. Bldgs., 8-14, Eden Crescent, Auckland, New Zealand. **7.** *Tea Council at Canada*, 42, Charles St. East, Toronto 5, Ontario, Canada. **8.** *Tea Council of Ireland Ltd.*, 85, Harcourt St., Dublin 2, Ireland.

Quantity and Value of Tea Exported to Selected Countries

Selected countries	1977 Q	1977 V	1978 Q	1978 V
United Kingdom	74,317	1,850·294	34,484	749·847
U.S.S.R. ..	47,723	1,229·146	33,653	654·113
Netherlands ..	3,386	83·174	1,782	39·026
Afghanistan ..	8,561	190·574	9,914	237·889
Sudan	12,950	226·388	13,098	243·636
U.S.A. ..	10,039	227·612	2,175	53·995
Poland ..	5,305	99·407	11,542	206·975
Iran	6,505	170·499	10,979	268·941
Ireland ..	6,397	141·246	4,335	78·119
A.R.E. ..	14,085	222·545	17,862	334·442

Q — Quantity in '000 kgs. V — Value in Rs. million.
Sources : Tea Board Statistics.

GENERAL

Production Target: A production target of 800 million kgs. has been set for 1985.

Average Yield Per Hectare

The average yield per hectare for various tea producing States is given below :

(In kgs.)

States	1977	1978
Assam	1,529	1,555
West Bengal	1,471	1,512
Bihar	68	118
Tripura	792	792
Uttar Pradesh	478	258
H.P. (Kangra & Mandi)	370	171
North India	1,472	1,497
Tamil Nadu	2,020	2,071
Karnataka	1,941	1,419
Kerala	1,436	1,829
South India	1,734	1,749
All India	1,525	1,548

Auction Centres: Indian tea is sold through auction centres at Calcutta and Cochin, which are also the major ports for export of tea, where nearly 185 m. kgs. and 78 m. kgs. of tea respectively is sold annually. Tea is also auctioned at Gauhati, Siliguri, Amritsar and Coonoor.

About 35 m. kgs. of Indian tea is sold through the London auction centre, major portion of which is meant for consumption in the U.K.

The Central Government earned about Rs. 395·9 million and 602·2 million during 1978–79 on tea through the export duty and customs and central excise duties respectively.

Instant Tea: The production of instant tea in India is from green leaf rather than from manufactured black tea, as is the practice in the U.S.A. It is manufactured in India by Tata Finlay Ltd. and Food Specialities Ltd. exclusively for export.

Production of Instant Tea in Kgs.: 1971: 254,307; 1972: 237,932; 1973: 214,508; 1974: 350,957; 1975: 276,912; 1976: 588,166; 1977: 735,000; 1978: 638,000.

Research: The Toklai Experimental station in Assam is considered to be one of the largest research establishments in the world dedicated entirely to tea.

The United Planters' Association of Southern India (address: Coonoor, Tamil Nadu) has facilities for tea research in south India at the Central Laboratory and Field Station in the Anamallis and a sub-station in Kerala. The scientific problems of the tea industry in the Kangra Valley are looked into by a Tea Experimental Farm located at Palampur. All these tea research establishments in India receive substantial financial assistance from the Government through the **Tea Board of India** (address: 14, Brabourne Rd., Calcutta-700001) which also maintains a close liaison with these institutions. The Tea Board has its own research centre at Kurseong in Darjeeling Dist. The Tea Board also sponsors and finances independent research projects at different universities and technical institutions to supplement the work of the various tea research establishments in the country.

Export of Instant Tea during 1977-78 to 1978-79

	Quantity (in kgs.)	Value (in Rs.)
1977–78	597,541	31,532,968
1978–79	686,333	35,500,225

Tea Corporation: Assam state-owned corporation was formed in 1971 and a similar corporation has been set up in West Bengal and Tamil Nadu.

TOBACCO INDUSTRY

BRIEF HISTORY

ALTHOUGH the official history of the development of tobacco on commercial scale in this country dates back to the advent of the Portuguese in the early 17th century, large number of references to tobacco in Puranic tales and the Ayurveda show that tobacco was known to India from times immemorial.

The black porous soil in certain parts of east India, throughout the Coromandel coast, particularly Guntur, East and West Godavari and Prakasam districts of Andhra Pradesh are considered to be favourable to the growth of quality grades of tobacco.

The present total number of cigarette factories in the private sector is 19, of which 5 are in Maharashtra, 5 in Andhra Pradesh, 2 each in West Bengal and Uttar Pradesh and 1 each in Karnataka, Bihar, Madhya Pradesh, Tamil Nadu and Gujarat. Letters of intent have also been issued to set up cigarette factories. The cigar industry is concentrated in Tamil Nadu, whilst the production of *bidis* is a cottage industry on a country-wide basis.

The first joint sector cigarette factory at Bari Brahman, 18 kms. south of Jammu has been put up by the state-owned Jammu & Kashmir Industrial Development Corporation and the Golden Tobacco Co. Ltd. The factory has attained a production level of 1·5 million cigarettes per day.

There are about 19 *zerda* (chewing tobacco) manufacturing factories and 3 snuff factories in the country situated mostly in Tamil Nadu and Uttar Pradesh.

Public Sector: The State Industrial Development Corporation of Assam, Haryana, Jammu and Kashmir, Kerala and Tamil Nadu have each been issued a letter of intent to set up a cigarette manufacturing unit. Each unit will have a capacity of 4,500 million cigarettes annually, except the unit in Assam which will have a capacity to produce 3,000 million pieces per year. An application from the Madhya Pradesh Industrial Development Corporation is reported to be under consideration.

LOCATION OF THE INDUSTRY: The following table gives the area and production of tobacco in India in 1977–78 and 1978–79.

(Thousand hec., Million kg.)

State/Union Territory	1977–78		1978–79	
	Area	Production	Area	Production
Andhra Pradesh ..	290·7	262·8	199·2	189·5
Assam	6·0	4·3	5·3	3·9
Bihar	11·8	9·8	11·1	9·6
Gujarat	81·5	125·3	74·6	153·6
Haryana	0·3	0·3	0·3	0·3
Himachal Pradesh	0·6	0·2	0·6	0·2
Jammu and Kashmir	0·4	0·2	0·4	0·2
Karnataka	42·1	30·5	47·7	33·0
Kerala	0·4	0·8	0·4	0·8
Madhya Pradesh ..	2·5	1·3	2·5	1·3
Maharashtra ..	10·8	5·6	12·8	7·4
Meghalaya	0·4	0·3	0·5	0·3
Mizoram	0·5	0·3	0·5	0·3
Orissa	16·6	7·1	19·6	9·6
Punjab	0·1	0·1	0·1	0·1
Rajasthan	3·7	3·0	2·9	2·7
Tamil Nadu ..	11·3	16·7	12·5	18·3
Tripura	0·9	0·3	0·9	0·3
Uttar Pradesh ..	8·9	10·2	5·9	7·1
West Bengal ..	14·9	14·5	13·2	12·7
Total All India ..	504·4	493·6	411·0	451·2

Source: Directorate of Economics and Statistics, Ministry of Agriculture and Irrigation (Department of Agriculture), Government of India, New Delhi.

No. of Persons Employed: It is estimated that about 700,000 growers and 500,000 curers are engaged in tobacco cultivation. In the manufacturing sector, the total number of persons employed is estimated at 3 million of which, 2 million are in the *bidi* industry. About 14,000 are employed in the cigarette industry.

Ranking in the World Market: India is the third most important tobacco producing country next only to mainland China and U.S.A. and accounts for about 7·63 per cent of the total world tobacco production.

Following is the estimated area in thousand hectares and production in million kgs. respectively, of tobacco producing countries of the world for the years 1978 and 1979.

Estimated area and production in specified countries

(Thousand hec., Million kg.)

Country	1978		1979	
	Area	Production	Area	Production
Argentina	62·3	62·1	65·0	67·6
Bangla Desh	55·5	49·9	49·8	43·7
Brazil	267·0	330·0	284·0	399·0
Bulgaria	112·0	117·0	125·0	150·0
Burma	64·0	75·0	64·0	75·0
Canada	48·5	115·6	36·3	83·6
China, Peoples Rep. of	780·0	975·0	780·0	965·0
Colombia	29·0	47·5	32·3	59·3
France	20·4	50·5	19·7	52·2
Greece	101·4	130·2	95·3	122·1
India*	504·4	493·6	411·0	451·2
Indonesia	174·5	78·9	189·2	89·2
Italy	58·1	109·7	58·9	111·0
Japan	63·6	172·0	62·5	157·5
Korea, Rep. of	64·4	134·3	55·7	123·2
Malawi	81·9	58·9	81·0	63·9
Mexico	43·9	67·0	45·0	76·0
Pakistan	55·2	76·3	45·0	68·2
Paraguay	24·8	26·9	22·0	27·0
Philippines	104·0	79·2	107·4	82·3
Poland	43·7	58·9	43·0	69·7
Rhodesia	49·4	84·9	61·6	112·1
South Africa, Rep. of	46·8	45·3	47·0	45·3
Tanzania	27·2	21·6	28·0	25·0
Thailand	152·0	81·4	151·5	80·0
Turkey	304·2	288·2	280·0	242·1
U.S.A.	384·7	919·8	340·6	715·3
U.S.S.R.	170·0	280·0	185·0	297·0
Yugoslavia	55·7	63·2	63·0	65·0
Estimated World Total†	4.476·6	5.616·1	4.339·4	5.438·2

* Data for India : Directorate of Economics and Statistics, Government of India.

† Total includes countries not listed above.

Source : Foreign Agriculture Circular, U.S.D.A.

PRODUCTION

India produces several types of tobacco which fall under two botanical species, namely Nicotiana Tabacum and Nicotiana Rustica.

Virginia Tobacco : The all India production of Virginia Tobacco in 1978-79 was 137·3 million kgs. from an area of 163·9 thousand hectares.

Production of Cigarettes : During 1978, the output of cigarettes in India was 71.000 million pieces. (Licensed capacity 102·6 billion pieces per annum.)

Production of *Bidis* : It is estimated that about 300 million pieces of *bidis* are manufactured annually.

Ranking in the World Market : In 1977 India stood twelfth, with 71 billion cigarette pieces. It produced 1·6 per cent of the total world output (4,241 billion pieces) as against China's 17·57 per cent (740 billion pieces) and U.S.A.'s 16·12 per cent (696 million pieces) per annum.

EXPORTS

The total tobacco exports from India, in 1978–79 were 85 million kgs. amounting to Rs. 1,162 million. India is the third biggest exporter of tobacco in the world next only to U.S.A. and Brazil. Indian FCV tobacco is exported to over 30 countries. Of these U.K., U.S.S.R. and Bangla Desh are the biggest buyers. Exports of unmanufactured tobacco dropped both in terms of quantity and value in 1978–79 compared to the preceding year.

Unmanufactured : The total exports of unmanufactured tobacco including FCV during 1971–72 to 1978–79 (Quantity in thousand kgs. and value in million rupees respectively) was : 1971-72 : 57,288·5, 422·4 ; 1972-73 : 94,483·8, 610·7 ; 1973-74 : 78,215·1, 684·1 ; 1974-75 : 74,981·9, 803·5 ; 1975-76 : 74,276·3, 930·9 ; 1976-77 : 80,133·8, 1,024·0 ; 1978-79 : 78,556·9, 1,106·6.

Manufactured : The total exports of manufactured tobacco including cigarettes and *bidis* during 1971-72 to 1978-79 (Quantity in thousand kgs. and value in million rupees respectively) was : 1971-72 : 3,608·4, 28·3 ; 1972-73: 3,613·0, 27·9 ; 1973-74 : 2,028·3, 25·0 ; 1974-75 : 2,972·9, 18·6 ; 1975-76 : 4,181·2, 52·7 ; 1976-77 : 4,169·6, 54·8 ; 1977-78 : 3.644·3. 40·3 ; 1978-79 : 6.634·3. 55·9.

Exports of Cigarettes during 1971–72 to 1978–79 (Quantity in thousand kgs. and value in million rupees respectively) was : 1971-72 : 1,178·9, 15·70 ; 1972-73 : 1,073·8, 16·75 ; 1973-74 : 839·7, 14·11 ; 1974-75 : 120·1, 3·03 ; 1975-76 : 1,386·6, 33·98 ; 1976-77 : 999·8, 22·72 ; 1977-78 : 461·1 ; 10·46 ; 1978-79 : 442·5, 10·6.

Exports of *Bidis* during 1971-72 to 1978-79 (Quantity in thousand kgs. and value in million rupees respectively) was : 1971-72 : 83·7, 1·59 ; 1972-73 : 64·8, 1·40 ; 1973-74 : 71·6, 1·48 ; 1974-75 : 87·7, 2·00 ; 1975-76 : 121·3, 3·00 ; 1976-77 : 296·8, 6·686 ; 1977-78 : 285·6, 8·72 ; 1978-79 : 231·7, 7·6.

Export Duty : With the devaluation of rupee in June, 1966, an export duty of 75 paise per kg. or 20 per cent *ad valorem*, whichever is lower was, levied on unmanufactured tobacco.

Export Promotion Agency : Tobacco Board, Old Club Rd., Kothapeta, Guntur 522001, Andhra Pradesh.

Statutory grades for all the varieties of unmanufactured tobacco entering the export trade have been prescribed by the Government for strict quality control.

Nearly 80 per cent of the tobacco produced is locally consumed and the rest is exported.

Consumption of Cigarettes : The per capita consumption rate per month in India is about 10, as against 217 in US, 176 in UK, 170 in Japan, 168 in Singapore, 70 in Malaysia, 24 in Pakistan, 20 in Sri Lanka and 13 in Nepal. Consumption of cigarettes in India was expected to reach 100 billion pieces by 1978-79.

Cigarettes cleared for home consumption during 1976-77 were 65.372 million pieces against 59,839 million in 1975-76.

Tobacco in each Cigarette: A regular ordinary cigarette of 7 mm length contains 1·05 gm. to 1·12 gm. of tobacco.

Quantity of raw tobacco cleared for home consumption in India

(Quantity: Thousand kg.)

Variety	1976–77	1977–78
Flue-cured Virginia Tobacco	45,474	43,841
Other than flue-cured and used for the manufacture of cigarettes, and smoking mixtures for pipes and cigarettes	29,908	29,775
Other than flue-cured and intended for manufacture into:		
(i) (a) Bidi		104,149
(b) Others		30,147
Total Bidi Tobacco	129,690	134,296
(ii) Cigar & Cheroot ..	84,371	14,377
(iii) Snuff		4,279
(iv) Hookah		21,448
(v) Chewing		41,728
(vi) Others		1,211
Agricultural Purposes ..	35,337	31,759
Destruction		3,566
Special Industrial Purposes ..		19,043
Stalks	19,043	14,269
Miscellaneous	464	1,406
Total	344 287	360,998

IMPORTS

The quantity and value of tobacco (manufactured, unmanufactured and cigarettes) imported into India during the past four years are given in the table below:

Year	Quantity (in kgs.)	Value (Rupees)
1974-75	128,228	3,625,481
1975-76	167,450	1.531,643
1976-77	127,463	1,766,417
1977-78	348,263	4,330,978

The imports of Flue-Cured Virginia tobacco were mainly from the U.S.A.

GENERAL

The nicotine content in Flue-Cured Virginia tobacco grown in India ranges between 0·6 per cent to 3 per cent. Nicotine content is lower in Virginia tobacco grown in light soil areas and high in tobacco grown in heavy black soil.

Tobacco is an excisable commodity and its movements, processing and manufacture from the stage of harvesting till it is consumed or exported are controlled by the Central Board of Excise and Customs of the Ministry of Finance.

Research: Research programmes on tobacco are implemented by the Indian Council of Agricultural Research. The Council has initiated an All India Co-ordinated Research Project on tobacco with its headquarters at Anand (Gujarat) with a view to conducting research for all round improvement of Indian tobacco.

The Central Tobacco Research Institute at Rajahmundry in Andhra Pradesh is mainly devoted to the investigation of fundamental problems connected with various aspects of tobacco. It also co-ordinates the work of other tobacco experimental farms and research stations (listed below), spread all over the country, which are carrying out research on different types of tobacco grown in the concerned regions.

1. Tobacco Research Station, Guntur, Andhra Pradesh.
2. Tobacco Research Station, Pusa, Bihar.
3. Bidi Tobacco Research Scheme, Anand, Gujarat.
4. Tobacco Research Station, Hunsur, Karnataka.
5. Bidi Tobacco Research Station, Nipani, Karnataka.
6. Tobacco Research Station, Vedasandur, Tamil Nadu.
7. Tobacco Research Station, Dinhata, West Bengal.

India Tobacco Co. Ltd., and their sister concern Indian Leaf Tobacco Development Co. Ltd. are conducting research on various aspects of tobacco at their research centre in Rajahmundry, Andhra Pradesh. Recently the company has established an integrated research centre at Bangalore.

The Indian Tobacco Development Council of the Government, formulates the tobacco development programmes, reviews the progress and considers the problems of marketing, trade and price policy.

The Tambaku Vikas Nideshalaya (Directorate of Tobacco Development) in the Ministry of Agriculture, with its headquarters at 3-A, Eldams Rd., Teynampet, Madras 600018, implements the development schemes, channels Government finances and renders technical advise and guidance.

Besides the development schemes, Tobacco Extension Units are also operating in the tobacco growing areas under the control of Agricultural Departments of the State Governments for educating and training the farmers in the improved methods of harvesting, handling and curing of tobacco.

The average **Per Hectare Yield** of tobacco in India during the last few years is given in the table below:

Year	All tobacco (kgs.)	Virginia tobacco (kgs.)
1973–74	989·0	943
1974–75	955·5	836
1975–76	950·0	794
1976–77	965·5	673
1977–78	988·9	810
1978–79	1,097·8	837

Source: Directorate of Economics & Statistics

Publications: 'Indian Tobacco Journal' (English), 'Bharatiya Tambaku' (Hindi) and 'Bharatiya Pogaku' (Telugu) — all quarterlies published by Directorate of Tobacco Development, Madras.

WOOLLEN INDUSTRY

BRIEF HISTORY

ALTHOUGH the first unit was set up more than a century ago, there was no significant expansion till the beginning of the fifties. From hardly 16 units in the organised sector in 1950, there are now 150 mills with an installed capacity of 375,662 spindles.

Public Sector: Of the 224 units only 3 are in the public sector. The names and addresses are as follows :

1. Rajasthan Government Worsted Spinning Mills. Churu, Rajasthan ;
2. Kashmir Government Woollen Mills, Shirinbaugh, Srinagar. Jammu & Kashmir ;
3. Government Spinning Mills, Nowshera, Srinagar, Jammu & Kashmir.

No. of Persons Employed: 100,000 in organised sector and 400,000 in decentralised sector.

Capital Investment : Approximately Rs. 2,500 million.

LOCATION OF THE INDUSTRY

Statewise distribution of installed capacity in 1980
Organised Mills

State/Union Territory	No. of Mills			Installed Capacity						
	Spinning	Composite	Total	Worsted	Shoddy	Woollen	Others	Total	Power looms	Combs
Gujarat	1	2	3	10,340	880	5.232	—	16,452	194	27
Himachal Pradesh	2	—	2	—	2,980	—	—	2,980	—	—
Jammu & Kashmir	7	2	9	12,318	1,200	2.506	—	16,024	31	—
Karnataka State	2	1	3	2,000	—	1.200	11.124	14,324	243	—
Maharashtra	20	9	29	63,260	15,464	8.468	—	87,192	720	94
New Delhi	13	—	13	2,464	4,800	162	—	7,426	—	—
Punjab	89	16	105	113,711	17,804	29,489	—	161,004	860	23
Haryana	18	—	18	4,670	5,250	7,128	—	17,048	—	—
Rajasthan	21	1	22	2,800	5,400	7,656	—	15,856	10	—
Uttar Pradesh	13	1	14	10,936	3,708	12,200	—	26,844	260	44
West Bengal	3	3	6	7,512	1,620	1,380	—	10,512	85	75
Total ..	189	35	224	230,011	59,106	75,421	11,124	375,662	2,403	263

EXPORTS

Export of Wool and Woollens from India during the following years

(All figures in million)

Items	Units	1977–78		1978–79		1979–80 (Provisional)
		Qty.	Value	Qty.	Value	Value
			Rs.		Rs.	Rs.
Raw wool	Kgs.	0·441	6·875	0·104	1·577	0·500
Wool rags/Waste	Kgs.	0·054	0·262	0·013	0·113	—
Wool tops	Kgs.	0·001	0·093	0·002	0·044	—
Woollen/Worsted Yarn	Kgs.	0·006	0·333	0·017	1·960	—
Woollen Worsted Blended fabrics	Mts.	0·480	16·400	0·770	26·217	28·500
Woollen/Mixed Readymade Garments	Nos.	0·203	12·550	0·347	23·333	13·500
Woollen Knitwear..	Kgs.	2·600	303·100	2·200	251·737	250·000
Woollen Shawls	Nos.	0·553	19·334	0·271	22·080	19·000
Woollen Blankets	Kgs.	1·753	49·680	1·907	51·934	31·000
Woollen Carpets/Druggets ..	Sq. mts.	3·636	847·732	3·530	962·800	1,050·000
Wool hair belting	Kgs.	—	—	0·008	0·433	—
Others		—	—	—	—	0·500
Total ..			1,256·359		1,342·228	1,393·000

Source : 1. Statistics based on D.C.I.S., Calcutta 1977–78, 1978–79.
2. 1979–80 Figures are estimates.

1982—PRODUCTIVITY YEAR

(STRESS ON SKILL, TRAINING & INDUSTRY)

An award-winning master craftsman at work.

Tourism indus 835, 148 arriva earned Rs. 5,640 in foreign exchange in 1981. Typifying the best in Indian hospitality (Lake Palace Hotel, Udaipur. Above right) and cuisine (Below right).

Left: Indian ready-made garments are attracting world-wide attention.

Photo: COURTESY TAJ MAHAL HOTEL, BOMBAY.

Photo: COURTESY TAJ MAHAL HOTEL, BOMBAY

Above left: Band-men taking part in the Republic Day celebrations.

Below left: 'Beating the Retreat' ceremony in New Delhi.

Above right: Military cadets in training

Below right: Keeping fit to man the various nation building jobs.

—PREM SUBRAMANIAM

—PREM SUBRAMANIAM

—PREM SUBRAMANIAM

—PREM SUBRAMANIAM

Above left: Icon makers of Swamimalai.

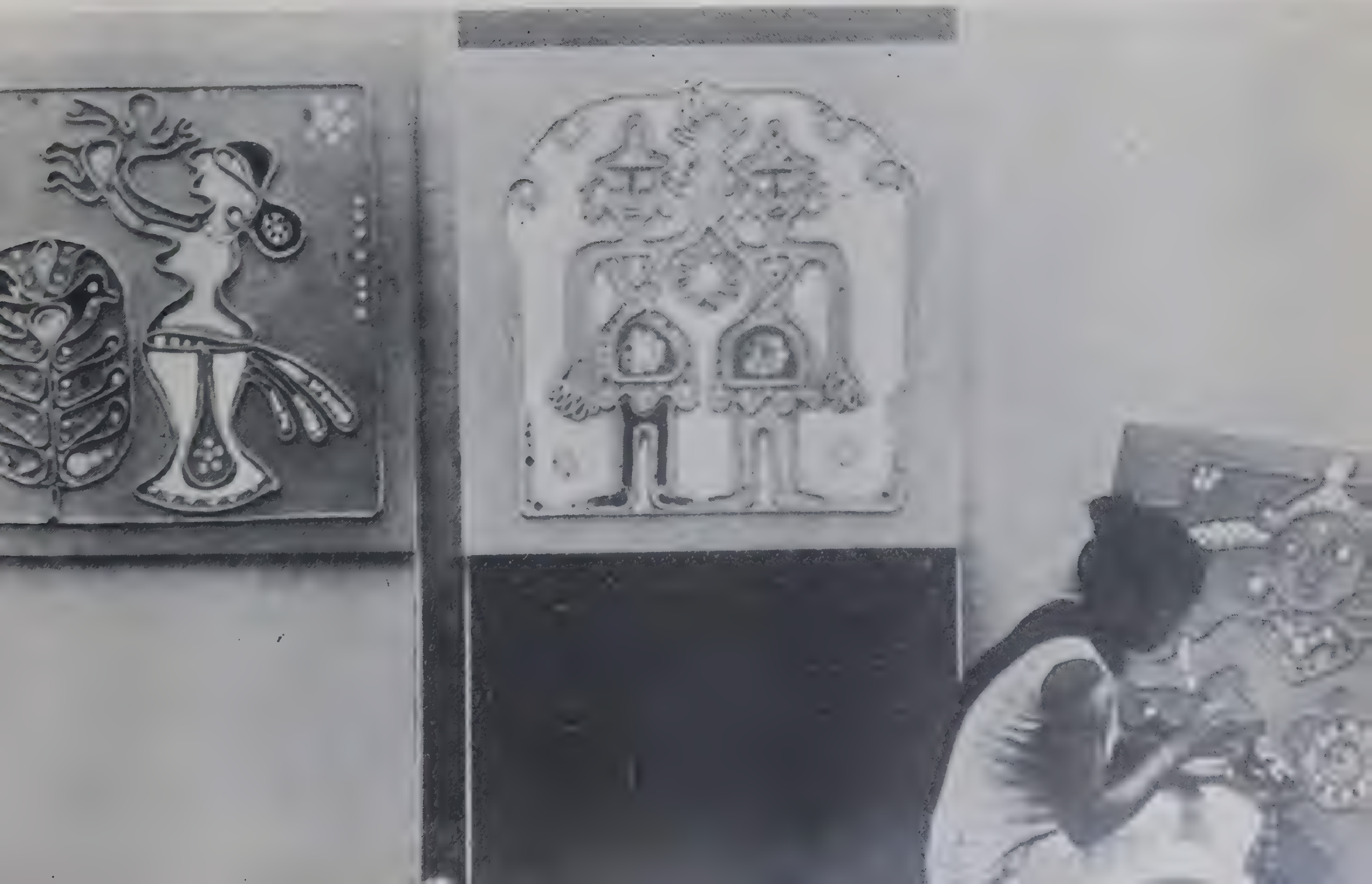
Below left: *'Kalam Kari'* artists at work.

Above right: Military cadets from N.D.A. Khadakvasla,

Below right: Folk art—decorators' delight.

—PREM SUBRAMANIAM

—JOGINDER CHAWLA



Above: Dancers Raja & Radha Reddy.

Below: A typical commercial office in Bombay.

—PREM SUBRAMANIAM.

—PREM SUBRAMANIAM.

India's Import of Raw Wool and other Raw Materials for the last Five Years

(Quantity in million Kgs. and value in Rs. million)

Items	1975–76		1976–77		1977–78		1978–79		1979–80	
	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value	Qty.	Value
Raw wool	15·341	246·047	13·104	277·530	10·238	220·691	7·098	160·372	5·824	128·076
Wool rags/waste	7·865	23·600	9·300	40·320	8·624	36·554	7·460	30·361	8·688	38·300
Wool tops	0·054	2·162	0·005	0·215	0·353	13·226	0·226	9·035	0·060	2·850
Polyester fibre	0·540	6·690	1·490	15·930	0·360	3·821	0·049	0·435	Neg.	0·009
Acrylic fibre	3·150	38·150	3·300	43·130	4·201	46·103	2·810	31·554	0·710	7·901
Nylon fibre	0·360	6·170	0·890	12·810	0·015	0·079	0·035	0·558	0·024	0·045
Total (including others)		322·819		389·935		322·662		234·967		182·613

Source : 1. Statistics for years 1975–76, 1976–77, 1977–78 based on D.C.I.S., Calcutta.
2. Figures for 1978-79 and 1979–80 are based on daily lists of Imports received from Bombay and Calcutta customs.

Wool and Woollen Export Promotion Council : Address : Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

IMPORTS

The trend in imports of raw wool and other raw materials during 1976–77 to 1979–80 was as follows (value in million Rs.): 1976–77 : 389·93 ; 1977–78 : 322·662 ; 1978–79 : 234·967 ; 1979–80 : 182·613.

PRODUCTION

India's 42 million sheep produce about 35 million kgs. of raw wool each year. Fifty per cent of this is below 40s count. Some of it is exported and the rest used for making coarse garments and carpets.

Sheep population and Raw Wool production in some major countries

Country	Approx. sheep population (in Mil. Nos.) (1978–79)	Approx. output of Raw wool (in Mil. Kgs.) (1978–79)
Argentina	35·2	171
Australia	134·2	706
France	11·7	23
Italy	9·0	12
New Zealand	63·7	321
U.K.	30·0	49
U.S.A.	12·2	47
U.S.S.R.	142·6	463
Total including other wool producing countries	978·5	2,636

Source : Statistics of Commonwealth Economic Committee.

GENERAL

Pashmina: Of the total 91,073 goats in Ladakh 70,000 are *Pashmina* bearing. A joint effort of the State and Central Governments is afoot to increase the size and production of *Pashmina* goats by cross breeding them with the Goran Altaksyia breed from U.S.S.R. and Angora bucks from Turkey.

With these measures the yield per goat is expected to increase from about 400 gms. at present to 1 kg. The maximum yield of *Pasham* wool recorded so far is 700 gms. the minimum being 200 gms. This means that the production of *Pasham* wool in Ladakh will increase from about 28,000 kgs. at present to 70,000 kgs. in due course.

A research project at Dhule, Maharashtra initiated by the Raymond Woollen Mills Ltd., Thane, spread over 4,100 hectares of forest land is engaged in intensive research to develop a sheep breed which will yield more wool per sheep. After several years of intensive research the farm has established a new breed of Indian Merino christened as "Gopal Merino".

Gujarat Sheep and Wool Development Corporation at Anand Bldg., Mirzapur Rd., Ahmedabad 380001, helps to produce quality wool by a cross-breeding programme This has substantially reduced imports of quality wool.

Karnataka State Sheep & Wool Development Board, 12, Rashtriya Vidyalaya Rd., Bangalore 560004.

International Wool Secretariat at Dugal Estate, 193. Backbay Recl., Bombay 400001, is a non-profit organisation with headquarters in London. It helps the Indian Woollen Industry in all its problems such as economic, research, planning etc.

Research: Central Sheep and Wool Research Institute at Malpura (88 kms. from Jaipur) in Rajasthan, is run by the Indian Council for Agricultural Research. Situated on a 1,618 hectares farm, its main programme is research and training facilities in sheep husbandry, better utilisation of land, wool shearing, grading, testing, technology and processing. It also trains key personnel, instructors, supervisors, managers and research workers.

Two Divisions, Division of Fur Animal Breeding Garsa (Kulu), H.P., and Division of Carpet Wool and Karakul Pelt Production, Bikaner and one regional station at Mannavanur (Kodaikanal), Tamil Nadu are run by the Institute.

Wool Research Association at Akbar Camp Road, P.O. Sandoz Baug, Kolshet, Thane 400607, deals with research on wool yarn and fibre and its application to different commodities, improvement of the quality of fabrics etc.

Association: Indian Woollen Mills' Federation, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Some Large Units: With their addresses and the number of powerlooms in brackets.

1. Bombay Fine Worsted Manufacturers, Castle Mills, Agra Rd., Thane 400601, Maharashtra (196).
2. The Raymond Woollen Mills Ltd., J. K. Bldg., Morarjee Marg, Ballard Est., Bombay 400038, Maharashtra (196).
3. Binny Ltd. (Bangalore Woollen, Cotton & Silk Mills Co. Ltd.), Agraharam Rd., Bangalore 560023, Karnataka (243).
4. New Egerton Woollen Mills Ltd. (British India Corpn. Ltd.), Dhariwal, Punjab (240).
5. Cawnpore Woollen Mills Ltd., Civil Lines, Kanpur 208001, Uttar Pradesh (260).
6. Shree Digvijaya Woollen Mills Ltd., Aerodrome Rd., Jamnagar 361003, Gujarat (114).
7. Modella Textile Industries P. Ltd., 4-C, Vulcan Insurance Bldg., Veer Nariman Road, Bombay 400020 (120).
8. Shri Dinesh Mills Ltd., P.B. No. 65, Padra Road, Vadodara 390005 (80).
9. India Woollen Textile Mills P. Ltd., Chheharta, Amritsar (123).
10. Oriental Carpet Mfrs. (India) Ltd., P. B. No. 34, G. T. Road, Amritsar 143001 (100).

Raw Material: The average yield of sheep in India works out at about 0·90 kg. as against over 4 kgs. in Australia.

Publications: 'Wool and Woollens of India', Churchgate Chambers, 5, New Marine Lines, Bombay 400020 (Quarterly).

DROUGHT

BACKGROUND

CONSTANT famine conditions in India compelled the British Government to appoint a commission in 1878 to draft the Famine Code which was formalised in 1883.

On an average the country receives 60.64 million cubic cms. of rain. But there is a variation in the seasonal and the annual distribution of rainfall. Some parts of Rajasthan get as low as 12.70 cms. of rain while hills of Assam get as much as 1,270 cms. About 12 per cent of the country's area receives less than 61 cms. of rain on an average and only 8 per cent more than 254 cms.

Drought : Though the definition of drought varies widely, drought in India refers to a situation when the normal rainfall is 5 mm or less for the week. Agricultural drought is a period of 4 such consecutive weeks in the period from the middle of May to the middle of October or 6 such consecutive weeks during the rest of the year. Droughts have been occuring, periodically, largely due to the variability of south-west monsoon from which 80 per cent of the annual rainfall is received during the period from June to September in most parts of the country. Not only a low rainfall but untimely distribution of fairly high rainfall can also lead to droughts. Approximate probability of deficient rainfall (deficiency equal to 25 per cent or more of the normal) is once in 4 to 5 years over large areas of the country.

In India, as many as 128 districts accounting for about 68 million hectares have low to medium rainfall under 1,125 mm. annually, and these also have very limited irrigation facilities. Of these districts, 25 are characterised by very poor rainfall in the range of 375-750 mm. annually with an irrigated area of 5-10 per cent of the cropped area. Another 91 of these districts receive annual rainfall ranging from 750 to 1,125 mm. The total net sown area in these districts is 42 million hectares of which about 5 million hectares are irrigated. Agriculture in these dry farming areas is faced with the twin problems of low productivity and high instability. Since, by and large, drought regions have low water resources, they may have to depend on rainfed agriculture with its attendant risk of instability in years of bad monsoon.

The chronically affected drought areas account for 19 per cent of the total geographical area of the country and 12 per cent of its population. With the exception of Kerala in the South, Punjab in the North and the States of North-Eastern region, every State in India has one or more drought-prone districts. Nearly 56 per cent of the geographical area of Rajasthan falls within the category of drought-prone areas; in terms of population the coverage is 33 per cent. Next to Rajasthan comes Andhra Pradesh, where about 50 per cent of the geographical area and 22 per cent of the population is within the ambit of the drought-prone areas. In Gujarat, about 29 per cent of the geographical area and about 18 per cent of the population are within the purview of the areas characterised as drought-prone. In Karnataka, the corresponding figures are 25 per cent and 22 per cent. These areas are the major factor contributing to regional imbalances in the country. Every third year, about 3 million inhabitants of arid zones take to migration with their livestock. These areas also remain a continuous source of strain on the financial resources of the country. The Irrigation Commission Report (1972) indicated the drought and chronic drought areas as follows:

(1) *Drought areas* (20 per cent probability of rainfall deficiency of more than 25 per cent of normal): Gujarat, Rajasthan and adjoining parts of Punjab, Haryana, West Uttar Pradesh and West Madhya Pradesh, Madhya Maharashtra, Interior Karnataka, Rayalaseema, South Telangana and parts of Tamil Nadu, a small portion of North-West Bihar and adjoining East Uttar Pradesh, and a small portion of North-East Bihar and adjoining portion of West Bengal.

(2) *Chronically Drought Affected areas* (40 per cent probability of rainfall deficiency of more than 25 per cent of normal): West Rajasthan and Cutch.

Drought-Prone Areas Programme (DPAP): Over the Plan period, several measures have been taken for the development of drought-prone areas. These include: *(a)* development of irrigation; *(b)* formulation of schemes specifically designed to benefit the drought-prone/dry areas; *(c)* agricultural research specifically oriented towards the problems of the low rainfall areas; *(d)* scarcity relief which also helped in creating additional production potential and provision of services like drinking water supply; and *(e)* special programmes like Emergency Agricultural Production Programme.

Drought-Prone Areas Programme (formerly known as the Rural Works Programme) which made a beginning in 1970-71 has been in operation in 54 districts primarily and contiguous areas of another 20 districts which have been identified as chronically drought prone. These districts have been identified on the following criteria:

(i) Incidence and pattern of rainfall; (ii) percentage of irrigated areas to the total area; and *(iii)* the frequency of drought over a period of time.

The districts covered under this Programme are as follows:

Andhra Pradesh: Anantapur; Kurnool; Cuddappah; Chittor; Mahboobnagar. **Bihar:** Monghyr; Palamau; Nawadah; Rohtas.

Gujarat: Panchmahals; Kutch; Jamnagar; Rajkot; Amreli; Banaskantha; Surendranagar. **Haryana:** Mohindergarh; Bhiwani; Rohtak. **Jammu & Kashmir:** Doda. **Karnataka:** Bijapur; Chitradurga; Kolar; Dharwar; Belgaum. **Madhya Pradesh:** Jhabua; Dhar; Sidhi; Betul. **Maharashtra:** Ahmednagar; Sholapur; Nasik; Pune; Satara; Sangli. **Orissa:** Kalahandi; Boudh Phulbani. **Rajasthan:** Jaisalmer; Barmer; Pali; Jalore; Bikaner; Churu; Jodhpur; Banswara; Nagaur; Dungarpur. **Tamil Nadu:** Dharmapuri; Ramanathapuram. **Uttar Pradesh:** Mirzapur; Banda; Allahabad; Varanasi; Hamirpur; Jalaun. **West Bengal:** Purulia; Midnapur; Bankura.

Contiguous areas selected under Drought-prone Areas Programme:

Andhra Pradesh: Ongole; Nalgonda. **Gujarat:** Mehsana; Ahmedabad; Bhavnagar. **Jammu & Kashmir:** Udhampur. **Karnataka:** Gulbarga; Raichur; Bellary; Tumkur; Chikmagalur. **Madhya Pradesh:** Khargaon; Shahdol. **Rajasthan:** Udaipur (Kharwara); Ajmer; Jhunjhunu.

Agricultural Research Oriented Towards Low Rainfall Areas: The All India Co-ordinated Research Project on dry land farming was introduced in 1970 in 15 centres and 9 sub-centres. Canadian assistance for this scheme was obtained under an Indo-Canadian agreement. This project provides research base for the integrated pilot dry land farming project. The Central Arid Zone Research Institute was also established at Jodhpur in 1959 and has been functioning as a focal point on research on agricultural problems of arid areas.

Loss due to drought in 1979: In 1979 drought had affected 97 districts in 11 States. The worst hit had been Andhra Pradesh, Bihar, Haryana, Himachal Pradesh, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Uttar Pradesh and West Bengal. It is estimated that about 38 million hectares of cropped area, 200 million people and 123 million cattle were affected. The loss of *kharif* foodgrains alone is estimated to be over 10 million tonnes.

Relief: Nearly Rs. 1,569.5 million have been allocated for relief measures during 1979. Another sum of Rs. 1,100 million has been made available for development under various schemes. It has also been decided to import 20 drilling rigs to augment the supply of potable water in the drought-prone areas. Further one million tonnes of foodgrains have been earmarked for the affected States.

FLOODS

GAUGING STATIONS: The Central Water Commission is maintaining about 420 key gauging stations on various rivers of the country (excluding the Indus System) to WMO standards to collect accurate and reliable data of river flows for a scientific study of the country's surface water potential. These national stations are supplemental to observations that are being made by various States.

Surface Water Resources: According to the studies made by CW&PC in 1949, the total annual flow of all the river systems in India comes to 1,672,599 m.cu.m. (1,356 million acre feet). Another appraisal of the water resources of the country made in 1960 based largely on statistical analysis of the flow-data and on suitable rainfall run off relationship (wherever observed data was meagre) puts the total flow at 1,881,057 m.cu.m. (1,525 million acre feet). Scientific observations for various river systems are underway to assess the firm water potential of the country. Only one-third of water resources available in the country could be used for utilisable purposes.

Floods: Floods are almost an annual occurrence. The flood havoc is acute in the Ganga and Brahmaputra basins. The states affected by floods are Bihar, Uttar Pradesh, West Bengal and Assam as well as Orissa. As much as 60 per cent of the flood damage is caused by the Himalayan rivers.

Flood-prone river basins are: Sutlej, Beas, Ghaggar, Upper Yamuna and Yamuna (Sahibi), Upper Ganga, Gomti, Ghagra, Rapti, Gandak, Burhi Gandak, Bagmati, Kamla, Kosi, Mahananda, Sone, Punpun, Ajoy and Rupnarayan.

It is estimated that flood control measures taken since initiation of Flood Control Programme in 1954 have afforded protection to about 11 million h.a. till March, 1980.

According to the recent assessment made, the flood-prone area in the country is of the order of 40 million ha. of which about 32 million ha. can be considered as protectable area.

The region traversed by the Himalayan rivers is also subject to earthquakes and land-slides, which make large areas flood-prone. Growing frequency of floods in Andhra Pradesh, Maharashtra, Gujarat and Rajasthan is largely due to deforestation.

Flood Tool: As a result of floods in 1980, 1,868 people died in 19 States and in the Union Territory of Delhi. Uttar Pradesh recorded the largest number of deaths (1,309) followed by Andhra Pradesh (88), Orissa (73), Bihar (67). The floods affected over 54 million people and 5.6 million ha. of cropped area. Besides, 59,699 heads of cattle perished and 2.5 million houses were damaged. The total loss amounted to Rs. 8,556 million.

Flood Control: Since the initiation of flood control programme in 1954, considerable progress has been made in protecting areas from floods. The amount earmarked has also increased in successive plans. During the Fourth Plan the outlay on flood control was Rs. 1,330 million. In the Fifth Plan it rose to Rs. 3,453 million. In the

Flood Damage data for years of heavy damages

(Rs. in million)

1953	542	(421)
1960	674	(461)
1970	2,868	(1,618)
1971	6,320	(4,226)
1974	5,690	(4,116)
1975	4,713	(2,712)
1976	8,888	(5,951)
1977	12,019	(7,206)
1978	14,548	(9,111)
1980	8,556	(3,732)

Damage by flood during 1980

State	Area affected in ha. million	Population affected in million	Human lives lost
Andhra Pradesh	.059	.224	88
Assam	1.160	3.359	57
Bihar	1.920	7.445	67
Gujarat	1.321	2.702	42
Haryana	.156	.669	7
Himachal Pradesh	Neg.	.007	46
Karnataka	.038	.342	11
Kerala	.061	3.600	42
Maharashtra	.003	.002	29
Manipur	.080	.300	7
Orissa	.355	2.639	73
Punjab	.045	.085	47
Rajasthan	Neg.	NR.	16
U.P.	5.857	30.347	1,309
West Bengal	.382	2.620	23
Delhi	.0014	NA.	2

Neg.: Negligible; NA.: Not available.

Sixth Plan 1980-85 an outlay of Rs. 11,500 million has been proposed.

The Working Group on flood control for Sixth Plan (1980-85) set up by the Planning Commission, has proposed an outlay of nearly Rs. 16,000 million for this sector. This includes required outlay for modernising flood forecasting system and for flood plain zoning.

As per the assessment of the Working Group, an area of about 5 million ha. is likely to be afforded reasonable protection with this outlay.

Progress Summary: To summarise the progress of the various flood control schemes since the launching of the National Flood Control Plan in 1954 to the end of March 1980, protective measures have covered 11 million ha. out of the estimated total of 40 million ha. regarded as flood-prone. These measures comprised the following: 11,870 kms. of embankments, 21,370 kms. of drainage channels, 297 town protection schemes and raising of 4,700 villages above flood level.

In spite of these measures the damage due to floods has shown a rising trend. A synoptic account of flood damage is furnished in the table on previous page with the damage to crops given in brackets.

ENERGY

IRRIGATION

SINCE the beginning of planned development in 1951 over 149 major and 785 medium projects were taken up for execution. Of these 40 major and 500 medium have been fully completed and the rest partially commissioned.

Thus, the irrigation potential created from major and medium projects, which was only 9.7 million hectares in 1951, was 26.9 m.ha. at the end of 1979-80, against the ultimate irrigation potential of 58.5 m.ha.

Progress of Irrigation Development: Prior to 1951, the total area irrigated in the country was 22.6 m. ha. (9.7 m. ha. by major and medium projects and 12.9 m. ha. by minor schemes). The irrigation potential increased to 52.1 m. ha. at the end of the 5th Plan in 1977-78 out of which 24.8 m.ha. was created by major and medium projects and 27.3 m. ha. by minor projects. The actual additional irrigation potential created during the 4 years of the 5th Plan, ending March 1980, was 7.9 m. ha. (4.1 m. ha. through major and medium projects and 3.8 m. ha. from minor irrigation schemes).

Water Potential: The total water resources are assessed at 178 million hectare metres. However, because of limitations of physiography, topography, geology, dependability, quality and the present state of technology only a fraction of this will be utilised.

The land area that can be ultimately irrigated has been assessed to be 113.5 million hectares as against possible gross cropped area of 210 million hectares of full development of irrigation potential.

Expenditure: The following table gives details of expenditure incurred and potential created from major and minor irrigation programmes during the various Plans.

	Outlay in million Rs.	Additional irrigation potential created in million hectares
Pre-Plan	N. A.	9.7
1st Plan (1951-56)	3,800	2.5
2nd Plan (1956-61)	3,800	2.1
3rd Plan (1961-66)	5,810	2.3
Annual Plans (1966-69)	4,340	1.5
4th Plan (1969-74)	12,370	2.6
5th Plan (1974-79) (Prov.)	24,420	4.1
6th Plan (1978-80)	21,470	2.1

Programme for (1979-80): There has been a substantial increase in the outlay of major and medium irrigation programme from Rs. 10,340 million in 1978-79 to Rs. 11,130 million in 1979-80 with a target of creation of additional irrigation potential of 1.13 m. ha.

Minor Irrigation: There were 1.74 million tubewells in 1977-78 as against 3,000 in 1950-51. During this period there was a phenomenal increase in pumpsets from 30,000 to 5 million. The number of dug-wells was 7.7 million.

During 1978-79, the target was to add 3,500 public tubewells, 225,000 private tubewells, 275,000 dug-wells, and 353,000 electrical pumpsets.

There has, however, been a great imbalance in the development and exploitation of minor irrigation resources in the various regions. Whereas states like Punjab, Haryana (in the north), and Tamil Nadu and Andhra Pradesh (in the south) with 20 per cent of the total groundwater resources, have 50 per cent of the total number of pumpsets in the country, the eastern states, like Orissa, West Bengal, Bihar and Uttar Pradesh with 50 per cent of the groundwater resources have only 15 per cent of the pumpsets.

One of the reasons for this imbalance is the non-availability of electricity in rural areas.

Although agriculture contributes 50 per cent to the Gross National Product, it receives only 15 per cent of the total electricity sold.

The requirement of electricity for minor irrigation will go up from the present 8.5 billion units to 23.7 billion units by 1982-85.

POWER

Rural Electrification: Out of the 570,000 villages in the country, nearly 250,000 had been electrified by March 21, 1980. The total number of pumpsets energised were nearly 2.95 million.

Total Capacity and Energy Generation: The last decades saw a massive increase in installed generating capacity from 2,300 Mw in 1951 to the 1980 level of 31,000 Mw. From a unit size of five to ten Mw used in 1947 the country had graduated to 200 Mw units. So far 18 steam power plants of 200 Mw units had been installed and 13 of these were in commercial operation.

The nation is in the process of installing its first 500 Mw unit at Trombay. Similar units would be installed at Singrauli. During the next seven years, it had been programmed to add five such units elsewhere.

In 1979-80, 105 billion units of power were generated (an increase of 2.12 per cent over the previous year). In 1980-81, 115 billion units are expected to be generated, (9 per cent increase over the previous year).

Future Power Programme: The total installed capacity of 26,000 M.W. available in March, 1978, is proposed to be increased to about 446,000 MW by the end of 1982-83.

India has plans to add 20,000 MW of new generating capacity during 1980-85 and has also identified 27,000 MW of new projects for the Seventh Plan period.

Per Capita Consumption: The per capita consumption in March, 1979 was 131 units as compared to 121 units for the previous year. It was only 17.8 kwh in 1950-51.

The number of consumers went up to 26.363 million (anticipated) by the end of March, 1979 against 1.501 million in Dec., 1950 and 25.139 million (Provisional) in March, 1978.

Pattern of Energy Sales (Utilities): Percentage of total sales (March 1979): *Domestic light and small power–10.3; commercial light and small power — 6.1; industrial power — 60.8; agricultural pumping — 14.8; railway traction — 3.7; others — 4.3.*

Resources: Hydro: The Central Water and Power Commission survey done in 1953-59 placed the potential from this source at 221 TWH of energy generation per annum equivalent to a continuous output of 25.26 million kw.

This estimate, however, did not include the seasonal energy generation, particularly from schemes located in the Himalayan region which are mostly run-of-river type developments. The potential of small schemes was also not included which could be covered only by site investigations.

Subsequent surveys by State Governments indicated a much higher potential.

Of the 57 schemes cleared this year 14 are hydro-electric schemes with a capacity of 3,078 MW and ten thermal schemes with a capacity of 3,078 MW. Thirtythree schemes pertain to transmission and distribution projects involving construction of transmission lines of various voltages upto 400 KV and associated sub-station.

In 1980-81, power production is expected to be 69 billion units from thermal plants, and 46 billion units from the hydro projects.

Coal: Coal-based thermal power stations contribute about 56.6 per cent of the total power generation. The coal consumption of public utility power station was expected to go upto 31 million tonnes during 1978-79 from 29.8 million tonnes in 1977-78.

The latest estimates place the reserves of coal at 111,660 million tonnes. Of these resources about 22,600 million tonnes are of the coking variety and 89,000 million tonnes of non-coking variety.

The total lignite reserves are estimated at about 2,100 million tonnes of which 1,900 million tonnes are estimated to be around Neyveli. The reserves of tertiary coal is estimated at 900 million tonnes.

Oil and Gas: Oil and gas have played an extremely limited role in the production of electricity. India has a large sedimentary area covering 1.41 million sq. kms. of land and 0.26 million sq. kms. off-shore, which are considered as potential oil bearing regions. Only a few gas turbine power plants, located close to oil and gas wells and refineries, and diesel power plants in isolated regions and some industrial establishments for providing standby power supply exist.

Nuclear Energy: Nuclear power generation was initiated in 1969 with the commissioning of the Tarapur Atomic Power Station with an installed capacity of 420 M.W. The following nuclear power stations are under construction:

1. Rajasthan Atomic Power Station (near Kota) 2 x 200 MW.
2. Madras Atomic Power Station (near Kalpakkam) 2 x 235 MW.
3. Narora Atomic Power Station (Uttar Pradesh) 2 x 235 MW.

Of this the first unit of 200 MW at RAPS was commissioned in December 1973. The second unit of RAPS is in an advanced stage of erection.

At present the capacity of nuclear power plants in the country is 640 MW and they contribute about 2,200 million kwh.

Non-Conventional Sources of Energy: During the last three years considerable attention has been devoted to the possibilities of using solar energy, geo-thermal energy, tidal power and wind power. Solar energy is the most promising of the non-conventional sources of energy in India.

Solar Energy: The minimum and average solar radiation in some representative locations in India is given below:

Location	Solar radiation (in cals/per sq. cm/day) Maximum	Minimum	Average
Madras ..	765	605	720
Bangalore ..	746	562	668
Bombay ..	795	542	701
Calcutta ..	817	501	681
Delhi ..	827	421	655
Srinagar ..	738	239	631

Solar energy and bio-gas offer the greatest scope and very high priority has been accorded for their development. IIT (Madras), Bharat Heavy Electricals Ltd. and the National Physical Laboratories are associated with a West German firm to develop a 10 k.w. solar power generation unit for demonstration.

Geo-thermal Energy: Western Himalayas and the west coast are areas where geo-thermal manifestations occur. A project for carrying out explorations to establish geo-thermal potential is under way with help from UNDP. Present indications are geo-thermal energy would have very limited potential.

Tidal Power: Investigations on the use of tidal power have been carried out and the Gulfs of Kutch and Cambay on the West Coast

INSTALLED CAPACITY AND PRODUCTION OF POWER

	CAPACITY (MW)				GENERATION * (GWH)			
	Thermal	Hydel	Nuclear	Total	Thermal	Hydel	Nuclear	Total
1970-71	7906	6383	420	14709	28161	25248	2417	55826
1971-72	8222	6612	420	15254	31712	28024	1189	60925
1972-73	8076	6785	620	16281	36218	27196	1133	64547
1973-74	9058	7529	640	17227	35321	28972	2396	66689
1974-75	10148	8441	640	19229	40109	27875	2206	70190
1975-76	11013	8464	640	20119	43308	33300	2628	79236
1976-77	11804	9025	640	21469	50244	34836	3525	88332
1977-78	12612	9957	640	23209	51012	38004	2268	91284
1978-79	14660	10764	640	26064	53420	41738	2770	103328
1979-80	15307	11001	640	26948	57155	45494	2876	105525
1980-81 (April-Oct.)	17987	11840	—	29827	34827	27790	—	62617

Note: GWH-1 million Kwh.* Includes diesel plants Data relate to public utilities, including nuclear. Source: Central Electricity Authority.

REQUIREMENT AND SUPPLY OF POWER — STATEWISE PATTERN (GWH)

STATES	1980-81 (April-August)				1979-80 (April-August)			
	Requirement	Supply	Surplus (+) or deficit (—) (units)	(%)	Requirement	Supply	Surplus (+) or deficit (—) (units)	(%)
I. Northern Region :								
1. Haryana	1887·75	1492·52	—395·23	—20·9	1486·42	1492·82	+6·40	+0·4
2. Himachal Pradesh	142·77	135·04	—7·73	—5·4	144·60	120·04	—24·56	—17·0
3. Jammu & Kashmir	378·91	404·03	+26·12	+6·6	333·50	309·94	—23·56	—7·1
4. Punjab	3059·52	2564·97	—494·55	—16·2	2621·00	2491·34	—129·66	—4·9
5. Rajasthan	1766·18	1519·02	—247·16	—14·0	1548·80	1524·64	—24·16	—1·6
6. Uttar Pradesh	6454·76	3962·46	—2492·30	—38·6	5286·67	5055·61	—231·06	—1·6
7. Delhi	1227·03	1198·26	—28·77	—2·3	1143·95	1068·77	—75·18	—6·6
8. Chandigarh	101·57	94·02	—7·55	—7·4	93·96	93·99	+0·03	Nil
9. Nangal Fertiliser	279·80	294·83	+14·95	+5·3	359·55	426·13	+66·58	+18·5
TOTAL	15298·37	11665·15	—3633·22	—23·7	13018·45	12583·28	—435·17	—3·3
II. Western Region:								
1. Gujarat	3649·61	3587·52	—62·09	—1·7	3444·01	3387·96	—56·05	—1·6
2. Madhya Pradesh	2737·26	2318·63	—418·63	—15·3	2468·64	2254·75	—213·89	—8·7
3. Maharashtra	8746·46	6775·69	—1970·77	—22·5	7832·71	6220·31	—1612·40	—20·6
4. Goa	214·62	143·43	—71·19	—33·2	134·70	97·71	—36·99	—27·5
TOTAL	15347·95	12825·27	—2522·68	—16·4	13880·06	11960·73	—1919·33	—13·8
III. Southern Region:								
1. Andhra Pradesh	2886·45	2445·33	—441·12	—15·3	2568·60	2555·85	—12·75	—0.5
2. Karnataka	3713·42	2531·72	—1181·70	—31·8	3369·06	2810·04	—559·02	—16·6
3. Kerala	1399·25	1406·01	+6·76	+0·5	1350·20	1327·01	—23·19	—1·7
4. Tamil Nadu	4640·57	4338·25	—302·32	—6·5	4659·78	4315·55	—344·23	—7·4
5. Pondicherry	64·30	64·30	Nil	Nil	61·20	61·20	Nil	Nil
TOTAL	12703·99	10785·61	—1918·36	—15·1	12008·84	11069·65	—939·19	—7·8
IV. Eastern Region:								
1. Bihar	1778·46	952·51	—825·95	—46·4	1483·20	1048·30	—434·90	—29·3
2. West Bengal	2645·01	2206·26	—438·75	—16·6	2656·30	2093·08	—563·22	—21·2
3. DVC	2326·45	1416·55	—909·90	—39·1	2222·40	1726·58	—495·82	—22·3
4. Orissa	1366·45	1069·77	—296·08	—21·7	1397·72	1351·26	—46·46	—3·3
TOTAL	8116·37	5645·09	—2471·28	—30·4	7759·62	6219·22	—1540·40	—19·9
V. North Eastern Region:	537·28	379·62	—157·66	—29·3	536·58	401·08	—135·50	—25·3
ALL INDIA	52003·96	41300·74	—10703·22	—20·6	47203·55	42233·96	—4969·59	—10·5

NOTE :

All figures are at station but after deducting consumption in station auxiliaries. The above data are 'actuals except for August 1980 which are 'anticipated' estimates. 1 Gwh = 1 million Kwh.

Source : Central Electricity Authority.

and the Sunderbans areas on the East Coast have been identified as areas where tidal range is fairly high and where tidal power could be developed.

It is estimated that a single basin development would provide an annual energy potential of 15,400 gwh, with an installation of about 7,400 MW in the Gulf of Cambay and 3,000 gwh with an installation of 1,200 MW in the Gulf of Kutch. The sites in the Sunderbans area can provide outputs of only about 1,500 to 2,000 kw with annual energy potential of 3 gwh.

The main problem with tidal energy relates to the high initial cost, the variable nature of the output and the technical and economic problems involved in firming up this power.

Wind Power: It has been found that by and large wind velocities are low and winds are not steady enough to permit any significant use of this source of energy. Research and development work on development of suitable wind-mill designs for lifting water and generating electricity along the coasts and on the hills, is in progress.

Bio-gas: The programme of bio-gas development, as implemented till 1977 was oriented to establishing small size plants to serve the needs of individual families. This programme has been inadequate to harness the large bio-gas potential rapidly.

For economic and accelerated development of bio-gas potential, the government has found it essential to develop large size bio-gas plants serving a whole village.

A pilot project for establishing community-type bio-gas is under preparation.

India had only 85,000 plants in 1980-81. KVIC has proposed construction of 650,000 gobar gas (additional) plants during the Sixth Plan. As a consequence, the production of gas would be 1,597.44 million cu.metres valued at Rs. 1,528.9 million and manure of 17.18 million tonnes valued at Rs. 814 million. Together, the production would be Rs. 2,342.9 million in 1984-85. This is indeed a big task.

National Power Grid: In order to extend the concept of integrated operations of systems from regions to the all India level, it is necessary to develop a National Power Grid. With the plans on hand, for construction of power stations with large capacity units, it has become necessary to adopt higher voltages for the transmission of power. Since the parameters involved are large and the associated problems complex, for efficient integrated operation, computerisation has become inescapable. Accordingly, System Planning Studies are being done in the CEA in association with Messrs. Teshment of Canada for developing the optimal EHV network requirements on a long-term basis. The 400 kv system to be developed in the next 5-6 years would be shortly finalised. It is anticipated that about 16,000 circuit kms. of 400 kv lines would be required to be constructed in the next 5 years. For the first time a 400 kv line between Obra and Sultanpur in Uttar Pradesh was test-charged in December, 1977. Action is underway for establishing the National Load Despatch Centre at New Delhi. The present status of integrated operations of the power systems in the country is summarised as follows:

(i) In the Northern, Western, and Southern regions, all the constituent systems are interconnected and are operating in an integrated manner.

(ii) In the Eastern Region, the Bihar, West Bengal, DPL and DVC and Orissa Systems are interconnected. While the West Bengal, DPL and DVC Systems are operating in parallel, the Orissa Systems (which is operating in parallel with the Southern Region) is catering to certain loads in Bihar radially.

(iii) In the North-Eastern Region, the Assam and Meghalaya Systems are operating in parallel. Mizoram, Nagaland and Arunachal Pradesh are partly fed from Assam.

Table I

Energy Resources:

The world reserves of known energy resources are as follows:

Coal ..	6,641 billion tonnes which will last upto 2,500 AD at present rate of consumption.
Petroleum Crude ..	76 billion tonnes which will last upto 2,100 AD at present rate of consumption.
Natural Gas ..	49,990 billion cu.m. which would last upto 2,015 AD at present rate of consumption.
Uranium ..	761,400 tonnes which would last upto 2,000 AD, but resources would be unlimited if fast breeder reactor technology is perfected.

Table II: World Energy Consumption

('000 billion kwh.)

	1975	1980	1985	1990
U.S.A	72.0	86.3	102.9	121.2
W. Europe	49.1	62.6	75.2	87.2
Japan	13.4	20.4	26.7	34.0
Sino-USSR Block	63.7	82.0	94.0	109.0
Others	35.7	45.0	52.1	62.4
Total	233.9	269.3	350.9	413.8

Table III : Measured World Non-Renewable Energy Resources

(QUADRILLION B.t.u.)*

	Solid fuel	Crude oil	Gas	Uranium non-breeder	Shale and tar sands	Total
Africa	361·7	526·6	201·7	198·1	81·4	1,369·5
Asia	2,608·6	2,211·4	432·6	3·1	870·2	6,126·0
Europe	2,581·5	57·1	153·6	46·4	117·0	2,955·6
USSR	3,325·5	336·6	577·9	—	139·0	4,379·0
N. America	70·9	301·0	380·6	422·7	9.111·0	10,286·2
S. America	49·8	311·5	60·6	11·9	23·7	457·5
Oceania	459·8	9·4	24·9	99·1	9·2	602·4

* Quadrillion B.t.u. — 500,000 bbl/day of petroleum for a year
— 40 million tonnes of coal
— 1 trillion cu. ft. of gas
— 1,000 billion kwh.

FORESTS

TOTAL forests: 75 mill. hectares. Percentage of forests to land: 22.8; Per capita forest area 0.13 hectares as compared to world average of 1.08 hectares. An average of 3.6 million people are engaged in forestry activities.

Revenue from forests: Rs. 2,043 million. Forest revenue as percentage of national revenue : 2.3.

By composition, coniferous forests constitute 4.2 million hectares, the broad-leaved species such as sal and teak aggregate 61.2 million hectares, while miscellaneous trees and bamboo forests account for 9.6 million hectares. The forests are owned by the State (95.2 per cent), by corporate bodies (3.1 per cent) and by private individuals (1.7 per cent).

The forests are unevenly distributed and the production is also proportionately low, being only 0.5 cu. m. per hectare per year as against the world average of 2.1 cu. m. per hectare. Forests are located mostly in hilly terrain or remote interior areas where communications are not properly developed. Madhya Pradesh has the maximum forest area and accounts for about 23 per cent of the country's total forest area. Other important wood-rich States are Andhra Pradesh, Assam, Himachal Pradesh, Karnataka, Maharashtra, Orissa, Rajasthan, Uttar Pradesh and Andaman and Nicobar Islands.

Classification: Forests in India can be broadly classified in the following major groups: (*i*) Tropical forest; (*ii*) Montane sub-tropical forest; (*iii*) Montane temperate forest and (*iv*) Alpine forest.

Each of these groups has a number of types which are in turn divided into sub-types. 16 broad climatic forest groups are recognised in this country. These are:

1. Tropical West Evergreen Forest — 4.5 million hectares including semi-evergreen forests (Parts of Assam, West Bengal, Karnataka, Kerala and Andaman and Nicobar Islands).
2. Tropical Semi-Evergreen Forest—1.9 million hectares (Parts of Assam, West Bengal, Orissa and Andamans).
3. Tropical Moist Deciduous Forest — 22.4 million hectares (Parts of Andamans, Uttar Pradesh, Madhya Pradesh, Maharashtra, Karnataka, Orissa, Tamil Nadu and Kerala).
4. Tropical Dry Deciduous Forest — 29.7 million hectares (Almost all over India).
5. Littoral and Swamp Forests — 0.7 million hectares (Deltas of big rivers).
6. Tropical Thorn Forest—5.2 million hectares (Parts of Punjab, Haryana, Rajasthan, Uttar Gangetic plains, the Deccan Plateau and Lower Peninsular India).
7. Tropical Dry Evergreen Forests—0.1 million hectares (Restricted to a small area of the East Coast in Tamil Nadu).
8. Sub-Tropical Dry Evergreen Forests—0.2 million hectares (Siwaliks and the Western Himalayas up to about 1,000 m).
9. Sub-Tropical Broad-leaved Hill Forests — 0.3 million hectares (Lower slopes of the Himalayas in W. Bengal and Assam and other hill ranges such as Khasi Hills, Nilgiris and Mahableshwar).
10. Sub-Tropical Pine Forests — 3.7 million hectares (North-West Himalayas, between 1,000 m to 1,800 m and in Khasi, Manipur and Naga Hills).
11. Montane Wet Temperate Forests — 1.6 million hectares (Tamil Nadu and Kerala above 1,500 m and in the Eastern Himalayas, viz., W. Bengal, Assam, Arunachal Pradesh from 1,800 m to 3,000 m).
12. Himalayan Moist Temperate Forests — 2.7 million hectares including dry temperate forests. (Entire length of Himalayas between the pine and sub-alpine forests in Kashmir, Himachal Pradesh, Punjab, Uttar Pradesh and Sikkim between 1,500 m to 3,300 m).
13. Himalayan Dry Temperate Forests — 0.2 million hectares (Inner ranges of the Himalayas where S-W monsoon is very feeble).
14. Sub-Alpine Forests
15. Moist Alpine Scrub
16. Dry Alpine Scrub

} Higher elevations over 3,000 m. on the Himalayas.

The treeless zone is the habitat of the Tibetan sheep, bharal, woolly hare with occasional appearance of snow leopard.

Over 16 per cent of the total forest area is inaccessible and 45 per cent of these could yield timber and other forest products.

Education and Research: Forest research and education are centralised in the Forest Research Institute and Colleges located at Dehra Dun and its regional centres all over the country. The Institute is recognised by the F.A.O. as a centre for training in forestry for South-East Asia

The Forest Research Institute and Colleges are under the administrative control of the Ministry of Agriculture and Irrigation (Dept. of Agriculture), Government of India. Its administrative head is designated the President. It has under its control four Regional Forest Research Centres, one each at Bangalore, Jabalpur, Coimbatore and Barnihat to deal with the special problems pertaining to the area. Forestry education is imparted through Indian Forest College and Northern Forest Ranges College at Dehra Dun and State Forest Service College. Southern Forest Rangers College, Eastern Forest Rangers College and Central Forest Rangers College at Barnihat, Coimbatore, Kurseong and Chandrapur respectively.

The institute has five directorates working under the President, viz. (1) The Directorate of Forest Education training professional foresters for Indian Forest Service, State Forest Service and Rangers for Centre and the States; (2) the Directorate of Forestry Research with ten branches — the silviculture branch, the logging branch, the forest genetics branch, the minor forest products branch, the forest economics branch, the forest ecology branch, the forest physiology branch, the forest influences branch, the forest soils branch, and the forest management and mensuration branch; (3) the Directorate of Biological Research with four branches—the systematic botany branch, the forest pathology branch, the entomology branch and the wood anatomy branch; (4) the Directorate of Forest Products Research with eight branches—the wood seasoning branch, the composite wood branch, the cellulose and paper branch, the timber mechanics branch, the timber engineering branch, the chemistry of forest products branch, the wood preservation branch and the wood working, saw milling and finishing branch; (5) the Directorate of Wildlife Research & Training.

Besides forestry training, the institute also imparts training in wood seasoning, wood preservation and pulp and paper technology and also imparts vocational training in forest based industries. It also provides research facilities for post M.Sc. and post doctorate research on forestry subjects to university scholars.

To train Indian Forest Service personnel in modern business aspect of forest resource management, an Indian Institute of Forest Management has been established recently in Ahmedabad with the assistance of Swedish International Development Agency.

Central Schemes: During the Fifth Five Year Plan the Govt. has sanctioned the implementation of 47 research schemes dealing with various aspects of forestry. Out of them 8 schemes are in the Directorate of Forestry Research, 7 in the Directorate of Biological Research, 10 in the Directorate of Forest Products Research, 5 in the Directorate of Forest Education, 1 in the Directorate of Wild Life Education & Research and 6 in the Publicity and other Central Branches. In addition, there are 10 field-oriented schemes for carrying out research in different climate and edaphic regions.

These satellite research centres are also expected to provide necessary extension support to bring about greater cohesion between research and implementation of the research results in the field. The problem-oriented multi-disciplinary research centres are carrying out research on the following aspects:—(*i*) Method of cultivation, exploitation, processing and storage of important minor forest products; (*ii*) Chemical and biological control of weeds; (*iii*) Survey, classification and determination of soil characteristics and correlating the same to vegetation; (*iv*) Identifying species and provenances of tropical pines and investigation of the most economic and effective method of raising plantations with a view to bridging the gap between demand and supply for coniferous pulpwood; (*v*) Study of hydrological behaviour of watersheds and effect of vegetation on atmospheric precipitation, run-off and soil loss; (*vi*) Raising cash crops in conjunction with forest vegetation and their economics; (*vii*) Setting up of seed banks, seed improvement and tree breeding centres to develop genetically superior and disease resistant strains for forest species; (*viii*) Best method of tapping for increased production of resin; (*ix*) Combat spike disease of sandal, including investigation on host-parasite relationship; (*x*) Establishment of popular research centres aimed at increasing production of industrial wood to meet the anticipated raw material shortage; (*xi*) Establishment of eucalyptus research centre to identify suitable species and provenances and their planting techniques for higher yield of pulpwood; (*xii*) Setting up a high level coniferous research centre to identify factors affecting natural and artificial regeneration so as to evolve suitable natural and artificial regeneration techniques of selected coniferous species for plantation in spruce-silver fir zone with a view to augmenting production of industrial wood; (*xiii*) cold desert afforestation research and demonstration centre.

Development Programmes: Forestry development includes elements such as rehabilitation of degraded forests, soil and moisture conservation, farm forestry, road-side and canal bank plantation, creation of wind breaks, wood lots on community land and pasture development. Emphasis is being laid on arresting the process of deforestation both for ecological reasons and to check soil erosion.

The programme of pasture development is being linked with sheep development through a scientific selection of suitable grass species for different agro-climatic zones. It is also expected that farm forestry would provide enough fuel wood for consumption so that organic manure will be available for utilisation on the soils for crop production. During 1976-77 plantation was undertaken on 176,500 hectares. Farm forestry and extension forestry was undertaken on 2,323 hectares and 639 kms. respectively. An area of 6,261 hectares was also brought under improved pastures.

Forest Produce: The forest produce can be broadly divided into two groups:—

(*i*) Major forest produce — timber and firewood. The important varieties are teak (Tectona grandis), deodara (Cedrus deodara), sal (Shorea robusta), sissoo (Delbergia sissoo), chir (Pinus roxburghii) and kail (Pinus wallichiana).

(*ii*) Minor forest produce — the commercially important items under this are bamboos, canes, gums, resins, dyes, tans, lac, fibres, floss and medicinal plant material.

Government is the largest timber producing agency in the country. Sale of timber is done mostly by auction and in standing form.

Teak is by far the most important species which occurs over an area of 8.9 million hectares. More than 50 per cent of total area under teak is in Madhya Pradesh. The next are the States of Maharashtra, Andhra Pradesh, Karnataka, Kerala and Gujarat.

Sal ranks next to teak in its utility and value. Sal forests cover an area of 11.6 million hectares and are distributed in Assam, Bihar, Madhya Pradesh, Orissa, Tripura, Uttar Pradesh and West Bengal.

Rosewood which is valued for its grain and colour, is mostly obtained from Kerala, Karnataka, Tamil Nadu, Andhra Pradesh and Maharashtra.

Cedrus deodara (Deodara) is by far the most important coniferous species highly valued as constructional timber.

Pinus roxburghii (Chir pine) ranks second best for constructional purposes and for resin. Abies pindrow (Fir) and Picea smithiana (Spruce) represent the valuable long fibre resource for pulp and paper industry.

The total production of wood is estimated at 26.5 million cu.m. of which 11.1 million cu.m. constitute industrial wood. Fuel wood production is 15.4 million cu.m. including wood for charcoal. This represents an increase of about 15 per cent over the production figures of 1966.

There are about 3,000 saw mill units. Their capacities range from 10 tonnes to 200 tonnes per day. There is an increasing tendency of opening departmental saw mills in various forest departments to obtain rational utilisation of forest produce. Some of the saw mills have introduced their own seasoning kilns.

Exports and Imports of forest products: The exports of total forest products (major and minor) went up from Rs. 656 million in 1973-74 to Rs. 858 million in 1974-75. On the other hand, imports during 1974-75 showed an increase and stood at Rs. 766 million as against Rs. 463 million in 1973-74.

Forest Development Corporations: Have been set up in selected States and Union Territories. These, apart from attracting institutional finance would promote marketing of timber and other forest produce, and also make available industrial and fuel wood. By 1978-79, 16 forest development corporations had been set up and were expected to achieve a target of 35,000 hectares of plantation and create employment for 13 million man-days during the year.

Preservation of Wild Life: Wild Life Protection Act, 1972 which governs the wild life conservation and protection of endangered species both inside and outside forest areas, has been extended to most of the States and Union Territories.

Trade in wild life and its products has been brought under the purview of the Act, and further restrictions have been imposed on the export trade of a number of animals, birds and their products. The export of rare and endangered species has been totally banned and a number of other products have been brought under quota system to regulate the export.

During 1978-79, a high-altitude National Park, known as 'Kanchanjunga National Park', was set up in Sikkim, and four sanctuaries of the Andaman and Nicobar Islands, three of Uttar Pradesh and one of Andhra Pradesh were declared as National Parks. At present there are 202 sanctuaries, 47 zoological gardens and 19 national parks and States are being given financial assistance to manage them scientifically. The total area of national parks and sanctuaries at present is 75,700 sq. km., which works to about 10 per cent of the total forest area.

Project Tiger: The alarming decline in the number of tigers (which numbered 2,000 in 1971) led to the launching of the Project Tiger on 1st April, 1973, at the Corbett National Park (U.P.) to protect and perpetuate the tiger.

The Project with 11 project areas, covers a total area of 15,800 sq. kms. in 10 States. It is proposed to eliminate all the disturbing factors at least from a core area of 4,963 sq. kms. of 11 Project Tiger reserves. A census in 1979, showed 711 tigers in the project areas and 3,015 in the whole country.

Following National Development Council decision, the Scheme has been changed from Central Sector Scheme to Centrally Sponsored Scheme to be implemented on a 50:50 basis (cost sharing basis) by the Centre and the concerned States. For 1979-80 Rs. 6.35 million was provided for grants-in-aid to States.

For 1980-81 a sum of Rs. 6.9 million has been provided for the scheme in the budget. The scheme will be continued in the Sixth Plan period.

The World Wild Life Fund, under their 'Operation Tiger', have promised one million dollars to Project Tiger (India).

Wild Life Societies: The following are some of the important societies concerned with conservation in India: (1) Assam Valley Wild Life Society, Pratapgarh, TE, P. O. Sootea, Darang 784175 Assam; (2) The Bihar Natural History Society, Patna 800001; (3) Indian Board of Wild Life, Dept. of Agriculture, Krishi Bhavan New Delhi 110001; (4) Gujarat Natural History Society, 57 Preetamnagar, Ellis Bridge, Ahmedabad 380001; (5) Peermade Wild Life Preservation Society, Stagbrook Estate, Peermade 685531, Kerala; (6) High Range Game Association, Munnar 685612, Kerala; (7) Bombay Natural History Society, Hornbill House, Shahid Bhagat Singh Road, Bombay 400001; (8) World Wild Life Fund Indian National Appeal, Hornbill House, Shahid Bhagat Singh Road, Bombay 400001; (9) Birdwatchers' Field Club of India, 32-A, Juhu Lane, Andheri, Bombay 400058; (10) Nilgiri Wildlife Association, Ootacamund 643001; (11) Wild Life Preservation Society of India, 7, Ashley Hall, Dehra Dun 248001

The World Wild Life Fund (India) has organised 492 Nature Clubs covering 14 States with over 10,000 members

FOOD AND AGRICULTURE

Employment :

AGRICULTURE (including animal husbandry, fishery and forestry) provided employment to 167 million in 1971 as against 138 million in 1961. The break-up of the work force in agriculture is as under :

Category	1961		1971	
	No. in million	Per cent to total	No. in million	Per cent to total
Cultivators ..	99·62	72	110·61	66
Agricultural labourers ..	31·52	23	50·36	30
Others ..	6·66	5	6·36	4
Total ..	137·80	100	167·33	100

The share of agriculture in the total labour force of 227 million was 74 per cent in 1971.

According to Planning Commission, about 192 million persons were engaged in agriculture and allied occupations in 1978.

Basic Facts (1978-79) : Gross cropped area: 173·30 million hectares; gross irrigated area: 50·65 million hectares; soil conservation on agricultural land; 22·60 million hectares; consumption of fertilisers: 5·12 million tonnes; foodgrains production: 132 million tonnes; procurement of food grains (1979): 14 million tonnes; per capita daily availability of food grains (1979): 480 grams.

Growth Rates : In recent years, agricultural production has maintained a steady uptrend, partly due to favourable weather and due to technological factors like improved farm practices, extensive use of high-yielding seeds and increase in the consumption of fertilisers. There is little doubt that the production potential of Indian agriculture is now much higher than what it was in the sixties. Compared to just 60 million tonnes in 1952-53, the output of foodgrains in 1978–79 was of the order of 132 million tonnes.

This, however, is the aggregate picture. In respect of cereal crops like jowar, of pulses and cash crops like jute, cotton and oilseeds, the production trends have been unsatisfactory. This is evident from the data on compound growth rates of production between 1960–61 and 1978–79.

The share of agriculture in India's net domestic product of Rs. 812,280 million in 1978–79 was Rs. 357,400 million or 44 per cent which includes forestry and fishery. This underscores the crucial role of agriculture in the Indian economy.

Per Capita Availability : The per capita availability of foodgrains is satisfactory from the overall point of view. But, given the abysmal poverty of the masses, it is doubtful whether they have the capacity to satisfy their biological demand for food in adequate measure. For this reason, the average picture would be grossly misleading. In any case, the per capita availability of pulses which is important from the nutritional point of view, is steadily declining. The data are given below for selected years.

Compound Growth Rate of Production
(1960–61 to 1978–79)

(Per cent per annum)

Crop	Growth Rate
Rice	2·05
Jowar	0·61
Bajra	2·32
Maize	1·74
Wheat	7·54
Cereals	2·94
Gram	(—) 0·72
Pulses	(—) 0·26
Foodgrains	2·56
Groundnut	0·94
Oilseeds	1·50
Cotton	1·38
Jute	(—) 0·12
Sugarcane	2·46
Tobacco	1·67
Non-foodgrains	2·23
All crops	2·45

Per Capita Daily Availability of Foodgrains

(Grams)

Year	Cereals	Pulses	Foodgrains
1956	360·5	70·4	430·9
1961	399·7	69·0	468·7
1965	418·6	61·6	480·2
1970	403·1	51·9	455·0
1975	366·7	39·9	406·6
1978	426·6	44·3	470·9
1979	435·4	44·9	480·3

Yield per Hectare : The major weakness of Indian agriculture is the extremely low levels of yield. This is evident from the data on yield per hectare of selected crops in India and selected countries in 1979 (in kilograms) given below.

Rice : U.S.A. (5,142); U.S.S.R. (3,934); China (3,717); Indonesia (2,977); Sri Lanka (2,009); India (1,792).

Wheat : Mexico (3,618); U.S.A. (2,301); Canada (1,690); U.S.S.R. (1,562); Pakistan (1,485); India (1,574).

Maize : Canada (5,575); U.S.A. (6,865); Egypt (3,714); U.S.S.R. (3,150); China (3,113); Pakistan (1,290); India (909).

Pulses : Egypt (2,051); Canada (1,791); U.S.S.R. (1,352); U.S.A. (1,630); India (524).

Sugarcane : U.S.A. (84,656); South Africa (83,164); Spain (94,286); Brazil (54,906); India (50,160).

High-yielding Varieties Programme : The high-yielding varieties programme was launched in 1966-67 as part of the new agricultural strategy to boost the production of foodgrains. The programme covers five crops — paddy, wheat, maize, jowar and bajra. In respect of all these crops, the coverage has steadily increased in recent years. During 1978–79, this programme was undertaken in 41 million hectares as against 11·40 million hectares in 1969-70. The details are tabulated in the next page.

Crops under HYV Programme

(million hectares)

Year	Paddy	Wheat	Maize	Jowar	Bajra	Total
1970–71	5·59	6·48	0·46	0·80	2·05	15·38
1971–72	7·41	7·86	0·44	0·69	1·77	18·17
1972–73	8·11	10·00	0·61	0·87	2·50	22·09
1973–74	9·98	11·02	0·87	1·15	3·00	26·02
1974–75	10·83	11·29	1·09	1·30	2·50	27·01
1975–76	12·74	13·45	1·13	1·95	2·89	32·16
1976–77	13·73	14·69	1·20	2·65	2·21	34·48
1977–78	15·60	15·50	1·20	3·10	2·60	38·00
1978–79	16·90	16·10	2·10	3·10	2·90	41·00

Estimates of production of major crops during five years ending 1979-80

Crop	Unit	1975–76	1976–77	1977–78	1978–79	1979–80
Rice	mil. tons.	48·74	41·92	52·67	53·77	42·19
Wheat	mil. tons.	28·85	29·01	31·75	35·51	31·56
Other Cereals	mil. tons.	30·40	28·88	30·01	30·44	26·73
Total Cereals	mil. tons.	107·99	99·81	114·43	119·72	100·48
Gram	mil. tons.	5·88	5·42	5·41	5·74	3·28
Total Pulses	mil. tons.	13·04	11·36	11·97	12·18	8·37
Total Foodgrains	mil. tons.	121·03	111·17	126·41	131·90	103·85
Potatoes	mil. tons.	7·31	7·17	8·14	10·13	8·31
Tapioca	mil. tons.	6·64	6·38	5·69	6·05	N.A.
Groundnuts (with shells)	mil. tons.	6·75	5·26	6·09	6·21	5·77
Total five major Oilseeds	mil. tons.	9·91	7·83	9·00	9·35	8·08
Sugarcane (gur)	mil. tons.	14·41	15·85	17·96	15·73	13·33
Cotton	mil. bales of 170 kgs. each	5·95	5·84	7·24	7·96	7·70
Jute	mil. bales of 180 kgs. each	4·44	5·35	5·36	6·47	6·12
Mesta	mil. bales of 180 kgs. each	1·47	1·75	1·79	1·86	1·91

N.A. = Not available.

Index Numbers of Agricultural Production : All-India

(base : 1969–70 = 100)

Crop	1973–74	1974–75	1975–76	1976–77	1977–78	1978–79	1979–80
Rice	112·7	101·3	124·7	107·2	134·7	137·5	107·9
Wheat	120·7	133·6	159·9	160·8	176·0	196·8	175·0
Cereals	113·2	106·4	128·8	117·8	137·3	143·6	119·2
Gram	78·7	77·1	112·9	104·2	103·9	110·2	63·0
Pulses	88·5	88·8	115·3	100·3	105·8	107·6	74·4
Foodgrains	110·3	104·3	127·2	115·7	133·6	139·3	113·9
Groundnut	114·9	99·1	130·9	102·0	118·0	120·3	111·8
Oilseeds	114·5	114·9	123·8	104·1	116·5	121·6	108·1
Cotton (lint)	112·7	127·8	106·2	104·2	129·3	142·0	137·4
Jute	125·4	90·2	89·5	107·9	108·1	130·4	123·4
Fibres	115·4	119·4	103·4	106·3	125·3	139·4	134·5
Sugarcane (gur)	118·3	120·7	118·2	130·0	147·3	129·1	109·4
Tobacco	129·9	102·0	98·4	117·8	138·8	127·6	125·7
Non-foodgrains	117·0	118·3	121·3	118·1	133·0	134·8	122·1
ALL CROPS	112·4	108·8	125·3	116·5	133·3	137·9	116·5

Agricultural Production (1978-79) : Thanks to favourable seasonal factors, the production of both food and cash crops showed a marked increase in 1978–79 as compared to 1977–78. The outturn of rice rose by 1·1 million tonnes to 53·77 million tonnes, of wheat by 3·8 million tonnes to 35·51 million tonnes and of food-grains as a whole by 5·5 million tonnes to 131·90 million tonnes. Among non-food crops, the production of sugarcane (gur) declined by 2·2 million tonnes to 15·73 million tonnes in 1978–79. Of five major oilseeds by 0·35 million tonnes to 9·35 million tonnes and of cotton by 0·72 million bales to 7·96 million bales.

The index of agricultural production (base : triennium ending 1969–70 = 100) registered a fall of 16 per cent in 1979-80 at 116·5 ; the index of food-grains output decreased by 18 per cent to 113·9 and of non-foodgrains by 9 per cent to 122·1 . Recent trends in the index numbers of agricultural production are given above.

Exports of Agricultural Commodities

Exports of agricultural commodities are a major source of foreign exchange for the country and account, on an average, for about 40 per cent of the total export earnings. The value of exports of some of the agricultural products during 1978-79 is as follows : Rice (Rs. 387 million) ; Wheat (Rs. 664 million) ; Tea (Rs. 3,405 million) ; Jute manufacturers (Rs. 1,656 million) ; Oilcakes (Rs. 1,158 million) ; Cashew Kernel (Rs. 1,158 million) ; Tobacco (Rs. 1,163 million) ; Coffee (Rs. 1,451 million) ; Sugar (Rs. 136 million) ; spices (Rs. 1,481 million) ; fish and fish preparations (Rs. 2,238 million) ; and vegetable oils (Rs. 189 million).

The Task Force under the Chairmanship of Secretary (Agriculture and Rural Development) carried out an in-depth review of the export potential of agricultural products, keeping in view the domestic requirements and production possibilities of various farm commodities. It estimated that, if certain measures are taken, the export of agricultural products can rise to Rs. 31,250 million tonnes in 1982–83 from about Rs. 12,170 million in 1975–76.

Food Consumption : The per capita consumption in India of all food items in terms of calories compares as follows : Canada : 3,346 ; U.S.A. : 3,537 ; U.K. : 3,305 ; Japan : 2,847 ; India : 1,949.

The increase in population by about 12 million persons per year in itself requires one million tonnes of additional grain. For an increase of the per capita intake of 100 calories per day the country would require an additional five million tonnes per year.

Foodgrain Loss : Six million tonnes of foodgrains valued at Rs. 10,000 million are lost every year because of non-scientific and old methods of storage.

Credit to Farmers : The long-term loans to farmers by Land Development Banks amounted to Rs. 2,460 million in 1975-76, Rs. 2.500 million in 1976-77 and Rs. 2,710 million in 1977-78. The target for 1978-79 is Rs. 4,320 million.

National Seeds Corporation Ltd., 4-E, Jhandewalan, New Delhi 110055 and the **Tarai Seeds Development Corporation**, Pantnagar, P.O. Haldi, Nainital (U.P.), were set up for the supply and production of foundation/certified seeds of the high yielding varieties.

Mechanised Farms : There are 14 Central and State mechanised farms in operation. They are located in Khammam (Andhra Pradesh) ; Kokilabut (Assam) ; Hissar (Haryana) ; Raichur (Karnataka) ; Aralam (Kerala) ; Lokjchera and Lushiachera (Mizoram) ; Jharsuguda (Orissa) ; Ladhowal (Punjab) ; Suratgarh and Jetsar (Rajasthan) ; Chengam (Tamil Nadu) ; Bahraich and Rae Bareili (Uttar Pradesh).

The cultivated area of these farms is about 35,000 hectares. Apart from providing improved varieties of seeds they help local farmers with land development, levelling, reclamation and harvesting on a commercial basis.

Food Corporation : The Food Corporation of India was set up as a statutory body in January, 1965, to purchase and store foodgrains and later distribute them as required. (See chapter on " Government of India Undertakings").

Canning Centres : Twenty-three community canning and preservation centres were under operation for popularising vegetable and fruit preservation. The units organise demonstrations, lectures and film shows on techniques of preservation and canning. 15 more were to be opened before the end of the Fifth Plan in 1979.

Community Canning and Preservation Centres in major cities are at : 1. 108, Magadi Chord Rd., Bangalore 560040 ; 2. Abhyudaya Nagar No. 1, G. D. Ambedkar Marg, Bombay 400033 ; 3. 107, B, BI ' F ' New Alipore, Calcutta 700069 ; 4. 2-2-2-University Rd., Hyderabad 500007 ; 5. Food & Nutrition Board, Shastri Bhavan, 35, Haddows Rd., Madras 600006 ; 6. 35, Raj Park, New Delhi 110060 ; 7. D26, C. C. Colony, New Delhi 110007.

Tractors: There are about 293,000 tractors in the country. Sixteen factories have been licensed with a total manufacturing capacity of 135,000 tractors per annum.

Fertilisers : (See Chapter on " Fertiliser Industry ").

Agricultural Education : Refer to chapter on Education.

Agricultural Research: The Indian Council of Agricultural Research is the apex organisation for sponsoring, coordinating and directing agricultural research and education in the country. The Council now has 29 research institutes under it.

Soil Conservation: All-India Soil and Land Use Survey Organisation, Pusa Rd., New Delhi 110012 carries out soil survey in selected river valley projects and priority watersheds for soil conservation works. Similar centrally sponsored schemes are also under operation in the catchment of major river valley projects.

Research Centres: Eight research-cum-training centres for soil conservation under the jurisdiction of Indian Council of Agricultural Research have been established at the following places :—

1. Ootacamund (Tamil Nadu) for erosion control in the Nilgiri and other hills ; 2. Bellary (Mysore) for soil conservation studies in black soils ; 3. Kotah (Rajasthan) with sub-centre at Agra for erosion control in the Chambal and Jumna ravines ; 4. Dehra Dun (U.P.) for studying problems of afforestation in the Sivalik hills with the sub-station at Chandigarh for training *chos* (hill torrents) ; 5. Vasad (in the Gujarat tract) for erosion control in the ravines along rivers in Gujarat ; 6. Chandigarh (outer Sivaliks) ; 7. Agra (Yamuna ravines) ; 8. Ibrahimpatnam (Andhra) for tackling red soil problems.

The centres train gazetted officers and assistants to man the soil and water conservation projects.

Minor Irrigation : Minor irrigation includes schemes relating to small storage tanks, river pumping projects, tube-wells, filter points, dug wells, small flood protection embankments and drainage schemes. The **Central Ground Water Board,** Jamnagar House, New Delhi 110011 is fully responsible for ground-water exploration in the country and most of the States have set up Ground Water Organisations for development of ground-water resources for agricultural purposes.

Primary Agricultural Credit Societies (All India Trend)

Item	1950–51	1960–61	1970–71	1972–73	1973–74	1974–75	1975-76*	1976 77
1	2	3	4	5	6	7	8	9
1. No. of Socieities (million)	0·105	0·212	0·168	0·155	0·154	0·153	0·135	0·123
2. Percentage of villages covered	N.A.	75	94	95	95	95	97	97
3. Membership (Nos. in million) ..	4·408	17·041	30·963	33·528	34·956	36·442	39·521	41·547
4. Percentage of rural population covered (Estimated)	9	30	N.A.	41	41	41	45	47
5. Average membership per society (Nos.)	45	80	193	217	227	239	293	338
6. Paid up share capital (Rs. million)	76·1	577·5	2,057·4	2,476·2	2,710·6	2,962·9	3,273·1	3,499·1
7. Deposits (Rs. million) ..	42·8	145·9	694·6	843·1	892·8	1,010·5	1,133·1	1,193·5
8. Working Capital (Rs. million)	372·5	2,739·2	11,534·0	14,619·2	15,802·8	18,014·8	19,897·0	20,711·0
9. Loans advanced during the year (Rs. million) ..	229·0	2,027·5	5,778·8	7,748·9	7,004·6	9,008·2	10,234·5	11,533·5
10. Percentage loans overdue to loans outstanding ..	22	20	41	38	42	43	43	42

* Excludes Assam, Jammu & Kashmir, Meghalaya and Andaman & Nicobar Islands.

Land Utilisation Statistics: 1975-76

('000 hectares)

State/Union Territory	Geographical area	Area reporting for land utilisation statistics	Forests	Area not available for cultivation	Other uncultivated land	Fallow (including current fallows)	Net area sown	Total cropped area
Andhra Pradesh	27,682	27,440	6,361	4,315	2,193	3,399	11,172	12,958
Assam	7,852	7,852	1,996	2,414	598	244	2,600	3,177
Bihar	17,388	17,330	2,823	2,691	843	2,503	8,470	11,287
Gujarat	19,598	18,812	1,567	3,737	3,078	772	9,658	10,198
Haryana	4,422	4,404	104	473	78	125	3,624	5,451
Himachal Pradesh	5,567	2,936	637	317	1,366	58	558	924
Jammu & Kashmir	22,224	4,524	2,753	579	384	114	694	923
Karnataka	19,177	19,116	2,901	1,866	2,422	1,567	10,360	11,159
Kerala	3,886	3,886	1,082	338	218	59	2,189	2,981
Madhya Pradesh	44,284	44,479	14,479	4,435	5,221	1,629	18,715	21,356
Maharashtra	30,776	30,758	5,334	2,686	2,828	1,648	18,262	19,664
Manipur	2,236	2,211	602	1,445	24	—	140	210
Meghalaya	2,249	2,249	823	309	614	329	174	203
Nagaland	1,653	1,653	288	1,252	—	—	113	114
Orissa	15,578	15,540	6,359	880	1,384	780	6,137	7,733
Punjab	5,036	5,033	209	531	68	67	4,158	6,255
Rajasthan	34,222	34,188	1,875	4,560	8,463	4,185	15,105	17,164
Tamil Nadu	13,007	12,999	1,972	2,324	776	1,938	5,989	7,235
Tripura	1,048	1,048	628	53	120	7	240	381
Uttar Pradesh	29,441	29,848	5,141	3,375	2,562	1,568	17,201	23,098
West Bengal	8,785	8,856	1,188	583	538	362	6,185	7,958
ALL-INDIA (including others)	328,778	304,342	66,422	39,518	34,171	21,986	142,245	171,160

Note: In some cases, the data relate to earlier years and not to 1975-76.

Area and Production of Selected Food and Cash Crops, 1978-79

(Area in thousand hectares : output in thousand tonnes)

State/Union Territory	Rice	Wheat	Jowar	Maize	Bajra	Gram	Ground-nut	Cotton ('000 bales of 170 kgs. each)	Tobacco	Jute ('000 bales of 180 kgs. each)	Sugar-cane (gur)
1	2	3	4	5	6	7	8	9	10	11	12
Andhra Pradesh											
Area	3,923	23	2,290	313	566	63	1,263	383	199	—	142
Production	7,301	15	1,340	345	356	19	1,129	347	190	—	1,041
Assam											
Area	2,241	68	—	23	—	3	—	4	5	115	48
Production	2,172	69	—	14	—	2	—	2	4	899	160
Bihar											
Area	5,586	1,834	18	875	13	218	7	1	11	165	131
Production	5,509	2,555	8	986	5	121	6	2	10	832	418
Gujarat											
Area	459	620	1,017	294	1,461	66	2,039	1,759	75	—	58
Production	535	1,192	577	244	1,554	59	1,827	2,101	154	—	329
Haryana											
Area	463	1,488	146	89	870	1,061	9	286	—	—	190
Production	1,241	3,422	26	70	382	1,039	11	603	—	—	685
Himachal Pradesh											
Area	99	323	—	271	—	37	2	1	—	—	4
Production	123	364	—	428	—	25	2	1	—	—	7
Jammu & Kashmir											
Area	267	190	—	273	15	4	—	1	—	—	1
Production	546	186	—	398	12	3	—	1	—	—	4
Karnataka											
Area	1,146	344	1,980	184	663	179	944	1,046	48	—	158
Production	2,303	223	1,932	542	314	74	774	823	33	—	1,182
Kerala											
Area	807	—	2	—	—	—	18	7	1	—	7
Production	1,241	—	4	—	—	—	17	10	1	—	41
Madhya Pradesh											
Area	4,729	3,534	1,910	692	171	1,869	448	677	3	—	72
Production	3.482	3.268	1,270	554	108	1,107	238	297	1	—	218
Maharashtra											
Area	1,498	1,187	6,524	69	1,575	460	795	2,509	13	—	244
Production	2,201	952	4,881	121	539	157	478	1,317	7	—	2,464
Manipur											
Area	179	—	—	13	—	—	—	—	—	—	2
Production	300	—	—	19	—	—	—	—	—	—	8
Meghalaya											
Area	106	2	—	17	—	—	—	6	—	6	—
Production	130	27	—	14	—	—	—	4	—	42	1
Nagaland											
Area	73	—	—	12	—	—	—	—	—	—	4
Production	77	—	—	9	—	—	—	—	—	—	15
Orissa											
Area	4,372	61	34	130	8	44	151	6	20	49	46
Production	4,402	113	22	112	4	22	225	7	9	439	281

Area and Production of Selected Food and Cash Crops, 1978-79—(*Contd.*)

(Area in thousand hectares ; output in thousand tonnes)

State/Union Territory	Rice	Wheat	Jowar	Maize	Bajra	Gram	Ground-nut	Cotton ('000 bales of 170 kgs. each)	Tobacco	Jute ('000 bales of 180 kgs. each)	Sugar cane (gur)
1	2	3	4	5	6	7	8	9	10	11	12
Punjab											
Area	1,053	2,721	2	433	97	349	129	633	—	—	107
Production ..	3,073	7,388	1	698	95	282	114	1,325	—	—	605
Rajasthan											
Area	210	1,989	809	808	4,531	1,746	385	402	3	—	60
Production ..	234	2,872	324	784	1,149	1,587	238	570	3	—	219
Tamil Nadu											
Area	2,713	2	712	19	433	9	990	328	13	—	171
Production ..	6,107	1	685	21	408	5	1,146	496	18	—	1,879
Tripura											
Area	299	4	—	—	—	—	1	2	—	4	2
Production ..	368	10	—	—	—	—	1	2	—	22	8
Uttar Pradesh											
Area	5,098	7,265	671	1,187	921	1,660	318	34	6	11	1,635
Production ..	5,896	11,234	493	770	577	1,264	180	17	7	96	6,261
West Bengal											
Area	4,632	521	—	47	1	101	—	1	13	538	32
Production ..	6,295	998	—	57	1	65	—	1	13	4,124	189
Andaman & Nicobar											
Area	11	—	—	—	—	—	—	—	—	—	—
Production ..	16	—	—	—	—	—	—	—	—	—	—
Arunachal Pradesh ..											
Area	81	2	—	23	—	—	—	—	—	—	—
Production ..	87	2	—	26	—	—	—	—	—	—	—
Dadra & Nagar Haveli											
Area	10	—	—	—	—	—	—	—	—	—	—
Production ..	14	—	—	—	—	—	—	—	—	—	—
Delhi											
Area	4	43	9	—	15	3	—	—	—	—	—
Production ..	4	116	4	—	7	3	—	—	—	—	—
Goa, Daman & Diu											
Area	54	—	—	—	1	—	—	—	—	—	1
Production ..	94	—	—	—	1	—	—	—	—	—	7
Mizoram											
Area	55	—	—	9	—	—	—	1	—	—	1
Production	19	—	—	8	—	—	—	1	—	—	1
Pondicherry											
Area	29	—	—	—	2	—	3	2	—	—	2
Production ..	59	—	—	—	5	—	3	3	—	—	20
ALL-INDIA											
Area	40.196	22,220	16,125	5,779	11,342	7,871	7,548	8,087	411	888	3.119
Production ..	53,829	34,982	11,563	6,219	5,515	5,835	6.387	7,927	451	6.454	16.035

Note : (1) '—' denotes nil or negligible.

(2) The all-India total may not agree with the sum of Statewise production figures due to rounding off.

Cultivated and Irrigated Area in States: 1975-76

('000 hectares)

State	Total reporting area	Cultivated area		Per cent of net cultivated area to total area	Irrigated area		Per cent of net irrigated area to net cultivated area
		Net	Gross		Net	Gross	
Andhra Pradesh	27,440	11,172	12,958	40·7	3,437	4,528	30·8
Assam	7,852	2,600	3,177	33·1	572	572	22·5
Bihar	17,330	8,470	11,287	50·2	2,760	3,363	31·7
Gujarat	18,812	9,658	10,198	51·3	1.414	1,535	14·6
Haryana	4,404	3,624	5,451	82·3	1,754	2,742	48·3
Himachal Pradesh ..	2,936	558	924	19·0	90	153	16·1
Jammu & Kashmir ..	4,524	694	923	15·3	302	371	44·2
Karnataka	19,116	10,360	11,159	54·2	1,365	1,707	13·2
Kerala	3,886	2,189	2,981	56·3	228	274	10·4
Madhya Pradesh	44,479	18,715	21,356	42·1	1,804	1,896	9·6
Maharashtra	30,758	18,262	19,664	59·4	1,802	2,171	9·9
Manipur	2,211	140	210	6·3	65	75	46·4
Meghalaya	2,249	174	203	7·7	43	46	24·7
Nagaland	1,653	113	114	6·8	37	38	32·7
rissa	15.540	6,137	7.733	39·5	1.015	1,482	16·5
Punjab	5,033	4,158	6.255	82·6	3.121	4.619	75·1
Rajasthan	34,188	15,105	17.164	44·2	2,547	2.934	16·9
Tamil Nadu	12,999	5.989	7.235	46·1	2,565	3.376	42·8
Uttar Pradesh	29.857	17.223	23,272	57·7	7.895	9.351	45·8
West Bengal	8.856	6.185	7.958	69·8	1,489	1,541	24·0
ALL-INDIA (including others)	304.342	142.245	171,160	46·8	34.453	42.944	24·2

All-India: Cultivated and Irrigated Area — Selected years

(Million hectares)

Item	1951-52	1960–61	1970–71	1975–76	1976–77	1977–78	1978–79
A. *Area sown*							
1. Gross	133·23	152·77	165·79	170·99	167·28	172·31	173·30
2. Net	119·40	133·20	140·78	142·25	—	—	—
B. *Area irrigated*							
1. Gross	23·18	27·98	38·19	45·30	46·91	48·46	50·65
2. Net	21·05	24·66	31·10	34·45	—	—	—
C. Gross area under high yielding varieties*	—	—	15·38	31·90	33·60	38·00	41·10
D. Share of gross irrigated area in gross sown area (per cent) ..	17·4	18·3	23·0	25·1	28·0	28·1	29·2

* The high yielding varieties programme was launched in 1966–67.

State-wise Production of Foodgrains: 1979-80

(Thousand tonnes)

State	Cereals	Pulses	Food-grains
Andhra Pradesh	9,022	330	9,352
Assam	1,963	41	2,004
Bihar	6,394	618	7,012
Gujarat	3,814	194	4,008
Haryana	4,682	346	5,028
Himachal Pradesh	815	45	860
Jammu & Kashmir	1,077	30	1,107
Karnataka	6,490	595	7,085
Kerala	1,286	17	1,303
Madhya Pradesh	5,709	1,461	7,170
Maharashtra	9,325	1,038	10,363
Manipur	238	2	240
Meghalaya	141	2	143
Nagaland	86	2	88
Orissa	3,271	577	3,848
Punjab	11,687	203	11,890
Rajasthan	4,393	818	5,211
Tamil Nadu	8,134	222	8,356
Tripura	300	2	302
Uttar Pradesh	14,627	1.520	16,147
West Bengal	6,575	298	6,873
All-India (including others)	100,479	8,371	108,850

LAND REFORMS : Legislative provisions have been made in most States conferring ownership rights on cultivating tenants, protecting tenants against wilful ejectment and regulation of rent payable. Consolidation of holdings has been accorded high priority. About 46 million hectares have already been consolidated.

Under the land ceiling laws, 648,000 hectares of surplus land have been distributed among 1·055 million farm families so far. Emphasis has been laid on proper maintenance of land records and their regular updating. The Government has accepted the recommendations of the Raj Krishna Committee that land reform laws should continue to enjoy constitutional protection by their inclusion in the Ninth Schedule and that disposal of land reform cases pending in courts should be expedited.

Average size of Land Holdings : The average size of a farm in India is 2·30 hectares. The State-wise average is as follows : Andhra Pradesh 2·87 hectares ; Assam 1·46 hectares ; Bihar 1·53 hectares ; Gujarat 4·49 hectares ; Jammu & Kashmir 1·43 hectares ; Kerala 0·75 hectare ; Madhya Pradesh 3·99 hectares ; Tamil Nadu 1·49 hectares; Maharashtra 4·65 hectares ; Karnataka 4·11 hectares ; Orissa 1·98 hectares ; Punjab 3·89 hectares ; Rajasthan 5·5 hectares ; Uttar Pradesh 1·78 hectares ; and West Bengal 1·56 hectares.

Out of a total 50 million rural households possessing operational holdings, 35 per cent hold on an average less than 0·20 hectare of land each.

The total number and area of operational holdings according to size are furnished in the following table :

Size class (hectares)	Number ('000)	Percent-age	Area ('000 hectares)	Percent-age
Below 0·5	23,178	32·9	5,446	3·5
0·5 — 1·0	12,504	17·7	9,099	5·6
1·0 — 2·0	13,432	19·1	19,282	11·9
2·0 — 3·0	6,722	9·5	16,353	10·0
3·0 — 4·0	3,959	5·6	13,646	8·4
4·0 — 5·0	2,684	3·8	11,928	7·4
5·0 — 10·0	5,248	7·4	36,305	22·4
10·0 — 20·0	2,135	3·0	28.521	17·6
20·0 — 30·0	401	0·6	9.344	5·8
30·0 — 40·0	120	0·2	4,179	2·6
40·0 — 50·0	45	0·1	2,050	1·3
50·0 and above	65	0·1	5.971	3·7
TOTAL	70,493	100·0	162,124	100·0

ANIMAL HUSBANDRY

INDIA has the largest cattle, buffalo and goat population. According to the 1972 census, there are about 179 million cattle, 58 million buffaloes and 68 million goats in the country. About one-sixth of the cattle, about half of the buffalo and one-fifth of the goat population in the world are in India. Animal husbandry plays an important role in the national life and accounts for about 10 per cent of the national income. In particular, the contribution of the cattle and buffalo to the economy is considerable. They are the main source of draught power in agricultural operations and rural transportation; they provide essential foods like milk and meat as also large quantities of animal by-products like hides, bones, blood and guts, as well as valuable original manure. Meat and meat products alone earn about Rs. 400 million by way of foreign exchange.

Census: The 12th quinquennial livestock census was due to be conducted in different States with April 15, 1977 as the reference date. But only a few States carried out the census as per schedule while others had to postpone it for a variety of reasons. Hence data in the consolidated form are available only for 1972, the year of the previous census.

The break-up for 1972 is: Cattle—178.9 million; sheep—40.4 million; goats—68.0 million; buffaloes—57.9 million; horses and ponies—1.0 million; pigs—6.5 million; camels—1.1 million and other livestock 1.2 million. Poultry makes up an additional 136.8 million.

Unofficial estimates place the latest population of buffaloes, sheep and goats at 64 million, 44 million and 75 million respectively.

Meat Production: There are nearly 2,800 slaughter houses operating under local bodies. Excepting a few, many of them lack even elementary facilities for hygienic production and handling of meat and for collection and utilisation of animal by-products. About 37.3 million sheep and goats, 1.5 million pigs and 1.4 million cattle and buffaloes are slaughtered annually in the organised slaughter houses. The percentage of the animals slaughtered to their respective population is : cattle: 0.9; buffaloes: 1.4; sheep: 32.5; goats: 36.8; pigs: 22.0; others: 6.4. (The percentage of cattle slaughtered in developed countries is between 30 per cent to 40 per cent.)

The yearly production of meat is around 720,000 tonnes consisting of 190,000 tonnes of beef and buffalo meat, 390,000 tonnes of mutton and goat meat, 50,000 tonnes of pig meat and 90,000 tonnes of poultry meat. National Commission on Agriculture has estimated that demand for meat will range between 1.6 and 2.1 million tonnes in 2000 A.D.

1,000 tonnes

PROJECTION OF PRODUCTION INCREASE

Category of meat	Present level of production	Potential for stepping up production	Local consumption	Export
Beef	62	65	65	—
Buffalo meat	125	1,000	300	700
Mutton and goat meat	305	484	436	48
Pig meat	54	60	60	—
Poultry meat	95	120	120	—
Total	721	1,729	981	748

There is a great potential for increasing meat production by improved animal-husbandry methods. A projection of the increased production is given in the above table.

Modernisation of Slaughter Houses: For the establishment of modern slaughter houses, six corporations have been set up—Modern Meat Complex Ltd., Panaji (Goa); The Bangalore Animal Food Corpn. Pvt. Ltd. (Bangalore); Modern Slaughter Houses Development Corpn. (Hyderabad); West Bengal Livestock Processing Corpn. Ltd.; Tamil Nadu Meat Industries Corpn. and Delhi Livestock Products Processing Corpn. Ltd. The modern abattoir at Deonar (Bombay), provides clean and wholesome meat and also caters to the needs of export market as regards buffalo meat.

Hide-Flaying and Carcass Utilisation: A model training-cum-production centre at Bakshi-ka-Talab, Lucknow, established with financial and technical assistance from the Government of Netherlands and Food & Agriculture Organisation of the United Nations, imparts training in hide-flaying, tanning, carcass utilisation, foot-wear making, etc. The Animal By-products Plant, Kesarpalli, Andhra Pradesh is handling, in addition to fallen animals, other raw materials such as bone chips, fish waste etc. and converting them into sterilised bonemeal, fish-meal and meat-meal. Hide-flaying and carcass utilisation centres are also situated at Dehra Dun, Jhansi, Mathura, Delhi, Koothatukulam, Madras and Bombay. Two more carcass utilisation centres are being organised at Cuttack and Srinagar.

Animal Health: At the end of 1979-80 there were 12,110 veterinary hospitals/dispensaries in the country as against only 904 during the 1930s. The production of veterinary biological products increased to 333.5 million doses in 1979-80 compared to 191.9 million doses in 1974-75.

CATTLE: The best Indian cattle breeds are found in the Punjab, Rajasthan, Saurashtra, parts of Maharashtra, Tamil Nadu, Karnataka and Andhra Pradesh. In the eastern parts of the country and in the coastal areas, the animals are non-descript and are poor milk yielders.

Milch Breeds: Sahiwal, Gir, Red Singhi and Deoni are some of the outstanding breeds of this group. The Sahiwal yields between 2,725 and 3,175 kgs. of milk in a lactation period of 300 to 325 days. The average yield of Gir is 1,675 kgs. The average milk yield of Singhi and Deoni varies from 1,135 to 1,725 kgs.

Draught: Cows of these breeds are poor milk yielders but the bullocks are excellent draught animals. About 42 per cent of the cattle in the country are draught animals. The Amritmahals and Hallikar (Karnataka) are the well-known draught breeds of India. Other important breeds are Malvi (Madhya Pradesh), Nagori (Rajasthan), Kenketha and Ponwar (Uttar Pradesh), Bahaur (Bihar), Bargur, Kongayam (Tamil Nadu) and Khillari (Maharashtra).

General Utility Breeds: The cows are fairly good milk yielders and the bullocks are good for draught purposes. Hariana (Haryana and Delhi); Kankrej and Tharparker (Gujarat and Rajasthan); Ongole (Andhra Pradesh), etc., which give about 1,500 to 2,000 kgs. of milk in the lactation period are some of the well-known breeds of this type.

Cattle Breeding: The Intensive Cattle Development Projects (ICDPs) was formulated during the latter half of the Third Plan with a view to increasing the milk production potential of cows and buffaloes. At present there are 90 such projects. In addition there are 625 key village blocks functioning on the same lines. These 2 projects together cover about 15 million breedable bovines. 500 regional artificial insemination centres and over 11 thousand artificial insemination sub-centres are functioning under these projects.

Development work has made further progress at the Central Cattle Breeding Farms, which have been set up to achieve a breakthrough in milk production. It was envisaged to set up 6 centrally administered Cattle Breeding Farms for some indigenous cattle and buffalo breeds and some exotic cattle breeds. Of the 6 farms, three farms were established during the Third Five Year Plan, and the remaining three during the Fourth Five Year Plan. The Five Year Plan (1978-83) envisages completion of the development work at the six cattle breeding farms at Suratgarh (Rajasthan), Dhamrod (Gujarat), Koraput and Chiplima (Orissa), Avadi (Tamil Nadu), and Andesh Nagar (Uttar Pradesh).

The **Central Frozen Semen Bank** at Hessarghatta, Bangalore, continued to supply frozen semen to the neighbouring States for cross-breeding purposes. A number of frozen semen stations have been set-up recently in places like Bangalore, Bhopal, Gurgaon and Amritsar and many more are likely to come up in the near future.

BUFFALOES: Buffalo is customarily classified into two types—the swamp and the river buffalo. The buffaloes in India are of the second type. There are seven breeds of Indian buffalo. It should, however, be noted that the breed classification of Indian livestock especially buffalo is not satisfactory. They are the Murrah of Haryana, the Jaffarabadi (Saurashtra region), Surti (Kaira, Anand and Nadiad districts) and Mehsana (Mehsana district) of Gujarat, Nagpuri of Maharashtra, Nili-Ravi of Punjab and Bhadawari of Uttar Pradesh. The average yield of milk in a single lactation period (which varies from 250-300 days) is 1,360-2,270 kgs. in the case of Murrah, 1,655 kgs. in the case of Surti, 1,360-1,825 kgs. in the case of Mehsana and 1,585 kgs. in the case of Nili-Ravi.

SHEEP: According to the 1972 livestock statistics, India has 40 million sheep and ranks fourth among the countries of the world in sheep population. Most of the sheep are concentrated in the arid zones with low rainfall and poor agriculture where they form a major source of livelihood for the people. The productivity of most of the sheep-stock is low in terms of wool and mutton. The average annual yield of wool per sheep in India is only 700 grams as against 5-7 kgs. in the case of some of the exotic breeds of sheep. As regards mutton, the average weight of sheep varies from 25 to 30 kgs. The exotic sheep weighs as much as 3 times this figure.

Wool: India produces over 39.5 million kgs. of wool annually with 36 per cent of this coming from Rajasthan alone. The bulk (57 per cent) of the wool produced is coarse and is used largely in the manufacture of carpets, druggets and coarse blankets. The rest (43 per cent) of the wool is of the apparel type. About 15 per cent of the total apparel wool produced in the country is of the combing quality. There is a demand of 68.70 million kgs. of apparel wool, as per spindlage available, with the woollen industry in the country. The demand for carpets has gone up in export market from Rs. 600 million to Rs. 800 million.

Rajasthan Sheep and Wool Development Corporation was established during the year 1978-79 with the objective of shearing, grading and marketing of wool. (See also Woollen Industry.)

Breeding: Sheep development involves cross-breeding of indigenous sheep using imported strains of Merino type sheep such as Rambouillett Stavrovoi, etc. About 400 Rambouillett sheep were to be imported during 1980-81. Recently the Govt. of Australia had allowed export of a limited number of Merino rams out of which India imported 93 good quality Merino rams to be distributed to various sheep breeding farms in India.

The Central Sheep Breeding Farm, Hissar, was set up in 1969 to produce and supply rare Corriedale and crossbred rams to various States for sheep development programmes. About 2,000 rams have been distributed to different States during the last ten years. The number of exotic breeds imported so far is 10,000.

Five Centrally sponsored large sheep-breeding farms have been set-up at Mamidipally (Andhra Pradesh), Challakeri (Karnataka), Daksum (Jammu & Kashmir), Bhainsora (Uttar Pradesh) and Fatehpur (Rajasthan). Action has been initiated for the establishment of two more sheep-breeding farms—one at Shivpuri (Madhya Pradesh) and another at Chatra (Bihar).

A large scale sheep shearing wool grading and marketing programme has been undertaken in Rajasthan with the assistance of Food and Agricultural Organisation. Another significant development was the setting up of the Central Sheep and Wool Research Institute, in 1962.

GOATS: Goats constitute an important source of animal protein and account for about 3 per cent of the total milk production. They account for 35 per cent of meat production. Exports of goat skins, casings and hair earn substantial foreign exchange.

Among the important breeds are Bakarwah, Assam Hill, Chamba, Gaddi and Gegu in the Northern temperate region, Beetah, Jamnapari, Kutchi, Marwari, Mehsana, Sirohi and Zalwadi in the North-Western region and Osmanabadi and Mahabari/Tellicherry in the Peninsular region.

POULTRY: There are only 26 chickens per 100 persons in India as against 540 in Denmark and 373 in Canada. The annual laying capacity of an Indian hen is about 60 small eggs in a year as against 180 large eggs of the American (exotic) breeds like White Leghorn.

Poultry production has made rapid strides in the last decade. The annual egg production increased from 2,500 million eggs in 1971 to about 12,000 million eggs in 1979. The production of poultry meat through broiler industry has touched a level of 20 million in 1979 compared to just 4 million in 1971. However, the per capita availability is very low when reviewed against world standards. The poultry industry has become nearly self-sufficient in respect of modern poultry equipment which has, now, found even export markets. However, the availability of eggs in India is estimated at only 12 per person per year as against 295 in U.S.A., 282 in Canada and 249 in West Germany. The annual per capita availability of poultry meat too is low, being estimated at 131 grams in India as compared with 13.18 kgs. in U.S.A. and 2.47 kgs. in other European countries.

Selective poultry breeding programmes are being carried out in Central Poultry Breeding Farms at Hessarghata, Bombay and Bhubaneshwar.

PIGGERY: Pig is one of the most efficient feed converting animals among domesticated stock, and in India an important source of protein-rich meat. The total pork production is around 53,000 tonnes and accounts for 7.4 per cent of meat production in India. In the Second and later Plans schemes were drawn up for the setting up of bacon factories, regional pig breeding stations, pig breeding farms/units and piggery development blocks. By the end of the Fourth Plan 8 bacon factories were set-up in different States—Andhra Pradesh, Maharashtra, West Bengal, Uttar Pradesh, Kerala, Bihar, Punjab and Rajasthan—but none of them is working at even half of their installed capacity. The total turn-over of these units was anticipated to be about Rs. 15 million. 2,000 exotic variety sows were made available to the farmers from the 8 regional pig breeding farms. Two more regional pig breeding farms are being set up in Mizoram and Arunachal Pradesh. There are 79 State pig breeding farms and 300 pig breeding stations all over India. Special efforts are made to promote piggery in North-east States.

The Centre has drawn up a comprehensive piggery development programme with the help of Danish International Developmental Agency. Under this scheme, a regional pig breeding station will be set up in Shillong with seven sub-units for all other North-Eastern States.

Export: The quantity of meat exported is roughly about 1 per cent of the total mutton production and 5 per cent of beef production. The number of live sheep and goats exported (during 1977-78) worked out to about 0.1 per cent of the total population against 2.5 per cent in Australia. As regards buffalo meat, since there is little market for its meat 70 per cent can be exported. The exports of meat and meat products, which amounted to Rs. 100 million in 1978-79, are expected to amount to Rs. 400 million in 1980-81.

Plan Targets: Against a base level production of milk of 23.2 million tonnes in 1973-74, the latest Plan document (1978-83) expects the production to reach 35.5 million tonnes by 1982-83. The target for egg production is 16,000 million, and wool 38 million kgs. (greasy). As against an outlay of Rs. 4,380 million for the Fifth Plan, the outlay for the Five-year Plan (1978-83) according to the draft is about Rs. 8,250 million.

FISHERIES

EXTENT of Resources: India has a long coast line of 6,535 kms. and an exclusive economic zone of 2 million sq. kms. which offer large stocks of the sardine group, the mackerel, the tuna and other scombroids, catfishes, the group of sharks and rays, Bombay duck, ribbonfishes, prawns, squids and cuttle-fishes, the pomfrets, solefish, the carangids, the perches, polynemids, sciaenids etc.

The country has an inland culturable water area of about 1.5 million hectares to raise indigenous and exotic carps, air-breathing fishes, hilsa, trouts etc. It also has a brackish water spread of about 2.6 million hectares, a portion of which could be brought under culture for raising prawns, mullet, milk fish, pearl spot etc. There are also good possibilities of producing shell-fishes, fin-fishes and algae through mariculture in the coastal belt.

India occupies eighth place in fisheries production in the world. Marine fisheries account for about 63 per cent of total production with 37 per cent contributed by inland fisheries. The present **per capita consumption** of fish is only 4.0 kg. a year against the desired consumption level of 31 kg. as recommended by the nutrition advisory committee on human nutrition.

An eight-fold increase in fish production is considered necessary to meet adequately the increasing demand for fish in the country.

Growth since Independence: From an estimated figure of 0.7 million tonnes in 1947, the catch increased to 2.37 million tonnes in 1978 of which 1.47 million tonnes were marine fish.

Development Programmes: At the end of 1977-78 there were about 14,282 mechanised fishing boats in operation as against only 13 at the commencement of the First Plan. Trawling deserve special mention, a method of fishing, which was practically unknown at the time of Independence, is now most popular.

In order to give a fillip to deep-sea fishing, it is proposed to have a fleet of 300 vessels by 1982-83. By the end of 1978-79, there were

123 vessels, of which 68 were on charter arrangements with foreign countries. Authorisation has been issued for import of more than 100 off shore/deep sea fishing vessels and provisional measures have been taken for the construction of such vessels at the indigenous shipyards.

Indian Fisheries: Fifty Fish Farmer's Development Agency Projects have been set up in different States for augmenting fish production through intensive fish-culture practices. The fish seed required for intensive fish culture is also being augmented, through **bund** breeding and induced breeding in small water areas like ponds and lakes. These practices will also help in spawn production and fish seed supplies. Attention will also be paid to the creation of additional nursery areas. Fingerlings production was 698 million during 1976-77 and 757 million during 1977-78. The total nursery area available for spawn rearing during 1976-77 was estimated at 1,135 hectares and for 1977-78 it was estimated at 1,402 hectares.

Of the 1.5 million hectares of ponds and tanks only 1.0 million hectares are now being partially utilised for the production of fish. It is proposed to bring more and more of the partially utilised area under intensive fish culture and reclaim the remaining area to make it suitable for fish farming.

PRODUCTION (1977-78)

('000 tonnes)

States	Inland	Marine	Total
Andhra Pradesh	100	160	260
Assam	37	—	37
Bihar	70	—	70
Gujarat	13	177	190
Haryana	2	—	2
Himachal Pradesh	2	—	2
Jammu & Kashmir	8	—	8
Karnataka	40	126	166
Kerala	25	340	365
Madhya Pradesh	11	—	11
Maharashtra	24	366	390
Manipur	2	—	2
Meghalaya	1	—	1
Nagaland	1	—	1
Orissa	28	28	56
Punjab	2	—	2
Rajasthan	12	—	12
Tamil Nadu	150	235	385
Tripura	5	—	5
Uttar Pradesh	29	—	29
West Bengal	288	17	305
Sikkim	—	—	—
TOTAL STATES	850	1,449	2,299
Union Territories			
Andaman & Nicobar	—	1	1
Arunachal Pradesh	neg	—	neg
Chandigarh	1	—	1
Delhi	1	—	1
Goa, Daman & Diu	1	47	48
Lakshadweep	—	3	3
Pondicherry	—	15	15
Mizoram	1	—	1
TOTAL U. T.s	4	66	70
TOTAL ALL INDIA	854	1,515	2,369

Fish production during 1978-79 was expected to be 2.76 million tonnes—1.76 million tonnes from marine sources, and 1 million tonnes from inland sources.

Job Opportunity: All the schemes of the fisheries sector taken together will directly generate an additional employment potential of 400,000 persons including skilled and semi-skilled workers by the end of 1982-83. In addition to this, employment potential will also be generated in the ancillary industry and for marketing and transportation of fish to the extent of 80,000.

Research: A multi-pronged research and technological effort is under way to double the present annual fish catch in the next few years.

The research activities are being carried on by the Central Marine Fisheries Research Institute and the Central Institute of Fisheries Technology, both located at Cochin and the Central Inland Fisheries Research Institute at Barrackpore. These Institutes have their subordinate establishments also. The National Institute of Oceanography, the Central Institute of Fisheries Education, the Pelagic Fisheries Project, the Zoological Survey of India, some of the agricultural universities and conventional universities and some fisheries departments of the State Governments also carry out research in different disciplines of fishery science.

Exports: The export of marine products during 1977-78 which was valued at Rs. 1,810 million, rose to Rs. 2,346.2 million in 1978-79 and to Rs. 2,488.2 million in 1980-81. The quantity exported was 86,657 tonnes (1978-79).

For augmenting the exports of sea foods, the Government of India has set up a Marine Products Export Development Authority at Ernakulam, Cochin 682016.

Main Buyers: These exports are directed to the sophisticated markets of Japan, America, Europe, and Australia.

Imports: There were no imports of fish during the years 1977 and 1978.

Rolling Plan: In the Plan for 1978-83, the principal objectives would be: (i) to step the fish production, (ii) to organise the inland fish production based on individual family basis and on high labour, low-investment technology so as to improve the socio-economic conditions, (iii) to organise intensive marine fishing survey and promote exploitation, distributed equitably among the different sectors and (iv) to improve and diversify the processing and marketing facilities. The Planning Commission has envisaged a target of 3.4 million tonnes of fish production for this five-year period. The target of fish production in 1979-80 was 2.626 million tonnes. The outlay for 1979-80 for Central, Centrally sponsored and State schemes was about Rs. 715 million.

Fishing Harbours: Besides limited facilities for landing and berthing of fishing vessels already available at about 80 centres, medium size fishing harbours have been completed at 4 sites, and work on large size fishing harbours is in progress at Cochin, Madras, Bombay and Calcutta. First stage harbours works at Visakhapatnam have been completed in all respects and harbour has been commissioned. Cochin harbour has also been commissioned while the fishing works are in progress. Construction of sizable fishing harbours are also in progress at Malpe, Honnaver, Ratnagiri, Porbunder, Bhavanapadu and Mangalore.

With the World Bank assistance, construction of integrated marine fisheries projects including fishing harbour has also been taken up at Veraval and Mangrol in Gujarat and at Visakhapatnam Stage-II, Kakinada and Nizampatnam in Andhra Pradesh.

NUMBER of Universities rose from 47 in 1960 to 118 (108 universities and 10 institutions deemed to be universities) as in 1979. **Number of Colleges** increased from 1,542 in 1960-61 to 4,460 in 1978-79 excluding pre-university, Intermediate and Junior Colleges.

As regards enrolment, the average growth rate in universities and colleges, excluding pre-university/Intermediate/pre-medical during the decade 1969-70 to 1978-79 was 5.3 per cent per annum. There were about 2.62 million students in the universities and colleges in 1978-79. The affiliated colleges accounted for 83.2 per cent of the total enrolment. The enrolment at post-graduate level in proportion to total enrolment at the University and Colleges level was 10.6 per cent.

The University Grants Commission (UGC) in its survey revealed that 1,678 colleges (57 per cent) of the 2,923 affiliated colleges in the country have less than 500 students each and 520 colleges have students between 100 and 200. The percentage of students going in for higher education in all States is about 3 per cent.

Number of Illiterates in 1981 was 446 million as against 386 million in 1971. However, the percentage of literacy according to 1981 census rose to 36.17 per cent from 29.45 per cent in 1971. Adult illiterates were estimated to be about 100 million by 1977. Sixty five million adults are to be covered under the adult education programme during the VI Plan (1978-83). The target for the year (1979-80) was about 4.5 million. A provision of Rs. 2,000 million has been made for Adult Education Programme in the Plan 1978-83 which represents nearly 10 per cent of the total plan provision for education. (See Chapter on Population.)

Adult Education: About 95,000 adult education centres are functioning in the country as on Oct. 1, 1979. Of these, nearly 33,000 are being run by voluntary organisations.

During 1979-80, 4.5 million more adults were expected to be covered by the National Adult Education Programme.

Some 603 voluntary agencies have been approved so far for financial assistance amounting to Rs. 47.30 million for running 27,956 adult education centres in 17 States and four Union Territories.

Fifty-five universities and 600 colleges were sanctioned funds by the University Grants Commission for running 7,330 adult education centres. About 80 universities and over 2,000 colleges have decided to participate in the NAEP. Most of them are conducting surveys and organising discussions to determine the manner of their involvement and the size of the programme to be undertaken by them.

Type of Institutions (1976): Primary Schools: 470,115; Middle Schools: 105,447; High & Higher Secondary Schools: 47,141; Arts & Science Colleges: 3,582; Engineering & Technology Colleges: 108; Medical Colleges: 215; Teacher Training Institutions: 1,511; Boards of Secondary & Intermediate Education: 28.

Teachers: Primary Schools: 1,242,911; Middle Schools: 779,495; High Schools: 716,964; Percentage of trained teachers in the primary, middle and high/higher secondary respectively was 83.0; 94.6 and 82.3.

Free Education: Education in classes I-V is free in Government schools and in schools run by local bodies. It is also free in classes VI-VIII in all States except for boys in Orissa and Uttar Pradesh.

Compulsory Education: All the States except Bihar, Manipur, Meghalaya, Nagaland, Sikkim and Tripura have enacted legislation for compulsory education. As for the Union Territories, such legislation is available in Delhi, Andaman & Nicobar Islands and Chandigarh.

Kendriya Vidyalaya Sangathan: During 1979-80, 26 new Kendriya Vidyalayas were opened bringing their total to 291. The student enrolment in KVs rose from 202,876 in 1978-79 to 224,203 in 1979-80.

School Enrolment since 1950-51 (In million)

	1950-51	1978-79	1982-83 Target
Age group 6-11			
Enrolment: Classes I — V	19.155	72.17	92.15
Enrolment as percentage of age group population	4.26	8.45	10.43
Age group 11 — 14			
Enrolment: Classes VI — VIII	3.120	18.12	27.76
Enrolment as percentage of age group population	1.27	3.81	5.48
Age group 6 — 14			
Enrolment: Class I — VIII	22.275	90.28	119.91
Enrolment as percentage of age group population	3.24	6.79	8.63

Enrolment (1976) to the engineering and technical education at the degree level was 22,492 and at the diploma level 44,000.

Expenditure on Education: Fifth Five-Year Plan (1974-79) final document revealed that the total expenditure on education was to rise from Rs. 14,500 million in 1974-75 to about Rs. 22,870 million in 1976-77*. The share of primary education had been cut down from Rs. 10,300 million to Rs. 7,720 million. Total expenditure on education, inclusive of Plan and non-Plan, during the Fifth Plan period was expected to be about Rs. 90,000 million, next only to that on Defence.

Budget estimates for the education departments of the States and the Centre was Rs. 21,750 million for 1977-78.

Per Capita Expenditure: For rural areas Rs. 3; for urban areas Rs. 16.32 (1978).

Indian Technical Personnel Abroad: According to the National Register (maintained by the Council of Scientific and Industrial Research), there are 3,614 scientists, 4,495 engineers, 639 technologists and 2,122 doctors abroad.

SUBJECTS OF STUDY

(Derived with permission from 'Directory to Subjects of Study at Indian Universities' published in the annual **Commonwealth Universities Yearbook** by the Association of Commonwealth Universities, London and **University Grants Commission**, New Delhi.)

This directory contains a list of selected subjects which may be studied at Universities in India, some in the departments or constituent colleges of universities themselves, some in colleges affiliated to universities, and others in both. The list is not exhaustive but it does cover most of the main subjects in which facilities for study or research are available. Many of the universities which provide courses for bachelor's or master's degrees in a subject also provide facilities for research in aspects of it which may lead to a doctorate.

Subjects marked † may, depending on the university, either (a) form a greater or lesser part of the course for a bachelor's degree, or (b) be studied for a master's degree, or (c) both.

Accounting and taxes: Shivaji.

Adult education: *Diploma*: Rajasthan.

Aeronautical Engg.: *Bachelor's*: I.I.T. (Kanpur, Kharagpur, Madras), Punjab. *Master's:* I.I.T. Bombay, Kanpur, Madras, Institute of Science.

Agricultural Engg.: *Bachelor's*: Allahabad, Bhagalpur (with soil conservation), Haryana Agri., G. B. Pant Univ. of Agri. and Tech.,* I.I.T. Kharagpur, J. L. Nehru Krishi Vish., Punjab Agri. (also Master's), Punjabrao Krishi, Udaipur. *Master's:* (Agri. Engg.) — Allahabad, Punjab Agri. *Diploma:* University of Agri. Sciences, Hebbal.

---

* Actual expenditure on education during 1976 was Rs. 19,633 million.

Universities marked* in the article provide instructions upto the Master's Degree (including MD) and Government Diploma. 'Tech' stands for Technology and 'Engg' for Engineering.

Agriculture: *Bachelor's*: Agra,* Allahabad,* Andhra Pradesh Agri.,* Annamalai, Assam Agri.,* Banaras,* Bhagalpur,* Bihar,* Calcutta,* G.B. Pant Univ. of Agri. and Tech.* (Previously U.P. Agri.), Gorakhpur,* Gujarat,* Haryana Agri.,* Himachal Pradesh,* J. L. Nehru Krishi,* Kalyani,* Kanpur,* Kerala,* Kurukshetra, Madras,* Madurai,* Mahatma Phule Krishi, Meerut,* Orissa Univ. of Agri. and Tech.,* Punjab,* Punjab Agri.,* Punjabrao Krishi,* Rajasthan, Ranchi,* Sardar Patel,* Saurashtra, South Gujarat,* Tamil Nadu Agri.,* Udaipur,*Univ. of Agri. Sciences,* Visva-Bharati.* *Diploma:* Assam Agri.

Agricultural Marketing: Shivaji.

Anaesthesiology/Anaesthetics: Agra d, Aligarh d, Allahabad d, Andhra d, Banaras dm, Bangalore d, Baroda dm, Bombay m, Calcutta d, Delhi dm, Dibrugarh dm, Gujarat dm, Kanpur d, Karnataka dm, Kerala d, Lucknow d, Madras dm, Madurai d, Marathwada d, Nagpur d, Osmania d, Patna d, Post-graduate Research Inst. in Medicine m, Poona dm, Punjab dm, Punjabi d, Rajasthan dm, Sambalpur d, Shivaji d, Utkal d.

Anatomy: Agra m, Andhra m, Banaras m, Baroda m, Bombay m, Calcutta m, Delhi m, Dibrugarh m, Gujarat m, Indore m, Karnataka m, Kerala m, Madras m, Marathwada m, Mysore m, Osmania m, Post-graduate Research Inst. in Medicine m, Punjab m, Rajasthan m, Sambalpur m, Shivaji m, Srivenkateswara m.

Ancient Indian History, Culture and Archaeology/Indology†: Agra, Allahabad, Andhra, Banaras, Baroda, Bombay, Calcutta, Gorakhpur, Gujarat, Jabalpur, Karnataka, Kurukshetra, Lucknow, Madras, Marathwada, Mysore, Nagpur, Osmania, Punjab, Patna, Poona, Rajasthan, Ravi Shankar, Saugar, Shivaji, Vikram, Visva-Bharati. *Diploma/Certificate*: Allahabad (Archaeology), Banaras, Mysore.

Animal Husbandry: See 'Dairy Science' in this list.

Anthropology†: Allahabad, Andhra, Bombay, Burdwan, Calcutta, Delhi, Dibrugarh, Gauhati, Gujarat Vidyapith (Social Anthropology), Karnataka, Lucknow, Madras, Punjab, Poona, Punjabi (Social Anthropology), Ranchi, Ravi Shankar, Saugar, Sri Venkateswara, Utkal. *Diploma/Certificate:* Calcutta (applied anthropology), Madras, Ravi Shankar (applied anthropology and tribal welfare).

Applied Chemistry: *Master's*: Calcutta, Indore, Jabalpur, Kerala.

Applied Geology: *Master's*: Andhra, Banaras, Baroda, Dibrugarh, Jadavpur, Kharagpur, Nagpur, Osmania, Rajasthan, Ravi Shankar, Roorkee, Saugar.

Applied Physics: *Master's*: Andhra, Calcutta, Indore, Jabalpur.

Applied Sociology: Kashi Vidyapith.

Applied Statistics: *Master's*: South Gujarat.

Arabic†: Agra, Aligarh, Allahabad, Banaras, Bhopal, Bihar, Bombay (also diploma and certificate), Burdwan, Calcutta, Delhi, Gauhati, Gorakhpur, Gujarat, Jamia Millia, Jammu (certificate), Kerala, Lucknow, Madras, Nagpur, Osmania, Patna, Poona, Punjab, Rajasthan, Shivaji, Sri Venkateswara, Utkal, Visva-Bharati.

Arabic Culture & Civilization: See 'Islamic Studies' in this list.

Archaeology: See 'Ancient Indian History' in this list.

Architecture: *Bachelor's*: Bangalore, Baroda, Bhopal, Bombay, Calcutta, Delhi, Indian Inst. of Tech., Kharagpur, Jadavpur, Kerala, Madras, Nagpur, Osmania, Punjab, Roorkee. *Master's:* Banaras (arts and architecture), Baroda (town and country planning), Calcutta, Roorkee. *Diploma*: Banaras (arts and architecture), Gujarat

Architectural Engg.: *Bachelor's*. Roorkee

Assamese†: Burdwan, Dibrugarh, Gauhati

Astronomy†: Lucknow, Osmania.

Audiology and Speech Therapy: *Bachelor's*: Bombay.

Automobile Engg.: *Master's*: Bombay.

Aviation Medicine: Bangalore d.

Bacteriology†: Andhra, Bihar, Bombay, Delhi, Gujarat, Kerala, Madras, Mysore, Osmania (MD), Poona, Rajasthan.

Diploma: Punjab, Rajasthan.

Banking and Finance: Rajasthan.

Banking/Bank Administration: Aligarh, Baroda, Gujarat.

Basic Medical Sciences: Calcutta d.

Bengali†: Allahabad, Banaras, Burdwan, Calcutta, Delhi, Dibrugarh, Gauhati, Gujarat, Jadavpur, Lucknow, North Bengal, Punjab, Patna, Punjabi, Ravindra Bharati, Ranchi, Utkal, Visva-Bharati. *Diploma/Certificate:* Allahabad, Banaras, Delhi, Lucknow, Visva-Bharati.

Biochemistry†: Aligarh, Allahabad, Andhra, Banaras, Baroda, Bombay, Calcutta, Delhi, Dibrugarh (MD), J.L. Nehru Krishi, Kerala, Lucknow, Madras, Mysore, Nagpur, Osmania, Post-graduate Research Inst. in Medicine, Chandigarh, Punjab, Punjab Agri., Rajasthan, Sambalpur (MD). *Diploma:* Indian Inst. of Science, Bangalore.

Biophysics†: Banaras (MD), Bombay, Madras, Post-graduate Research Inst. in Medicine, Chandigarh, Punjab, Punjabi.

Botany†: Agra, Aligarh, Allahabad, Andhra, Annamalai, A. P. Singh, Banaras, Bangalore, Baroda, Berhampur, Bhagalpur, Bhopal, Bihar, Birla Inst. of Tech. and Science, Pilani, Bombay, Burdwan, Calcutta, Delhi, Dibrugarh, Gauhati, G. B. Pant Univ. of Agri. and Tech., Gorakhpur, Gujarat, Haryana Agri., Indore, Jabalpur, Jammu, Jiwaji, Jodhpur, Kalyani, Kanpur, Karnataka, Kerala, Kurukshetra, Lucknow, Madras, Madurai, Magadh, Marathwada, Meerut, Mysore, Nagpur, North Bengal, Osmania, Patna, Poona, Punjab, Punjabi, Rajasthan, Ranchi, Ravi Shankar, Sambalpur, Sardar Patel, Saugar, Saurashtra, Shivaji, South Gujarat, Sri Venkateswara, Udaipur, Utkal, Vikram, Visva-Bharati.

Buddhist Studies: *Master's*: Delhi.

Business Administration: *Bachelor's*: Birla Inst., of Tech. and Science, Pilani, Madurai, Rajasthan. *Master's:* Allahabad, Andhra, Birla Inst. of Tech. and Science, Pilani, Cochin, Delhi, Himachal Pradesh, Jodhpur, Lucknow, Osmania, Poona, Punjab, Punjab Agri. (agri. business administration), Punjabi, Rajasthan, Shivaji, Udaipur.

Cambodian: Banaras.

Cardiology: Bombay m, Calcutta d, Madras m, P. G. Research Inst. in Medicine m.

Cardiothoracic Surgery: P.G. Research Inst. in Medicine M.Ch.

Cartography: *Diploma:* Nagpur, Osmania, Punjab.

Ceramics Tech.: *Bachelor's:* Calcutta, Osmania, *Master's:* Banaras, Osmania.

Chemistry†: Guru Nanak, Himachal Pradesh, I.I.T. (Bombay, Delhi, Kanpur, Kharagpur, Madras), Jadavpur, Punjab Agri, Roorkee and all universities listed above under 'Bombay'.

Child Health–Paediatrics: Agra d, Aligarh d, Allahabad d, Andhra d m, Banaras d m, Bangalore d, Baroda d m, Bombay m, Calcutta d, Delhi d m, Dibrugarh d m, Gujarat d m, Indore d m, Jiwaji d, Kanpur d, Karnataka d, Kerala d m, Lucknow d, Madras d m, Madurai d m, (M.Ch.), Marathwada d m, Nagpur d, Osmania d m, Patna d, Poona d, Punjab d, Punjabi d, Rajasthan d m, Sambalpur d, Shivaji d m, Sri Venkateswara d, Utkal d.

Chinese: Allahabad, Banaras, Calcutta, Delhi, Gorakhpur, Lucknow, Punjab, Punjabi, Saugar, Varanaseya Sans. Vish., Visva-Bharati.

Civil and Hydraulic Engg.: *Master's:* Indian Institute of Science.

Coal Mining Course: Industrial Training Instt. (Chandrapur, Nagpur)

Universities marked* in the article provide instructions upto the Master's Degree (including MD) and Government Diploma. 'Tech.' stands for Technology and 'Engg for Engineering

Commerce and Business Management: *Bachelor's and Master's:* Agra, Aligarh, Allahabad, Andhra, Annamalai, A.P. Singh. Banaras, Bangalore, Baroda, Berhampur, Bhagalpur, Bhopal, Bihar, Bombay, Burdwan, Calcutta, Calicut (Master's only), Cochin (Master's only), Delhi, Dibrugarh, Gauhati, Gorakhpur, Gujarat, Indore, Jabalpur, Jammu, Jiwaji, Jodhpur, Kanpur, Karnataka, Kashmir, Kerala, Kurukshetra, Lucknow, Madras, Madurai (Bachelor's), Magadh, Marathwada, Meerut, Mysore. Nagpur, North Bengal, Osmania, Patna, Poona, Punjab, Punjabi (Bachelor's), Rajasthan, Ranchi (Bachelor's), Ravi Shankar. Sambalpur, Sardar Patel, Saugar, Saurashtra, Shivaji, South Gujarat, Sri Venkateswara (Bachelor's), Udaipur, Utkal, Vikram.

Communication Engg.: See 'Electronics' in this list.

Computer Science: *Bachelor's:* I.I.T., Kanpur. *Master's:* Bombay. *Diploma:* Bombay (c. management), I.I.T., Kharagpur, Jadavpur. *Certificate:* South Gujarat (c. programming).

Co-operation: *Master's:* Bhagalpur (rural economics and c). *Diploma:* Andhra (c. and rural studies), Baroda, Gujarat, Marathwada (co-operative management), Rajasthan, Shivaji.

Criminology and Forensic Science: Karnataka, Mysore, Saugar. *Diploma/Certificate*: Delhi (forensic sciences), Lucknow, Madras, Rajasthan, Saugar, Shivaji.

Dairy Science: *Bachelor's:* Allahabad (animal husbandry and dairying), Assam Agri. (animal husbandry), Bhagalpur, G.B. Pant Univ. of Agri. and Tech., Punjab, Punjab Agri. (animal husbandry), Punjabrao (animal husbandry), Sardar Patel. *Master's*: Allahabad, Assam Agri. (animal husbandry), Meerut (animal husbandry and dairying), Punjab, Sardar Patel, Udaipur. *Diploma*: Indian Instt. of Tech., Kharagpur.

Dance: See 'Music' in this list.

Dentistry: *Bachelor's:* Bangalore*, Bombay*, Calcutta, Gujarat*, Indore, Kerala*, Lucknow*, Madras*, Mysore*, Nagpur, Osmania, Patna, Punjab*, Punjabi. *Master's:* Universities marked*.

Dermatology: Andhra d m. Bombay m. Calcutta d. Delhi d. Gujarat m. Madras d m. Punjab d.

Dietetics/Nutrition: Baroda d. Calcutta d. Madras d. Osmania m. Punjab d.

Dogri: *Certificate*: Jammu.

Drama: *Bachelor's and Master's*: Rabindra Bharati. *Diploma*: Gujarat. Punjabi (dramatic arts). Rabindra Bharati.

Econometrics: See 'Applied Statistics' in this list.

Economics†: Agra. Aligarh, Allahabad, Andhra, Annamalai, A.P. Singh, Banaras, Bangalore, Baroda, Berhampur, Bhagalpur, Bhopal, Bihar, Birla, Bombay, Burdwan, Calcutta, Delhi, Dibrugarh, Gauhati, Gorakhpur, Gujarat, Haryana Agri. (agri. economics), Himachal Pradesh (agri. economics), Indore, Jabalpore, Jadavpur, Jamia Millia Islamia, Jammu, Jiwaji, Jodhpur, Kalyani, Kanpur, Karnataka, Kashi Vidyapith, Kerala, Kurukshetra, Lucknow, Madras, Madurai, Marathwada, Meerut, Mysore, Nagpur, North Bengal, Osmania, Patna, Poona, Punjab, Punjab Agri., Punjabi, Rajasthan, Ranchi, Ravi Shankar, Sambalpur, Sardar Patel, Saugar, Saurashtra, Shivaji, S.N.D.T. Women's, South Gujarat, Sri Venkateswara, Udaipur, Utkal, Varanaseya Sanskrit Vish., Vikram, Visva-Bharati.

Economics Applied: *Master's*: Andhra, Utkal.

Education: *B Ed/B T:* Agra*, Aligarh*, Andhra*, Annamalai*, A.P. Singh, Banaras*, Bangalore*, Baroda*, Berhampur, Bhagalpur, Bhopal, Bihar, Bombay*, Burdwan, Calcutta*, Delhi*, Dibrugarh, Gauhati*, Gorakhpur*, Gujarat*, Gujarat Vidyapith*, Himachal Pradesh*, Indore*, Jabalpur*, Jammu, Jiwaji*, Jodhpur, Kalyani*, Kanpur*, Karnataka*, Kerala*, Kurukshetra*, Lucknow*, Madras*, Madurai*, Marathwada*, Meerut*, Mysore*, Nagpur*, North Bengal, Osmania*, Patna*, Poona*, Punjab*, Punjabi*, Rajasthan*, Ranchi*, Ravi Shankar*, Sambalpur, Sardar Patel*, Saugar*, Saurashtra*, Shivaji*, S.N.D.T. Women's*, South Gujarat*, Sri Venkateswara*, Udaipur*, Utkal*, Varanaseya Sanskrit Vish., Vikram, Visva-Bharati*. *Master's:* Allahabad and universities marked*. *Diploma:* Baroda, Bihar, Bombay, Gauhati, Gujarat, Jabalpur, Kalyani, Karnataka, Lucknow, Nagpur, Patna, Poona, Rajasthan, Sardar Patel, Shivaji.

Educational Administration: *Diploma/Certificate:* Baroda, Nagpur, Sardar Patel (school administration).

Educational Guidance & Counselling: *Diploma/Certificate*: Baroda, Punjab, Sardar Patel.

Educational Measurement & Evaluation: Nagpur d.

Educational & Vocational Guidance: Nagpur d.

Education & Community Psychology: *Master's*: Punjabi.

Electrology: See 'Medical Radiology & Electrology' in this list.

Electronics & Communication: Roorkee (B.E., M.E.), Kurukshetra (B.Sc.).

Endocrinology: P. G. Research Inst. in Medicine m.

Engineering (Chemical): *Bachelor's*: Bombay, Burdwan, Gujarat, I.I.T. (Bombay*, Delhi*, Madras*), Jadavpur*, Madras*, Nagpur*, Osmania*, Punjab*, Roorkee, Sambalpur* (see also oil technology). *Master's:* Indian Inst. of Science, Ranchi and Universities marked*.

Engineering, (Civil, Electrical or Mechanical): *Bachelor's*: Agra (electrical/mechanical), Aligarh*, Allahabad*, Andhra*, Annamalai*, A. P. Singh, Banaras*, Bangalore*, Baroda*, Bhagalpur — Bhopal (electrical, civil, mechanical), Bihar, Birla*, Bombay*, Burdwan, Calcutta*, Delhi*, Dibrugarh, Gauhati, G. B. Pant Univ. of Agri. and Tech., Gorakhpur, Gujarat*, I.I.T. (Bombay*, Delhi*, Kanpur*, Kharagpur*, Madras*), Indian Institute of Science (electrical communication, electrical and mechanical), Indore*, Jabalpur*, Jadavpur*, Jiwaji, Jodhpur*, Karnataka, Kerala*, Kurukshetra*, Madras*, Madurai, Marathwada*, Mysore*, Nagpur, North Bengal*, Osmania*, Patna, Poona*, Punjab, Punjabi, Rajasthan*, Ranchi*, Ravi Shankar, Roorkee*, Sambalpur*, Sardar Patel*, Saurashtra, Shivaji*, South Gujarat, Sri Venkateswara*, Vikram. *Master's:* Indian Institute of Science and universities marked*. *Diploma:* Aligarh (civil, electrical, mechanical).

English†: Rabindra Bharati and all universities listed above under 'Economics'.

English as a Foreign Language: *Diploma:* Jiwaji, Calicut, Madurai (teaching of English), Shivaji (teaching English as a foreign language).

E. N. T.: P. G. Research Inst. in Medicine m.

Fermentation Tech.: *Master's: Bombay.*

Fibre Science: I.I.T., Delhi.

Financial and Industrial relations: Shivaji.

Fine Arts: (See also 'Painting'). *Bachelor's:* Banaras, Baroda, Kerala, Nagpur, Punjab, S.N.D.T., Visva-Bharati (History of Art). *Master's:* Baroda, Madras, Punjab. *Diploma/Certificate:* Allahabad (applied arts and crafts for women), Banaras, Gujarat, Rabindra Bharati, Visva-Bharati.

Fisheries Tech: See 'Marine Biology' in the list.

Folklore Studies: *Diploma:* Rajasthan.

Food Tech.: *Bachelor's*: Andhra, Bombay, Jadavpur. *Master's:* Bombay, Jadavpur, Mysore.

Forensic Medicine Science: (See also Criminology): Bombay d, Mysore d m, Osmania d m, Sambalpur m.

French: Agra, Aligarh, Allahabad, Annamalai, Banaras, Bangalore, Baroda, Bombay, Burdwan (also bachelor's), Calcutta, Delhi, Gauhati, Jadavpur, Jodhpur, Karnataka, Kurukshetra, Lucknow, Madras; Madurai, Mysore, Nagpur, Osmania, Poona. Punjab, Punjabi, Rajasthan, Udaipur, Utkal, Varanaseya Sans. Vish., Visva-Bharati. *Master's:* Agra, Annamalai, Bombay, Calcutta, Karnataka, Madras, Madurai, Poona.

Furnaces & Refractories Tech.: *Master's:* Madras, Osmania

Gastro-Enterology: P.G. Research Ist. in Medicine m.

General Medicine: P.G. Research Inst. in Medicine m.

Genito-Urinary Surgery: P.G. Research Inst. in Medicine m.

Universities marked* in the article provide instructions upto the Master's Degree (including MD) and Government Diploma. 'Tech.' stands for Technology and 'Engg for Engineering.

Geography†: Agra, Aligarh, Allahabad, A.P. Singh, Banaras, Baroda, Bhagalpur, Bombay, Burdwan, Calcutta, Delhi (Human Geography also), Dibrugarh, Gauhati, Gorakhpur, Gujarat, Indore, Jabalpur, Jamia Millia, Jiwaji, Jodhpur, Kanpur, Karnataka, Kurukshetra, Madras, Mysore, Nagpur, North Bengal, Osmania, Punjab, Patna, Poona, Punjabi, Rajasthan, Ranchi, Ravi Shankar, Sardar Patel, Saugar, Saurashtra, Shivaji, S.N.D.T., Udaipur, Utkal, Vikram, Visva-Bharati.

Geology†: Agra, Aligarh, Andhra, Annamalai, A.P. Singh, Banaras, Bangalore, Baroda, Bombay, Burdwan, Calcutta, Delhi Dibrugarh, Gauhati, Gujarat, I. I. T. (Bombay, Kharagpur), Jabalpur, Jadavpur, Jammu, Karnataka, Kerala, Lucknow, Madras, Meerut, Mysore, Nagpur, Osmania, Patna, Poona, Punjab, Rajasthan, Ranchi, Ravi Shankar, Roorkee, Saugar, Shivaji, Sri Venkateswara, Udaipur, Utkal, Vikram.

Geophysics†: *Bachelor's:* Andhra, Banaras, Kharagpur (also Diploma), Osmania, Roorkee. *Master's:* Andhra, Kharagpur

German: Jadavpur (also bachelor's), Kerala, Marathwada, Sardar Patel, South Gujarat, Vikram and Universities named under 'French' above except, Annamalai, Jodhpur, Kurukshetra. *Master's:* Agra, Banaras, Bombay, Calcutta, Karnataka, Poona.

Glass. Tech.: *Master's:*. Banaras.

Greek†: Agra, Allahabad, Bombay, Burdwan, Calcutta.

Gujarati†: Allahabad, Baroda, Bombay, Delhi, Gujarat, Gujarat Vidyapith, Sardar Patel, Saurashtra, S.N.D.T., South Gujarat. *Diploma/Certificate:* Agra, Allahabad, Delhi.

Gynaecology/Obstetrics: Agra d m, Aligarh d, Allahabad d, Andhra d m, Banaras m, Bangalore d, Baroda d m, Bihar d, Bombay m, Calcutta d m, Delhi d m, Dibrugarh d m, Gujarat d m, Indore m, Jiwaji d, Kanpur d, Karnataka d m, Kerala d m, Lucknow d, Madras d m, Madurai d, Marathwada m, Nagpur d m, Osmania d m, Patna d, Poona d m, Post-Graduate Research Inst. in Medicine m, Punjab d m, Punjabi d m, Rajasthan Sambalpur m, Shivaji d m, Sri Venkateswara d, Utkal d.

Hebrew†: Agra, Allahabad, Bombay, Burdwan, Calcutta, Madras, Punjab.

High Voltage Engg.: *Master's:* Indian Institute of Science.

Highway & Marine Engg. Structures: *Bachelor's:* Andhra. *Master's:* Karnataka.

Hindi†: Cochin, Calicut, Gujarat Vidyapith, Guru Nanak and all Universities listed above under 'Economics' except Berhampur Dibrugarh, Jadavpur, Sambalpur.

History†: Rabindra Bharati and all Universities listed above under 'Economics' except Haryana Agri., Punjab Agri.

Home Science (Home Economics, Home Arts): *Bachelor's:* Agra, Allahabad, Andhra,* Bangalore, Baroda*, Bhopal,* Bombay, Delhi*, G. B. Pant University of Agri. and Tech., Gujarat,* Indore, Jabalpur,* Madras,* Madurai, Karnataka,* Nagpur,* Punjab,* Punjab Agri.,* Saugar, Sardar Patel, S.N.D.T.,* Udaipur. *Master's:* Sri Venkateswara and Universities Marked.* *Diploma:* Calcutta, G. B. Pant University of Agri. and Tech.

Horticulture: *Bachelor's:* Bhagalpur, Haryana Agri. *Master's.* Allahabad, Assam Agri., Banaras, Bhagalpur, Haryana Agri., J. L. Nehru Krishi, Kalyani, Madras, Meerut, Nagpur, Udaipur. *Diploma:* Madras.

Hygiene: Bombay (doctorate).

Indian Philosophy & Religion†: Banaras, Kurukshetra, Madras, Visva Bharati. *Diploma/Certificate:* Allahabad, Banaras (Indian Philosophy and Culture).

Indology: See 'Ancient Indian History' in this list.

Industrial Electronics: *Master's*: Kharagpur

Industrial Health: Calcutta d, Gujarat d.

Industrial Management: Allahabad, Bombay, Cochin, Delhi, Indian Inst. of Science, I.I.T. (Madras), Bangalore, Kerala, Madras, South Gujarat.

Intermediates and Dyes Tech. (Pigments, paints and varnishes plastics): *Bachelor's and Master's:* Bombay.

Internal Combustion Engg.: *Master's*: Indian Institute of Science.

Islamic Studies (Arab Culture and Civilization†): Aligarh, Bombay, Calcutta, Gujarat, Lucknow, Osmania.

Italian: Calcutta, Delhi; *Master's*: Agra.

Japanese: Banaras, Visva-Bharati.

Journalism: *Bachelor's:* Mysore, Nagpur, Osmania, Punjab. *Master's:* Calcutta, Mysore. *Certificate/Diploma:* Calcutta, Calicut, Gauhati, Gujarat, Jabalpur, Madras, Poona, Punjab, Ravi Shankar, Shivaji.

Kannada†: Bangalore, Bombay, Karnataka, Madras, Mysore, Osmania, Poona, Shivaji. *Diploma/Certificate:* Annamalai, Bangalore, Karnataka, Madras.

Kashmiri: *Certificate:* Jammu.

Labour/Social Welfare: *Degree/Diploma*: Berhampur, Bhagalpur, Bombay, Calcutta, Gujarat, Patna, Punjab (industrial relations and labour welfare), Rajasthan, Ravi Shankar (industrial sociology, labour welfare and labour administration), Udaipur (labour law, labour welfare and personnel management), Utkal (social and labour welfare).

Laryngology & Otology: See 'Otorhinolaryngology' in this list.

Latin†: Agra, Allahabad, Bihar, Bombay, Burdwan, Calcutta, Gauhati, Madras, Nagpur, Poona, Punjab, Shivaji, Utkal.

Law: , *Bachelor's*: Agra,* Aligarh,* Allahabad,* Andhra,* A.P. Singh,* Banaras,* Bangalore,* Baroda,* Berhampur, Bhagalpur, Bhopal, Bihar,* Bombay,* Calcutta,* Delhi,* Dibrugarh,* Gauhati,* Gorakhpur,* Gujarat,* Himachal Pradesh,* Indore,* Jabalpur,* Jammu, Jiwaji,* Jodhpur,* Kanpur, Karnataka,* Kerala,* Kurukshetra, Lucknow,* Madras,* Magadh, Marathwada,* Meerut,* Mysore,* Nagpur,* Osmania,* Patna,* Poona,* Punjab,* Punjabi, Rajasthan,* Ranchi, Ravi Shankar, Sambalpur,* Sardar Patel, Saugar,* Saurashtra,* Shivaji, South Gujarat,* Sri Venkateswara, Udaipur,* Utkal,* Vikram.* *Master's:* Universities marked* and Cochin. *Diploma:* Gorakpur, Gujarat (labour law and practice; and also taxation law and practice), Jodhpur (labour law), Rajasthan (legislative res. and drafting; also taxation laws and practice), Shivaji (income tax, sales tax, labour laws, insurance and banking law, cooperation law, mercantile law), Udaipur (labour law, labour welfare and personnel management).

Leather Tech.: *Bachelor's*: Calcutta, Madras. *Master's*: Madras.

Library Science: *Bachelor's*: Aligarh, Andhra, A. P. Singh, Banaras, Baroda, Bombay, Burdwan, Delhi, Gauhati, Gujarat, Jadavpur, Jiwaji, Karnataka, Kerala, Kurukshetra, Lucknow, Madras, Marathwada, Mysore, Nagpur, Osmania, Punjab, Punjabi, Rajasthan, Saugar, Shivaji, S.N.D.T., Sri Venkateswara, Vikram. *Master's:* Andhra, Aligarh, Banaras, Bombay, Delhi, Karnataka, Madras, Osmania, Vikram. *Diploma/Certificate:* Burdwan, Calcutta, Madras, Madurai, Shivaji, S.N.D.T.. Varanaseva Sans. Vish.

Linguistics†: Agra, Aligarh, Annamalai, Baroda, Bombay, Burdwan, Calcutta, Delhi, Gujarat, Gujarat Vidyapith, Jabalpur, Karnataka, Kerala, Kurukshetra, Lucknow, Mysore, Osmania, Poona, Ravi Shankar, Saugar, Shivaji, Visva-Bharati. *Diploma/Certificate:* Aligarh, Annamalai, Baroda (applied linguistics), Delhi, Karnataka, Kerala, Madurai, Osmania, Punjabi, Ravi Shankar (Phonetics).

Local Self Govt.: *Diploma*: Nagpur.

Maithili†: Bihar, Patna.

Malayalam†: Calicut, Delhi, Kerala, Madras, *Diploma/Certificate*: Aligarh, Annamalai, Madras.

Management Science: Bombay, Madras.

Marathi†: Agra, Allahabad, Baroda, Bombay, Gujarat, Indore, Jabalpur, Jiwaji, Karnataka, Lucknow, Marathwada, Nagpur, Osmania, Poona, Saugar, S.N.D.T., Vikram. *Diploma/Certificate:* Agra, Allahabad, Banaras, Delhi, Lucknow.

Marine Biology & Fisheries†: Calicut, Univ. of Agri. Sciences (Bangalore) (Fisheries Science), Annamalai, Cochin (Oceanography also, only master's). *Diploma:* Shivaji (Marine Biology),

---

Universities marked* in the article provide instructions upto the Master's Degree (including MD) and Government Diploma. 'Tech.' stands for Technology and 'Engg.' for Engineering

Univ. of Agri. Sciences, Bangalore (fish processing technology).

Material Science Engg.: *Bachelor's*: I.I.T., Kanpur.

Maternity & Child Welfare: Calcutta d.

Mathematics†: Guru Nanak, Haryana Agri., Himachal Pradesh, I.I.T. (Bombay, Delhi, Kanpur, Kharagpur, Madras), Jadavpur, Jamia Millia, Jammu, Punjab Agri., Roorkee and all universities listed above under Botany.

Mathematics applied†: (see also 'Computer Science' above). *Master's:* Andhra, Calcutta, Indore, Jabalpur, Roorkee.

Medical Laboratory Tech.: Bombay d.

Medical Pathology & Bacteriology: Andhra m, Punjab d, Rajasthan m.

Medical Radiodiagnosis/Radiotherapy: Aligarh d, Banaras d, Baroda d, Bombay d, Calcutta d, Delhi d, Karnataka d, Madurai d, Nagpur d, Patna d, Poona d, Punjab d, Rajasthan d.

Medical Radiological Diagnosis: Nagpur d, Rajasthan d.

Medical Radiological Therapy: Rajasthan d.

Medical Radiology: Aligarh d, Baroda d, Karnataka d, Madurai d, Punjab d, Patna d.

Medical Radiology & Electrology: Agra d, Allahabad d, Baroda d, Bombay d, Gujarat d, Jiwaji d, Kanpur d, Kerala d, Lucknow d, Osmania d, Poona d.

Medicine (MBBS, MD and MS): Agra, Aligarh, Allahabad, Andhra, A. P. Singh, Banaras, Bangalore, Baroda, Bhagalpur (only MBBS), Bihar, Bombay, Calcutta, Delhi, Dibrugarh, Gauhati,* Gujarat, Indore, Jabalpur, Jiwaji, Kanpur, Karnataka, Kerala, Lucknow, Madras, Madurai, Marathwada, Meerut,* Mysore, Nagpur, North Bengal,* Osmania, Patna, Poona, Punjab, Punjabi, Rajasthan, Ranchi,* Ravi Shankar,* Sambalpur, Saurashtra, Shivaji, South Gujarat,* Sri Venkateswara, Utkal.

Medicine (Ayurvedic/Indian): *Bachelor's*: Andhra, Bangalore, Gujarat, Indore, Jabalpur, Jammu, Jiwaji, Karnataka, Kerala, Madras, Madurai, Marathwada, Mysore, Nagpur, Osmania, Poona, Rajasthan, Ravi Shankar, Saugar. *Dyam:* Banaras.

Medicine (Unani): *Bachelor's*: Aligarh, Osmania.

Metallurgical Engg.: *Bachelor's*: Banaras,* Baroda, Burdwan, Calcutta,* I. I. T. (Bombay,* Kanpur,* Kharagpur,* Madras*), Jadavpur, Madras, Nagpur, Punjab, Poona,* Rajasthan, Ravi Shankar, Roorkee,* Sambalpur. *Master's:* Andhra (ore-dressing), Ranchi and Universities marked.*

Metallurgy: *Bachelor's and Master's*: Indian Institute of Science, Roorkee.

Meteorology: *Master's*: Andhra.

Microbiology†: Annamalai, Banaras, Baroda, Bombay, Delhi, Gujarat, Haryana Agri., Karnataka, Madras (MD), Punjab, Punjab Agri., P. G. Research Inst. in Medicine, Rajasthan, Saurashtra, South Gujarat.

Middle Eastern Languages: Mysore.

Military Science†: Agra, Allahabad (defence studies), Gorakhpur, Jiwaji, Kurukshetra, Lucknow, Meerut, Poona, Punjab, Punjabi.

Mining Engg.: *Bachelor's:* Banaras, Calcutta, I. I. T. Kharagpur, Jodhpur, Madras, Osmania, Ravi Shankar, *Master's:* Banaras, I. I. T. Kharagpur, Jodhpur.

Mongolian: Banaras.

Musicology: *Diploma:* Banaras, Baroda, Calcutta.

Music: *Bachelor's:* Annamalai, Banaras, Baroda, Calcutta, Delhi, Indore, Kerala, Madurai, Mysore, Rabindra Bharati (also dance), S.N.D.T., Sri Venkateswara, Visva-Bharati. *Master's:* Banaras, Baroda, Delhi, Indira Kala Sangit (also dance), Indore, Jabalpur, Kerala, Madras, Mysore, Nagpur, Punjab, Ravindra Bharati (also dance), Rajasthan, Sri Venkateswara. *Diploma/Certificate:* Agra (also Indian music), Allahabad (Indian Music), Banaras, Baroda, Bombay (Hindustani vocal classical), Burdwan, Delhi (Hindustani music or Karnataka music), Gujarat (also dancing), Indira Kala Sangit (also dance), Madras, Patna, Poona, Punjabi, Rabindra Bharati (also dance), Saugar (military music), Saurashtra, Varanaseya Sans. Vish., Visva-Bharati (music, dance and vocal music).

Naval Architecture: *Bachelor's:* Kharagpur.

Nephrology: Madras m, P. G. Research Inst. in Medicine m.

Neurology: Bombay m, Madras m, National Instt. of Mental Health & Neuro Sciences, Bangalore.

Neurosurgery: Bangalore m, Bombay m, Madras m, P. G. Research Inst. in Medicine m., National Instt. of Mental Health & Neuro Sciences, Bangalore.

Nursing: *Bachelor's:* Bombay, Delhi, Gujarat, Indore, Kerala, Madras, Osmania, Poona, Punjab, Rajasthan, S.N.D.T. *Master's:* Delhi, Madras.

Nutrition: See 'Dietetics' in this list.

Occupational Therapy: *Bachelor's:* Bombay, Nagpur.

Oceanography: *Master's:* Andhra, Kerala.

Oils, Fats and Waxes Tech.: *Bachelor's:* Bombay, Nagpur, Osmania.

Operational Research: *Master's:* Delhi.

Opthalmology (Ophthalmic Medicine & Surgery): Agra d m, Aligarh d, Allahabad d, Andhra d m, Banaras d m, Bangalore d, Baroda d, Bombay m, Calcutta m, Delhi d m, Dibrugarh d m, Gujarat d m, Indore d m, Jiwaji d, Kanpur d, Karnataka d, Kerala d m, Lucknow d, Madras d m, Madurai d, Marathwada d m, Mysore d, Nagpur d, Osmania d m, Patna d, Poona d m, Punjab d m, P. G. Research Inst. in Medicine m, Punjabi d m, Rajasthan d m, Sambalpur m, Saurashtra d, Shivaji d m, Shri Venkateswara d, Utkal d m.

Oriental Learning: *Bachelor's:* Bihar, Osmania, Sambalpur, Utkal. *Master's:* Bihar, Rajasthan. *Diploma:* Nagpur, Osmania.

Oriya†: Berhampur, Burdwan, Sambalpur, Utkal Visva-Bharati. *Diploma/Certificate:* Visva-Bharati.

Orthopaedic Surgery: Agra d, Aligarh d, Allahabad d, Andhra m, Banaras d m, Baroda m, Bombay m, Delhi m, Gujarat m, Kanpur d, Karnataka d m, Kerala d m, Lucknow d, Madras d m, Madurai d, Poona d m, P. G. Research Inst. in Medicine m, Rajasthan d m. Sambalpur d, Shivaji d m, Utkal d.

Otorhinolaryngology: Aligarh d, Allahabad d, Andhra d m, Banaras d m, Baroda d m, Bombay m, Calcutta d, Delhi d m, Dibrugarh d m, Gujarat d m, Indore m, Kanpur d, Karnataka d m, Kerala d, Lucknow d, Madras d m, Madurai d, Osmania d, Patna d, Poona m, Punjab d, Rajasthan d m, Sambalpur m, Shivaji d m, Sri Venkateswara d, Utkal d.

Paediatrics: See 'Child Health' in this list.

Painting: *Bachelor's:* Indira Kala Sangit, Meerut, S.N.D.T., Visva-Bharati. *Master's :* Agra, Indira Kala Sangit, Meerut, Rajasthan, Udaipur, Vikram. *Diploma/Certificate:* Allahabad, Annamalai, Banaras, Baroda, Gujarat, Indira Kala Sangit Rabindra Bharati.

Paints & Varnishes Tech.: *Bachelor's:* Osmania.

Pali†: Banaras, Baroda, Bombay, Burdwan, Calcutta, Gujarat, Jabalpur, Kurukshetra, Marathwada, Nagpur, Patna, Poona, Shivaji, Visva-Bharati. *Diploma/Certificate :* Lucknow, Visva-Bharati.

Pathology: Agra m, Andhra m, Banaras m, Baroda m, Bombay m, Delhi m, Dibrugarh d m, Gujarat m, Indore m, Karnataka m, Kerala m, Madras m, Marathwada m, Mysore m, Osmania m, Poona m, P. G. Research Inst. in Medicine m, Punjab m, Punjabi m, Rajasthan m, Sambalpur m, Shivaji m.

Pathology Clinical: Agra d, Aligarh d, Allahabad d, Andhra d, Banaras d, Bangalore d, Baroda d, Bihar d, Indore d, Kanpur d, Karnataka d, Kerala d, Lucknow d, Madras d, Osmania d, Patna d, Poona d, Rajasthan d, Shivaji d, Sri Venkateswara d, Utkal d.

Pearl Culture: Central Marine Fisheries Research Instt., Tuticorin 628001.

Persian†: Agra, Aligarh, Allahabad, Banaras, Baroda, Bihar, Bombay (also certificate), Burdwan, Calcutta, Delhi, Gauhati, Gorakhpur, Gujarat, Jabalpur, Jamia Millia, Jammu (certificate), Karnataka, Lucknow, Madras, Mysore, Nagpur, Osmania, Punjab, Patna, Poona, Punjabi, Rajasthan, Ravi Shankar, Saugar,

---

Universities marked* in the article provide instructions upto the Master's Degree (including MD) and Government Diploma. 'Tech.' stands for Technology and 'Engg' for Engineering.

Saurashtra, Shivaji, Sri Venkateswara, Utkal, Visva-Bharati.

Petro-chemicals Tech.: *Master's:* Kharagpur.

Pharmaceuticals and Fine Chemicals Tech.: *Bachelor's:* Bombay, Osmania. *Master's :* Bombay, Osmania.

Pharmacology: Agra m, Andhra m, Banaras m, Baroda m, Bombay m, Delhi m, Dibrugarh m, Gujarat m, Indore m, Karnataka m, Kerala m, Madras m, Marathwada m, Mysore m, Osmania m, Poona m, P. G. Research Inst. in Medicine m, Punjab m, Punjabi m, Rajasthan m, Sambalpur m.

Pharmacy: *Bachelor's:* Andhra,* Banaras,* Bangalore, Birla,* Bombay,* Gujarat,* Jadavpur,* Jodhpur, Kerala, Madras,* Madurai, Mysore, Nagpur,* Punjab,* Saugar,* Shivaji. *Master's :* Universities marked.* *Diploma/Certificate :* Gujarat, Poona, Punjab.

Philosophy: Gujarat Vidyapith, Rabindra Bharati and all Universities listed above under 'Economics' except Berhampur, Birla, Himachal Pradesh, South Gujarat.

Photogrammetric Tech.: *Master's:* Roorkee.

Physical Education: *Bachelor's*: Bangalore, Jiwaji, Kalyani, Madras, Madurai, Punjab, Punjabi, Ravi Shankar, Shivaji. *Master's:* Jiwaji, Madras, Punjab, Punjabi. *Diploma :* Andhra, Banaras, Bangalore, Gujarat, Jabalpur, Jiwaji, Kalyani, Lucknow, Madras, Nagpur, Osmania, Punjabi, Shivaji (also certificates).

Physics†: Calicut, Cochin, Himachal Pradesh, Indian Inst. of Science, I.I.T. (Bombay, Delhi, Kanpur, Kharagpur, Madras), Jadavpur, Jammu, Roorkee and all Universities listed above under 'Botany' except Haryana Agri.

Physiology: Agra m, Andhra m, Banaras m, Baroda m, Bombay m, Calcutta m, Delhi m, Dibrugarh m, Gujarat m, Indore m, Karnataka m, Kerala m, Madras m, Marathwada m, Mysore m, Osmania m, Punjab m, Punjabi m, Rajasthan m, Sambalpur m, Shivaji m, Sri Venkateswara m.

Physiotherapy: *Bachelor's:* Baroda, Bombay (Physical Therapy).

Planning: *Master's:* Calcutta (City and Regional Planning), Kharagpur (Town and Regional Planning). *Diploma :* Calcutta (Town and Country Planning). *Bachelor's :* Madras.

Plastic Surgery: Bombay m, Madras m, Nagpur m, P.G. Research Inst. in Medicine m.

Plastic & Rubber Tech.: *Bachelor's:* Bombay, Calcutta.

Polish: Delhi.

Political Science†: All Universities listed under 'Economics' except Haryana Agri., Punjab Agri. and South Gujarat.

Portuguese: Bombay (Bachelor's and Master's).

Prakrit†: Allahabad, Baroda, Bihar, Gujarat, Jabalpur, Kurukshetra, Lucknow, Nagpur, Visva-Bharati. *Diploma:* Mysore.

Preventive & Social Medicine: Banaras m, Baroda m, Bombay m, Gujarat m, Indore m, Marathwada m, Poona m, Rajasthan m, Sambalpur m, Shivaji m.

Psychiatry: P.G. Research Inst. in Medicine m.

Psychiatric Nursing: National Instt. of Mental Health & Neuro Sciences, Bangalore.

Psychiatric Social Work: Bangalore m, National Instt. of Mental Health & Neuro Sciences, Bangalore.

Psychological Medicine: Bangalore d m, Bombay d m, Calcutta d, Gujarat d, Karnataka d, Mysore d, Rajasthan d, National Instt. of Mental Health & Neuro Sciences, Bangalore.

Psychology†: Guru Nanak and all Universities listed under 'Economics' except Berhampur, Birla, Dibrugarh, Haryana Agri., Himachal Pradesh, Jadavpur, Jammu, Jiwaji, Punjab Agri., Sambalpur, Varanaseya Sans. and Visva-Bharati, National Instt. of Mental Health & Neuro Sciences, Bangalore.

Psychology, Clinical: Banaras d, Kerala d, National Instt. of Mental Health & Neuro Sciences, Bangalore

Public Administration†: Aligarh, Andhra, Karnataka, Lucknow, Madras, Marathwada, Mysore, Nagpur, Osmania, Patna, Pune, Punjab, Punjabi, Rajasthan, Saugar, South Gujarat, Utkal. *Diploma:* Aligarh, Gorakhpur, Lucknow, Osmania, Patna.

Public Health: Andhra d, Bombay d, Calcutta d, Gujarat d, Kerala d, Lucknow d, Marathwada d, Osmania (Bachelor's), Patna d, Poona d, Rajasthan d, Shivaji d.

Public Health Engg.: *Master's:* Bangalore, Calcutta, I.I.T. (Kharagpur), Nagpur, Roorkee.

Punjabi†: Delhi, Gauhati, Guru Nanak, Kurukshetra, Punjab, Punjabi. *Diploma/Certificate*: Allahabad, Jammu, Punjabi.

Radar Engg.: *Master's:* I.I.T., Delhi, I.I.T., Madras.

Radiation Medicine: Bombay d, Delhi d.

Radio-Physics & Electronics: Calcutta.

Radiodiagnosis: Gujarat m, Madras d m, P.G. Research Instt. in Medicine m, Sambalpur d, Utkal d.

Radiology/Radiological Medicine: Agra m, Baroda m, Bombay m, Dibrugarh m, Gujarat m, Jiwaji d m, Madras d, Punjab m, Poona m, Rajasthan m.

Radiotherapy: Gujarat m, Karnataka d, Madras d m, P. G. Research Instt. in Medicine m, Utkal d.

Religion: See 'Indian Philosophy' in this list.

Rocketry: See 'Space Engg.' in this list.

Rubber Tech.: *Bachelor's:* Bombay, Calcutta.

Rural Studies: *Master's:* South Gujarat.

Russian: Agra, Aligarh, Allahabad, Andhra, Banaras, Baroda, Bombay, Calcutta, Delhi, Gauhati, Indore, Jadavpur, Karnataka, Kerala, Lucknow, Madras, Madurai, Mysore, Nagpur, Osmania, Poona, Punjab, Rajasthan, Shivaji, Utkal, Varanaseya Sanskrit Vish., Vikram.

Sanitary Science: *Bachelor's:* Madras.

Sanskrit†: Rabindra Bharati and all Universities listed above under 'Economics' except Berhampur, Haryana Agri., Punjab Agri., and Sambalpur.

Sculpture: *Bachelor's:* Visva-Bharati. *Diploma:* Banaras, Baroda, Gujarat.

Serbo-Croatian: Delhi.

Sillicate Tech.: *Bachelor's:* Banaras. *Master's:* Banaras.

Sindhi†: Bombay, Gujarat, Poona, Punjab, Punjabi.

Social Service: *Diploma/Certificate:* Allahabad, Kerala, Madras.

Social Welfare: See 'Labour' in this list.

Social Work: *Bachelor's:* Bombay, Kashi Vidyapith, Mysore, Visva-Bharati. *Master's:* Agra, Andhra, Baroda, Bombay, Delhi, Gujarat Vidyapith, Delhi, Indore, Karnataka, Kashi Vidyapith, Kerala, Lucknow, Madras, Mysore, Shivaji, Udaipur. *Diploma/Certificate:* Calcutta, Nagpur, Poona, Allahabad, Kerala, Madras.

Sociology†: Agra, Aligarh, Andhra, Annamalai; A.P. Singh, Banaras, Bangalore, Baroda, Bhagalpur, Bhopal, Bombay, Calcutta, Delhi, Dibrugarh, Gorakhpur, Gujarat, Haryana Agri., Indore, Jabalpur, Jiwaji, Jodhpur, Kalyani, Kanpur, Kashi Vidyapith, Kerala, Lucknow, Madras, Marathwada, Meerut, Mysore, Nagpur, Osmania, Patna, Poona, Punjab, Punjab Agri., Punjabi, Rajasthan, Ravi Shankar, Sardar Patel, Saugar, Saurashtra, Shivaji, S.N.D.T., South Gujarat, Sri Venkateswara, Udaipur, Utkal, Vikram, Visva-Bharati

Space Engg. & Rocketry: *Master's:* Ranchi

Spanish: Delhi, Utkal.

Speech Therapy: *Bachelor's:* Bombay.

Statistics†: Agra, Aligarh, Allahabad, Andhra, Annamalai, Banaras, Bangalore, Baroda, Bhagalpur, Bombay, Burdwan, Calcutta, Delhi, Dibrugarh, Gauhati, G.B. Pant University of Agri. and Tech., Gujarat, Guru Nanak, Haryana Agri., I.I.T. Kanpur, Indore, Kanpur, Karnataka, Kerala, Lucknow, Madras, Meerut, Mysore, Nagpur, Osmania, Patna, Poona, Punjab, Punjab Agri., Rajasthan, Sardar Patel, Shivaji, South Gujarat, Sri Venkateswara, Utkal,

---

Universities marked* in the article provide instructions upto the Master's Degree (including MD) and Government Diploma. 'Tech.' stands for Technology and 'Engg.' for Engineering

Vikram. *Diploma/Certificate:* Aligarh, Andhra (applied statistics), Gauhati, Gujarat, Karnataka, Kurukshetra, Madras, Punjab (also economic statistics), Punjabi.

Surgery: P. G. Research Inst. in Medicine m.

Swahili: Delhi.

Syriac†: Burdwan, Calcutta, Madras.

Tamil†: Allahabad, Annamalai, Banaras, Delhi, Kerala, Lucknow, Madras, Madurai, Osmania, Punjab, Punjabi, Sri Venkateswara, Utkal. *Diploma/Certificate:* Agra, Aligarh, Allahabad, Annamalai (teaching Tamil), Banaras, Lucknow, Madras, Punjab, Udaipur.

Telecommunication: *Bachelor's* : Andhra, Jadavpur, Karnataka, Osmania, Poona. *Master's*: Jadavpur, Poona.

Telugu†: Aligarh, Andhra, Annamalai, Madras, Osmania, Sri Venkateswara. Utkal. *Diploma/Certificate:* Agra, Aligarh, Allahabad, Annamalai, Banaras, Madras.

Textile Chemistry: *Bachelor's & Master's*: Bombay.

Textile Engg.: *Master's*: Baroda.

Textile Tech.: *Bachelor's & Master's*: Bangalore, Baroda, Bombay, Burdwan, Calcutta, I.I.T. Delhi, Kanpur, Madras, Punjab.

Thai: Banaras.

Theology: (see also 'Islamic studies' and 'Indian Philosophy and Religion'). *Diploma*: Aligarh.

Tibetan: Banaras, Calcutta, Gorakhpur, Lucknow, Punjab, Punjabi, Saugar, Varanaseya Sanskrit Vish., Visva-Bharati.

Tubercular Diseases/Tuberculosis: Agra d, Andhra d, Baroda d, Bombay m, Calcutta d, Delhi d, Gujarat m, Indore d, Karnataka d, Lucknow d, Madras d, Nagpur d, Osmania d, Patna d, Poona m, Rajasthan d, Sambalpur d, Utkal d.

Turkish: Aligarh.

Urdu†: Agra, Aligarh, Annamalai, Allahabad, Banaras, Baroda, Bhopal, Bihar, Bombay, Burdwan, Calcutta, Delhi, Gauhati, Gorakhpur, Gujarat, Jabalpur, Jammu, Karnataka, Kerala, Lucknow, Madras, Marathwada, Mysore, Nagpur, Osmania, Patna, Poona, Punjab, Rajasthan, Ravi Shankar, Saugar, Shivaji, Sri Venkateswara, Udaipur, Utkal, Vikram. *Diploma/Certificate*: Aligarh, Allahabad, Delhi, Jammu, Lucknow, Madras, Visva-Bharati.

Venereal Diseases: Agra d, Andhra d, Calcutta d, Madras d m, Osmania d, Sambalpur d.

Venereology & Dermatology: *Diploma*: Baroda, Bombay, Gujarat, Karnataka, Poona, Rajasthan, Utkal.

Veterinary Science: *Bachelor's:* Agra.

Vocational Guidance: *Diploma*: Nagpur.

Yogic Science: *Diploma*: Saugar.

Zoology†: All universities listed above under 'Botany' except Haryana Agri. and South Gujarat.

Zoo-Physiology: *Master's*: Kerala.

MERCHANT NAVY TRAINING INSTITUTIONS

Merchant Navy Training Board at Jahaz Bhavan, Walchand Hirachand Marg, Bombay 400038, advises Government on all matters pertaining to the training of merchant navy personnel.

Shri Narotam Morarjee Institute of Shipping, 76, Jolly Maker Chambers No. 2, Nariman Point, Bombay 400021, imparts training and conducts examinations in subjects pertaining to the commercial side of shipping—chartering, ship broking practice, marine insurance etc.

The Government of India has set up six training establishments for the training of merchant navy officers and ratings. The training ship **"Dufferin"** which started functioning in 1929 was replaced by T.S. **"Rajendra"** in 1972. It provides pre-sea training facilities of one year duration for navigating cadets. The new training ship has an intake of 250 cadets per year. The **Directorate of Marine Engineering Training** at Bombay and Calcutta provides four years' course for engineering cadets. The boys desirous of undergoing training in the "Rajendra" as well as D.M.E.T. are selected on the basis of marks obtained and are drawn from all parts of the country through a competitive entrance examination followed by interviews and medical and eyesight tests.

Rules for Entry into T.S. **"Rajendra"** and D.M.E.T. are as follows: **Age Limit:** Candidate must have completed 16 years of age and must not have exceeded 20 years on September 1 of the year of entry. **Eligibility:** A candidate is eligible provided he has passed intermediate science examination of any University with mathematics and physics.

The pre-entry qualifications for engineering cadets for entry into D.M.E.T. is a pass in higher secondary examination or equivalent of a recognised board of secondary examination or a University in the science stream with physics, chemistry and mathematics as elective subjects. The duration of the course is 4 years.

The Lal Bahadur Shastri Nautical and Engineering College at Hay Bunder, Tank Road, Bombay 400033 provides post-sea training instructional courses for both navigating and engineering officers and apprentices who are preparing for Ministry of Transport Certificates of Competency Examination. There is a Life Boat School attached to the college.

Candidates with the requisite educational qualification and within the age group prescribed for "Rajendra" and D.M.E.T. training are also admitted by shipping companies as Direct Entry Cadets. The Shipping Corpn. of India and the Great Eastern Shipping Company have established special pre-sea training schemes of their own for such cadets.

Ratings' Training Establishments: The Training Ships **"Bhadra"** (Calcutta), **"Mekhala"** (Visakhapatnam) and **"Naulakhi"** (Navlakhi, Gujarat) are ratings' training establishments. These institutions provides a six months' course for deck and engine room ratings. Candidates between the age group 18 to 22 with minimum educational qualification of 8th standard pass are eligible for admission, if medically fit. Advertisements are published in all important newspapers in India in different languages once in a year or when necessary for selection of candidates for pre-sea training courses and they are selected on merits after an interview at Bombay by the Director, Seamen's Employment Office and at Calcutta, Navlakhi and Visakhapatnam by the respective Captain Superintendents of the training ships according to the number required each year.

MEDICAL COLLEGES: The list of 106 Medical Colleges:

Andhra Pradesh: Andhra Med. Coll., Visakhapatnam 530001; Gandhi Med. Coll., Hyderabad 500020; Guntur Med. Coll., Guntur 522001; Kakatiya Med. Col., Warangal 506002; Med. Coll., Kurnool 518001; Osmania Med. Coll., Hyderabad 500001; Rangaraya Med. Coll., Kakinada 533001; S.V. Med. Coll., Tirupati 517501.

Assam: Assam Med. Coll., Dibrugarh 786001; Gauhati Med. Coll., Gauhati 781001; Silchar Med. Coll., Silchar 788014.

Bihar: Bhagalpur Med. Coll., Bhagalpur 812002; Darbhanga Med. Coll., Darbhanga 846003; M.G.M. Med. Coll., Sakchi, Jamshedpur 831012; Magadh Med. Coll., Gaya 823001; Nalanda Med. Coll., Patna 800001; Patliputra Med. Coll., Dhanbad 826001; Patna Med. Coll., Patna 800004; Rajendra Med. Coll., Ranchi 834009; Sri Krishna Med. Coll., Muzaffarpur 842001.

Delhi: All India Instt. of Med. Sciences, Ansari Nagar, N. Delhi 110016; Lady Hardinge Med. Coll., N. Delhi 110001; Maulana Azad Med. Coll., N. Delhi 110001; University Coll. of Med. Sciences, Delhi 110005.

Goa: Goa Med. Coll., Panaji 403001.

Gujarat: B. Jijibhai Med. Coll., Ahmedabad 380001; Govt. Med. Coll., Surat 395001; Govt. Med. Coll., Vadodara 390001; M.P. Shah Med. Coll., Jamnagar 361001; Smt. N.H. Municipal Med. Coll., Ahmedabad 380006.

Haryana: Govt. Med. Coll., Rohtak 124001.

Himachal Pradesh: H.P. Med. Coll., Simla 171001.

Jammu & Kashmir: Govt. Med. Coll., Srinagar 190001; Govt. Med Coll., Jammu 180001.

Karnataka: Bangalore Med. Coll., Bangalore 560002; Govt. Med Coll., Bellary 583101; J.J.M. Med. Coll., Davangere 577004; J.J.

---

†Instts. impart post-graduate education.

Nehru Med. Coll., Belgaum 590001; Karnataka Med. Coll., Hubli 580022; Kasturba Med. Coll., Manipal 576119; M.R. Med. Coll., Gulbarga 585105; Mysore Med. Coll., Mysore 570001; St. John's Med. Coll., Bangalore 560034.

Kerala: Med. Coll., Calicut 673008; Med. Coll., Kottayam 686001; Med. Coll., Trivandrum 595011; T. Devaswom Med. Coll., Alleppey 688005.

Madhya Pradesh: G.R. Med. Coll., Gwalior 474001; Gandhi Med. Coll., Bhopal 477001; Govt. Med. Coll., Jabalpur 482001; J.L. Nehru Med. Coll., Raipur 492001; M.G.M. Med. Coll., Indore 452001; S.S. Med. Coll., Rewa 486001.

Maharashtra: Armed Forces Med. Coll., Pune 411001; B.J. Med. Coll., Pune 411001; Dr. V.M. Med. Coll., Sholapur 413001; Govt. Med. Coll., Aurangabad 431001; Grant Med. Coll., Bombay 400008; Indira Gandhi Med. Coll., Nagpur 440001; L.T.M. Med. Coll., Sion, Bombay 400022; M.G. Instt. of Med. Science, Sevagram 442102; Med. Coll., Nagpur 440001; Miraj Med. Coll., Miraj 416410; S.R.T.R. Med. Coll., Ambajogai 431517; Seth G.S. Med. Coll., Bombay 400012; T.N. Med. Coll., Bombay 400008.

Manipur: Regional Med. Coll., Imphal 795001.

Orissa: Maharaja K.C. Gajapati Med. Coll., Berhampur 760004; S.C. Bhanj Med. Coll., Cuttack 753007; V.S. Sai Med. Coll., Burla, Sambalpur 768017.

Pondicherry: Jawaharlal Nehru Instt. of Post-Graduate Medical Educ. & Research, Pondicherry 605006.

Punjab: Christian Med. Coll., Ludhiana 141001; Dayanand Med. Coll., Ludhiana 141001; Govt. Med. Coll., Amritsar 143001; Govt. Med. Coll., Patiala 147001; Guru Govind Singh Med. Coll., Faridkot 151203.

Rajasthan: Dr. S.N. Med. Coll., Jodhpur 342001; J.L. Nehru Med. Coll., Ajmer 305001; R.N. Tagore Med. Coll., Udaipur 313001; S.P. Med. Coll., Bikaner 334001; Sawai Mansingh Med. Coll., Jaipur 302001.

Tamil Nadu: Chengalpattu Med. Coll., Chengalpattu 603001; Christian Med. Coll., Vellore 632002; Kilpauk Med. Coll., Madras 600010; Med. Coll., Madras 600001; Med. Coll., Madurai 625020; Med. Coll., Thanjavur 613004; Med. Coll., Tirunelveli 627001; Stanley Med. Coll., Madras 600001.

Uttar Pradesh: B.R.L. Med. Coll., Gorakhpur 273001; G.S.V. Med. Coll., Kanpur 208002; Instt. of Med. Sciences, Varanasi 221005; K.G. Medical Coll., Lucknow 226003; L.L.R.M. Med. Coll., Meerut 250001; M.L.B. Med. Coll., Jhansi 284001; Med. Coll., Aligarh 211001; Motilal Nehru Med. Coll., Allahabad 211001; S.N. Med. Coll., Agra 282001.

West Bengal: B.S. Med. Coll., Bankura 722101; Burdwan Med. Coll., Burdwan 713101; Calcutta National Med. Coll., Calcutta 700014; Med. Coll., Calcutta 700014; Nilratan Sarcar Med. Coll., Calcutta 700073; North Bengal Univ. Med. Coll., Darjeeling 734101; R.G. Kar Med. Coll., Calcutta 700004.

PHARMACY COLLEGES

Andhra Pradesh: †Arts and Science College, Warrangal 506002; †*Dept. of Pharmacy, Univ. Coll. of Science & Technology, Andhra Univ. Waltair 530004; *Govt. Polytechnic, Hyderabad 500001; *Govt. Polytechnic for Women, Kakinada 533001; *Govt. Polytechnic, Visakhapatnam 530001; *Govt. Polytechnic for Women, Guntur 522001; Kamala Nehru Women Polytechnic, Mukarram Jahi Rd., Hyderabad 500001; *S.V. Govt. Polytechnic, Tirupati 517501; Govt. Polytechnic for Women, Guntur 522001; Sri Padmavati Women Polytechnic, Tirupati 517501.

Assam: *Instt. of Pharmacy, Assam Med. Coll., Dibrugarh 786004.

Bihar: †*Birla Instt. of Technology, Ranchi, 834001; *Pharmacy School, Patna 800008; †Ram Lakhan Singh Mahavidyalaya, Anisabad, Patna 800002; Dr. Ram Manohar Lohia Memorial Pharmacy School, Ranchi 834001; *School of Pharmacy, Gulzarbagh, Agam Kuan, Patna 800007

Chandigarh: *Govt. Polytechnic for Women, Chandigarh 160003; *Dept. of Pharmaceutical Sciences, Punjab Univ., Chandigarh 160014.

Delhi: *Coll. of Pharmacy, Pusa, N. Delhi 110012; †*Hamdard Coll. of Pharmacy, Madangir, N. Delhi 110062.

Goa: †*Goa Coll. of Pharmacy, Panaji 403001.

Gujarat: Govt. Polytechnic, Rajkot 360001; L.M. Coll. of Pharmacy, Ahmedabad 380009; Pharmacy Deptt. Deptt. of Technology & Engg., M.S. Rao Univ., Vadodara 390002; *Shri Mohan Lal Narain Das Coll. of Pharmacy, Bethak Rd., Cambay 388620.

Haryana: *Govt. Tech. Instt. for Women, Ambala City 133003; Hindu Coll. of Pharmacy, Sonepat 131001; Janata Coll. of Pharmacy, Butana 124302; Med. Coll., Rohtak 124001.

Karnataka: B.E.S. School of Pharmacy, Davangere 577001; C.S. Instt. of Pharmacy, Harapanahalli 583131; †*Coll. of Pharmacy, Kasturba Med. Coll., Manipal 576119; Farooqui Instt. of Pharmacy, Mysore 577001; Govt. Coll. of Pharmacy, Lal Bagh, Bangalore 560002; H.K.E. Society's Coll. of Pharmacy, M.R. Med. Coll., Gulbarga 585101; *J.S.S. Coll of Pharmacy, Ramayana Rd., Mysore 570001; K.L.E. Society's School of Pharmacy, Belgaum 590002; Madan Mohan Instt. of Pharmacy, Bidar 585401; *Municipal Coll. of Pharmacy, Chikballapur 562101; †Nat. Educ. Society's Instt. of Pharmacy, Shimoga 577201; School of Pharmacy, Rajaji Nagar, Bangalore 580002; Sri Baasweshwar Science Coll., Bagalkot 587101; *V.L. Coll. of Pharmacy, Raichur 584101.

Kerala: *Calicut Med. Coll., Calicut 673008; *Coll. of Pharmacy, Lisie Hospital, Ernakulam 682011; *Kottayam Med. Coll., Kottayam 686001; *Med. Coll., Trivandrum 695001; *T.D. Med. Coll., Alleppey 688005.

Madhya Pradesh: †*Dept. of Pharm. Sciences, Univ. of Saugar, Saugar 470003; *Holkar Science Coll., Indore 452001; *S.V. Govt. Polytechnic, Bhopal 462001.

Maharashtra: *Armed Forces Med. Coll., Pune 411001; Arts, Science & Commerce Coll., Panchavati, Nasik 422001; Bharati Vidyapeeth's Coll. of Pharmacy, Pune 411001; Bombay Coll. of Pharmacy, Kalina 400029; †*Coll. of Pharm., Karad 415110; †*Coll. of Pharmacy, Ulhasnagar 421001; †*Deptt. of Chem. Technology, Univ. of Bombay, Matunga, Bombay 400019; †*Deptt. of Pharm. Sciences, Nagpur Univ. Campus, Nagpur 440010; Modern Medical Training Instt., Nagpur 440010; *Govt. Polytechnic, Amravati 444601; Govt. Polytechnic, Lajgaon 425001; Kamla Nehru Coll. of Pharmacy, Aurangabad 431001; K.M. Kundnani's Coll. of Pharmacy, Ulhasnagar 421001; N.D.M.V.P. Samaj's Coll. of Pharmacy, Nasik 422001; N.M. Patel Society, Dadar, Bombay 400014; *Poona Coll. of Pharmacy, Sai Krupa, 122, Bhavani Peth, Pune 411001; Premila Vithaldas Polytechnic, S.N.D.T. Women's Univ., Juhu Campus, Bombay 400049; S.V. Bhavsar Education Society, Akot 444101.

Orissa: Instt. of Pharmaceutical Sciences, Berhampur 760001; S.C.B. Med. Coll., Cuttack 735001.

Punjab: *Govt. Med. Coll. Patiala 147001; Govt. Polytechnic for women, Jullundur City 144001; Med. Coll., Amritsar 143001.

Rajasthan: †*Birla Instt. of Tech. & Sciences, Pilani 333031; S.M.S. Med. Coll., Public Health Training Centre, Jaipur 302001.

Tamil Nadu: C.L. Baid Mehta Coll. of Pharmacy, Madras 600001; *Christian Med. Coll., Vellore 632001; J.R.E. Society's Coll. of Pharmacy, Ootacamund 643001; †*Madras Medical Coll., Madras 600001; †*Madura Med. Coll., Madurai 625001.

Tripura: Health Training Instt., Agartala 799001.

Uttar Pradesh: *Dept. of Pharmaceutics, Banaras Hindu Univ., Varanasi 221005; *G.S.V.M. Med. Coll., Kanpur 208001; Govt. Polytechnic, Dwarhat 263653; Govt. Polytechnic Uttarkashi 249193; L.L.M. Med. Coll., Meerut 350002; M.L.N. Med. Coll., Allahabad 211001; S.N. Medical Coll., Agra 282001.

West Bengal: *Dept. of Pharmacy, Jadavpur Univ., Calcutta 700032; Instt. of Pharmacy, Kalyani 741235; *Instt. of Pharmacy, Jalpaiguri 735101.

---

*B. Pharm. approved by the Pharmacy Council of India for the purpose of registration under the Pharmacy Act, 1948.

†Instts. impart post-graduate education.

DENTAL COLLEGES

Andhra Pradesh: Govt. Dental Coll., Afzalganj, Hyderabad 500012.

Bihar: Dental Coll. and Hospital, Agamkuan, Patna 800007.

Chandigarh: Post-graduate Instt. of Med. Educ. & Research, Chandigarh 160001 (Exclusively for MDs in Pedodontia and Preventive Dentistry).

Gujarat: Govt. Dental Coll. & Hospital, Assarwa, Ahmedabad 380016.

Karnataka: Coll. of Dental Surgery, Kasturba Med. Coll., Manipal 576119; Dental Coll., Davangere 577004; Govt. Dental Coll., Bangalore 560002.

Kerala: Dental Wing, Medical Coll., Trivandrum 695011.

Madhya Pradesh: Coll. of Dentistry, Indore 452001.

Maharashtra: Dental Dept., Armed Forces Med. Coll., Pune 411001; Govt. Dental Coll. & Hospital, 1, P.D'Mello Rd., Bombay 400001; Govt. Dental Coll. & Hospital, Nagpur 440001; Nair Hospital Dental Coll., Dr. A.L. Nair Rd., Byculla, Bombay 400008.

Punjab: Govt. Dental Coll. & Hospital, Amritsar 143001; Dental Wing, Govt. Med. Coll., Patiala 147001.

Tamil Nadu: Madras Dental Coll., Madras 600003; Rajah Muthiah Dental Coll. & Hospital, Annamalainagar 668002.

Uttar Pradesh: Dental Wing, King George's Medical Coll., Lucknow 226003.

West Bengal: Dr. R. Ahmed Dental Coll. & Hospital, 114, Acharya Jagdish Chandra Rd., Calcutta 700014.

SPECIALISED STUDIES: The Dental Council of India has prescribed nine specialised subjects for post-graduate education in dentistry. They are (i) Prosthetic Dentistry, (ii) Oral Surgery, (iii) Operative Dentistry, (iv) Orthodontia, (v) Periodontia, (vi) Oral Diagnosis and Dental Radiology, (vii) Dental Pathology and Bacteriology, (viii) Pedodontia and Preventive Dentistry and (ix) Public Health Dentistry.

Departments in these specialised fields exist in the following Dental Institutions:-

Govt. Dental,Coll., Hyderabad, Andhra Pradesh—Orthodontia, Oral Medicine and Radiology, Prosthetic Dentistry and Periodontia.

Government Dental College and Hospital, Ahmedabad, Gujarat—Operative Dentistry, Prosthetic Dentistry, Periodontia, Oral Pathology & Bacteriology, Oral Diagnosis and Dental Radiology, Orthodontia and Oral Surgery.

Govt. Dental College, Bangalore, Karnataka—Orthodontia, Oral Surgery, Periodontia, Oral Diagnosis and Dental Radiology, Operative Dentistry and Public Health Dentistry.

College of Dental Surgery, Kasturba Medical College, Manipal, South Kanara, Karnataka—Orthodontia, Operative Dentistry, Periodontia, Oral Surgery and Prosthetic Dentistry.

Dental Wing, Medical College, Trivandrum, Kerala—Operative Dentistry, Prosthetic Dentistry, Orthodontia, Oral Surgery and Periodontia.

Government Dental College and Hospital, Bombay, Maharashtra—Prosthetic Dentistry, Periodontia, Orthodontia, Dental Pathology and Bacteriology, Oral Surgery, Operative Dentistry and Dental Radiology.

Govt. Dental Coll. & Hospital, Nagpur—Oral Surgery, Periodontia, Operative Dentistry and Prosthetic Dentistry.

Nair Hospital Dental College, Bombay, Maharashtra—Prosthetic Dentistry, Periodontia, Operative Dentistry, Orthodontia, Dental Pathology & Bacteriology, Dental Radiology and Oral Surgery.

Punjab Govt. Dental College and Hospital, Amritsar, Punjab—Dental Prosthetics & Crown and Bridge work, Oral Surgery, Operative Dentistry, Pedodontia, Preventive Dentistry and Periodontia.

Madras Dental College, Madras, Tamil Nadu—Oral Surgery, Periodontia, Orthodontia, Operative Dentistry and Prosthetic Dentistry.

Dental Wing, K.G.'s Medical College, Lucknow, Uttar Pradesh—Prosthedontics, Periodontics, Orthodontics, Oral Surgery, Pedodontia, Preventive Dentistry and Operative Dentistry.

Facilities for training of **Dental Mechanics** and **Dental Hygienists** are available at: (1) Government Dental College and Hospital, Bombay, Maharashtra; (2) Madras Dental College, Madras, Tamil Nadu; (3) Govt. Dental College, Bangalore, Karnataka; (4) Dental Wing, K.G.'s Medical College, Lucknow, Uttar Pradesh; (5) Dental Wing, Medical College, Trivandrum; (6) Govt. Dental College & Hospital, Ahmedabad; (7) some centres of Armed Forces for army personnel only; (8) the Institute of Medical Sciences, Banaras Hindu Univ., Varanasi (Dental Mechanic Course only); (9) Govt. Dental Coll. & Hospital, Amritsar; (10) Deptt. of Dental Surgery, Govt. Med. Coll., Jammu.

AYURVEDIC COLLEGES FOR DEGREE COURSES

Karnataka: S. J. Institute of Indian Medicine, Bangalore 560001

Kerala: Ayurveda College, Trivandrum 695001.

Madhya Pradesh: Shri Rajkumar Singh Ayurvedic College, Indore 452001; Mahakoshal Ayurveda Mahavidyalaya, Prem Nagar, Jabalpur 482001; Govt. Ayurvedic College, Amkho, Gwalior 474001; Government Ayurvedic College, Raipur 492001.

Maharashtra: Govt. Ayurvedic College, Nanded 431601; Vidarbha Ayurved Mahavidyalaya, Amravati 444604; R.A. Poddar Medical College, Bombay 400018; Tilak Ayurved Mahavidyalaya, Pune 411011.

Rajasthan: Govt. Ayurved College, Jaipur 302001.

Tamil Nadu: Govt. College of Indian System of Medicine, Palayamkottai 627002.

Uttar Pradesh: Ayurvedic College, Gurukul Kangri Vishvavidyalaya, P.O. Gurukul, Kangri 249404; Sahu Ram Narain M. M. Ayurvedic College, Bans Mandi, Bareilly 243001; State Ayurved College, Lucknow 266001; Ayurveda College, Attara, Banda 242402; Takmilut Tib College, Jhawai-Tola, Lucknow 266003; Unani Medical College, Himmatganj G.T. Rd., Allahabad 211001.

YOGA INSTITUTES

Bihar: Institute of Yoga Research (Bihar Government, Dept. of Cardio-Vascular Diseases), The Prince of Wales Medical College Hospital, Patna 800001.

Gujarat: Yoga Sadhan Ashram, 16, Pritamnagar, Ahmedabad 390006.

Madhya Pradesh: Saugar University, Dept. of Yogic Studies, Saugar 470001.

Maharashtra: Yoga Institute, Santa Cruz (East), Bombay 400055. Yoga Mahavidyalaya, Khatri Estate, Falkland Rd., Bombay 400008.

Kaivalyadhama (Ishwardas Chunilal Yogic Health Centre), N. Subhash Rd., Bombay 400002.

Yoga Education Centre, Hindi Vidya Bhavan, 79, Marine Drive, Bombay 400020.

G. S. College of Yoga & Cultural Synthesis, Kaivalyadama, Lonavala, Pune 410401.

New Delhi: Yogashram, Mandir Lane, Behind Lakshmi Narayan Temple, New Delhi 110001.

Yoga International Instt., Block F, Lajpatnagar—II, New Delhi 110024.

Vishwayatan Yogashram, Alexandra Place, Opp. Gole Post Office, New Delhi 110001

Tamil Nadu: All India Manava Sevak Samaj, 39, Sullivan Garden Rd., Mylapore, Madras 600004

Kriya Baba Yoga Rehabilitation Centre, 1-A, Arulananda Mudali St., Madras 600004

Prof. T. Krishnamacharya's Yoga Institute. 9. West Circular Rd., Mandavalli Pakkam. Madras 600028.

Yoga Centre. Arya Samaj. 107. Lloyds Rd.. Madras 600006.

Training Teachers for Deaf & Dumb, Blind and Mentally Handicapped.

Central Institute of Teachers of the Deaf. Central Court, 18. Motlibai St., Agripada. Bombay 400011.

Centre for Training Teachers of the Deaf. Lady Noyce School for the Deaf. Kotla Ferozshah. New Delhi 110001.

National Academy of the Teachers of the Blind, C/o. School for the Blind, Palayamkottai, Tirunelveli.

Training Centre for Teachers of the Deaf, C/o. Education Audiology & Research Centre. Punam. 67. Nepean Sea Rd., Bombay 400006.

Training Centre for the Teachers of the Mentally Handicapped Children. Sewri Hill. Bombay 400033.

Training College for the Teachers of the Deaf. Aishbagh. Lucknow 226001.

Training College for the Teachers of the Deaf. Calcutta Deaf & Dumb School. 293. A.P. Chandra Rd., Calcutta 700009.

UNIVERSITIES

List of Universities. Institutions deemed to be Universities and Institutions of National Importance.

Universities in India: Acharya Narendra Deva University of Agriculture and Technology, Faizabad, (Unitary); Agra, Agra, (Affiliating): Aligarh Muslim. Aligarh. (Unitary): Allahabad. Allahabad. (Unitary); Andhra. Waltair. (Affiliating); Andhra Pradesh Agricultural. Rajendranagar. Hyderabad. (Unitary); Annamalai. Annamalainagar. (Unitary): Assam Agricultural. Jorhat. (Unitary); Avadh. Faizabad. (Affiliating); Awadesh Pratap Singh Rewa. (Affiliating): Banaras Hindu. Varanasi. (Unitary); Bangalore. Bangalore. (Federal); Berhanpur, Berhanpur. (Affiliating); Bhagalpur. Bhagalpur. (Affiliating). Bhopal. Bhopal. (Affiliating) Bidhan Chandra Krishi. Kalyani. (Unitary); Bihar. Muzaffarpur. (Affiliating): Bombay. Bombay. (Federal): Bundelkand. Jhansi. (Affiliating): Burdwan. Burdwan. (Affiliating): Calcutta. Calcutta. (Affiliating): Calicut. Calicut. (Affiliating): Central Univ. of Hyderabad, Hyderabad, (Unitary); Chandra Sekhar Azad University of Agriculture and Technology, Kanpur. (Unitary); Cochin. Cochin. (Federal): Delhi. Delhi. (Affiliating): Dibrugarh. Dibrugarh, (Affiliating); Garhwal Srinagar, (Garhwal), (Affiliating); Gauhati. Gauhati. (Affiliating): G.B. Pant Universitv of Agricultural & Technology. Pant Nagar, (Unitary); Gorakhpur, Gorakhpur, (Affiliating); Gujarat Ahmedabad, (Affiliating); Gujarat Agricultural, Ahmedabad, (Unitary); Gujarat Ayurveda, Jamnagar, (Affiliating); Guru Nanak. Amritsar. (Affiliating); Haryana Agricultural. Hissar (Unitary); Himachal Pradesh. Simla. (Affiliating): Indira Kala Sangeet. Khairagarh. (Affiliating); Indore. Indore. (Federal): Jabalpur. Jabalpur. (Affiliating): Jadavpur. Calcutta. (Unitary); Jammu. Jammu. (Affiliating); Jawaharlal Nehru. New Delhi. (Unitary); Jawaharlal Nehru Krishi. Jabalpur. (Federal): Jawaharlal Nehru Technological, Hyderabad. (Federal); Jiwaji, Gwalior. (Affiliating): Jodhpur. Jodhpur. (Unitary); Kakatiya. Warangal (Affiliating): Kalyani. Kalyani. (Affiliating): Kameshwar Singh Darbhanga Sanskrit. Dharbhanga. (Affiliating): Kanpur. Kanpur. (Affiliating): Karnataka. Dharwar. (Affiliating): Kashi Vidyapith. Varanasi, (Unitary); Kashmir, Srinagar, (Affiliating;) Kerala. Trivandrum, (Affiliating); Kerala Agricultural, Trichur, (Unitary); Kondan Krishi, Dapoli, (Ratnagiri Dt.) (Unitary): Kumaon. Nainital (Affiliating): Kurukshetra. Kurukshetra (Affiliating): Lucknow. Lucknow. (Unitary): Madras. Madras (Affiliating): Madurai Kamraj. Madurai. (Affiliating): M.S. University of Baroda. Baroda. (Unitary): Magadh. Bodh Gaya. (Affiliating) Mahatma Phule Krishi, Rahuri, (Dt. Ahmednagar) (Federal); Marathwada. Aurangabad. (Affiliating); Marathwada Krishi, Parbhani, (Unitary); Meerut, Meerut, (Affiliating); Mithila, Darbhanga, (Affiliating); Mysore, Mysore, (Affiliating); Nagarjuna. Guntur, (Unitary); Nagpur, Nagpur, (Affiliating); North Bengal, Raja Ram, Mohanpur (Darjeeling), (Affiliating); North Eastern Hill, Shillong, (Affiliating); Orissa University of Agriculture & Tech., Bhubaneshwar, (Unitary); Osmania, Hyderabad, (Affiliating); Patna. Patna, (Unitary); Punjab, Chandigarh. (Affiliating); Punjab Agricultural, Ludhiana. (Unitary); Punjabi. Patiala, (Affiliating); Punjabrao Krishi. Akola. (Federal); Poona. Pune, (Affiliating); Rabindra Bharati, Calcutta, (Affiliating); Rajasthan, Jaipur, (Affiliating); Rajendra Agricultural, Pusa (Samastipur), (Unitary); Ranchi, Ranchi, (Affiliating); Ravi Shankar, Raipur, (Affiliating); Roorkee, Roorkee, (Unitary); Sambalpur, Sambalpur, (Affiliating); Sampurnanand Sanskrit, Varanasi, (Affiliating); Sardar Patel, Vallabh Vidyanagar, (Affiliating); Saugar, Sagar, (Affiliating); Saurashtra, Rajkot, (Affiliating); Shivaji, Kolhapur, (Affiliating); SNDT Women's, Bombay, (Affiliating); South Gujarat, Surat, (Affiliating); Sri Venkateswara, Tirupati, (Affiliating); Tamil Nadu Agricultural, Coimbatore, (Unitary); Udaipur, Udaipur, (Affiliating); University of Agri. Sciences, Bangalore, (Unitary); Utkal, Bhubaneshwar, (Affiliating); Vikram, Ujjain, (Affiliating); Visva-Bharati, Shantiniketan, (Unitary).

Institutions deemed to be Universities: Birla Institute of Technology and Science. Pilani. Rajasthan; Central Institute of English & Foreign Languages. Hyderabad: Gandhigram Rural Institute. Gandhigram. Tamil Nadu: Gujarat Vidyapith. Ahmedabad: Gurukul Kangri Vishwavidyalaya. Hardwar. Uttar Pradesh: Indian Agricultural Research Institute. New Delhi: Indian Institute of Science, Bangalore; Indian School of Mines, Dhanbad, Bihar, Jamia Millia Islamia, New Delhi; Tata Institute of Social Sciences, Bombay.

Medical & Technological Institutes of National Importance: All India Institute of Medical Sciences, New Delhi; Postgraduate Institute of Medical Education & Research. Chandigarh: Indian Institute of Technology. New Delhi. Kanpur. Madras. Kharagpur. Bombay: Dakshina Bharat Hindi Prachar Sabha. Madras: Hindi Sahitya Sammelan. Allahabad: Indian Statistical Institute. Calcutta.

SCHOOLS OF SOCIAL WORK★

Institute of Social Sciences, University of Agra, Agra 282001; Dept. of Social Work, Gujarat Vidyapith, Ahmedabad 380001; Dept. of Social Work, Ahmednagar Coll., Ahmednagar 414001; Post-Graduate Institute of Social Work, Alwaye 683104; Dept. of Social Work, Bangalore Univ., Bangalore 560056; Post-Graduate Dept. of Social Work, D.N.R. Coll., Bhimavaram 534201; Bhopal School of Social Sciences, Bhopal 462001; College of Social Work, Bombay 400012; Tata Institute of Social Sciences, Sion-Trombay Rd., Deonar, Bombay 400088; Indian Institute of Social Welfare and Business Management, College Square West, Calcutta 700007; Dept. of Social Work, P.S.G. Arts Coll., Coimbatore 641004; Dept. of Social Work, Karnatak Univ., Dharwar 580003; Delhi School of Social Work, Delhi 110007; College of Social Work, Hyderabad 500001; School of Social Work, Indore 452001; Dept. of Social Work, Lucknow Univ., Lucknow 226001; Dept. of Social Work, Stella Mary's College, Cathedral Rd., Madras 600006; Madras School of Social Work, Casa Major Rd., Madras 600008; Loyola College, Dept. of Social Work, Madras 600034; Inst. of Social Work, Alagarkoil Rd., Madurai 625002; School of Social Work, Mangalore 575001; Matru Seva Sangh's Instt. of Social Work, North Ambazari Rd., Nagpur 440010; National Instt. of Social Work, Hanuman Nagar, Nagpur 440003; Tirpude Coll. of Social Work, Nagpur 440001; Dept. of Social Work, Jamia Milia, Jamia Nagar, New Delhi 110025; Karve Institute of Social Service, Hillside, Karvenagar, Pune 411029; Dept. of Social Work, Visva Bharati, Shantiniketan 731235; Dept. of Social Work, Solapur Coll., Solapur 413001; Loyola College of Social Sciences, Trivandrum 695001; Udaipur School of Social Work, Rajasthan Vidyapeeth, Udaipur 313001; School of Social Work, M.S. Univ. of Baroda, Fatehgunj, Vadodara 390002; Institute of Social Sciences, Kashi Vidyapith, Varanasi 221001; School of Social Work, Kashi Vidyapith, Varanasi 221001; Dept. of Social Work, Andhra Univ., Waltair 530004.

★There are now 34 schools of which 27 offer • Master's degree courses, 10 Bachelor's degree courses and 11 Doctoral courses

OTHER EDUCATIONAL INSTITUTIONS

ANDHRA PRADESH

Administrative Science, Indian Institute of, 79, Jubilee Hills, Hyderabad 500034.

Administrative Staff College of India, Bella Vista, Hyderabad 500475. Provides trg. to senior executives from private & public sectors and Govt.; management consultancy and computer services; conducts research in management problems.

American Studies Research Centre, Hyderabad 500007. Maintains a comprehensive library on American civilisation for the benefit of Indian scholars and teachers.

Bharatiya Vidya Bhavan, 5-9-1105, Hyderguda, Hyderabad 500001.

Centre for Organization Development, 'Nageena', Rd. No. 3, Banjara Hills, Hyderabad 500034.

To promote research of management and development of organisation & other trg. programmes and expert advice towards improving effectiveness of organisation and managers.

Community Devpt. & Panchayati Raj, State Instt. of, Rajendranagar, Hyderabad 500030.

Economics, Indian Instt. of, Himayatnagar, Hyderabad 500029.

English & Foreign Languages, Central Instt. of, Hyderabad 500007. An autonomous Institution deemed to be a University set up by the Govt. of India, to improve the teaching of English and foreign languages and their literatures. It offers M.Litt. and Ph.D. courses in English, Arabic, French, German and Russian; postgraduate diploma course in teaching of English, English studies, Arabic, French, German and Russian; M.A. in French, German and Russian (by correspondence-cum-attendance); postgraduate certificate and diploma courses in the teaching of English (by correspondence); proficiency, diploma and advanced diploma courses in French, German, Russian and Modern Arabic; diploma in translation courses in French and German; and diploma in interpretation in German. It provides extension services in the field of English and foreign language teaching throughout the country. It has Regional Centres at Shillong and Lucknow.

Food Craft Instt., CTI Campus, Vidyanagar, Hyderabad 500768.

Foreign Studies Guidance & Service Bureau, 2-1-488, New Nallakunta, Hyderabad 500020.

Geoscience, Indian Academy of, C/o Geology Deptt., Osmania Univ., Hyderabad 500007.

Industrial Safety & Productivity, Instt. of, A.C. Guards, Hyderabad 500004.

Instructors, Central Training Instt. of, I.T.I. Bldg., Mallepally, Hyderabad 500001.

Leadership Trg., McGrath Instt. of, Mathrusri Apts., Hyderguda, Hyderabad 500001.

Marketing Trg. Centre for Market Secretaries, 5-8-493, C.A. Lane, Hyderabad 500001.

Medical Sciences, Instt. of, Osmania Medical College, Sultan Nazar, Hyderabad 500001.

Plant Production Trg. Instt., Central, Rajendranagar, Hyderabad 500030.

Preventive Medicine, Instt. of, Narayanguda, Hyderabad 500029.

Public Enterprises, Instt. of, New Bldg., Zainyar Jung Circle, Osmania Univ. Campus, Hyderabad 500007.

Sanskrit Vidyapeeth, Kendra, Tirupati 517501.

Science, Andhra Pradesh Academy of, Ex-Physiology Block, Osmania Univ., Hyderabad 500007.

Science Assocn., Hyderabad, 36, Asifnagar, Hyderabad 500012.

Science Socy., Hyderabad, 12-2-460, Malkapur, Asifnagar, Hyderabad 500028.

Small Industry Extension Trg. Instt., Yousufguda, Hyderabad 500045. Provides trg. in small industry devpt., management, behavioural sciences & extension; undertakes research & consultancy in related fields and provides documentation service to the small industry.

Tool Design, Central Instt. of (Govt. of India Socy.), Balanagar, Hyderabad 500037. Trg. of tool designers & tool makers, design & manufacture of tools, dies and moulds, etc.

Village Devpt. Officers Trg. Centre, Rajendranagar, Hyderabad 500030.

ASSAM

Engineering and Technology, H.R.H. The Prince of Wales Instt. of, Jorhat 785001.

Historical Instt., Narayani Handiqui, Gauhati 781001.

Science Socy., Assam, Panbazar, Gauhati 781001.

BIHAR

Agricultural Sciences, Bihar Academy of, P.O. Sabour, 813210.

Cultural Studies, Indian Instt. for, P.O. Mandar Vidyapith, Bhagalpur Dist.

Foundry & Forge Technology, National Instt. of, P.O. Hatia, Ranchi 834003. Imparts industrially oriented specialised trg. on foundry, forge and related fields; offers Adv. Dip. Courses of 18 months duration in foundry technology and forge technology, short term refresher courses of 2 to 12 weeks duration and Post Graduate Programme through research for engrs. working in industries. Undertakes research and development works pertaining to foundry & forge technology and provides consultancy services in preparation of project reports, selection of equipment and machinery, testing of raw materials, castings, forgings and other components. Provides Documentation & Information Services in foundry, forge and allied fields.

Industrial Design Instt. of, Patna 800001.

Mine Planning and Design Instt., Central, Darbhanga House, Ranchi 834001.

Nava Nalanda Mahavihara, Nalanda 803111. Postgraduate and research Instt. in Pali, Buddhist Studies, philosophy and ancient Indian and Asian Studies.

Personnel Management, Indian Instt. of, 36, Tisco Guest House Annexe, Jamshedpur 831001.

Public Health Instt., Patna 800004.

Rural Instt., Birouli 848113, Darbhanga Dist.

Vaccine Instt. and Pasteur Instt., Government, Namkum, Ranchi 834010.

Yogoda Sat-Sanga Vidyalaya, Club Rd., Ranchi 834001.

DELHI

Administrative Management, Institute of, 41, Masjid Road, Jangpura, New Delhi 110014. (1) The Institute has liaison with Administrative Management Society of U.S.A., Systems Procedures Association of U.S.A. and Institute of Administrative Management of U.K. (2) a Certificate Course for Office Supervision for graduate women is also conducted in collaboration with the Delhi University.

Adult Education & Community Services, Centre for Continuing, M.S. Univ. Office Compound, Vadodara 390002.

Adult Education Assocn., Indian, 17B, Indraprastha Marg, New Delhi 110001.

Architecture, School of Planning &, 4, Block-B, Indraprastha Estate, New Delhi 110001.

Audio-Visual Education, National Instt. of, Indraprastha Estate, New Delhi 110001.

Bharatiya Vidya Bhavan, K. Gandhi Mrg., New Delhi 110001.

Book Trust, India, National, a-5, Green Park, New Delhi 110016. An autonomous body set up by the Government of India.

Activities include organisation of book exhibitions and fairs at home and abroad, including a World Book Fair every two years; conducting seminars and workshops on problems connected with the writing, translation, publication, distribution and promotion of books; and publication of good books at moderate prices under various series, important among which are *India—The Land and the People*, *National Biography*, *Nehru Bal Pustakalaya*, *Young India Library*, *Folklore of India*, *Popular Science*, *Aadan Pradan*, in Indian languages and in English. Over 2,100 titles have been published so far. Of these 1,780 are in the Indian languages. In order to ensure easy availability of its publications, the NBT has, so far, set up its own Book Centres at New Delhi, Hyderabad, Calcutta and Amritsar.

The Trust also implements two schemes known as the Scheme of Subsidised Publication of University Level Books in English' and the 'Core Books on Medical Sciences' scheme.

Chinese Studies, Centre for, Delhi Univ., Delhi 110007.

Constitutional and Parliamentary Studies, Instt. of, 18, Vithalbhai Patel Marg, New Delhi 110001.

Crafts, Swami Sivananda Memorial Instt. of Fine Arts & (Vocational Trg. Centre), Rd. No. 31, East Avenue, Punjabi Bagh, New Delhi 110026.

Creative Intelligence, Maharishi Instt. of, C-282, Defence Colony, New Delhi 110024.

Criminology, Instt. of Forensic, E-12/3, Vasant Vihar, New Delhi 110057.

Developing Societies, Centre for the Study of, 29, Rajpur Rd., Delhi 110006.

Distress, Action In, Post Box 2527, Bangalore 560025. A child sponsorship/development agency which supports a large number of supplementary, independent, experimental or non-formal village primary schools designed to help children think for themselves & enjoy a practical, relevant, creative and enjoyable edn.

Economic Growth, Instt. of, Univ. Enclave, Delhi 110007.

Education, National Instt. of, (NCERT—National Council of Educational Research & Trg.), Sri Aurobindo Marg, New Delhi 110016.

Education, Public Enterprises Centre for Continuing, C/o Guest House, C-6/5, Safdarjung Devpt. Area, New Delhi 110016.

Educational Planning and Administration, National Instt. of, 17-B, Sri Aurobindo Mrg., New Delhi 110016.

Foreign Languages, Instt. of, 1/3, NDS, Lajpat Nagar, New Delhi 110024.

Foreign Trade, Indian Instt. of, Ashok Bhavan, 93, Nehru Place, New Delhi 110019. Its principal activities include (1) trg. of personnel in foreign trade & INTNL. BUSINESS MANAGEMENT, (2) functional research, (3) overseas mkt. studies, area surveys, (4) consultancy, and (5) collection & dissemination of information relating to India's foreign trade.

Health Administration & Education, National Instt. of, E-16, Greater Kailash, New Delhi 110048.

Health & Family Welfare, National Instt. of, near D.D.A. Flats, Munirka, New Delhi 110067—an autonomous Insttn. for augmenting, promoting and providing expertise and knowledge in the field of national health and family welfare plng. programmes. The Instt. undertakes research in Social Sciences, Communication, Statistics, Demography, Public Health Admn., Information and Documentation.

Home Economic, Instt. of, NDSE, Part I, New Delhi 110049.

Hotel Management, Catering and Nutrition, Instt. of, Pusa Institute, New Delhi 110012

Indology, Instt. of, 24E, N. Subhash Mrg., Delhi 110006.

International Studies, Indian School of, 35, Ferozeshah Rd., New Delhi 110001

Islamic Studies, Indian Instt. of, Panchkuin Mrg., New Delhi 110001.

Jamia Rural Instt., Jamia Millia, New Delhi 110025.

Kendriya Vidyalaya Sangathan, Nehru House, Bahadur Shah Zafar Mrg., New Delhi 110002.

Labour Instt., National, AB-6, Safdarjang Enclave, New Delhi 110029. It conducts research, including action research, consultancy, trg. and edn. programmes for managers from public and private sector undertakings, labour administrators, trade union leaders, development officials, educators and organisers of rural poor, and nominees of foreign Governments. It has collaborative programmes with international organisations like I.L.O., F.A.O. and U.N.D.P.

Ladakh Bauddha Vihara, Bela Rd., Delhi 110006.

Management Devpt. Instt. (Sponsored by the Industrial Finance Corpn. of India), Gate No. 3, Jeevan Tara Bdg., 5, Sansad Marg, New Delhi 110001; *Campus*: Mehrauli Rd., Gurgaon 122001. Provides trg. in modern management techniques; undertakes research in industrial and business management, development banking and related subjects; accepts consultancy assignments for particularised attention to the specific problems of industrial and commercial undertakings in relation to their industrial development responsibilities and other economic objectives and functions. The Devpt. Banking Centre provides trg. and offers technical assistance to development financing/promotional institutions and banks, within and outside the country, in the areas of organisational structure and information system, staff recruitment, "In-house" training and manpower development.

Mass Communication, Indian Instt. of, D-13, South Extn., Part II, New Delhi 110049. Trg. programmes held in New Delhi and regional centres aim at improving professional knowledge, technical skills and motivations of personnel working in newspapers, broadcasting & T.V. stns., information & publicity depts. Two courses of one academic year's duration. Diploma in Journalism and Diploma in News Agency Journalism. Open to Indian and foreign students. Conducts seminars & symposia and provides professional advice on problems of manpower & infrastructure. Instt.'s specialised library and documentation unit helps researchers. Quarterly journal: *Communicator*; Half-yearly journal: *Sanchar Madhyam* (Hindi).

Medical Sciences, Indian Academy of, C-11/16, Ansari Nagar, New Delhi 110016.

Medicine, Indian Council of, 1E-6, Jhandewalan Extn., New Delhi 110055.

Orthopaedics, Central Instt. of, Safdarjung Hospital, New Delhi 110016.

Planning & Management, Indian Instt. of, B-4, Chirag Enclave, New Delhi 110048.

Population Council of India, Lodi Estate, New Delhi 110003.

Power Engineers Training Society, 41, Community Centre, Basant Lok, Vasant Vihar, New Delhi 110057—An autonomous apex body under the Min. of Energy for the four Thermal Power Station Personnel Trg. Instts. at Neyveli, Durgapur, New Delhi & Nagpur for meeting the trg. needs of the power sector.

Press Instt. of India, Sapru House Annexe, Barakhamba Rd., New Delhi 110001. Set up in 1963 by Indian newspapers to help the press improve itself through seminars, workshops, courses, consultancies, study tours, etc. It publishes books relating to the mass media, *Vidura*, a bimonthly media journal; and *Data India* a weekly archive of developmental information. It also edits and produces a feature news service on aspects of Indian development called *Depth News*.

Public Administration, Indian Instt. of, Indraprastha Estate, Ring Rd.,, New Delhi 110001.

Public Co-operation and Child Devpt., National Instt. of, 92, Nehru Place, New Delhi 110024.

Public Finance and Policy, National Instt. of, 12, Rajendra Place, Pusa Rd., New Delhi 110008. *Functions*: Continuous study of the fiscal system and measurement of the effects of budgetary policy on the economy; consultancy work for and trg. of officials of the Union, State and Local Govts.

Rail Transport, Instt. of, Rail Bhavan, New Delhi 110001. The Instt. functions in close collaboration with the Indian Railways to promote and foster the science and art of rail transport and management. Conducts a correspondence course leading to a diploma in "Rail Transport & Management".

Russian Studies, Instt. of, J. L. Nehru Univ. Campus, Sri Aurovindo Marg, New Delhi 110057.

School Certificate Examinations, Council for the Indian, C-52, Nizamuddin East, New Delhi 110013.

Science & Culture, Instt. of Advancement of, J-22, Haus Khas Enclave, New Delhi 110016.

Science Education, National Council for, Sri Aurovindo Ashram, Sri Aurovindo Marg, New Delhi 110057.

Scientific & Technical Literature, Indian Council for Promotion of, 89, Mohan Singh Plot, Kharak Singh Marg, New Delhi 110001.

Social Defence, National Instt. of, Deptt. of Social Welfare, West Block-I, Wing 7, Ramakrishnapuram, New Delhi 110022. Previously known as the Central Bureau of Correctional Services, the Institute deals with the policies and programmes regarding the prevention of crime and treatment of offenders. It undertakes research on social defence; compile, process and analyse statistics on social defence; draft model legislation and rules in the field of social defence; advise the Central and State Governments/Union Territory Administrations on social defence problems and provide technical services facilities for preparation of schemes, formulation of projects, drafting of legislation etc.

Social Instt., Indian, Lodi Rd., New Delhi 110003. Purpose: Research; publications; labour welfare & management courses; trg. in co-opn.; promotion & organisation of socio-economic projects; family life education. Publication: *Social Action* (Quarterly).

Statistical Instt., Indian, J-19, Haus Khas, New Delhi 110016.

Technology, Centre for Devpt. of Instructional, 3, Birbal Marg, New Delhi 110014.

Technology, Indian Instt. of, Haus Khas, New Delhi 110016.

Tibetan Schools Socy., Curzon Road, Barracks, New Delhi 110001.

United States Educational Foundation in India, 12, Hailey Rd., New Delhi 110001.

Universities, Assocn. of Indian, Rouse Ave., New Delhi 110002.

Vallabhbhai Patel Chest Instt., Univ. of Delhi, Patel Mrg., Delhi 110007.

Zoology Centre of Advanced Study, Univ. of Delhi, Delhi 110007.

GOA

Cancer Socy., Goa, Govt. Pestana Rd., Panaji 403001.

Food Craft Instt., P.O. Betim 403101, Bardez, Goa.

Public Assistance (Provedoria), Instt. of, Panaji 403001.

GUJARAT

Agricultural Instt., Government, Anand 388001.

Area Planning, Gujarat Instt. of, New Brahmkshatrya Socy., Pritamrai Marg, Ahmedabad 380006. Undertakes studies, projects and research in the field of rural and regional development and planning.

Ayurvedic University, Gujarat, Dhanwantri Mandir, P.O. Box No. 511, Jamnagar 361001.

Co-operative Management, Instt. of, 9, Brahmin Mitra Mandal Socy., Ellisbridge, Ahmedabad 380006.

Design, National Institute of, Paldi, Ahmedabad 380007. An autonomous national insttn. for education, research, consultancy and training in design set up by the Govt. of India, Ministry of Industry. NID at present offers 5½ years Professional Education Programme in Industrial Design (Product Design, Furniture Design, Ceramic Design, Textile Design), Visual Communication and exhibition design leading to PEP diploma, recognised by the Ministry of Education. Recently NID has started advanced entry 3 years PEP in Textile design for candidates with graduate background in related fields leading to PEP diploma.

Education Socy., Ahmedabad, Lal Bhavan, Bhadra, Ahmedabad 380001.

Engineering College—Birla Vishvakarma Mahavidyalaya, P.B. No. 20, Vallabh Vidyanagar 388120, Kaira Dist.

Environmental Planning & Technology, Centre for, Navarangpura, Ahmedabad 380009.

Export, Indian Instt. of, Sayajiganj, Vadodara 390005.

Food Craft Instt., Govt. Polytechnic Compound, Ahmedabad 380015.

Homoeopathic Instt., Gujarat Rajya, 702/9, Seth Mangaldas Rd., Ahmedabad 380006.

Homoeopathic System of Medicine, Gujarat Council of, Civil Hospital Bldg., Ahmedabad 380016.

Management, Indian Instt. of, Dr. Vikram Sarabhai Rd., Vastrapur, Ahmedabad 380015. *Dir.*: Dr. Samuel Paul.

Management Studies, All India Instt. of, 14, Lal Baug Society, Vadodara 390004.

Occupational Health, National Instt. of, Meghani Nagar, Ahmedabad 380016.

Oriental Instt., Smt. Hansa Mehta Library Bldg., Tilak Rd., Vadodara 390001.

Political Science, Harold Laski Instt. of, Mavlankar Haveli, Bhadra, Ahmedabad 380001. The Instt. encourages & facilitates the scientific study of political and allied questions & problems. *Founder-Dir.:* Prof. P. G. Mavlankar.

Public Administration, Sardar Patel Instt. of, (Govt. of Gujarat), New Civil Hospital Annexe, Meghaninagar, Ahmedabad 380016.

School Textbooks, Gujarat State Board of, 29, Duffnala, Ahmedabad 380004.

Space Applications Centre, Jodhpur Tekra, Ahmedabad 380009.

HIMACHAL PRADESH

Advanced Study, Indian Instt. of, Rashtrapati Niwas, Simla 171005.

JAMMU & KASHMIR

Skiing & Mountaineering, Indian Instt. of, Gulmarg 193403.

KARNATAKA

Adult Education Council, Karnataka State, Idigara Krishnamurthypuram, Mysore 570004.

Ayurved Vidyapeeth Socy., Karnataka, Khasbag, Belgaum 590001.

Bharatiya Vidya Bhavan, R. C. Rd., Bangalore 560001.

Biological Control, Commonwealth Instt. of, Hebbal, Bangalore 560009.

Bowring Instt., 19, St. Mark's Rd., Bangalore 560001. Postgraduate and research instt. for medicine.

Education Socy., Mysore, 15th Cross, Malleswaram, Bangalore 560003.

Education Socy. of Mysore, National, Basavangudi, Bangalore 560004.

English, Regional Instt. of, (South India), 6A, Cunningham Rd., Bangalore 560052. Estd. in 1963 by the Govts. of A.P., Karnataka, Kerala and Tamil Nadu in collaboration with the British High Commission, British Council Divn., with the primary aim of offering diversified trg. to teachers and key personnel in the field of English language teaching in these States.

Food Craft Instt., S. J. Polytechnic Bldgs., Seshadri Rd., Bangalore 560001. Jointly sponsored by the Govt. of India and the Govt of Karnataka to train men and women for catering industry

Foremen Trg. Instt. (Govt. of India/Min. of Labour), Tumkur Rd., P. B. 2232, Bangalore 560022.

Genetic Studies, Instt. for, 230, 12th Cross, Wilson Gardens, Bangalore 560027.

Indian Languages, Central Instt. of, Manasa Gangotri, Mysore 570006.

Management, Indian Instt. of, 33, Langford Rd., Bangalore 560027.

Management Studies, Kousali Instt. of, Karnataka Univ; Dharwar 580003.

Mental Health & Neuro Sciences, National Instt. of, Post Bag No. 2779, Hosur Rd.; Bangalore 560029. Conducts the following post-graduate courses: *(i)* M. D. Degree in Psychological Medicine; *(ii)* M. Ch. Degree in Neurosurgery; *(iii)* D. M. Degree in Neurology; *(iv)* Diploma in Psychological Medicine (DPM); *(v)* M. Phil. in Medical & Social Psychology; *(vi)* Ph. D. Degree in Clinical Psychology; and *(vii)* M. Phil. in Psychiatric Social Work The Institute is affiliated to the Bangalore Univ. Post-certificate course in Psychiatric Nursing (DPN) is also conducted at the Institute. The diploma is recognised by the Govt. of India and the Indian Nursing Council.

Production Engineers, Insttn. of, C/o Wing Cdr. G. Venkateshwaran, 15, Eagle St., Langford Town, Bangalore 560026.

Public Affairs, Gokhale Instt. of, Narasimharaja Colony, Bangalore 560019.

Religion & Socy., Christian Instt. for the Study of, 17, Miller's Rd., Bangalore 560046.

Science, Indian Instt. of, Bangalore 560012. The Institute has the status of a University.

Serum Instt., Mysore, Hebbal. Bangalore 560024.

Social & Economic Change, Instt. for, Nagarbhavi, Bangalore 560040. An all India Instt. for inter-disciplinary research & trg. in social sciences.

Social Sciences, National Instt. of, 40, Wellington St., Richmond Town, Bangalore 560025.

Speech and Hearing, All India Instt. of, Mansa, Gangothri, Mysore 570006.

Statistical Instt., Indian, 112, 11th Cross, Malleswaram, Bangalore 560003.

Technical Education Socy., Mysore, 4th Block, Rajajinagar, Bangalore 560010.

Technical & Management Education, Socy. of, Bank of India Bldg., K. G. Rd., Bangalore 560009.

Technological Instt., Shri Krishnarajendra Silver Jubilee, Krishnarajendra Circle, Bangalore 560001.

Tuberculosis Instt. of India, National, Avalon, Bellary Rd., Bangalore 560003. 1. Studies Epidemiology, Sociology and Methodology of Tuberculosis Control; 2. Formulates & evolves TB Control Programme; 3. Supervision & Monitoring of National TB Control Programme; 4. Offers twice a year a 13 weeks' Trg. course to TB Control teams deputed by State Govts.; accepts undergraduate and post-graduate medical students (from several universities); holds twice a year Seminars for Sr. Public Health Administrators & once a year International Course for Paediatric Teachers.

Vidyasala Assocn., Bharathi, Ambika Cloth Mkt. Bldg., D. K. Lane, Bangalore 560053.

World Culture, Indian Instt. of, 6, B. P. Wadia Rd., Basavangudi, Bangalore 560004

KERALA

Fisheries Project, Integrated (Indo-Norwegian), (Govt. of India), Foreshore Rd., Cochin 682016. Experimental diversification in fishing methods; popularising fishery products in internal and external mkts.; trg. of technical personnel for fishing industry

Fisheries, Nautical & Engineering Trg., Central Instt. of, Dewan's Rd., Ernakulam, Cochin 682016.

Fisheries Technology, Central Instt. of (CIFT), (under I.C.A.R.), Matsyapuri P.O., Cochin 682029. **Research Centres:** Bunder Road, Veraval 362265 (Gujarat); D. No. 1-14-7, Sreeramanagar, Kakinada 533003 (A.P.); P.O. Burla 768017, Sambalpur Dist., Orissa State; 162, Sassoon Dock, Colaba, Bombay 400005; 2nd Flr., 'Shanta', 18th June Rd., St. Inez, Panaji 403001, Goa.

Food Craft Instt., Kalamassery, Alwaye 683104.

Law Academy, Kerala, Peroorkada, Trivandrum 695005.

Medical Centre, Sree Chitra Tirunal, Trivandrum 695011. Autonomous institute set up by the Govt. of Kerala for service, research and trg. in cardiology and neurology.

Natana Niketanam, Palıam Rd., Vadakke Angady. Trichur 680001. Teaches dancing and fine arts exclusively to girls.

Nautical Studies, Kerala Instt. of, Vizhinjam 695521.

Supervisory Devpt., Instt. of, Angamali 683572.

MADHYA PRADESH

Earth & Environmental Sciences, Academy of, School of Studies in Geology, Vikram Univ., Ujjain 456001.

Technological Instt., Shri Govindram Seksaria, Opp. Nehru Park, Indore 452001.

MAHARASHTRA

Adult Education Assocn., Bombay, 136, Apollo St., Bombay 400023.

Alliance Francaise de Bombay, French Bank Bldg., 21, Homji St., Bombay 400001.

Ambulance, College of, Bombay City Ambulance Corps., 21, New Marine Lines, Behind Govt. of India Offices, Bombay 400020. Instructor's courses in advanced First Aid and home nursing.

Anglo-Scottish Education Socty., 6, Purshottam Thakurdas Mrg., Bombay 400001.

Apprentice School, Dockyard, Naval Dockyard, Fort, Bombay 400023. Dockyard Apprenticeships are offered to boys between 14-19 years under Apprenticeship Act, 1961 twice yearly in March and September. Competitive examinations and interviews are held in various recruiting centres in India. Period of apprenticeship three years.

Architecture, Academy of, Plot No. 278, Shankar Ghanekar Mrg., Prabhadevi, Bombay 400025.

Art, Sir Jamsetjee Jeejeebhoy School of, Dr. D. Naoroji Rd., Bombay 400001.

Asian Studies, Indian Instt. of, 23, Azad Nagar, J. Prakash Rd., Bombay 400058.

Bank Management, National Instt. of, 85, L. Jagmohandas Mrg., Bombay 400006. Serves as the apex research and trg. institution of the banking system.

Bankers, Indian Instt. of, The Arcade, World Trade Centre, 2nd Flr., Cuffe Parade, Colaba, Bombay 400005.

Bharatiya Vidya Bhavan, Kulapati K. M. Munshi Marg, Bombay 400007. Founded in 1938 by late Kulapati Dr. K. M. Munshi; is devoted to the promotion of education, art & culture, having branches all over India and London (U.K.); New York (U.S.A.).

Building Industries, Vazifdar College of, 17, Arthur Bunder Rd., Colaba, Bombay 400005

Catering Technology and Applied Nutrition, Instt. of, Veer Sawarkar Marg, Bombay 400028.

Cercle Litteraire Bibliotheque, Dinshaw Petit — 60, Forbes St., Bombay 400001. *Object:* To promote the study of French language, literature & civilization; Library & Reading Room.

Commerce, Alexandra College of, Prospect Chambers Annexe, Dr. D. Naoroji Rd., Bombay 400001.

Commerce, Davar's College of, 51, M. Gandhi Rd., Bombay 400023.

Commerce, Laxmi College of, Sharadashram Vidyamandir, Dadar, Bombay 400028.

Communication Studies, Rajendra Prasad Instt. of, Kulapati K. M. Munshi Rd., Bombay 400007.

Community Health, Foundation for Research in, 48-A/R. G. Thadani Mrg., Bombay 400025.

Computing Techniques, National Centre for Software Development, Tata Instt. of Fundamental Research, Homi Bhabha Rd., Bombay 400005. Providing assistance to computing activities in India to develop systems & applications software and generalised software packages in all areas of computing including graphics & computer-aided design; organising specialised advanced courses in computer science & technology; design of multi-processor networks and devpt. of digital data communication technology in general.

Co-operative Management, Vaikunth Mehta National Instt. of, Reserve Bank Bldg., Ganeshkhind Rd., Pune 411016.

Creative Intelligence, Maharishi Instt. of, Navyug Nivas, Lamington Rd., Bombay 400007 and at 29, Satya Apartments, Naupada, Thane 400602.

Education, Audiology & Research Centre, 67, L. Jagmohandas Mrg., Bombay 400006.

Education, Indian Instt. of Workers', Adarshnagar, Worli, Bombay 400025.

Education, Council for Economic, 125, Wodehouse Rd., Bombay 400005.

Education Committee, Bombay City Social, Samaj Shikshan Mandir, Adarsha Nagar, Worli, Bombay 400025.

Education Socy., Deccan, Fergusson Coll., Pune 411004.

Education Socy., Mahatma Phule, Bhoiwada, Parel, Bombay 400012.

Education Socy., People's, Anand Bhavan, Dr. D. Naoroji Rd., Bombay 400023. To promote higher edn. amongst the poorer people in general and the backward classes in particular. The Society runs 5 Colleges, 2 Diploma Institutes, 1 Night High School, 1 Buddhist Centre and 1 Research Centre in Bombay; 1 School at Belapur, CBD Sector I, New Bombay; 4 Colleges, 2 High Schools and 1 Buddhist Centre at Aurangabad and 1 college at Mahad; 1 High School and 1 Backward Classes Hostel at Pandharpur and 1 Backward Classes Hostel at Dapoli (Ratnagiri Dist.). The Society gives annual grant-in-aid to the Backward Classes Hostel at Manmad, Nandurbar, Chalisgaon, Pune, Mahad, Nipani, Dholka, Patan, Vasamat and Kankavli.

Education Socy., Prince Shivaji, Sykes Extension, Kolhapur 416001.

Electrical Measuring Instruments, Instt. for Design of, Adjoining Eastern Express Highway, Chunabhatti, Sion, Bombay 400022. Set up by the Govt. of India under U.N.D.P. Assistance Programme for assistance in the development of Electrical Measuring, Process Control & Electronics instruments industry in the country.

Energy Management, Instt. of, 18, Oak Shade, Deonar Baug, Bombay 400088.

Family Welfare Trg. & Research Centre, 332, Sardar V. Patel Rd., Bombay 400004.

Fire Service College, National, Nagpur 440001.

Fisheries Education, Central Instt. of, Kakori Camp, Jaiprakash Rd., Versova, Bombay 400058.

Food Craft Instt., Engg. Coll. Hostel Campus, Shivajinagar, Pune 411005.

Gemmological Instt. of India, C/o Gem & Jewellery Exporters Assn., 29, Gurukul Chambers, 187-89, Mumbadevi Rd., Bombay 400002. Provides facilities for study of gemmology & for testing, weighment and valuation of gem stones of all kinds, thereby introducing scientific methods in the gem and jewellery trade. It also conducts regular trg. courses in Gemmology and Diamond grading/assortment. The laboratory of the Institute has been recognized by the Govt. of India as a Research and Development Laboratory.

German Studies, Indian Instt. of (Max Mueller Bhavan), 14/3B, Boat Club Rd., Pune 411001 and Prince of Wales Museum Annexe, Bombay 400001.

Geomagnetism, Indian Instt. of, Colaba Observatory, Bombay 400005. An autonomous Instt. under Min. of Tourism and Civil Aviation, Govt. of India.

Grantha Sangrahalaya, Mumbai Marathi, 172, Naigaum Cross Rd., Bombay 400014.

Handicrafts Devpt. Assocn., Indian, Nirmal Mahal, Bomanji Petit Rd., Bombay 400036. Trg. in designing furniture and decorative items in stone, metal etc.

Handmade Paper Instt., K. B. Joshi Rd., Pune 411005.

Harijan Girijan Samaj Unnati Mandal, Vidyashram, Bhiwandi 421302, Thane Dist. Runs 60 ednl. insttns. in nearly 60 villages.

Industrial Engineering, National Instt. for Training in (NITIE), Vihar Lake Rd., Bombay 400087. NITIE offers a two-year Post-Graduate Course in Industrial Engineering equivalent to M. Tech., and short term trg. programmes for senior and middle level executives. It is also engaged in research and consultancy activities in Industrial Engg.

Industrial Security, Instt. for Trg. in, Farmee House, Shastri Marg, Vikhroli, Bombay 400083.

Labour Studies, Maharashtra Instt. of, (Govt. of Maharashtra), D. Chamarbaugwala Rd., Parel, Bombay 400012. Recognised by the Bombay Univ. as a post-graduate Instt. of specialised studies leading to 2-year Univ. Master's Degree in Labour Studies (M.L.S.). The course is open to candidates with a Bachelor's Degree of Bombay Univ. in any faculty or a degree of another Univ. recognized as equivalent thereto. The Instt. also guides students for Ph.D. and the admissions are open to the T.U. & I.R. & M.L.S. students.

Leather Technology, Instt. of, Bombay 400051.

Literature, Arts, Crafts & Culture, Peoples University of.—Shri Shivaji Loka Vidyapitha, Shivaji Nagar, Morshi Rd., Amravati 444001.

Local Self-Government, All-India Institute of, 11, Horniman Circle, Bombay 400023.

Management & Growth Economics (IMAGE), Instt. of, 232, General Assurance Bldg., 1st flr., Dr. D. N. Rd., Bombay 400001.

Management, M.M.C. School of, Court Chambers, New Marine Lines, Bombay 400020.

Management Studies, Jamnalal Bajaj Instt. of, 164, Backbay Reclamation, Bombay 400020.

Medical Sciences, Mahatma Gandhi Instt. of, Sevagram, Wardha 442102.

Naturopathy—Indian Instt. of Drugless Therapy, Sundar Mahal, V. Nariman Rd., Bombay 400020. Correspondence Course in nature cure.

Nritya Shree, 3, Dhake Colony, Jaiprakash Rd., Andheri (West), Bombay 400058. Trg. in Kathakali, Bharatnatyam and other classical and folk styles of dancing.

Occupational Therapy Trg. School and Centre, K.E.M. Hospital, Parel, Bombay 400012.

Oceanography, National Instt. of, Sea Shell Bldg., Versova, Bombay 400061.

Oriental Instt., K. R. Kama, 136, Apollo St., Bombay 400023

Packaging, Indian Instt. of, E-2, Marol Indl. Estate, P.O. MIDC, Andheri East, Bombay 400093. *Regnl. Office:* Madras.

Philosophy, Pratap Centre of, Amalner 425401.

Physical Education, Government College of, Kandivli West, Bombay 400067.

Politics and Economics, Gokhale Instt. of, Deccan Gymkhana, Pune 411004.

Population Studies, International Instt. for, Govandi Station Rd., Deonar, Bombay 400088. Sponsored by the Govt. of India and the United Nations. It serves as the regnl. centre for teaching and research in Population Studies for the countries of Asia and the Pacific.

Puppetry, Indian Instt. of, Datta Nivas, Shivaji Park Rd. No. 5, Bombay 400016.

Radio Electric Instt., Lamington Chambers, Dadasaheb Bhadkamkar Rd., Bombay 400004.

Road Transport, Central Instt. of (Trg. & Research), Pune-Nasik Rd., Pune 411026.

Road Transport, Indian Instt. of, BEST House, Bombay 400039.

Sahakari Sangh, Maharashtra Rajya (Bombay Central Co-op. Instt.), 11, Bank St., Bombay 400023. Imparts co-op. edn. & trg. to co-op. society members and to co-operative movement workers.

Sanskrit Vishva Parishad, (World Academy of Sanskrit), Bharatiya Vidya Bhavan, K. Munshi Marg, Bombay 400007.

Science, Instt. of, 15, Cama Rd., Bombay 400032.

Shikshan Sanstha, Rayat, Satara 415001. Provides facilities for the edn. of the poor by providing means to earn while learning on the principle of self-help. The insttns. are conducted without distinction of religion, caste, creed or class. It conducts 20 colleges, 313 secondary schools (including 68 higher secondary schools), 7 primary trg. colleges, 70 hostels in the State. *Students on Roll*: 166,183; *Workers on Roll*: 8,476.

Shikshana, Prasaraka Mandali, S.P. College Bldgs., Pune 411030. The main object of the Society is to give edn. at moderate cost, by starting schools, colleges, etc.

Social Sciences, Tata Instt. of, Sion-Trombay Rd., Deonar, Bombay 400088. Founded by Sir Dorabji Tata Trust in 1936, this pioneer institution, which is deemed to be a university, offers programmes of trg. leading to the Ph.D. degree in Social Work/Social Sciences; M.Phil. degree in social work/Social Sciences; M.A. degree in Social Work in the fields of Criminology & Correctional Adm., Family & Child Welfare, Medical & Psychiatric Social Work, Urban & Rural Community Devpt., Social Welfare Adm., M.A. degree in Personnel Management & Industrial Relations, Post-graduate Certificate Course in Research Methodology.

Social Service, Instt. of, 38, New Marine Lines, Bombay 400020.

Social Service, Karve Instt. of, Hillside, Karvenagar, Pune 411029.

Spastics Society of India, Upper Colaba Rd., near Afghan Church, Colaba, Bombay 400005. It runs (1) Centre for Special Education—provides education and therapy for 60 spastic children and (2) Post-graduate Diploma Course for Training of Teachers for Physically Handicapped Children.

Statistical Instt., Indian, Old CGO Bldg., 101, M. Karve Rd., Bombay 400020.

Sugar Instt., Deccan, MSFC Bldg., 270, Senapati Bapat Rd., Pune 411016.

Technical Instt., Victoria Jubilee, Matunga, Bombay 400019.

Technology, Indian Instt. of, I.I.T., Powai, Bombay 400076. It provides instruction and facilities for research in various branches of science, engineering, technology, humanities & social sciences. It enjoys the status of University, B. Tech. (Aero. Engg., Chem. Engg., Civil Engg., Elect. Engg., Mech. Engg., & Metallurgical Engg.): M. Tech. (Aero Engg., Chem. Engg., Civil Engg., Elect. Engg. including Electronics, Mech. Engg. & Metallurgical Engg.); Inter-disciplinary programmes in Industrial Engg., and Operations Research, Materials Science, Environmental Science & Engineering, and Systems & Control Engineering; Master of Design (Product Design); M.Sc. 5-year Integrated and 2-year Post B.Sc. (Chem. Math., Phys. & Applied Geology); Post-graduate Diploma course in Dock & Harbour Engg., Computer Science, Aeroengine Design; Advanced Aerial Photo Interpretation; Indl. Design & Applied Hydrology; Ph.D. Programmes in Humanities, Sciences & Engg. Technology.

Textbook Production & Curriculum Research, Maharashtra State Bureau of, 'Balbharati', S. Bapat Mrg., Pune 411004.

Trade Centre, Indian International, 59, Nariman Bhavan, Nariman Point, Bombay 400021. *Branch:* 310, Jolly Bhavan No. 2, New Marine Lines, Bombay 400020. Specialised in Trade Promotion Trg., Market-Research, Intnl. Business Consultancy Services & Publications. Organises Post-Graduate Diploma Course in Export-Import Management (DEIM) & Diploma Course in Labour Laws, Management (DLLM). Also conducts short-term trg. courses in Intnl. Mktg., etc. *Branches:* New Delhi, Bangalore & Madras.

Transport Management, Patel Instt. of, 21, Lakozy Mansion, Chowpatty Seaface, Bombay 400007.

Veterinary & Biological Products, Instt. of, Pune 411007.

Welding, Indian Instt. of, c/o Advani-Oerlikon Ltd., Ador House, 6, K. Dubash Mrg., Bombay 400023.

Workers' Education, Indian Instt. of, Adarsh Nagar, Worli, Bombay 400025.

ORISSA

Food Craft Instt., Sachivalaya Mrg., Unit 4, Bhubaneswar 751001.

Physics, Instt. of, A/105, Saheed Nagar, Bhubaneswar 751007.

PONDICHERRY

Post-graduate Medical Education & Research, Jawaharlal Instt. of, Pondicherry 605006.

PUNJAB

Engineering, National Instt. of, Hoshiarpur 146001.

Medical Education & Research, Post-graduate Instt. of, Chandigarh 160011.

Physical Education & Sports, Socy. for the National Instts. of, Moti Bagh, Patiala 147001.

Polytechnic, J.R. Govt., Hoshiarpur 146001.

Sports, Netaji Subhas National Instt. of, Motibagh, Patiala 147001.

Technical Teachers' Trg. Instt., Sector 26, Chandigarh 160019.

Textile Chemistry & Knitting Technology, Govt. Instt. of, Dressi Rd., Old Fort, Ludhiana 141001.

RAJASTHAN

Homoeopathy Assocn., Rajasthan, New Colony, Jaipur 302001.

Public Administration, H.C.M. State Instt. of, J. L. Nehru Mrg., Jaipur 302004.

Sciences, Rajasthan Academy of, Birla Coll., Pilani 333031.

Technology & Sciences, Birla Instt. of, Pilani 333031.

Vidyapith, Banasthali, P.O. Banasthali Vidyapith 304022. All India residential instn. imparting all-round edn. to girls from nursery to post-graduate and research stage with faculties of Arts, Science & Education.

Vidyapith, Saraswati, Tipta, Kota 324001.

TAMIL NADU

Adult Education, Regional Council for, 274, Linghi Chetty St., Madras 600001.

Advanced Trg. Instt. (A Govt. of India-ILO Project), Guindy, Madras 600032. Offers programmes of short duration for upgrading and updating the skills of workers.

Anatomy, Instt. of, Madras Medical College, Park Town, Madras 600003.

Ayyappa Arts Academy, 35/36, Arunachala Acharya St., Madras 600005.

Bala Sevika Trg. Instt., C/o Indian Council of Child Welfare, I, Prakasa Mudali St., T. Nagar, Madras 600017.

Catering Technology and Applied Nutrition, Instt. of (Govt. of India & Govt. of T.N.), Adyar, Madras 600020.

Ceramic Technology, Instt. of, Vriddhachalam 606001.

Co-operative & Vocational Education, State Instt. of, Post R.E.C., Tiruchirapalli 620015.

Development Studies, Madras Instt. of, 74, 2nd Main Rd., Gandhinagar, Madras 600020.

Educational Assocn. of Southern India, Muslim, 49, Peters Rd., Royapettah, Madras 600014.

Engineering Technology, Indian Instt. of, 70/4L, Arcot Rd., Madras 600024.

Engineering Trg. Centre, Hindustan, 40, North Parade Rd., Madras 600016.

Film Acting, Instt. of, Southern India Film Chamber of Commerce, 122, Mount Rd., Madras 600006.

Film Technology, Instt. of, Adyar, Madras 600020.

Financial Management and Research, Instt. for, 3, Kothari Rd., Nungambakkam, Madras 600034.

Fine Arts, International College of, 35/36, Arunachala Achari St., Triplicane, Madras 600005.

Fisheries Co-operatives, Central Instt. of, 81, S. N. Chetty St., Royapuram, Madras 600013.

Footwear Trg. Centre, Central (Min. of Industry, Govt. of India). 65/1, Grand Southern Trunk Rd., SISI Campus, Madras 600032.

Forensic Science & Chemical Laboratory, Tamil Nadu, South Beach Rd., Madras 600004.

Home Science College for Women, Sri Avinasilingam, Coimbatore 641011.

Human Relationship, Gandhi Lincoln Instt. of, Gandhigram 624302. (Madurai Dist.).

Industrial Engineering, Trg. Instt. for Productivity in, No. 1, Dr. A.C. Rd., Madras 600084.

Industrial & Fiscal Economics, Indian Socy. of, Univ. of Madras, Madras 600005.

Instructors, Central Trg. Instt. of, Industrial Estate, Guindy, Madras 600032.

Kalakshetra—College of Fine Arts, Thiruvanmiyur, Madras 600041.

Labour Instt., Regional, Adyar, Madras 600020.

Leather Technology, Instt. of, Adyar, Madras 600020.

Management, Instt. of, Shanmugha Mandram, Race Course, Coimbatore 641018.

Marine Biology Centre for Advance Studies, Annamalai Univ., Parangipettai 608502.

Mathematical Sciences, Instt. of, Central Polytechnic Bldgs., Madras 600020.

Music Academy, Madras, 115-E, Mowbray's Rd., Madras 600014.

P.S.G. & Sons Charity Industrial Instt., Peelamedu Post, Coimbatore 641004.

Pasteur Instt. of Southern India, Coonoor 643103.

Plastics, Engineering and Tools (Min. of Chemicals & Fertilisers), Central Instt. of, Guindy, Madras 600032.

Printing & Graphic Arts, Indian Academy of, 'Sudha Sindhu', 8, Second St., Subramania Nagar, Madras 600024.

Prototype Devpt. & Trg. Centre (NSIC), Sector B-24, Guindy Indl. Estate, P.O. Ekkaduthangal, Madras 600097.

Ramakrishna Mission Vidyalaya, Sri, Sri Ramakrishna Vidyalaya P.O., 641020, Coimbatore Dist.

Regional Testing Laboratory, Ind. Estate, K. Pudur, Madurai 625007.

Rural Health and Family Planning, Gandhigram Instt. of, P.O. Ambathurai R.S. 624309, Madurai Dist.

Rural Instt., Gandhigram, Gandhigram 624302. (Madurai Dist).

Sanskrit Academy, Sanskrit College Bldgs., Mylapore, Madras 600004.

Science Trust, Divine, 26, K.K. Rd., Ambattur, Madras 600053. An educational trust for the advancement of science of Visishtadvaita.

Screen Printing, Indian Instt. of, 85, Chamier's Rd., Madras 600018.

Seva Sadan, Madras, 5, Harrington Rd., Chetput, Madras 600031. Runs High School, office assistant trg. course, Industrial School, Working Women hostel etc., for the destitute and deserted women.

Tamil Studies, International Instt. of, C.I.T. Campus, Adyar, Polytechnic, Madras 600020.

Technical Teachers' Trg. Instt. (S. Region), (Govt. of India, Min. of Education), Adyar, Madras 600020.

Technology, Coimbatore Instt. of, P.O. Aerodrome, Coimbatore 641014.

Technology, Indian Instt. of, Madras 600036.

Technology, Madras Instt. of, P.O. Chromepet, Madras 600044.

Technology, Seshasayee Instt. of, Ariyamangalam, Tiruchirapalli 620010.

Tuberculosis Instt., Government, Spur Tank Rd., Chetput, Madras 600031.

Veterinary Assocn., Indian, 10, Avenue Rd., Madras 600034.

Vivekananda Kendra, Vivekanandapuram, Kanyakumari 629702. Teaches Sanskrit and Yoga besides managing the Vivekananda Rock Memorial.

Vocational Education, State Instt. of Co-op., Post REC, Tiruchirapalli 620015.

Welding, Indian Instt. of, 21, Vaidyaraman St., T. Nagar, Madras 600017.

UTTAR PRADESH

Creative Intelligence, Maharishi Instt. of, Shankaracharya Nagar, Rishikesh 249201.

Earthquake Engineering, School of Research & Trg. in, Univ. of Roorkee, Roorkee 247667.

Fisheries Operatives, Regnl. Trg. Centre for Inland, Raja Niketan, P.O. Bldgs., Civil Lines, Delhi Gate, Agra 282002.

Food Craft Instt., 18-B, Ashok Marg, Lucknow 226001.

Forest Academy, Yoga Vedanta, Divine Life Society, P.O. Sivanandanagar 249192, Tehri Garhwal Dist.

Gandhian Studies, Instt. of, Rajghat, Varanasi 221001.

Kashi Vidyapith, Varanasi 221001.

Kashiraj Trust, All India, Fort Ramnagar, Varanasi 221001. *Objects*: Advancement and propagation of the Sanskritic learning & Indology.

Ophthalmology, Instt. of, Gandhi Eye Hospital, Aligarh 202001

Oriental Philosophy, Instt. of, Vrindaban 281121, Mathura Dist

Paper Technology, Instt. of, Saharanpur 247001.

Petroleum, Indian Instt. of, P.O. 11P, Dehra Dun 248005. *Projects Divn.:* CSIR Complex, 5th Flr., Library Rd., Pusa, New Delhi 110012. *Proteins Project*: C/o Gujarat Refinery, P.O. Jawahar Nagar 391320.

Photo-Interpretation Instt., Indian (National Remote Sensing Agency), Kalidas Rd., Dehra Dun 248001

Population Centre, Ram Sagar Misra Nagar, Faizabad Rd., Lucknow 226001.

Sanskrit Vidyapeetha, Ganganatha Jha Kendriya, Motilal Nehru Park, Allahabad 211001.

Sanskrit Vishwa Vidyalaya, Varanaseya, Varanasi 221001. Teaching-cum-affiliating. Has the richest collection of Sanskrit Manuscripts.

Sciences, India, National Academy of, 5, Lajpat Rai Rd., Allahabad 211002.

Soil Science, Sheila Dhar Instt. of, Univ. of Allahabad, 2-D, Beli Rd., Allahabad 211002.

Technological Instt., H.B., Company Gardens, Kanpur 208001.

Technology, Indian Instt. of, Kanpur 208016.

Textile Instt., Govt. Central, Parbati Bagla Rd., Kanpur 208001.

Vijnana Parishad, Thornhill Rd., Muir College Bldgs., Allahabad 211002.

Viswavidyalaya, Gurukul Kangri, P.O. Gurukul, Kangri 249404 (Saharanpur Dist.).

Work Study, Defence Instt. of, Landour Cantt., Mussoorie 248179.

WEST BENGAL

Adult Education Assocn., West Bengal, Student Hall, 1/2A, College Square, Calcutta 700012.

Animal Husbandry & Dairying, State Instt. for, Haringhata Farm, P.O. Mohanpur 741246, Nadia Dist.

Asian & African Relations, Instt. of, 57/B, Beltola Rd., Calcutta 700025.

Bharatiya Vidya Bhavan, 1–1, Meredith St., Calcutta 700013.

Bratachari Socy., Bengal, 191/1, B.B. Ganguly St., Calcutta 700012. Trg. in physical education, work education and social service under the system of Bratachar, education founded by late Gurusaday Dutt.

Catering Technology and Applied Nutrition, Instt. of, 21, Convent Rd., Calcutta 700014.

Child Health, Instt. of, 95, Dilkhusa St., Calcutta 700017.

Computer Education, Instt. of, Dabriwala House, 10, Middleton Row, Calcutta 700071.

Detective Trg. & Forensic Instts., Central, 20, Gorachand Rd., Calcutta 700014.

Economic & Entrepreneurship Devpt. Foundation, 27A, Camac St., Calcutta 700016.

Education Socy., 6/A, Sahitya Parishad St., Calcutta 700006.

Electronic Technology, Indian Instt. of, 8/8, R.N.K. St., Calcutta 700005.

Homoeopathy, National Instt. of, 118, Amherst St., Calcutta 700009.

Jute Technology, Instt. of, 35, Ballygunge Circular Rd., Calcutta 700019.

Libraries & Information Centres, Indian Assocn. (IASLIC), P. 219, CIT Scheme 6M, Kankurgachi, Calcutta 700054.

Management, Indian Instt. of, "Emerald Tower", Diamond Harbour Rd., P.O. Joka, Calcutta 700027.

Mountaineering Instt., The Himalayan, Jawahar Parbat, Darjeeling 734101.

Neurology, Bangur Instt. of, 52/1A, S.N. Pandit St., Calcutta 700025

Nuclear Physics, Saha Instt. of, 92, Acharya Prafulla Chandra Rd., Calcutta 700009.

Pasteur Instt., 2, Convent Lane, Calcutta 700014.

Personnel Management, National Instt. of, Apeejay House, Block B, 5th Flr., 15, Park St., Calcutta 700016.

Sangit Samaj, Bharatiya, 39-B, Mahim Halder St., Calcutta 700026. College of Indian music.

Sangit Samaj, Surer Maya, 171/26, Roy Bahadur Rd., Calcutta 700034.

Social Welfare and Business Management Indian, Instt. of, College Sqr. West, Calcutta 700073.

Statistical Instt., Indian, 203, Barrackpore Trunk Rd., Calcutta 700035.

Technology, Indian Instt. of, Kharagpur 721301.

Theoretical Physics, Instt. of, 4/1, Mohan Bagan Lane, Calcutta 700004.

Women's Education Socy., Bani Mandir, 2, Dr. A.R. Chowdhury Lane, Calcutta 700019.

VOCATIONAL GUIDANCE BUREAUX

(State-wise list)

Andhra Pradesh : Director, State Bureau of Educational and Vocational Guidance, Himayat Nagar, Hyderabad 500029.

Bihar : Director, State Bureau of Educational and Vocational Guidance, Kadam Kuan, Patna 800003.

Gujarat : Vocational Guidance Officer, Instt. of Vocational Guidance, Narayan Park, Naurangpura, Ahmedabad 380009.

Himachal Pradesh : Counsellor-in-Charge, State Bureau of Educational & Vocational Guidance, Educational Directorate, Labour Hostel, Simla 171004.

Karnataka : Director, Bureau of Educational & Vocational Guidance, No. 27, 'V' Block, Kumara Park, West Extension, Bangalore 560020.

Kerala : Director, Bureau of Educational Research & Services, Trivandrum 695001.

Madhya Pradesh : Principal, College of Educational Psychology and Guidance, Jabalpur 482001.

Maharashtra : Principal, Instt. of Vocational Guidance, 3, Mahapalika Marg, Bombay 400001.

Manipur : Guidance Officer, Bureau of Educational & Vocational Guidance, Imphal 795001.

Meghalaya : State Bureau of Educational and Vocational Guidance, Office of the D.P.I., Shillong 793001.

Orissa : Director, State Bureau of Educational & Vocational Guidance, Radhanath Training College, Cuttack 753002.

Rajasthan : Director, State Bureau of Educational & Vocational Guidance, Bikaner 334001.

Tripura : Guidance Officer, Bureau of Educational & Vocational Guidance, Govt. of Tripura, Military Rd., Agartala 799001.

Uttar Pradesh : Nirdeshak, Manovigyan Shala, Allahabad 211001.

West Bengal : Incharge, Bureau of Educational & Psychological Research, David Hare Training College, 25-3, Ballygunj Circular Road, Calcutta 700019.

Chandigarh : Bureau of Educational & Vocational Guidance, House No. 70-C, Sector 19-A, Chandigarh 160019.

Delhi : Incharge, State Bureau of Educational & Vocational Guidance, Directorate of Education, Old Secretariat, Delhi 110006.

PRIVATE GUIDANCE AGENCIES

Gujarat : Student Psychological Centre, B. M. Instt., Ashram Road, Near Nehru Bridge, Ahmedabad 380009; Psychological Educational & Remedial Service, Near Akhada Pritam Nagar, Ahmedabad 380017.

Karnataka : Y.M.C.A. Guidance Unit, Cenotaph Road, Bangalore 560002.

Madhya Pradesh : Director, Bureau of Educational Counselling, Y.M.C.A., Indore 452001.

Maharashtra : Vocational Guidance Bureau, St. Xavier's Instt. of Education, 15, Marine Lines, Bombay 400001 ; Student Counselling Centre, Mahapalika Marg, Bombay 400001 ; Maharashtra Vyavasayic Margadarshan Kendra, Bhavani Shankar Road, Bombay 400028 ; Maharashtra Vyavasay Margadarshan Kendra, Sanmitra Mandal Vidya Mandir, Gogewadi, Goregaon East, Bombay 400063 ; Officer Incharge, Parsi Panchayat Vocational Guidance Bureau, C/o BJPC Instt., Opp. Charni Rd. Stn., Bombay 400004 ; Director, Education & Vocational Guidance Bureau, Jan Seva Sangh, 7th Nauroji Hill Road, Dongri, Bombay 400009 ; Vocational Guidance Centre, C/o Ramakrishna Vidyalaya, Amraoti 444601 ; Director, Psychological Tests and Guidance Centre, Kamptee Road, Nagpur 440001.

RESEARCH

EXPENDITURE : In 1952–53 the country spent Rs. 122 million on research and development. By 1973–74 it had gone up to Rs. 2,460 million and the revised budget estimate for 1977–78 was Rs. 3,986 million.

Annual Plan allotment for scientific services and research for 1981–82 was Rs. 1,880 million.

NATIONAL RESEARCH DEVELOPMENT CORPORATION OF INDIA : 61, Ring Rd., Lajpat Nagar III, New Delhi 110024.

Main Functions : To stimulate development and commercial exploitation of Indian patents and inventions ; award prizes for outstanding inventions ; finance pilot plants/demonstration units and making of prototypes in collaboration with industry ; aid horizontal transfer of technology from one industry to another to minimise repetitive import of technology and export indigenous technology.

Publications : NRDC Process List ; Invention Intelligence (English Monthly) ; Awishkar (Hindi Monthly).

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH : Rafi Marg, New Delhi-110001.

CSIR functions as a part of the Department of Science & Technology in the Cabinet Secretariat. There are 30 research establishments which include national laboratories, institutes, organisations, regional laboratories and two information centres. In addition, there are constituent technical divisions at the Headquarters, *viz.*, the Technical Manpower Division, the Technology Utilisation Division, the Planning Division, Centre for the Study, Technology and Development, the Patent Unit, the Grant-in-Aid Unit, the Science Reporter Unit and the Public Relations Unit.

National Register maintained by the Technical/Manpower Division, CSIR, is a clearing house of information regarding availability and utilisation of Indian scientists, engineers, technologists, medical personnel and social scientists in India and abroad.

NATIONAL LABORATORIES/INSTITUTES

Aeronautical Laboratory, National, *P.O. Bag No.* 1779, *Bangalore* 560017 — Scientific investigations into the problems of flight and their practical application to design, construction and operation of flight vehicle in India.

Botanical Research Instt., National, *Rana Pratap Marg, Lucknow* 226001 — Primarily concerned with agro-botany and utilisation of non-agricultural/non-traditional economic plants, and with discovering new vegetable raw materials of industrial value.

Building Research Institute, Central (CSIR), *Roorkee* 247667, *U.P.* — Undertakes applied research on planning, foundation, materials, design, construction and fire safety aspects of bldgs. for achieving functional efficiency, speed, economy and productivity in bldg. construction. The Instt. has five extension centres at Delhi, Bhopal, Ahmedabad, Calcutta and Hyderabad.

Chemical Laboratory, National, *Pune* 411008 — Fundamental and applied research in the field of Chemistry and Chemical Technology. Undertakes contractual research.

Fields of Specialisation : Pesticides, drugs, petrochemicals, organic intermediates, inorganic chemicals, physical chemistry, catalysis, polymer chemistry & engg., chemical engg. & process devpt., plant tissue culture & biochemistry.

Cultural Property, National Research Laboratory for Conservation of, *C*-257, *Niralanagar, Lucknow* 226007 — Conducts research for technical study and conservation of objects of art, archaeology, ethnology, library, etc. It also assists in setting up of laboratories and giving technical advice to any laboratory relating to conservation of arts. Conducts trg. in conservation of cultural property.

Drug Research Institute, Central, *Chattar Manzil Palace, P.O. Box* 173, *Lucknow* 226001 — All aspects of drug research including evaluation & standardisation of crude drugs, discovery of substitutes for pharmacopoeial drugs and plants, pharmaceutical and synthetic chemicals, biochemistry and biophysics, infection, immunisation, pharmacology, chemotherapy & experimental medicine.

Electro-Chemical Research Institute, Central, *Karaikudi* 623006, *Tamil Nadu* — Research on different aspects of electrochemical science & technology. The institute has two extension centres at Madras and Mandapam.

Electronics Engineering Research Institute, Central, *Pilani* 333031, *Rajasthan* — Research, design and development work in the area of (*i*) vacuum tubes, (*ii*) semiconductor devices, (*iii*) electronic equipment, controls & systems.

Environmental Engineering Research Institute (NEERI), National, *Nehru Marg, Nagpur* 440020. Formerly known as Central Public Health Engg. Research Instt., it has zonal laboratories at Ahmedabad, Bombay, Calcutta, Cochin, Delhi, Hyderabad, Jaipur, Kanpur and Madras.

Experimental Medicine, Indian Institute of, 4, *Raja Subodh Mullick Rd., Calcutta* 700032 — Research on basic sciences on the current biological and medical needs of the country.

Food Technological Research Institute, Central, *Chaluvamba Mansion, Mysore* 570013 — R & D in post-harvest technology for conservation of food resources and to promote food industries. To develop nutritious foods ; to provide assistance to industry and new entrepreneurs. Serves as an international trg. centre in food science and technology and also as an Associated Insttn. of the U. N. Univ. for advanced trg. & research in post-harvest conservation, preservation & processing of food.

Fuel Research Institute, Central (*Min. of Energy*), *P.O.: F.R.I.* 828108, *Dhanbad Dist., Bihar*—Fundamental and applied research on fuels, coal and lignite. Physical and chemical surveys of coals are done by its seven coal survey stations.

Geophysical Research Institute, National, *Hyderabad* 500007 — Research & development in gravitational, magnetic, electrical and seismic surveys for exploration of minerals, groundwater & oil, and studies in solid earth geophysics.

Glass and Ceramic Research Institute, Central, *Jadavpur University P.O., Calcutta* 700032 — Applied research on glass, pottery, refractories, vitreous enamels and mica ; evaluation and utilisation of indigenous raw materials, import substitution, development of new processes and products, improvement in quality of industrial products, standardisation, etc. ; undertakes investigation sponsored by industry and operates pilot plant for the production of optical glass. The institute has established its first extension centre at the Naroda Indl. Estate on the outskirts of Ahmedabad 382330.

Leather Research Institute, Central, *Adyar, Madras* 600020 — Fundamental and applied aspects of leather technology and allied fields like footwear, leather goods and auxiliaries, and machinery for these industries ; technology transfer and training in these fields.

Mechanical Engineering Research Institute, Central, *Mahatma Gandhi Ave., Durgapur* 713209, *W. Bengal* — Conducts research and devpt. in all aspects of mechanical engg. It maintains Mechanical Engineering Research and Development Orgn. Centres at Ludhiana, Pune, Madras, Durgapur and Cochin and a liaison office at Calcutta.

Medicinal & Aromatic Plants, Central Institute of, *P.O. Faridinagar* (*Near Kukrail Picnic Spot*), *Lucknow* 226010 — Devpt., cultivation & processing of medicinal and aromatic plants. It has Regnl. Centres at Bangalore, Pantnagar (U.P.), Jammu & Kashmir, Kodaikanal & Darjeeling and a commercial unit consisting of farms & factories in Jammu & Kashmir. Two new centres one at Boduppal (A.P.) and the other in Gujarat will start functioning soon.

Metallurgical Laboratory, National, *Jamshedpur* 831007, *Bihar* — Fundamental and applied metallurgical research. It maintains six field stations in Punjab, Tamil Nadu, Gujarat and West Bengal.

Mining Research Station, Central, *Barwa Rd., Post Box* 50, *Dhanbad* 826001, *Bihar* — To assess the technical needs of the mining industry and to study the feasibility of new methods and techniques ; to devise means of improving the standards of safety, health and efficiency in mining industry ; to develop new machines, methods and practices as required and to suggest import substitutes, etc. etc.

Oceanography, National Institute of, *Dona Paula,* 403004, *Goa*—Research on physical, biological, geological, chemical, geophysical, instrumentation and engineering aspects of oceanography including prospecting for petroleum and minerals in sea bed. The Institute has regional centres at Bombay, Cochin and Waltair and an Indian National Oceanographic Data and Information Centre at the headquarters.

Petroleum, Indian Institute of (*Min. of Petroleum*), *P.O.: I.I.P., Dehra Dun* 248005—Research in petroleum refining and processing of natural gas, petrochemicals, demand surveys on petroleum products, process design, devpt. of alternate fuels and the training of personnel.

Physical Laboratory, National, *Hillside Rd., New Delhi* 110012 — Custody, development, maintenance & updating of the national standards of physical measurements, with facilities for calibration, evaluation and developmental & type testing against specifications ; research in fundamental and applied physics ; development of physics-oriented technologies.

Research Laboratory, Regional, *Bhubaneswar* 751013, *Orissa*—Research and developmental work on minerals, metals, chemicals, forest and marine products with major emphasis in the area of minerals and metals, leading to development of new processes and products for setting up industries; undertaking projects on sponsored/collaborative basis including setting up of pilot plants, engineering consultancy and preparation of feasibility reports for commercial exploitation.

Research Laboratory, Regional, *Hyderabad* 500009 — General research & testing facilities.

Research Laboratory, Regional, *Canal Rd., Jammu Tawi* 180001, *Jammu & Kashmir* — Research on the utilisation of plant, animal and mineral resources and their waste products; development of drugs, fermentation products and phytochemicals.

Research Laboratory, Regional, *Jorhat* 785006, *Assam* — Research relating to more efficient utilisation and conservation of important national resources of Assam and surrounding areas.

Road Research Institute, Central (*Min. of Shipping & Transport*), *Mathura Rd., P.O. : CRRI, New Delhi* 110020 — Research in highway, bridge & traffic engg.

Salt & Marine Chemicals Research Institute, Central, *G. Badheka Marg, Bhavnagar* 364002, *Gujarat* — Research & Devpt. work on solar salt, marine chemicals, marine algae, seaweed chemicals, sea water irriculture, desalination of sea/brackish water, Ion exchange, utilisation of solar energy for different applications and corrosion.

Scientific Instruments Organisation, Central, *Sector* 30, *Chandigarh* 160020 — Design and development of scientific instruments for teaching, research and industry with service centres in New Delhi, Madras, Calcutta, Bombay, Lucknow, Hyderabad, Chandigarh, Cochin and Jaipur.

Structural Engineering Research Centre, *Roorkee* 247672, *Uttar Pradesh* — Research in specialised design and development work on bldgs., bridges, transmission line towers, silos, ferrocement bins, bio-gas plants, water tanks, digital computation. Developed know-how for experimental investigations of complicated type of structures using small scale models. Has adequate measurement facilities. Provides design consultancy services in civil engg.

Toxicology Research Centre, Industrial, *M. Gandhi Marg, Post Box* 80, *Lucknow* 226001—To study harmful effects of substances encountered in industry, agriculture and mine ; to conduct experiments on the mode of action of indl. toxin ; to elucidate the mechanism of tissue injury and suggest therapeutic & preventive measures ; to carry out investigations on environmental problems such as hazards due to indl. dusts, radioactivity, X-ray radiation, pollution of water & food resources etc. and to collect & disseminate documented information on problems of industrial toxicology.

SCIENCE MUSEUMS

Industrial & Technological Museum, Birla (*Min. of Education*), 19*A*, *Gurusaday Rd., Calcutta* 700019.

Industrial & Technological Museum, Visvesvaraya (*Min. of Education*), *Kasturba Rd., Bangalore* 560001.

Science Centre, Nehru (*Min. of Education*), *Dr. E. Moses Rd., Worli, Bombay* 400018.

INFORMATION CENTRES

Documentation Centre, Indian National Scientific (INSDOC), *Hillside Rd., New Delhi* 110012 — Established in 1952, with technical assistance from UNESCO, it provides a complete range of documentation services in science and technology to individuals and institutions all over the country.

Documentation Centre, Social Science, 35, *Ferozshah Rd., New Delhi* 110001.

Publications and Information Directorate, *Hillside Rd., New Delhi* 110012—It disseminates scientific and technical information through publication of 20-volume encyclopaedia (Wealth of India) on Indian raw materials and industrial products, journals and monographs; runs Medicinal & Aromatic Plants Information Service and Indl. Information Service; imparts trg. in editorial work.

INDIAN COUNCIL OF AGRICULTURAL RESEARCH, *Krishi Bhavan, New Delhi* 110001.

ICAR functions as an apex body for agricultural research education and extension education (including animal husbandry and fisheries research), with a Govt. link provided by the Department of Agricultural Research & Education of the Ministry of Agriculture, Government of India. There are 39 research establishments which include institutes and laboratories. All of these have their own regional field stations. In addition, ICAR has established a research complex for undertaking the research on problems of farming community in north-eastern hills region of the country. The headquarters of **ICAR Research Complex** for north-eastern region is located in Shillong 793004. Another research complex has recently been established in Goa.

Agricultural Engineering, Central Instt. of, *Bhopal* 462003.

Agricultural Research Institute, Indian, *Pusa, New Delhi* 110012—The centre of origin of many new findings relevant to increasing productivity of our economic crops and of techniques for improving soil fertility, fertilizer use, water management, dryland farming and greater use of renewable sources of energy. It has provided leadership for the high yielding varieties programme that has contributed to our present production advance in agriculture. Since 1958, when it became a Deemed Univ., about 1,267 students have taken the M.Sc. and 1,317 students the Ph.D. degrees in 15 major disciplines at this Instt.

Agricultural Research Institute for Andaman and Nicobar Group of Islands, Central, *Port Blair* 744101.

Agricultural Research Management, Academy for, *Rajendranagar, Hyderabad* 500030.

Agricultural Statistics Research Institute, Indian, *Library Ave., New Delhi* 110012.

Arid Zone Research Institute, Central, *Jodhpur* 342001, *Rajasthan.*

Avian Research Institute, Central, *Izatnagar* 243122, *Uttar Pradesh.*

Cotton Research, Central Instt. of, *Nagpur* 440001.

Cotton Technological Research Laboratory, *Bombay* 400019.

Dairy Research Institute, National, *Karnal* 132001, *Haryana. Regional Stations: Eastern — at Kalyani, West Bengal; Southern — at P.O. Adugodi, Hosur Rd., Bangalore* 560030; *Western — at Aarey Milk Colony, Bombay* 400065.

Dryland Agriculture, All India Co-ordinated Research Project on, 2-2-58/60, *Amberpet, Hyderabad* 500013, *Andhra Pradesh.*

Fisheries Education, Central Institute of, *Post Box No.* 7392 *Kakori Camp, Jaiprakash Road, Bombay* 400061.

Fisheries Technology, Central Institute of, *Wellingdon Island, Matsyapuri, Cochin* 682029, *Kerala.*

Goat Research Institute, National, *Makhdoom, P.O. Farah, Mathura Dist.* 281122. *Uttar Pradesh.*

Grassland and Fodder Research Institute, Indian, *Jhansi* 284001, *Uttar Pradesh.*

Groundnut, National Research Centre for, *Maharshi Dayanand Farm, Gujarat Agricultural University Campus, Junagadh* 362001, *Gujarat.*

Horticultural Research, Indian Institute of, *No.* 255, *Upper Palace Orchards, Bangalore* 560006.

ICAR Research Complex for North-Eastern Hills Region, *Shillong* 793004, *Meghalaya.*

Inland Fisheries Research Institute, Central, *Barrackpore* 743101, *West Bengal.*

Jute Agricultural Research Institute, *Barrackpore* 743101, *West Bengal.*

Jute Technological Research Laboratories, *Calcutta* 700040. ✓

Lac Research Institute, Indian, *Namkum, Ranchi* 834010, *Bihar.* ✓

Marine Fisheries Research Institute, Central, *Cochin* 682018, *Kerala.*

Oilseeds Research, Directorate of, *'D' Block, College of Agriculture, Rajendranagar, Hyderabad* 500030, *Andhra Pradesh*

Plant Genetic Resource, National Bureau of, *IARI Campus, New Delhi* 110012.

Plantation Crops Research Institute, Central, *Kasaragod* 670124, *Kerala.*

Potato Research Institute, Central, *Simla* 171001, *Himachal Pradesh.*

Rice Improvement Project, All India Co-ordinated, *Rajendranagar, Hyderabad* 500030.

Rice Research Institute, Central, *Cuttack* 753006, *Orissa.*

Sheep and Wool Research Institute, Central, *Avikanagar* 304501, *Rajasthan.*

Soil and Water Conservation Research & Training Institute, Central, *Dehra Dun* 248195, *Uttar Pradesh.*

Soil Salinity Research Institute, Central, *Karnal* 132001, *Haryana.*

Soil Survey and Land Use Planning, National Bureau of, *Nagpur* 440006.

Sugarcane Breeding Institute, *Coimbatore* 641007, *Tamil Nadu.*

Sugarcane Research, Indian Institute of, *Lucknow* 266002, *Uttar Pradesh.*

Tobacco Research Institute, Central, *Rajahmundry* 533101, *Andhra Pradesh.*

Tuber Crops Research Institute, Central, *'Vardhini', Vazhuthacaud, Trivandrum* 695017.

Veterinary Research Institute, Indian, *Izatnagar* 243122, *Uttar Pradesh.*

Vivekananda Parvatiya Krishi Anusandhan Shala, *Almora* 263601, *Uttar Pradesh.*

INDIAN COUNCIL OF MEDICAL RESEARCH, *Ansari Nagar, New Delhi* 110016.

The ICMR is an autonomous organisation which initiates, develops and co-ordinates bio-medical research in the country. It maintains sixteen permanent and several semi-permanent research institutes. These institutions and units have been marked with an asterisk in the list of important medical research bodies mentioned below.

Anatomy: *Institute of Anatomy, Madras Medical College, Park Town, Madras* 600003.

Cancer: (1) *Cancer Research Institute of Tata Memorial Centre, Parel, Bombay* 400012. (2) *Chittaranjan National Cancer Research Centre, 37, S. P. Mookerjee Rd., Calcutta* 700026. (3) *Mehdi Nawaz Jung Cancer Hospital and Radium Institute, Red Hills, Hyderabad* 500001, *Andhra Pradesh.* (4) **Cytology Research Centre, Maulana Azad Medical Coll., Bahadur Shah Zafar Mrg., New Delhi* 110002.

Haematology : *Blood Group Reference Centre, Seth G. S. Medical College, Bombay* 400012.

Health, Preventive Medicine : (1) †*All India Institute of Hygiene and Public Health,* 110, *Chittaranjan Ave., Calcutta* 700012. (2) *Chemical Examiners' Laboratory, Madras* 600003. (3) *Public Health Laboratory, Red Cross Rd., Trivandrum* 695001, *Kerala.* (4) *Government Analyst's Laboratory, Red Cross Rd., Trivandrum* 695001, *Kerala.*

Indian Systems of Medicine : (1) *Institute for Ayurvedic Studies and Research, Dhanwantri Mandir, P.O. Bag* 513, *Jamnagar* 361001, *Gujarat.* (2)† *Institute of Research in Indigenous System of Medicine, Approach Rd., Jogindernagar, Himachal Pradesh.* (3) *Central Council for Research in Ayurveda & Siddha, Dharma Bhavan, S-10, Green Park Extn. Mkt., New Delhi* 110016. (4) *Central Council for Research in Unani Medicine, No.* 5, *Panchsheel Shopping Centre, New Delhi* 110017. (5) *Central Council for Research in Homoeopathy, C/o Homoeopathy Pharmacopoeia Laboratory, Navyug Market, Ghaziabad* 201001. (6) *Central Council for Research in Yoga and Nature Cure, Ashoka Rd., New Delhi* 110003.

Infectious Diseases : (1) **National Instt. of Cholera & Enteric Diseases,* 3, *Dr. Ishaque Rd.* (*Kyd. St.*), *Calcutta* 700016. (2) *Institute of Venereology, Government General Hospital, Madras* 600003. (3) †*National Institute of Communicable Diseases,* 22, *Alipore Rd., Delhi* 110006. (4) **Vector Control Research Centre, 5/38, Lenin St., Kosapalayam, Pondicherry* 605011. (5) **Malaria Research Centre,* 22, *Alipore Rd., Delhi* 110006.

Leprosy : (1) †*Central Leprosy Teaching and Research Institute, P.O. Box* 1, *Chingleput* 603001, *Tamil Nadu.* (2) *Leprosy Investigation and Treatment Centre, Zaheerabad* 502220, *Andhra Pradesh.* (3) *Schieffelin Leprosy Research Sanatorium, Karigiri, Via Katpadi* 632007, *Tamil Nadu.* (4) **Central JALMA Instt. for Leprosy, Tajganj, Agra* 282001, *Uttar Pradesh.*

Medical Education and Research : (1) †*All India Institute of Medical Sciences, Ansari Nagar, New Delhi* 110016. (2)† *All India Institute of Physical Medicine and Rehabilitation, Haji Ali Park, Clerk Rd., Bombay* 400034. (3) † *Central Research Institute, Kasauli* 173204, *Himachal Pradesh.* (4) *Haffkine Institute for Training, Research & Testing, Parel, Bombay* 400012. (5) *Indian Institute of Experimental Medicine,* 4, *Raja Subodh Mullick Rd., Calcutta* 700032. (6) *Institute of History of Medicine and Medical Research, 2/A-3, Asaf Ali Rd., New Delhi* 110001. (7) *Institute of Post-graduate Medical Education and Research,* 244, *Lower Circular Rd., Calcutta* 700020. (8) † *Jawaharlal Nehru Institute of Post-graduate Medical Education and Research, Pondicherry* 605006. (9) † *National Institute of Health Administration and Education, E-16, Greater Kailash, New Delhi* 110048. (10) *Post-graduate Institute of Indian Medicine, Varanasi* 221005, *Uttar Pradesh.* (11) *Post-graduate Institute of Medical Education and Research, Sector* 12, *Chandigarh* 160001. (12) *Sheth K. M. School of Postgraduate Medicine and Research, Ellis Bridge, Ahmedabad* 380006. (13) **Laboratory Animal Information Service, National Instt. of Nutrition, Jamia-Osmania, Hyderabad* 500007.

Medical Statistics: **Instt. for Research in Medical Statistics, ICMR, Ansari Nagar, New Delhi* 110016 ; *Sathyamurthi Rd., Chetput, Madras* 600031.

Mental Health : (1) †*All India Institute of Mental Health, P.O. Bag* 15, *Shantinagar P.O., Bangalore* 560027. (2) *Hospital for Mental Diseases and Post-graduate Training Centre, Kanke, Ranchi* 834001, *Bihar.*

Nutrition : **National Institute of Nutrition, Jamia-Osmania, Hyderabad* 500007, *Andhra Pradesh.*

Occupational Health: (1) *Industrial Toxicology Research Centre, Chattar Manzil Palace, Post Box* 80, *Lucknow* 226001, *Uttar Pradesh.* (2) * *National Institute of Occupational Health, Meghani Nagar, Ahmedabad* 380016, *Gujarat.*

Ophthalmology : (1) *M. U. Institute of Ophthalmology, Gandhi Eye Hospital, Aligarh* 202001, *Uttar Pradesh.* (2) *Nehru Institute of Ophthalmology, Eye Hospital, Sitapur* 261001, *Uttar Pradesh.*

Paediatrics : (1) *B. M. Institute, Balghar, Godavari Centre for Family Relations, Navrangpura, Near Nehru Bridge, Ahmedabad* 380009, *Gujarat.* (2) *Institute of Child Health,* 11, *Dr. Biresh Guha Rd., Calcutta* 700017.

Pathology: *Institute of Pathology, Department of Pathology, Safdarjung Hospital, P.O. Box* 3039, *New Delhi* 110016.

Pharmacy: (1) *Central Drug Research Institute, Chattar Manzil Palace, P.O. Box* 173, *Lucknow* 226001, *Uttar Pradesh.* (2)† *Central Drug Laboratory,* 3, *Ishaque Rd.* (*Kyd St.*), *Calcutta* 700016. (3) * *Food & Drug Toxicology Centre, National Instt. of Nutrition, Jamia-Osmania, Hyderabad* 500007.

Physiology : *Defence Institute of Physiology and Allied Sciences, Cantonment, New Delhi* 110010.

Radiotherapy : (1) *Barnard Institute of Radiology, Madras Medical College, Madras* 600003. (2) *Institute of Nuclear Medicine and Allied Sciences, Probyn Rd., Delhi* 110006.

Reproduction : (1) * *Institute for Research in Reproduction, Jehangir Merwanji St., Parel, Bombay* 400012.

Serology : (1) † *B. C. G. Vaccine Laboratory, Guindy, Madras* 600032. (2) *Government Vaccine Institute and Pasteur Institute, Namkum P.O., Ranchi* 834010, *Bihar.* (3) *King Institute of Preventive Medicine, Guindy, Madras* 600032. (4) *State Vaccine Institute, Patwa-Dargar* 263128, *Uttar Pradesh.*

Tuberculosis : (1) *Government Chest Institute and Tuberculosis Demonstration and Training Centre, Spur Tank Rd., Chetput, Madras* 600013. (2) † *National Tuberculosis Institute,* 8, *Bellary Rd., Bangalore* 560003. (3) * *Tuberculosis Research Centre, Chetput, Madras* 600013. (4) † *Vallabhbhai Patel Chest Institute, University of Delhi, Delhi* 110007.

Virus Infections: **National Instt. of Virology,* 20-*A, Dr. Ambedkar Rd., Pune* 411001.

Voice and Speech: †*All India Institute of Speech and Hearing, Maharaja College Centenary Hall, Mysore* 570005.

---

* Institutions under Indian Council of Medical Research. † Institutions under Central Government, Ministry of Health and Family Welfare.

OTHER CENTRAL GOVERNMENT INSTITUTIONS

Anthropological Survey of India, 27, *Jawaharlal Nehru Rd., Indian Museum, Calcutta* 700013. (*Min. of Edu.*), *Zonal Museums at Jagdalpur* (*M.P.*) *& Nagpur.*

Atlas Organisation, National, 50A, *Gariahat Rd., Calcutta* 700019. (*Min. of Edu.*).

Bee Research Institute, Central, 839/1, *Shivajinagar, Pune* 411004. (*Min. of Ind.*).

Botanical Survey of India, *P.O. Botanic Garden, Howrah* 711103, (1) *Indian Botanic Garden, Howrah* 711103; (2) *Central National Herbarium, Howrah* 711103; (3) *Central Botanical Laboratory, Howrah* 711103; (4) *Industrial Section, Indian Museum,* 1, *Sudder St., Calcutta* 700013; (5) *Central Circle—*10, *Chatham Lines, Allahabad* 211002, *Uttar Pradesh*; (6) *Eastern Circle—' Woodlands', Lower New Colony, Shillong* 793003, *Meghalaya*; (7) *Northern Circle—*3, *Lakshmi Rd., Dehra Dun* 248001, *Uttar Pradesh;* (8) *Southern Circle — Tamil Nadu Agricultural Univ. Campus, Lawley Rd. P.O., Coimbatore* 641003. (*T. Nadu*); (9) *Western Circle — Koregaon Rd., Moti Mansion, Pune* 411001, *Maharashtra*; (10) *Arid Zone Circle — D-*7, *Shastri Nagar, Jodhpur* 342001, *Rajasthan*; (11) *Andaman and Nicobar Circle — Horticultural Rd., Haddo, Port Blair* 744102; (12) *Itanagar Field Station, Itanagar, Arunachal Pradesh*; (13) *Sikkim Himalayan Circle, Shenga's House, Balwakhani, Chief Justice Rd., Gangtok* 737101, *Sikkim.*

Botanic Garden, Indian, *Shibpore, Howrah* 711103, *West Bengal.* (*Min. of Edu.*).

Buildings Organisation, National, *Nirman Bhavan, 'G' Wing, Maulana Azad Rd., New Delhi* 110011. (*Min. of Works & Hsg.*).

Civil Aviation Department, Research and Development Directorate, *Technical Centre, Civil Aviation Department, Safdarjung, New Delhi* 110003. (*Min. of Tourism & Civil Aviation*).

Coconut Research Station, Central, *P.O. Kudla, Kasaragod* 670124, *Kerala. Regional Stations*: (1) *Kayangulam* 690533, *Kerala*; (2) *Calicut* 673011, *Kerala*; (3) *Vittal* 574243, *Karnataka.*

Coffee Research Institute, Central, *P.O. Coffee Research Station, Chikmagalur Dist., Karnataka State.* (*Min. of Commerce*).

Coir Research Institute, Central, *P.O. Kalvoor, Alleppey* 688001, *Kerala State.* (*Min. of Commerce*).

Crops Research Institute for the Semi Arid Tropics, International, 1-11-256, *Begumpet, Hyderabad* 500016.

Design Institute, National, *Paldi, Ahmedabad* 380007. (*Min. of Ind.*).

Family Welfare Institute, *L-*17, *Green Park, New Delhi* 110016. (*Min. of H. & F. Welfare*).

Family Welfare Training & Research Centre, 382, *Sardar Vallabhbhai Patel Rd., Bombay* 400004. (*Min. of H. & F. Welfare*).

Fishing Organisation, Deep Sea, *Botawala Chambers, Sir P. M. Rd., Bombay* 400001. (*Min. of Agri.*).

Food Laboratory, Central, 2, *Kyd St., Calcutta* 700016. (*Min. of Agri., Dept. of Food*).

Forensic Science Laboratory, Central, 30, *Gora Chand Rd., Calcutta* 700014. (*Min. of Home Aff.*).

Forest Research Centre, *Coimbatore* 641002, *Tamil Nadu,* (*Min. of Agri.*).

Forest Research Institute and Colleges, *New Forest P.O., Dehra Dun* 248001, *Uttar Pradesh.* (*Min. of Agri.*).

Forest Research Laboratory, *Malleswaram P.O., Bangalore* 560003. (*Min. of Agri.*).

Foundry & Forge Technology, National Institute of, *Hatia P.O., Ranchi* 834003, *Bihar.* (*Min. of Edu.*).

Geodetic and Research Branch, *Survey of India, P.O. Box* 77, *Dehra Dun* 248001, *Uttar Pradesh.* (*Min. of Edu.*).

Geological Survey of India, 27, *Jawaharlal Nehru Rd., Calcutta* 700001. (*Min. of Petro. & Chem.*).

Grain Storage Research and Training Centre, *Meerut Rd., P.O. Box* 10, *Hapur, Uttar Pradesh.* (*Min. of Agri., Dept. of Food*).

Handloom Technology, Indian Institute of, (1) *Foulkes Compound, Salem* 636001, *Tamil Nadu*; (2) *Chowkaghat, Varanasi* 221002, *Uttar Pradesh.* (*Min. of Commerce*).

Housing Wing, Rural, *Punjab Engineering College, Chandigarh* 160001. (*Min. of Works & Hsg.*).

Housing Wing, Rural, Research-cum-Training Centre, *Birla Vishvakarma Mahavidyalaya, Vallabh Vidyanagar, Kaira District, Gujarat.* (*Min. of Works & Hsg.*).

Hydrology, National Instt. of, Roorkee 247672. (*Min. of Irri.*).

Machine Tool Institute, Central, *Tumkur Rd., Bangalore* 560022. (*Min. of Ind.*).

Man-power Research, Institute of Applied, *Indraprastha Estate, Ring Rd., New Delhi* 110001. (*Min. of Home Aff.*).

Meteorological Department, India, *Meteorological Office, Lodi Rd., New Delhi* 110003. (*Min. of Tourism & Civil Aviation*). ✓

Meteorology, Institute of Tropical, *Ramdurg House, Poona University Rd., Pune* 411005. (*Min. of Tourism & Civil Aviation*).

Mines, Indian Bureau of, *New Secretariat Bldg., Nagpur* 440001. (*Min. of Steel & Mines*).

Observatory, Astrophysical, *Kodaikanal* 624103, *Tamil Nadu.* (*Min. of Tourism & Civil Aviation*).

Observatory, Central Seismological, *Health Home, Shillong* 793005, *Assam.* (*Min. of Tourism and Civil Aviation*).

Observatory, Colaba and Alibag, *Colaba, Bombay* 400005. (*Min. of Tourism and Civil Aviation*).

Oil & Natural Gas Commission, Research & Training Institute, 9, *Kaulagarh Rd., P.O. Box* 40, *Dehra Dun* 248000, *Uttar Pradesh.* (*Min. of Petro. & Chem.*).

Orthopaedics, Central Institute of, *Safdarjang Hospital, New Delhi* 110016. (*Min. of H. & F. Plg.*).

Photo-Interpretation Institute, Indian, *No.* 113, *Rajpur Rd., Dehra Dun* 248001, *Uttar Pradesh.* (*Min. of Edu.*).

Pineapple Fibre Research Centre, *Moodbidri* 574227 (*Karnataka State*). (*Min. of Ind.*).

Population Studies, International Institute of, *Govandi Station Rd., Chembur, Bombay* 400071.

Power Research Institute, *P.O. Box* 1042, *Bangalore,* 560012. (*Min. of Energy*).

Productivity Council, National, 38, *Golf Links, New Delhi* 110003. (*Min. of Ind.*).

Radio, Office of the Research Engineer, All India, *Indraprastha Estate, New Delhi* 110001. (*Min. of Inf. & Br.*).

Railways, Research, Designs and Standards Organisation, *Alambagh, Lucknow-226005.* (*Ministry of Railways*).

Rice Research Station, Central Saline, *C/o Central Rice Research Inst., Canning Town P.O., 24-Parganas, West Bengal.*

Rubber Research Institute of India, *Kottayam* 686009, *Kerala.* (*Min. of Commerce*).

Salt Test Laboratory, Government, *Antop Hill, Wadala, Bombay* 400031. (*Min. of Petro. & Chem.*).

Science Education, Department of, *National Institute of Education, Mehrauli Rd., New Delhi* 110016. (*Min. of Edu.*)

Sericultural Research and Training Institute, Central, *Shanthivilas, Nazarbad, Mysore* 570001. (*Min. of Ind.*).

Small Industries Extension Training Institute, *Yousufguda, Hyderabad* 500038. (*Min. of Ind.*).

Soil Mechanics Research Station, Central, *Exhibition Grounds, American Pavilion, Mathura Rd., New Delhi.* (*Min. of Irr.*).

Standards Institution, Indian, 9, *Bahadur Shah Zafar Marg, New Delhi* 110002. (*Min. of Ind.*).

Sugar Institute, National, *Kalimpur, Kanpur* 208001, *Uttar Pradesh.* (*Min. of Agri., Dept. of Food*).

Telecommunication Research Centre, *Eastern Court Compound, Janpath, New Delhi* 110002. (*P. & T. Dept.*).

Test House, National, 11/1, *Judges' Court Rd., Alipore, Calcutta* 700027. (*Min. of Ind.*).

Village Industries, Jamnalal Bajaj Central Research Institute for, *Maganwadi, P.O. Box* 4, *Wardha,* 442001, *Maharashtra.* (*Min. of Ind.*).

Water & Power Research Station, Central, *Khadakwasla P.O., Pune* 411024. (*Min. of Irr.*).

Zoological Survey of India, 34, *Chittaranjan Ave., Calcutta* 700012. (*Min. of Edu.*).

OTHER RESEARCH BODIES

ANDHRA PRADESH

Archaeological & Cultural Research Instt., Birla, 16-1-740, Asmangadh Palace, Malakpet, Hyderabad 500036.

Defence Metallurgical and Research Laboratory, Yakutpura, Hyderabad 500033.

Geography, Indian Instt. of, 10-3-81/1, Marredpalli East, Secunderabad 500026. Branch : Topenagar Camp, Amravati 444602, Maharashtra.

Historical Research Socy., Andhra, Rajahmundry 533101.

Nutrition, National Institute of (ICMR), Jamia Osmania, Hyderabad 500007. Principal research and trg. centre on Nutrition for South & South East Asia. Publications include *Nutrition* (*Quarterly*), *Nutrition News* (*Quarterly*), *Nutritive Value of Indian Foods, Dietary Allowances for Indians*, etc.

Within the National Institute of Nutrition, the following three centres have been established : 1. Food and Drug Toxicology Research Centre (FDTRC); 2. Laboratory Animal Information Services (LAIS). 3. National Nutrition Monitoring Bureau (NNMB).

Oil Technological Research Instt., Anantapur 515001. Run by the A.P. Govt. Conducts research on vegetable oils, fats & allied products. Technical advice and service on problems relating to oil technology are offered.

Oilseeds Development Council, Indian, Telhan Bhavan Himayatnagar, Hyderabad 500029.

Organisation Development, Centre for, Nageena, Rd, No. 3, Banjara Hills, Hyderabad 500034. To promote research on management and development of organisations, and to assist organisations in developing their capability and improving their effectiveness.

Public Enterprise, Instt. of., Osmania Univ. Campus, Hyderabad 500007.

Remote Sensing Agency, National, 4, Sardar Patel Rd., Secunderabad 500003. Autonomous orgn. sponsored by the Deptt. of Science & Technology, Govt. of India, to undertake earth resources survey using remote sensing, a technology which finds applications in agriculture, forestry, ground & surface water, soil classification, land use, urban plng., pollution monitoring, mineral surveys, geophysical survey, cartography, etc. The organisation has modern facilities for remotely sensed data acquisition, analysis and interpretation including a Landsat reception station.

Scientific Research, Ashok Instt. of, 108, Walker Town, Secunderabad 500025.

Tribal Cultural Research & Trg. Instt., Banjara Hills, Road No. 1, Hyderabad 500034.

Unani Medicine, Central Research Instt. for, 10-2-8, A. C. Guards, Hyderabad 500004.

Water Development Society, Ind. Estate, Moula Ali, Hyderabad 500040.

Yoga and Allied Sciences, Indian Instt. of Research in, 4th Hostel, S.P.W. Coll., Tirupati 517502.

ASSAM

Tea Research Assocn., Tocklai Experimental Stn., Jorhat 785008.

BIHAR

Hydraulic & Allied Research, Bihar Instt. of, Patna 800001.

Medical Sciences, Rejendra Prasad Memorial Research Instt. of, Agam Kuan, Patna 800007.

Prakrit, Jainology and Ahimsa, Research Instt. of, Vaishali 844128.

Research Instt., K. P. Jayaswal (Govt. of Bihar), Museum Bldgs., Patna 800001.

Soil Conservation Research, Demonstration & Trg. Centre, P.O. Jogbani 854328. Purnea Dist.

Soil Conservation Socy. of India, 15, Bayley Rd., Patna 800001.

NEW DELHI

Applied Manpower Research, Instt. of, Indraprastha Estate, Ring Rd., New Delhi 110002. Studies and disseminates knowledge about the nature, characteristics and utilisation of human resources in India ; forecasts demand for and supply of manpower and provides a broad perspective of requirements of framed manpower for economic devpt. ; develops improved techniques for the trg. & devpt. of the existing work force.

Applied Economic Research, National Council of, Parisila Bhavan, 11, Indraprastha Estate, New Delhi 110001. An autonomous orgn. estd. in 1956, which undertakes sponsored research work — mainly from Central and State Govts., public undertakings & private enterprises — besides projects on its own initiative. It has so far done about 391 projects of which 220 have been published. The areas of research cover almost all aspects of economic devpt. & plng., such as agriculture, industry, trade, transport, energy, employment, public finance and financial infrastructure. The Council runs a quarterly journal ' Margin '.

Blindness, National Socy. for the Prevention of, Ansari Nagar, New Delhi 110016. Conducts research into causes of blindness — how these can be eliminated and suggests steps for the correct care and use of eyes. The Society has branches all over the country, opthalmic research centres in Modinagar, U.P., Raison and Kulu (H.P.) and a research workshop in New Delhi for the manufacture of highly sophisticated contact lenses.

Cement Research Instt. of India, M-10, S. Extn., Ring Rd., New Delhi 110049.

Economic & Scientific Research Foundation, Federation House, Tansen Marg, New Delhi 110001.

Employment Service, Central Instt. of Research & Trg. in, Pusa, New Delhi 110012. Objectives : (*a*) Conducting research studies on matters relating to organisational, functional and procedural problems of employment exchanges ; (*b*) organising professional trg. for the employment service personnel from developing countries under programmes of intnl. co-opn. and (*c*) preparation & publication of occupational information and career literature for use in ednl. instns. and employment exchanges for vocational guidance.

Historical Research, Indian Council of, 35, Ferozeshah Rd., New Delhi 110049.

Industrial Relations & Human Resources, Shri Ram Centre for, 5, Sadhu Vashwani Mrg., New Delhi 110005. A research and teaching insttn. concerned with the applied problems of public & private sector industries as well as of rural labour. Conducts research and disseminates the findings through trg. programmes, seminars & conferences, etc.

Industrial Research, Shri Ram Instt. for, 19, Univ. Rd., Civil Lines, Delhi 110007. Consists of two research divns., *i.e.*, Polymer and Fibre and one analytical divn. called Shriram Test House. Serving the nation through applied industrial research for the last 30 years.

Informatics Centre, National, E-Wing, Pusha Bhavan, Madangir Rd., New Delhi 110062. Responsible for creating and servicing interactive data bases on interactive network of computers for the various Ministries/Departments of the Govt. of India and associated organizations. Developing methodologies relating to large data bases and computer-communication networking.

Malaria Eradication Programme, National (Min. of Health & Family Welfare), 22, Sham Nath Mrg., New Delhi 110054.

Malaria Research Centre (ICMR), 22, Sham Nath Mrg., New Delhi 110054.

Nehru Memorial Museum and Library, Teen Murti House, New Delhi 110011. A personalia museum depicting the life & work of Jawaharlal Nehru in the context of the struggle for Indian freedom, and a research library specialising in the history of modern India. Besides 76,000 volumes, the library has a rich collection of newspapers, unpublished private papers, photographs, oral history recordings & microfilms.

Nuclear Research Laboratory, I.A.R.I., New Delhi 110012.

Petroleum Conservation Research Assocn., 709/711, Surya Kiran Bldg., 19, Kasturba Gandhi Mrg., New Delhi 110001.

Population, Indian Assocn. for the Study of, Instt. of Economic Growth, Univ. of Delhi, Delhi 110007.

Psychic & Spiritual Research, Instt. of, 22, Sardar Patel Marg, New Delhi 110021.

Public Co-operation, Central Instt. of Research & Training in, C-1/4, Safdarjang Dev. Area, Hauz Khas, New Delhi 110016. Trg. & research in social welfare & public co-operation.

Public Co-operation and Child Development, National Instt. of (Min. of Social Welfare, Govt. of India), Siri Institutional Area, Opp. Police Stn., Hauz Khas, New Delhi 110016.

Small Industries Research & Devpt. Organisation (SIRDO), Laghoodyog Kutee, 23-B/2, Guru Govind Singh Mrg., New Delhi 110005. To identify the potential entrepreneur, help them with consultancy service, project-preparation, management training in all disciplines, financial assistance, easy and regular flow of new materials through setting up of raw materials, banks and arrange marketing of the products.

Small Industry Research Institute (Regd.), 4/43, Roopnagar, Delhi 110007.

Social Science Research, Indian Council of, IIPA Hostel, Ring Rd., Indraprastha Estate, New Delhi 110002. An autonomous body set up by the Govt. of India to promote social science research, to expand its quantum, to improve its quality & to facilitate its utilisation in policy formulation and national devpt.

Training and Development, Indian Society for, Block 1, J. L. Nehru Univ. Campus, New Mehrauli Rd., New Delhi 110057.

Water Pollution, Central Board for Prevention and Control of, Ex-AFO Mess, Dr. R. Prasad Rd., New Delhi 110001.

GOA

Historical Research, Xavier Centre of, Miramar, Panaji 403001. Set up by the Goa-Pune Province of the Society of Jesus in collaboration with the Heras Instt. of Indian History & Culture. It encourages research in Indo-Portuguese period.

Medical Research Centre, Salgaocar, Salgaocar House, Vasco da Gama 403802.

GUJARAT

Cancer Research Instt., Gujarat, New Civil Hosp. Campus, Asarwa, Ahmedabad 380016.

Economic & Social Research, Sardar Patel Instt. of, Thaltej, Ahmedabad 380054.

Electrical Research & Development Assocn. (ERDA), Commercial Bdlg., Makarpura Indl. Estate, Vadodara 390010.

Electronic Research Centre, Sarabhai, Naroda Ind. Area, Naroda, Ahmedabad 382320.

Engineering Research Instt., Race Course Rd., Vadodara 390005.

Learning and Research, Sheth Bholabhai Jeshinghbhai, Instt. of, R. C. Marg, Ahmedabad 380009.

Man-Made Textile Testing & Research Assocn., SASCMA, Resham Bhavan, Lal Darwaja, Surat 395003.

Physical Research Laboratory, Navrangpura, Ahmedabad 380009.

Research Centre, Sarabhai, Wadi Wadi, Vadodara 390007.

Research Society, Gujarat, 445, Paldi, Ahmedabad 380007.

Soil Conservation Research, Demonstration & Trg. Centre, Opp. Rly. Station, Valsad 391830.

Textile and Allied Industries Research Organisation (TAIRO), Kala Bhavan Premises, Vadodara 390001.

Textile Industry's Research Assocn., Ahmedabad (ATIRA), P.O., Polytechnic, Ahmedabad 380015. Devpt. of new products & processes ; consultation on technical & managerial problems ; trg. of supervisors from industry. Recognised for postgraduate research degree of Gujarat University.

JAMMU & KASHMIR

Dogri Research Institute (Regd.), Raghunath Mandir, Jammu 180001.

KARNATAKA

Agricultural Research, Karnataka Instt. of Applied, Sameerwadi 587312. Bijapur Dist.

Historical Research Socy., Karnatak, S. K. Rodda Rd., Dharwar 580001.

Leprosy Relief and Research Instt. of Ayurveda, Arunodaya, P. O. Kengeri 562118, Bangalore South.

Machine Tool Institute, Central, Tumkur Rd., Bangalore 560022. An industry-oriented research organisation devoted to research and development of machine tools and production engineering in India.

Naturopathy & Yogic Science, Instt. of, 16th K.M., Tumkur Rd., Bangalore 560073.

Oriental Research Instt., Mysore 570001.

Plywood Industries Research Instt., Indian (Min. of Industry, Govt. of India), Tumkur Rd., Bangalore 560022.

Raman Research Instt., Mekhri Circle, Bangalore 560006.

Social & Economic Change, Institute for, Nagarabhavi, Bangalore 560072. An all India Instt. for inter-disciplinary research & trg. in social sciences.

KERALA

Development Studies (C.D.S.) Centre for, Arkonam Rd., Trivandrum 695001. Research and study of various disciplines relevant to the national development.

Earth Science Studies, Centre for, P.B. 2235, Sasthamangalam, Trivandrum 695010. An autonomous research and trg. organisation established by the Govt. of Kerala.

Forest Research Instt., Kerala, Peechi 680653, Trichur Dist.

Industrial and Commercial Research Socy. of India, Vallia Veedu, Kozhencheri 689641.

Maternal & Child Health, Instt. of, Calicut 673008.

Tropical Botanic Garden & Research Institute, Navaranga Rd., Trivandrum 695011. Founded by Govt. of Kerala in 1978. *Objects :* To promote & establish modern scientific research and devpt. studies relating to plants of importance to India, and to Kerala in particular ; to establish a botanical garden, and arboretum & laboratories for botanical, horticultural & chemical research, etc. *Dir. :* Prof. A. Abraham.

MADHYA PRADESH

Applied Sciences, Birla Research Instt. for, Birlagram, Nagda 456331.

Defence Research & Devpt. Establishment, Tansen Rd., Gwalior 474002.

Forest Research Instt., State, Ratannagar, Jabalpur 482001.

Oriental Research Instt., Scindia, Vikram Univ., Vikram Kirti Mandir, Ujjain 456001.

Tribal Research Instt., Chhindwara 480001.

MAHARASHTRA

Agricultural Research & Development Foundation, Post Box 7602, Malad, Bombay 400064.

Agricultural Research Instt., Nimbkar, Phaltan 415523, Satara Dist.

Agro-Industries Foundation, Bharatiya, Kamdhenu, S. Bapat Marg, Pune 411016. A research organisation in agriculture and animal sciences. Also engaged in rural socio-economic devpt. programmes & vaccine production.

Animal Health, BAIF Research Instt. for (RIAH), Off Pune-Nagar Rd., Wagholi 412207.

Armament Research & Devpt. Establishment, Pashan, Pune 411008.

Automotive Research Assocn. of India (A Research Instt. of the Indian Automotive Industry with the Min. of Industry, Govt. of India), Vetal Hills, Off Paud Rd., Kothrud, Post Box No. 832, Pune 411004. Conducts research connected with the design, devpt. and proving of automotive equipments and ancillaries. Publication : *Automotive Abstracts* (Monthly).

Cancer Research and Treatment Centre, Ayurvedic, Atreya Arogya Mandir Trust, Laud Mansion, M. Karve Marg, Bombay 400002.

Cattle & Agriculture Devpt., BAIF Research Instt. of, Uruli-Kanchan 412202.

Computing Techniques, National Centre for Software Devpt. &, C/o T.I.F.R., Homi Bhabha Rd., Bombay 400005.

Dharmakosha Mandal, P.O. Wai 412803. To conduct research in ancient Indian religion, philosophy & culture and to edit & publish encyclopaedic works such as Dharmakosha, Mimamsakosha, etc.

Drugs Research Assocn., Indian, 561-B, Shivajinagar, Behind Congress House, Pune 411005.

Electrical Research & Devpt. Assocn. (ERDA), C/o Indian Electrical Mfrs. Assocn., Kakad Chambers, Dr. A. Besant Rd., Bombay 400018.

Engineering Research Instt., Maharashtra, Dindori Marg, Nasik 422004.

Ergonomics Laboratory, Central Labour Instt. Campus, Sion, Bombay 400022. The discipline of ERGONOMICS also known as HUMAN FACTORS ENGINEERING enables us to study the man-machine systems in order to attempt at matching the machines and the environments to the man's capabilities. The Ergonomics Laboratory studies the total stress on the man arising out of the multiple factors like heat, toxic chemical fumes, vapour and dust as well as work load.

Fundamental Research, Tata Instt. of, Homi Bhabha Rd., Bombay 400005 (Estd. 1945). Fundamental research in pure mathematics, applications of mathematics, theoretical physics (particle physics, nuclear physics, solid state theory, astrophysics), high energy physics, cosmic rays (balloon altitudes, mountain altitudes and deep underground), space astronomics (with balloons, rockets and satellites), radio astronomy, nuclear physics, solid state physics, chemical physics, molecular biology and virology, and hydrology ; applied research in solid state electronics, microwave engineering and computer sciences ; national centre of the Government of India.

Haffkine Instt. for Trg. Research & Testing, Parel, Bombay 400012. The Instt. undertakes research in the fields of bacteriology, experimental medicine, chemotheraphy, pharmacology, pathophysiology, biochemistry, haematology, immunology & virology related to communicable & other diseases. Also undertakes biological standardisation and evaluation of drugs. Scientists may study here for Master's or Doctorate degree or could be trained in specialised fields. It also undertakes commercial testing.

Havrashtra Foundation and Zoroastrian Community Development Institute, P. Box 4087, Bombay 400007.

History & Culture, Heras Instt. of, St. Xavier's College, Mahapalika Marg, Bombay 400001.

Hope Foundation for Child Development & Biomedical Research Centre, 'SHUBHATARA', Erandawana, Karve Rd., Pune 411004. Helps those unfortunate lives, from whose lifestream the word 'HOPE' has been taken away by leukemia & other types of cancer. It aims at improving the quality of their remaining life by alleviating physical suffering & mental anguish.

Industrial Research & Devpt. Centre, M. Visvesvaraya, Cuffe Parade, Colaba, Bombay 400005.

Janana Prabhodhini, 510, Sadashiv Peth, Pune 411030. A reasearch body for Social Sciences.

Man-Made Textiles Research Foundation, Resham Bhavan, 76, V. Nariman Rd., Bombay 400020. Undertakes & promotes studies & research activity concerning man-made textiles in the field of manufacture product devpt., mktg., etc.

Management & Research, Bhartiya Vidya Bhavan's Shriyans Prasad Jain, Coll. of, Andheri, Bombay 400058.

Management & Research, Chetana Instt. of, Bandra East, Bombay 400051.

Mathematical Research Instt., Bhaskaracharya Pratishthana, 106/6, Erandavane, Pune 411004.

Micrographics, Indian Instt. of, Sarang St., Bombay 400003.

Music & Performing Arts, Research Instt. for (RIMPA), c/o K. C. Vajifdar, Warden Court, August Kranti Marg, Bombay 400036.

Natural History Socy., Prince of Wales Museum Compound, Bombay 400039.

Oriental Research Instt., Bhandarkar, Pune 411004.

Performing Arts, National Centre for the, Nariman Point, Bombay 400021. Objectives : To establish a national centre for research in the classical, folk, traditional and contemporary arts & sciences of performance and communication ; to ensure their preservation by recording and master classes ; to disseminate knowledge and raise the standard of public understanding of music, dance, drama & related arts ; and accordingly, to establish schools, auditoriums, libraries, studies & workshops.

Post-Graduate and Research Instt., Deccan College, Yeravda, Pune 411006.

Reproduction, Instt. for Research in (ICMR), Opp. K.E.M. Hospital, Parel, Bombay 400012. Research in reproductive physiology, testing and evaluation of fertility regulating methods in animals, sub-human primates and humans ; endocrinological and genetic studies of reproductive failure and mental retardation. **National Pituitary Agency** established in 1977. Activities are, extraction of protein hormones and preparation of diagnostic kits of hormones for biomedical research. Postgraduate teaching & training.

Research Socy., Gujarat, Samshodhan Sadan, South Ave., Khar, Bombay 400052.

Rubber Mfrs. Research Assocn., Indian (Min. of Industry, Govt. of India), B/88 Road U, Wagle Estate, Thane 400604.

Rural Devpt.—Instt. of Regional Devpt. Planning, Wardha 442102. A regd. society financed wholly by Govts. which undertakes research for the Govts. & local bodies.

Rural Education — Shri Mouni Vidyapeeth, Gargoti, Kolhapur 416001. A research & experimental centre in the field of rural education.

Samshodhana Mandal, Vidarbha (Vidarbha Research Society), West High Court Rd., Nagpur 440001.

Sciences, Maharashtra Assocn. of Cultivation of, 173B, Law College Rd., Pune 411004. Research in biological sciences.

Serum Instt. of India, 283, M. Gandhi Rd., Pune 411001.

Silk & Art Silk Mills Research Assocn. Ltd. (Min. of Industry, Govt. of India), Resham Bhavan, 78, Veer Nariman Rd., Bombay 400020.

Small Industries Devpt. Instt., Agri. College Compound, Pune 411005. State Govt. agency under the Dte. of Industries.

Surgery, Rehabilitation & Research, Socy. for Reconstructive, C/o Tata Dept. of Plastic Surgery, Sir J. J. Group of Hospitals, Bombay 400008.

T. T. G. Foundation, 1st Flr., State Bank Annexe, Bank St., Bombay 400023.

Textile Research Assocn., Bombay (Min. of Industry, Govt. of India), Bombay Agra Rd., Ghatkopar, Bombay 400077.

Training, Development & Technology, Centre for, 108, Bajaj Bhavan, N. Point, Bombay 400021.

Vehicles Research & Devpt. Instt., Ahmadnagar 414001.

Veterinary Biological Products, Instt. of, Ganeshkhind Rd., Pune 411007. A State Govt. Instt. manufacturing 20 biologicals including life saving vaccines against dreadful livestock & poultry diseases.

Village Industries, Jamnalal Bajaj Central Research Instt. for, Maganwadi, Wardha 442001. Estd. in 1955 for research & investigation for the improvement of tools & techniques of village industries.

Vividhlaxi Audyogik Samshodhan Vikas Kendra, P.O. Box No. 9037, Patel Vanika, Western Express Highway, Goregaon (E), Bombay 400063. Promotion of research in various fields, giving 6 Annual Awards, scholarship to needy research workers, establishment of a well equipped research reference library & research laboratory and research oriented indl. estate in Kaira Dist.

Wool Research Assocn. (Min. of Industry, Govt. of India), Churchgate Chambers, 7th Flr., 5, New Marine Lines, Bombay 400020.

Yogic Research, Trg. and Therapeutic Instt., Kaivalyadhama S.M.Y.M. Samiti, Lonavla 410403.

MEGHALAYA

King Edward VII Memorial Pasteur Instt. & Medical Research Instt., Shillong 793001.

ORISSA

Aviation Research Centre, Charbatia 754028, Cuttack Dist.

Pulp & Paper Research Instt., P.O. Jaykaypur 765017, Koraput Dist.

Scientific & Industrial Research, Dalmia Instt. of, Rajgangpur 770017, Sundargarh Dist.

PUNJAB

Advanced Management & Technology, Centre for, 99, Sector 18-A, Chandigarh 160018.

Vedic Research Instt., Vishveshvaranand, Sadhu Ashram, Hoshiarpur 146021.

RAJASTHAN

Soil Conservation Research, Demonstration & Trg. Centre, Kota 324002.

TAMIL NADU

Adi Sankara Advaita Research Centre, 1-E, Rosewood Offices, 28A, Nungambakkam High Rd., Madras 600034.

Fisheries Research Instt., Central Inland, 51-A/16, Perambur High Rd., Madras 600012.

Historical Research, Tamil Nadu Council of Archives &, Tamil Nadu Archives, 6, Gandhi Irwin Rd., Egmore, Madras 600008.

Industrial & Scientific Research Assocn., 96, Mount Rd., Madras 600018.

Library and Research Centre, Adyar, The Theosophical Socy., Adyar, Madras 600020.

Plastic Research Centre, Fibre Reinforced, I.I.T., Madras 600036.

Plastics & Rubber Instt., C/o Bhor Inds. Ltd., Raj Bldg., 730, Mount Rd., Madras 600006.

Soil Conservation Research, Demonstration and Trg. Centre, Patna House, Ootacamund 643001.

T. T. G. Foundations, 480, Mount Rd., Nandanam, Madras 600035.

Tamil Devpt. and Research Council, Directorate of Tamil Devpt., Kuralagam, 2nd Flr., Madras 600001.

Tamil Isai Sangam, Rajah Annamalai Hall, Madras 600001. Research in Tamil music and to encourage further musical compositions in Tamil.

Tamil Research, International Instt. of, 14/1, Off Sterling Rd., Madras 600034.

Tamil, Sanskrit & Other Indian Languages Research Instt., 16-A, Marshall's Rd., Madras 600008.

Testing Laboratory, Regional (Govt. of Tamil Nadu), Indl. Estate, K. Pudur, Madurai 625007. Physical testing and chemical analysis of raw materials and finished products are carried out with the latest addition of sophisticated instruments like impact tester, tensile testing machine for rubber, ion meter, D.C. polarograph, ultrasonic flaw detector, in addition to furnishing of technical opinions on chemical and other allied industries in this laboratory.

Textile Research Assocn., South India (Min. of Industry, Govt. of India), Coimbatore 641014.

UTTAR PRADESH

Geology, Wadia Instt. of Himalayan, Dehra Dun 248001.

Grain Storage Research & Trg. Centre, Meerut Rd., P.O. Box 10, Hapur 245001.

Irrigation Research Instt., U.P., Roorkee 247667.

Music & Performing Arts (RIMPA), Research Instt. for, 'Hemangana', S. 13/131, Tarana Bazar, Shivpur, Varanasi 221002.

Nature Cure, Council of Medical Research, 52-57, Gwyne Rd., Lucknow 226001.

Palaeobotany, Birbal Sahni Instt. of, 53, University Rd., Lucknow 226007. Research on fossil plants in its purely scientific aspects and its application to problems of economic geology, coal and petroleum prospecting; library of 3,500 books, 7,000 journals, 25,300 reprints and 225 micro-films & 20 theses.

Sah Indl. Research Instt., Sa. 15/171, Gautam Buddha, Rajpath, Sarnath, Varanasi 221007.

Soil & Water Conservation Research & Trg. Instt., Central, Dehra Dun 248195.

Soya Production & Research Assocn., P. Box 75, Bareilly 243001.

Vedic Research Instt., Maharshi, P.O. Shankaracharya Nagar, Rishikesh 249805.

Vedic Sadhana Ashram, Arshi Gurukul, Tapovan, Dehra Dun 248001. Vedic research & education.

WEST BENGAL

Astro-Research Bureau, 17, Brindaban Mullick 1st Lane, Calcutta 700025.

Bose Instt., 93/1, Upper Circular Rd., Calcutta 700009. Research work in different fields of life sciences.

Documentation and Research on Children's Literature, Academy for, 4/2, Jadab Ghosh Rd., Calcutta 700061.

Economic & Scientific Research Assocn., India Exchange, Calcutta 700001.

Folk Culture, Research Instt. of, 32, Becharam Chatterjee Rd., Calcutta 700034.

Homoeopathy, Central Research Instt. of, 37, Jodhpur Park, Calcutta 700031.

Jute Industries' Research Assocn., Indian, (Min. of Industry, Govt. of India), 17, Taratola Rd., Calcutta 700053.

Medical Aid and Research Socy., Calcutta, 130, Sarat Bose Rd., Calcutta 700029.

Operational Research Society of India, 7/3, Mandeville Gardens, Calcutta 700019.

Plywood Industries Research Instt., Indian, 2/2, Biren Roy Rd. West, Sarsuna, Calcutta 700061.

River Research Instt., 11A, Free School St., Calcutta 700016.

Scientific Research Instt., Usha, 14, Princep St., Calcutta 700072. Research & development in the field of steel wires and wire rope industry, wire drawing machines, alloy steel making and in related sectors.

Sciences, Indian Assocn., for the Cultivation of, Jadhavpur 700032. Fundamental research in different branches of physics and chemistry.

Socio-Economic Research Instt., C-19, College Mkt., Calcutta 700012.

Tea Research Assocn., 6, Netaji Subhas Rd., Calcutta 700001.

Torsteel Research Foundation in India, 4, Govt. Place North, Calcutta 700001.

SPACE RESEARCH

THE Indian Space Programme began in the year 1962 when the **Indian National Committee for Space Research** (INCOSPAR) was formed in the Department of Atomic Energy of the Government of India. In 1969, the **Indian Space Research Organisation (ISRO)** was created to plan, manage and execute the nation's growing activities in Space Science, Space Technology and Space Applications.

The Government of India established the Space Commission in June 1972, backed by the Department of Space (DOS) and entrusted DOS with the responsibility for conducting India's space programme. ISRO functions under DOS as its research and development organisation.

The Space Commission, the Department of Space and the Indian Space Research Organisation have their Headquarters in Bangalore.

The primary aims of the Indian Space Programme are the applications of space science and technology to further national developmental objectives in mass communication and education via satellites; the survey and management of natural resources through remote sensing technology from space platforms and the development of space technology with the maximum degree of self-reliance.

The activities of ISRO are carried out at its four Space Centres: (1) **Vikram Sarabhai Space Centre** (VSSC), Trivandrum, Kerala; (2) **ISRO Satellite Centre** (ISAC), Bangalore, Karnataka; (3) **SHAR Centre,** Sriharikota, Andhra Pradesh and (4) **Space Applications Centre** (SAC), Ahmedabad, Gujarat.

In addition, DOS provides major support to the **Physical Research Laboratory** (PRL) at Ahmedabad which is India's prime centre for research in space sciences.

Vikram Sarabhai Space Centre (VSSC): Named after the late Prof. Vikram A. Sarabhai, the founder of the Indian space programme, VSSC encompasses work related to the development of sounding rockets and satellite launch vehicles, scientific and technological payloads, ground-based and vehicle-borne instrumentation and production facilities for propellants and rocket hardware. VSSC is also responsible for building and launching the **Menaka** and **Rohini** (including **Centaure**) series of sounding rockets for meteorological and scientific investigations of the upper atmosphere. India's first **satellite launch vehicle SLV-3,** successfully launched on July 18, 1980, was developed at this centre. This four-stage solid propellant rocket placed a 35-kg indigenous Rohini Satellite (RS-1) into a near-earth orbit and all the systems of SLV-3 worked satisfactorily. The 22.7-metre-long SLV-3 is being augmented with strap-ons to achieve a vehicle **(ASLV)** capable of putting 150 kg satellites into a low earth orbit. **A Polar Satellite Launch Vehicle (PSLV)** for putting 600 kg class satellites into a sun-synchronous orbit is another programme on the anvil.

The Space Science and Technology Centre (SSTC) of VSSC is the main research and development laboratory. Solid propellant for the rockets is produced at the Rocket Propellant Plant while the rockets and other hardware are made at the Rocket Fabrication Facility (RFF). The Propellant Fuel Complex (PFC) produces special materials required for the processing of propellants. Liquid propellants for rockets have also been developed on a laboratory scale. An experimental plant for the production of Ammonium perchlorate used as oxidiser in solid propellants has been set up at Alwaye, Kerala.

VSSC operates and maintains the **Thumba Equatorial Rocket Launching Station** (TERLS) which has been recognised by the United Nations Organisation (UNO) as an international facility for sounding rocket experiments to investigate problems of meteorology and ionosphere over the geomagnetic equator running close to Thumba and for other experiments. Since November 1963, when the range became operational, more than 1,300 sounding rockets of different makes have been launched for meteorological, ionospheric, aeronomic and astronomical studies. Scientists from Bulgaria, France, Federal Republic of Germany, Japan, the U.K., the USA and the USSR have participated, in co-operation with their Indian counterparts, in many of these experiments.

ISRO Satellite Centre (ISAC) is responsible for the design, fabrication and integration of spacecraft and the development of satellite technology. The first Indian satellite, **Aryabhata,** named after the famous ancient Indian astronomer and mathematician, was designed and fabricated by this Centre. This 360-kg satellite was launched on April 19, 1975 into a near-circular orbit of 600 km at an inclination of 51^0 to the equator from a Soviet Cosmodrome using a Soviet Intercosmos rocket. The spin-stabilised satellite survived in orbit well beyond the design lifetime of six months. All the technological systems on-board the satellite have been functioning well.

With the launching of Aryabhata, India has acquired indigenous capability in satellite technology, namely, to design and fabricate a space-worthy system and evaluate its performance in orbit, evolve the methodology of conducting a series of complex operations on the satellite and set up the necessary receiving, transmitting and tracking systems besides the establishment of the infrastructure for fabrication of satellite systems.

The second Indian satellite, **Bhaskara,** was launched on June 7, 1979, from a Soviet Cosmodrome, for earth observations. The 444-kg experimental satellite named after an ancient Indian astronomer, was designed and built by ISRO. It contained sophisticated instruments for carrying out remote sensing experiments over India, using TV cameras and microwave radiometers. Bhaskara experiments are useful in the fields of forestry, hydrology snow-cover and snow-melt, geology, soils, land use and ocean surface studies. The orbital period of the satellite was 95.2 minutes and the inclination 50.7^0. The maximum height of orbit above surface of earth (apogee) was 557 km and the minimum height (perigee) 512 km.

An improved version of Bhaskara with a wider scanning range is getting ready at the centre for launching from Soviet Union.

Rohini Satellite (RS/D1) went into orbit on May 31, 1981.

Rohini Satellite (RS-1): Polyhedral in shape, weighing 35 kg and developed at ISAC, RS-1 was the first Indian satellite to be launched from India using the indigenous SLV-3 vehicle. A series of Rohini satellites covering selected scientific and application payloads for launch by future SLV vehicles are under development at the centre.

Apple Satellite: India's first three axis body stabilised geostationary experimental satellite, Apple, developed here was launched on 19th June 1981 using the third Ariane launch vehicle of the European Space Agency (ESA). The spacecraft weighing about 660 kg will provide India expertise in the technology necessary for the building and operation of geosynchronous satellites. While the communication payloads of the satellite were built at SAC (Space Applications Centre), important subsystems like ABM (Apogee Boost Motor) and secondary propulsion systems were built at VSSC. Under Apple project, a series of experiments aimed at speeding up the tempo of space communications in India would be carried out.

Indian Remote Sensing Satellite (IRS): Space-based remote sensing of natural resources being one of the major goals of ISRO, efforts are underway to develop an operational Indian Remote Sensing Satellite (IRS) by mid-eighties. The spacecraft will need to be placed in sun-synchronous near polar orbit at a nominal altitude between 550 km & 1,000 km, the orbit depending on the mission requirement.

SHAR Centre: The SHAR Centre at Sriharikota island, off India's east coast, is about 100 km. north of Madras city. It is being developed as a range for launching bigger satellite launch vehicles like ASLV and PSLV. India's first satellite launch vehicle SLV-3 was launched from here.

A comprehensive test facility for conducting various ground tests of rocket motors and subsystems has been set up at Sriharikota. This test facility is being augmented for PSLV programme.

The ISRO Telemetry, Tracking and Command Network (ISTRAC) which has been set up to manage the telemetry and telecommand network of ISRO has supported all ISRO missions such as Aryabhata, Bhaskara and RS-1 with its network stations at SHAR Centre, Ahmedabad, Car Nicobar and Trivandrum.

Space Applications Centre (SAC) is engaged in the planning and execution of the space application projects of ISRO. Its objective is to apply space science and technology to practical uses. To achieve this goal SAC has taken up work in telecommunications and television broadcasting and reception via satellites; use of remote sensing techniques to survey natural and renewable earth resources; studies in space meteorology and satellite geodesy.

This Centre conducted the **Satellite Instructional Television Experiment** (SITE), the year-long (August 1st, 1975 to July 31st, 1976) experiment in direct broadcast of television programmes via the NASA satellite, ATS-6. During the experiment, community TV sets were installed in 2,400 villages in Rajasthan, Bihar, Orissa, Madhya Pradesh, Karnataka and Andhra Pradesh and instructional programmes were beamed directly via the satellite.

Under an agreement between ISRO and the Symphonie organisation, one of the two transponders aboard the Franco-West German Symphonie satellite with a bandwidth of 90 MHz, was made available for Indian experiments in satellite telecommunications for two years, beginning from June 1977. Known as the **Satellite Telecommunications Experiments Project** (STEP) this two year project was taken up by ISRO in collaboration with the Posts and Telegraphs (P & T) Department of the Ministry of Communications. Under STEP, experiments in remote area communications using transportable terminals, radio-networking, emergency communications, digital communications, multiple access, integration of satellite circuits into terrestrial net-works and multiple audio-video transmissions were conducted. The project was mainly aimed at providing a system test of geo-synchronous communication satellite and to sharpen India's expertise in the design, development, fabrication and operation of communication systems involving geo-stationary satellite.

The ground network for STEP consisted of the following: The earth stations at Ahmedabad, Delhi and Madras, Transportable Remote Area Communication Terminal (TRACT) and the Emergency Communication Terminal (ECT).

Except for the Madras Earth Station, the modification, fabrication and operation of all other earth stations were the responsibilities of ISRO. ISRO was also responsible for fabricating the antenna system and the high-power amplifier for the Madras Earth Station. TRACT was fabricated at SAC and was tested with ATS-6 in July 1976. ECT, a miniaturised and ruggedised communication system, is mounted on a jeep in such a way that it can be detached easily and the whole unit air-lifted in emergencies like natural calamities when the terrestrial communication system is disrupted.

One important area of SAC activity is the remote sensing of natural and renewable resources. ISRO and the Indian Council of Agricultural Research (ICAR) conducted, during 1974-75, a joint experiment called the **Agricultural Resources Inventory and Survey Experiment** (ARISE), employing remote sensing techniques, to assess crops and land-use pattern in Anantapur District of Andhra Pradesh and Patiala district of Punjab.

The remote sensing techniques are being applied for a wide range of purposes such as collection of data relating to agriculture (crop vigour, crop census, classification of soil, etc.) detection of minerals, management of water resources, forest inventories and meteorological studies. SAC is developing sensors for use from balloons, aircraft and spacecraft to collect data for these applications. Some of these sensors are: infra-red scanner, multispectral scanner, microwave radiometer and the vidicon TV camera.

About ten remote sensing experiments have so far been conducted to study aspects of agriculture and landscape features over sites in Pune, Bombay, Sriharikota island, Jaipur, Bangalore, Anantpur district in Andhra Pradesh, Patiala district in Punjab and Panchmahals district in Gujarat.

INSAT: The Department of Space, in close cooperation with the Ministries of Communications, Tourism and Civil Aviation and Information and Broadcasting, has taken up the establishment of the Indian National Satellite (INSAT) system. The INSAT system is a multi-purpose operational space system providing telecommunications, meteorology and television services from a common satellite in geostationary orbit. The proposed system envisages a very significant telecommunications component providing for long-distance telephony, communication with remote areas and islands and emergency communications. The meteorological capability includes 24-hour observation of weather system, data collection and relay from remote, unattended platforms and a disaster warning. Television capability relates both to direct TV broadcasting from satellite to community TV sets in rural areas and to radio networking. The Government of India has approved the implementation of the INSAT-1 system which is expected to be operational in 1982. DOS has entered into a contract with the Ford Aerospace Communication Corporation (FACC) of USA for the supply of two INSAT-1 spacecraft along with certain satellite control equipment for the Master Control Facility (MCF) in India. The launch and associated services for INSAT-1 system are being obtained from United States National Aeronautics and Space Administration (NASA) on a cost reimbursible basis as per Agreement concluded in November 1980.

Ahmedabad Earth Station (AES): SAC operates the Ahmedabad Earth Station (AES), Ahmedabad, which is an international Centre for training in satellite telecommunications technology.

STARS: The Satellite Tracking and Ranging Station (STARS) came into operation on January 23, 1977 at Kavalur in Tamil Nadu. In addition to the tracking cameras there is a Ranging Laser at the station. This facility is used to determine orbits of satellites. The data collected by this station will be useful for geodetic purposes.

PRL: The Physical Research Laboratory has been the cradle of space science in India and is being further developed as a national centre in this field. Its activities are supported mainly by DOS. PRL conducts basic research in many areas of space sciences for understanding the structure and dynamics of the earth's upper atmosphere, the solar terrestrial relationships, plasoma physics and astrophysical problems. For these studies, data are collected through laboratory experiments, ground-based observations and measurements with rocket-borne instruments. PRL participates in many rocket-borne experiments at TERLS. It also uses data received from various orbiting scientific satellites of other countries. Investigations on lunar samples and meteorites and laboratory studies of plasma for understanding certain ionospheric phenomena and astrophysical problems are also conducted. Climatological, archeological and hydrological studies are also undertaken.

Sponsored Research: Various universities and academic institutions in the country are identified and encouraged by ISRO to undertake research and development studies in Space Science, Space Technology and Applications relevant to the Indian Space Programme.

ATOMIC ENERGY

PROGRAMME

THE Indian atomic energy programme was launched chiefly to supplement the limited conventional energy resources to meet the long-term electricity needs of the country, to produce nuclear power and to utilise nuclear techniques in agriculture, industry, medicine and other areas. The **Atomic Energy Commission** was constituted in 1948 as the policy-making body of the Government of India for the development and utilisation of atomic energy.

The **Atomic Energy Establishment** was set up at Trombay in 1957 (renamed in 1967 as Bhabha Atomic Research Centre) for carrying out research in basic sciences, development of nuclear technologies based on indigenous resources, and demonstration of their economic viability.

The production of nuclear fuels, control instruments, reactor components, plant and machinery, research equipment, high purity metals and materials required for the atomic energy programme is undertaken either under the aegis of the Department of Atomic Energy or by the industry with technical assistance from the Department.

Over the last few years, the Department has placed considerable emphasis on the following areas in addition to its main task of nuclear research and development producing commercial nuclear power and applying nuclear techniques to agriculture, industry, medicine etc. These activities are :

(a) Training and development of personnel in different fields of science and technology related to the atomic energy programme.
(b) Development of the nuclear equipment/industry, both in the public and private sectors.
(c) Transfer of technology from research centres to industry in several non-nuclear areas.
(d) Planning and implementation of pilot level and semi-commercial demonstration projects to extend the benefits of atomic energy in industry, medicine, agriculture and research.
(e) Assistance, both financial and otherwise, to various academic and other institutions for promoting research and other activities that are beneficial to the atomic energy programme.

RESEARCH AND DEVELOPMENT

The **Bhabha Atomic Research Centre**, Trombay, which was set up as the Atomic Energy Establishment in 1957 and renamed in 1967, is the national centre for research and development work in nuclear energy and related disciplines. Its facilities include four research reactors, namely, *Cirus* (40 MW), *Apsara* (1 MW), *Zerlina* (a zero energy thermal reactor) and *Purnima* (a zero energy fast reactor), a 5.5 MeV Van de Graaff accelerator, a H-400 computer, a BESM-6 computer, and various special laboratories. It also has a uranium metal plant, a fuel element fabrication plant, a plutonium plant etc.

The main developmental projects undertaken by the Centre during 1979-80 and 1980-81 are the radiological laboratories, thermal research reactor, new engineering halls, plutonium recycling project, plutonium plant expansion, radio pharmaceutical production facility and uranium metal plant expansion. Besides these a number of new projects/schemes are being undertaken by the Centre during 1980-81 the main ones being the establishment of a modern computer system, extension of facilities for analysis of fuel elements for FBTR, extension to existing library etc.

The **Reactor Research Centre** has been set up at Kalpakkam, Tamil Nadu, adjacent to the Madras Atomic Power Station.

The research and development efforts has been in the area of sodium technology, metallurgy reprocessing, engineering and material science. The major projects undertaken by the Centre are a Fast Breeder Test Reactor, the Materials Development Laboratory, Radiometallurgy Laboratory, Radiochemistry Laboratory and Computer Centre.

The Gauribidanur Seismic Station (of the Bhabha Atomic Research Centre), 80 Kilometres north of Bangalore, was set up towards the end of 1965 in collaboration with the U. K. Atomic Energy Authority. It has an array of 20 short-period seismographs and 3 long-period seismographs deployed over an area of 25 km x 25 km. It helps in the detection and identification of underground nuclear explosions and also facilitates seismic research.

The **Variable Energy Cyclotron** has been set up at Bidhan Nagar, Calcutta, by the Bhabha Atomic Research Centre. It is a national facility for advanced work in nuclear physics and for the controlled direct irradiation of biological and agricultural products.

The **High Altitude Research Laboratory**, Gulmarg, which was set up by the Department of Atomic Energy in 1963, provides facilities for high altitude research to all scientific institutions and universities in the country.

The **Nuclear Research Laboratory**, Srinagar, is devoted to applied research in nuclear and radiation physics, with particular emphasis on local problems.

Aided Institutions : The 3 aided institutions which receive grants from the Department for their research and development plan schemes are the Tata Institute of Fundamental Research, Tata Memorial Centre and the Saha Institute of Nuclear Physics.

The **Tata Institute of Fundamental Research**, Bombay, was founded in June 1945. It is the national centre for nuclear science and mathematics. It has two schools : the School of Mathematics and the School of Physics (experimental physics, theoretical physics, astrophysics, geophysics, computer science, molecular biology and radio astronomy).

The institute has established a National Computation Centre, a Balloon Fabrication and Flying Facility and a Tritium Laboratory for hydrological studies. A new liquid Helium Plant is being installed. At the Balloon Facility, Hyderabad the new launch vehicle built during 1977-78 has been further modified to launch heavier payloads. In 1980-81, it is proposed to supplement the Liquid Nitrogen and Helium Plant with additional compressors to raise the liquifying capacity to improve the storage and purification facility. At the Hyderabad Balloon Facility capabilities for launching heavier payloads, upto 1500 kg. are being developed. A Tool Room Facility is being set up in the Central Workshop to fabricate precision jigs and fixtures etc. required for modern experimental research.

The **Tata Memorial Centre**, Bombay, comprises two institutions: The Tata Memorial Hospital and the Cancer Research Institute.

It is one of the foremost cancer treatment centres in the country and conducts extensive research on cancer. The Centre proposes to acquire sophisticated equipment and intensify research in cancer. It is recognised as a post-graduate teaching institute by the University of Bombay.

The **Saha Institute of Nuclear Physics**, Calcutta, was formally opened in June 1950. Its fields of research include : electron microscopy, EPR spectroscopy, mass spectrometry, microwave absorption spectroscopy, molecular biology, NMR spectroscopy, NCR spectroscopy, nuclear activation, nuclear reactions, nuclear spectroscopy, radiochemistry, solid state physics, structural crystallography, technical physics and theoretical nuclear physics.

It aims at development of polarised target facilities, development of high power Hd. glass laser, and studies of radioactive isotopes etc.

POWER

Nuclear power provides an alternative and long-lasting source of electricity and its role is expected to enlarge with installation of more PHW (Pressurised Heavy Water) reactors and Fast Breeder Technology. The total nuclear power generation capacity expected to be achieved (by 1979), out of a total power generation capacity of **28.79 million KW, was 0.640 million KW (about 2.2 per cent).**

To meet the requirements of heavy water for the PHWR atomic power stations, following heavy water plants have been set up:

1. **Heavy Water Plant, Tuticorin:** The plant, designed to produce 71.3 tonnes of heavy water per annum became operational in July 1978. It started continuous operation from January 1980 and is expected to produce around 35 tonnes of heavy water in 1980-81. Modification works to improve the stream factor are expected to be completed in 1980-81.
2. **Heavy Water Project, Baroda:** Designed to produce 67.2 tonnes of heavy water per year had become operational in April 1977, but had to be closed for extensive repairs as a result of fire and explosion in the plant in December 1977. The plant is expected to produce around 32 tonnes of heavy water during the year 1980-81.
3. **Heavy Water Plant, Kota:** This plant with a capacity to produce 100 M.T.S. per year of nuclear grade heavy water was expected to be completed by July 1980, and the connected activities were expected to be completed within two months thereafter. The plant is expected to be ready for testing with nitrogen water system by November 1980, and for production towards the end of 1981.
4. **Heavy Water Plant, Talcher:** This plant is designed to produce 62.7 tonnes of heavy water per year and is linked with the Ammonia Plant of Fertiliser Corporation of India at Talcher. The mechanical testing is planned for completion by Oct./Nov. 1980 if power supply severely cut in 1979 is resumed by July 1980 and supply of Syn-Gas commences by October 1980. Commissioning activities will be taken up with a view to start production by July 1981.
5. **Heavy Water Plant, Nangal:** This plant was commissioned in August 1962. It has an annual capacity of about 14 tonnes.

For fabricating the fuel bundles the Coolant and the Colandria Tubes required for the Nuclear power stations in the country, the Department has established the Nuclear Fuel complex at Hyderabad.

Nuclear Fuel Complex, Hyderabad: This complex is designed to fabricate fuel elements for meeting the requirements of nuclear power reactors. All the plants of the complex except the Ball Bearing Steel Tubes Plant have already become operational. The Ball Bearing Steel Tubes Plant is designed to produce 21.000 metric tonnes of S.S. Tubes for the Ball Bearing Industry, and 3.000 metric tonnes of drill pipes for O.N.G.C. The plant is expected to be operational in 1980-81. The expansion of non-enriched fuel fabrication facilities is being taken up to meet the fuelling needs of the power reactors already under construction in order to achieve self-sufficiency in this regard.

The **Power Reactor Fuel Reprocessing Plant,** Tarapur, has been built by the Bhabha Atomic Research Centre. This plant processes the irradiated fuel from the Tarapur and Rajasthan Atomic Power Stations.

The **Atomic Minerals Division** is responsible for surveying, prospecting and exploratory development of atomic minerals required for the atomic energy programme.

During 1979-80 it has carried out Reconnaissance Radio-metric Survey over an area of 20,994 sq. kms. and have brought to light a number of zones of uranium mineralisation. The total meterage of drilling carried out in the different prospects during the year was 15,890 metres. Investigations for location of new sources for Niobium-Tantalum and Beryllium were also continued, covering an area of 1,150 sq. kms.

The **Tarapur Atomic Power Station,** 100 kms. north of Bombay, is the first atomic power station in India. It was built by General Electric Co. of U.S.A. It has two boiling water type reactors fuelled by enriched uranium with a total output of 420 MWe, has been supplying power to Maharashtra and Gujarat since October 1969.

The **Power Projects Engineering Division** undertakes the design, construction and commissioning of nuclear power plants.

It is engaged in development work on power reactors; for setting up a Nuclear Power Plant Training Simulator; on fuelling machine heads, lattice tube to tube sheet welding, primary heat transport system loop test etc.

The **Rajasthan Atomic Power Station** at Rana Pratap Sagar has two units. The first unit with a capacity of 220 MWe is in commercial operation since Dec., 1973. All jobs relating to Solar Evaporation Facility have been completed. Construction of an additional heavy water upgrading plant is in progress. All civil works and installation of major equipment in respect of second unit of the station have been completed. The unit is expected to achieve criticality during 1980.

The **Madras Atomic Power Station**, about 80 kms. south of Madras has two candu-type units. Most of the equipments have been delivered and installed for the first unit which is expected to be completed by the beginning of 1981 subject to availability of heavy water. Second unit of the station is expected to be completed by early 1983.

The **Narora Atomic Power Station,** U.P. consists of two units. The first unit of the station is expected to be completed in 1984 and the second unit in 1985.

PUBLIC SECTOR UNDERTAKINGS

The **Indian Rare Earths Ltd**., was incorporated on 18th August, 1950, with its registered office at Bombay with the object of processing monazite recovered from the beach sand deposits in Kerala and Tamil Nadu to produce rare earths chloride as main product and a compound containing uranium and thorium as a co-product at their Rare Earths Plant at Udyogmandal, Alwaye, Kerala. The company owns and operates two Mineral Sands Separation Plants, at Chavara (Kerala) and Manavalakurichi (Tamil Nadu). It also manages the Thorium Factory at Trombay.

The **Electronics Corporation of India Limited** was incorporated, with its registered office at Hyderabad on April 11, 1967 with the primary object of developing, manufacturing and marketing electronic components, instruments and systems based on indigenous know-how. It also undertakes commercial manufacture of various electronic equipment developed at Bhabha Atomic Research Centre and Tata Institute of Fundamental Research and other commercial products like T.V. sets, Computer etc. The Corporation's expansion programme for the period from 1978-83 envisages the production and sales targets at Rs. 627.5 million and Rs. 632.5 million respectively by 1982-83 with a cumulative capital expenditure of Rs. 394.5 million.

The **Uranium Corporation of India Ltd.,** Jaduguda, was formed in Oct., 1967, with the primary object of providing uranium required for the Indian nuclear power programme. The Corporation took over the assets and liabilities of two Government projects viz. the Jaduguda Mines Project and the Jaduguda Uranium Mill Project on 16th Oct., 1967. The production of copper and molybdenum concentrates as by-products is estimated at 340 M.T. and 28 M.T. in 1979-80. The value of production of uranium concentrates in expected to be of the order of Rs. 59.54 million in 1979-80.

GENERAL SURVEY

The **Variable Energy Cyclotron** (VEC), Calcutta, was commissioned for the internal beam. A circulating beam of alpha particles accelerated to energies where it can produce radioactivity in copper, was first obtained at 6 a.m. on June 16, 1977. An external beam of 30 MeV alphas was first obtained on July 8, 1978. During the subsequent runs, alpha particles were accelerated upto the full radius of 99 cms. which is the design radius for the extraction of the beam outside the cyclotron chamber. The complete assembly was done by BARC entirely indigenously with the assistance of some of the leading public and private sector industries in the country. The programme for obtaining an external beam is continuing.

The 100 MW thermal research reactor project (R-5), with 100 per cent indigenous design and detailed engineering, is progressing at Trombay. Its building superstructure is almost complete and major components such as the reactor vessel, coolant channel

assemblies etc. are under fabrication. The reactor will give great impetus to research and development activities in the country in the fields of nuclear engineering, physics, chemistry activation analysis and biology. It will also produce radioisotopes of specific activities higher than what is hitherto possible at Trombay.

Another important R & D project on hand is Magneto hydrodynamics (MHD) Power Generation. Located at Tiruchirapalli, the Project is a joint venture of BARC and Bharat Heavy Electricals Ltd. The MHD technique relates to the direct conversion of thermal energy to electrical power. The technology is expected to improve the thermal efficiency of fossil-fired power plants from the present 30-40 per cent to 50 per cent, and even higher.

BARC has also built and commissioned a flash X-ray generator in a national laboratory at Chandigarh. The flash X-rays have many applications in high-speed radiography, pulse radiolysis and X-ray cinematography.

Production of wide range of radioisotope preparations and associated equipment is a major activity at the BARC. During the year, the Centre supplied over 32,000 consignments of various radioactive products to users in India and abroad.

Important developments in this area include installation of a 50,000 curies cobalt-60 panoramic batch irradiator at Baliapatam, Kerala and receipt of an order for the supply and installation of a similar unit with 75,000 curies of cobalt-60, on a turn-key basis, at the Pasar Jumar Research Centre, Indonesia. A scale-up process for wood-polymer composite has also been developed. This process will help the country tide over the scarcity of high-grade timber by upgrading the inferior native timbers with monomer impregnation and gamma irradiation. The Nuclear Research Laboratory at Srinagar, has also been carrying on radiation polymerisation studies on cheap and fast growing local woods, willow and poplar, to assess the commercial feasibility of using them in the wood-carving industry.

Isomed, the radiation sterilisation plant at Trombay, sterilised a total of 1,610 cu.m. of various medical products during the year. Some 150,000 ready-to-use surgical kits were also supplied for use in minor surgical operations.

Trombay Groundnut (TG) strains were multiplied in Saurashtra, Maharashtra, Madhya Pradesh and Andhra Pradesh. About 2,500 tonnes of improved seeds were raised for further distribution. Yield studies have shown that TG-17 is suitable for Gujarat and TG-3 for Madhya Pradesh.

The country-wide personnel monitoring service for evaluating radiation exposure covered around 45,000 workers from nearly 2,400 institutions. The country-wide radiological protection surveys, covering source-loading operations of teletherapy units also, were conducted in 150 institutions consisting of 122 medical, 11 industrial and 17 research institutions.

NUCLEAR EXPLOSION

The first peaceful underground nuclear explosion at Pokhran in the Rajasthan desert was conducted on May 18, 1974. The plutonium device used was designed to yield about 12 kilotons of TNT explosive energy.

REVENUE FROM PROGRAMMES

Research and Development Programme: The total revenue expected to be realised by the Department from the various R and D Programmes during 1979-80 and 1980-81 amounts to Rs. 20 million.

Nuclear Power Programme: The total revenue expected to be realised during 1979-80 and 1980-81 by the projects coming under this programme amounts to Rs. 554.4 million and Rs. 802.0 million respectively.

Industry and Extension Programme: The expected revenue during 1979-80 and 1980-81 amounts to Rs. 2.63 million and Rs. 1.32 million respectively.

Support Services: The revenue of Rs. 6.02 million and Rs. 6.17 million expected during 1979-80 and 1980-81 respectively, comprise, recovery of licence fee from the employees of the Department for occupying Government quarters.

Foreign Exchange Earnings: Indian Rare Earths Ltd., expects to earn foreign exchange of Rs. 51.2 million and Rs. 52.9 million during 1979-80 and 1980-81 respectively. BARC is also expected to earn Rs. 0.65 million and Rs. 0.7 million in 1979-80 and 1980-81 respectively through export of products and services.

FIVE-YEAR PLAN (1978-83)

Proposed Plan outlay under various programmes of the Atomic Energy for the year 1980-81 (in Rs. million): Research and Development: 332.4; Nuclear Power Programme: 917.2; Industry and Extension Programme: 205.0; Support Services 3.0; Grand Total 1,457.6.

ANDAMAN AND NICOBAR ISLANDS

HEADQUARTERS: Port Blair; **Population** (1971 census): 26,218; **Area of the Territory:** 8,293 sq. kms. (Andamans 6,340 sq. kms., Nicobars 1,953 sq. kms.); **Population** (1981 census): 188,254; **Density:** 23 per sq. km. **Sex ratio:** 761 females per 1,000 males; **Literacy:** 51.27 per cent.

No. of villages: 399 (both inhabited and uninhabited) as per 1971 Census.

Boundary: The Andamans are a string of islands of various sizes, large and small, lying between 6° and 140°N. latitude and from 92° and 94° E. longitude in the Bay of Bengal. They have an average width of 24.13 kms and an axis of about 321.8 kms. the northernmost 'Land fall Island' is 901.13 kms. from the mouth of the river Hooghly. The headquarter Port Blair is about 1,255 kms. and 1,190 kms. from Calcutta and Madras respectively.

The main part of the Andaman group is composed of five large islands viz., North Andaman, Middle Andaman, South Andaman, Baratang and Rutland Islands generally known as the Great Andamans. To the south of the Great Andamans is the island of Little Andaman. These islands consist mostly of a mass of hills covered with dense tropical forests and separated by three straits and several creeks.

The Nicobar Islands from Car Nicobar in the north to Great Nicobar in the South intervene between Little Andaman and Sumatra. The Southern island of Great Nicobar is about 480 kms. from Port Blair. These islands are partly hilly and partly flat. The most important harbour in the area is Nancowrie reputed to be the finest harbour in the east.

Population according to language spoken: Sanskrit: nil, Sindhi: 7, Tamil: 14,518, Telugu: 9,361, Urdu: 2,488, Assamese: 17, Bengali: 28,120, Gujarati: 159, Hindi: 18,499, Kannada: 201, Kashmiri: 8, Malayalam: 13,953, Marathi: 115, Oriya: 250, Punjabi: 1,023, Nicobarese: 17,955.

Climate: The Islands are exposed to both monsoons with north easterly gale from November to January and south westerly gale from May to October. The weather is good only from January to April and to some extent in October. The average rainfall is 318 cms. The temperature varies between 21°C and 34°C throughout the year.

Agriculture: Total reporting area during 1978-79 was 72,856 hactares. The principal crops are rice, coconut and arecanut. Rice production during 1978-79 was 9,574 tonnes. Commercial production of rubber, coffee, red palm oil and spices like clove, cinnamon,

INDUSTRIES

Types of Industries	No. of Units	Fixed Investments (Rs. million)	No. of Workers	Estimated Production in value (Rs. million)
1	2	3	4	5
Saw Mill	07	0.718	104	1.278
Furniture	20	0.250	80	1.000
Rice Huller	50	0.700	125	1.325
Oil Extraction	05	0.070	26	0.225
Coir Products	02	0.085	8	0.050
Bricks	01	0.029	16	0.029
Tyre Retreading and Vulcanising	04	0.040	16	0.200
Ice Candy	02	0.030	6	0.050
Bakery	12	0.300	70	1.200
Blacksmithy	20	0.060	40	0.600
Printing Press	05	0.200	25	0.125
Autorepairing	06	0.060	27	0.225
Shell Craft	14	0 200	80	1.000
Stainless/Aluminium Utensils	02	0.100	12	0.400
Candles	03	0.040	7	0.200
Bamboo & Cane Products	10	0.040	30	0.350
Hollow Blocks	2	0.025	12	0.240
Miscellaneous	35	0.331	108	2.442
	200	3.198	792	10.939

Besides the above small scale units there are five large scale units functioning in this Union Territory. Their details as available with us are also indicated below:-

Name of the Unit	Items manufactured	Estimated fixed investment (Rs. million)	Persons employed (estimated) Nos.	Present production (estimated)
1	2	3	4	5
WIMCO	Match splints	8.09	310	Rs.8.000 million in terms of value.
Jayshree Timber Products	Plywood	4.785	424	1.46 million Sq. m.
Andaman Timber Products	Plywood	8.468	1000	2.80 million Sq. m.
Asian Woods & Polymer Pvt. Ltd.*				
Government Saw Mills:				
Chatham Unit	Sawn Timber	Rs. 1.400 million (Depreciated value)	1.150	12.500 cu.m.
Betapur Unit	Sawn Timber	Rs. 0.200 million (Depreciated value)	100	1.500 cu.m.

---

*The Unit has recently taken over the factory of Albion Plywood Ltd. at Long Island on lease basis and has started production of veneers only. The Albion Plywood Ltd. was lying completely closed from 1974.

EDUCATION: (As on 31-3-1980)

Types of Institutions	Number	No. of students		Total
		Boys	Girls	
Pre-primary Schools	16	469	386	855
Primary Schools	167	7,300	6,149	13,449
Middle Schools	36	7,109	5,458	12,567
High Schools	10	2,472	1,892	4,364
Hr. Sec. Schools	12	4,154	2,969	7,123
Trs. Trg. Institute	1	41	49	90
Govt. College	1	181	127	308
Total	243	21,726	17,030	38,756

nutmeg and black pepper is considered good. About 18.46 per cent of the total working population is engaged in agricultural pursuits.

Forests: Forests cover an area of 7,464 sq. kms. These forests yield timber to the plywood and matchwood industries in addition to timber for constructional purposes.

The species of timber found in the forest region are mainly Padauk, Gurjan, White Chuglam, Papita etc. The Forest Department exports approximately 35,000 cubic metres of timber to the mainland.

Animal Husbandry: Veterinary hospitals 5; Veterinary dispensaries 4; Minor veterinary dispensaries 25; Key village blocks 2; Key village units 6; Artificial insemination centres 2; Artificial insemination sub-centres 11; Govt. poultry farm 1; Piggery demonstration centres 3 (Nicobar, Strait Island & Dugong Creek); Govt. training centre 1; Diseases investigation laboratory 1; Fodder farm 1; Cattle breeding farm 1.

Population as per 1979 Census: Livestock: 82,827; Poultry: 183,846.

Power Projects: AC electric supply in Port Blair was started in 1951. The installed capacity during 1979-80 was 6,708 KW.

Apart from Port Blair, electricity is available for the public at the following places. The installed capacity of the Power house in KW is also given:

Neil 41.5, Havelock 47, Baratang 47, Kadamtalla 47, Rangat 744, Mayabunder 96, Diglipur 72, Car Nicobar 144, Nancowrie 53.5, East Bay Katchal 53 and Campbell Bay 72.

LABOUR (1979-80): No. of Unions 73; No. of members N.A.; No. of strikes 9; Mandays lost 2,802; Total employment 17,000.

COMMUNICATIONS: Length of Motorable roads 1,728 Kms.; No. of State transport buses 75; No. of passengers carried by State transport daily 30,000.

Shipping: Three passenger cum cargo ships viz. M.V. Harshavardhana, M.V. Andamans and T.S.S. Nancowrie and two cargo ships viz. M.V. Diglipur and M.V. Shompen ply between Mainland Ports and Port Blair. The passenger vessels normally ply from Calcutta and Madras and sometimes from Visakhapatnam.

As far as inter-island communication is concerned, ferry vessels viz. S.S. Cholunga, T.S.S. Yerawa and M.V. Onge ply on a regular schedule to the northern as well as southern group of Islands. In addition to the above vessels, some other small vessels ply in the narrow creeks and harbours carrying passengers and cargo to places inaccessible to the large vessels. The M.V. Little Andaman and M.V. Yamuna carry out ferry services between Port Blair and Rangat viz. Havelock and Neil Island. The M.V. Ganga operates Harbour Ferry Services at Port Blair. The shallow draft vessels procured subsequently under plan schemes viz., M.V. Chital, M.V. Chinkara, M.V. Sambur, M.V. Narmada, M.V. Gomati and M.V. Kadamtala also have been put into service in the above inter-island lines and harbour ferries.

Harbours: Port & Harbour facilities have been provided at Diglipur, Mayabunder, Rangat, Havelock, Neil, Port Blair and Hut Bay (Little Andaman) and at Malacca (Car Nicobar). Katchal, Kamorta and Campbell Bay in Nicobar Group of Islands.

PUBLIC HEALTH: All treatment, medical or surgical, is completely free. Specialised treatment is also free. For specialised treatment, patients are sent to the mainland at Government expense.

The G.B. Pant Hospital, Port Blair is the largest civil hospital with 192 beds. All types of treatment, except for cancer and mental diseases, are provided here.

There is a 50-bed T.B. Hospital and a 20-bed isolation hospital at Port Blair. Besides, there are 10 Civil hospitals, two primary health centres and 64 dispensaries (including two travelling dispensaries). The hospitals are located at Port Blair, Bambooflat, Car Nicobar, Nancowrie, Campbell Bay (Great Nicobar), Rangat, Mayabunder, Diglipur, Billiground, Long Island and Havelock. The Primary Health Centres are located at Wimberlygunj (South Andaman) and Kapanga (Katchal). The total bed strength of hospitals and primary health centres is 570.

No. of doctors: 62; No. of nurses: 112; Amount spent on medicine and equipment (1977-78): Rs. 3,163,400/-.

GENERAL

Press: "Daily Telegrams" published from Port Blair in English and Hindi.

Panchayats: 38 Gram Panchayats and 38 Nyaya Panchayats continue to function in the South, Middle and North Andamans. In the Nicobar group of islands, the traditional Panchayats continue to function.

Banks: The State Bank of India has branches at Port Blair, Rangat, Hut Bay, Car Nicobar, Nancowrie, Diglipur, Garacharama, Bambooflat, Chouldari, Mithakari and Manglutan.

The Andaman and Nicobar State Cooperative Bank Ltd. functions with its headquarters at Port Blair with eight branches at Diglipur, Mayabunder, Wimberlygunj, Haddo, Thusnabad, Baratang, Bambooflat and Rangat.

The Syndicate Bank has three branches at Port Blair, Wimberlygunj and Campbell Bay.

The Canara Bank has got a branch at Port Blair.

Tourism: There are two guest houses with 17 beds, one tourist home with 38 beds and one circuit house with six beds, the Megapode Nest and Nicobaree Cottage with 16 beds at Port Blair, besides guest houses at Rangat, Mayabunder and Car Nicobar

These apart the Carbyn's Cove Beach Resort with 64 beds has come in the private sector at the Carbyn's Cove Beach which is 5 Kms. away from the capital city of Port Blair. This hotel is managed by the Hotel Corporation of India, a subsidiary of Air India.

ANDHRA PRADESH STATE

CAPITAL: Hyderabad. **Area:** 220.36 sq. kms. **Population** (1981 census): 2.566 million.

Area of the State: 276,814 sq. kms. **Population (1981 census):** 53,403,619. **Density:** 194 per sq. km. **Sex Ratio:** 975 females per 1,000 males. **Literacy:** 29.94 per cent.

The headquarters of the districts are the towns of the same name except for the following districts with the headquarters in the brackets: East Godavari (Kakinada); Rangareddy (Hyderabad); Krishna (Machilipatnam); Modak (Sangareddy); Prakasam (Ongole), and West Godavari (Eluru). New Vizianagaram District was formed on 1st June, 1979, from the existing districts of Srikakulam and Visakhapatnam. Separate figures for the five districts i.e. Hyderabad, Rangareddy, Srikakulam, Vizianagaram, Visakapatnam are not available.

District	Area in sq. kms.	Population (1971 census)
Adilabad	16,133	1,288,348
Anantapur	19,125	2,115,321
Chittoor	15,763	2,285,536
Cuddapah	15,356	1,577,267
East Godavari	10,970	3,087,262
Guntur	11,377	2,844,488
Hyderabad (Rangareddy)	7,707	2,791,762
Karimnagar	11,824	1,963,928
Khammam	15,872	1,369,892
Krishna	8,734	2,493,574
Kurnool	18,799	1,982,090
Mahbubnagar	18,419	1,932,082
Medak	9,685	1,467,944
Nalgonda	14,242	1,819,738
Nellore	13,058	1,609,617
Nizamabad	7,969	1,313,268
Prakasam	17,620	1,919,995
Srikakulam	9,743	2,589,991
Visakhapatnam	13,799	2,805,366
Vizianagaram	—	—
Warangal	12,875	1,870,933
West Godavari	7,744	2,374,306

Major Cities with area in sq. kms. and population (1971 census) respectively.

Hyderabad Town Group: 298.51—1,796,339; Vijayawada: 66.30—344,607; Guntur: 30.01—269,991; Visakhapatnam: 94.53—363,467; Warangal: 54.98—207,520; Rajahmundry: 43.90—188,805; Kakinada: 30.51—164,200; Machilipatnam; 23.93—112,612; Kurnool: 15.02—136,710; Nizamabad: 36.86—115,640; Tenali: 7.90—102,937; Eluru: 14.38—127,023; Nellore: 13.68—133,590.

No. of Villages: (1971) 27,221; **No. of Towns:** 224; **No. of Talukas:** 215 as on October 1, 1979. More talukas are being created from the existing talukas as part of the general reorganisation of talukas.

Boundaries: The State is surrounded in the east by the Bay of Bengal, in the south by Tamil Nadu, in the south-west by Karnataka, in the north-west by Maharashtra, in the north by Madhya Pradesh and in the north-east by Orissa.

State Language: Telugu is the language of the State with Urdu also spoken by a large section.

AGRICULTURE: (See main chapter on 'Agriculture'). In 1978-79 (provisional figures): Rice production 7.43 million tonnes; total food grains 10.67 million tonnes; net area sown: 11,35 million hectares; net irrigated area 3.66 million hectares; gross cropped area 13.12 million hectares

Land Reforms: 428,821 cases have been disposed of by the tribunals. A total of 975,788 hectares of agricultural land had been declared surplus till the end of January 1977 by tribunals set up under the Land Ceilings Act.

Over 910,500 hectares of land had been assigned to the landless people for cultivation out of which 768,910 hectares had been brought under cultivation as on May 31, 1978.

Animal Husbandry: A cattle farm near Adoni has been established to improve the milk yield of the cattle. The Central Govt. has sanctioned schemes to raise production of milk, meat and eggs. It aims at calf-rearing in Khammam district, sheep-rearing in Medak, Nellore and Srikakulam districts and poultry development in East Godavari and Karimnagar districts. The number of cattle (1977) was 12.05 million and buffaloes 7.16 million.

Poultry: The Agricultural Refinance and Devpt. Corpn. (ARDC) is financing a huge poultry project costing Rs. 2 million in Karimnagar district which will have 200 units each having 250 birds, a poultry shed, rearing equipment and chicks. Total poultry (1977) was 21.61 million. The poultry development in the State necessitated formation of A.P. State Meat and Poultry Development Corporation. Under special employment schemes training in poultry farming is imparted to unemployed youth to enable them to start poultry estates of their own.

Forests: Forest area of the State is 64,154 sq. kms.—about 23 per cent of the total geographical area. The per capita forest area is 0.13 hectares against 0.12 hectares for the country as a whole.

Andhra Pradesh forest department has formulated a massive scheme to raise cashew gardens along the coastal districts. There are 2,000 hectares of economically viable plantations under the forest department in the districts of Guntur, Visakhapatnam and Srikakulam besides 5,000 to 6,000 hectares of afforestation land and areas containing cashew trees. Annually 2,000 tonnes of cashewnut is obtained from these plantations giving a revenue of about Rs. 500,000. There is a programme to raise 7,600 hectares of cashew plantations in the coming 5 years.

Fisheries: With a coastal line of 960 kms. and fishable area of 81,080 sq. kms. and inland water sources of about 320,000 hectares, the potential for development of fisheries held out by Andhra Pradesh is outstanding. There are about 50 major reservoirs and lakes with total water area of 275,000 hectares, in addition to 40,000 ponds and tanks.

There are 1,233 Fishermen Co-operative Societies with a membership of 118,737. The Andhra Fishermen Central Co-operative Society is the Apex Institution for Andhra area while the Hyderabad Fishermen Central Co-operative Society is the Apex Body in the Telangana Area.

A Fisheries Training Institute at Kakinada, started in 1958, imparts training to fishermen and Fisheries Officers.

A centrally sponsored Small Farmers Development Agency scheme with an outlay of Rs. 8.07 million is in operation in Srikakulam District which envisages supply of effective fishing crafts to tap large quantity of fish and prawns.

MAJOR IRRIGATION PROJECTS: Twenty-one medium irrigation projects in the Telangana, coastal Andhra, and Rayalaseema regions of the State, involving a total outlay of Rs. 940 million, were taken up during the Fifth Plan. Many of these projects were expected to be completed by the end of the Fifth Plan period.

Fifteen medium sized irrigation projects in the Telangana, coastal Andhra, and Rayalaseema regions of the State, involving a total outlay of Rs. 400 million, are proposed to be taken up soon.

During 1977-78 Planning Commission had sanctioned 6 more medium irrigation schemes, which were expected to increase the irrigation potential by 26,450 hectares of land. For the Rayalaseema region 5 medium irrigation projects had been allocated at a cost of Rs. 27.5 million to irrigate about 38,500 hectares. The State Government had sanctioned Rs. 58.8 million towards minor irrigation which would on completion, irrigate 88.000 hectares.

POWER PROJECTS: (1978-79 Provisional): Installed capacity: 1,678 MW; Electricity generated: 6,056 million KW; villages electrified: 15,677. No. of agricultural pumpsets energised: 306,000.

INDUSTRIES: Cycle and cycle accessories, steel furniture, scientific instruments, radios, tape recorders, electric measuring instruments, automobile parts, air conditioners, safety razor blades, PVC cables, switchgear, electrical accessories, stainless steel vessels, agricultural implements, T.V. sets, light and heavy engineering, cement, fertilisers, oils (edible and non-edible), drugs and chemicals, food products, electrical and electronic components, petroleum products, ship building and mineral products, etc.

There were 7,353 factories in the State in 1976-77 against 5,798 in the previous year. The total number of working factories were 11,797 under Factories Act employing 446,020 persons in 1977.

Cottage Industries: There are about 600,000 handlooms in the State that provide employment to about three million persons.

The handloom goods exported from the State are about 20 per cent of the export from the country.

The important varieties of handloom goods exported are as follows: Bleeding Madras, Madras handkerchiefs, *lungies, sarongs,* silks (printed), *tussar* and *Kalamkari.*

Industrial Estates and Industrial Development Areas: Industrial estates and industrial development areas have been established throughout the State. As on June, 1977, there were 51 industrial estates and 28 industrial development areas in the State. Besides 20 industrial estates and four industrial development areas are in the formative stage. They are situated in the following towns: Viz., Visakhapatnam, Rajahmundry*, Vijayawada, Guntur, Nellore*, Chittoor, Tirupathi*, Nizamabad*, Hyderabad and Commercial complexes in Visakhapatnam, Nellore*, Cuddapah*, Warangal*, Nizamabad* and Hyderabad.

LABOUR (1977): Strikes 38, lock-outs 4. In 1979 the total number of industrial disputes were 63; no. of workers involved 31,643; manday's lost 282,951.

Employment: (March 1978)

There are 5,468 public and 5,969 private sector establishments in the State employing totally 1,233,495 people (960,355 being in the public sector establishments).

Number of employment exchanges in the state are 32 and total number of applicants on live register 824,701.

EDUCATION: Statistics for 1978-79 with number of schools and students respectively are:

Pre-primary 115—7,516; primary 38,836—3,548,184; upper-primary 4,201—1,089,990; high, higher secondary schools and high schools attached to junior colleges 4,011—1,359,563; schools for professional and special education 158—24,289.

Colleges (1976-77): Colleges of gen. education incl. commerce colleges: 250—169,383; junior colleges: 323—74,070: colleges for professional and special education: 104—31,593.

Universities: Andhra Pradesh Agricultural University, Hyderabad 500004; Shri Jawaharlal Nehru Technological Univ., Hyderabad 500028; Central University of Hyderabad, Hyderabad 500001; Andhra University, Waltair 530004; Osmania University, Hyderabad 500007; Sri Venkateswara University, Tirupati 517501; Kakatiya Univ., Warangal 506002; Nagarjuna Univ., Guntur 522004.

PUBLIC HEALTH

Provisional figures 1978-79: Hospitals 289, dispensaries 1,178; beds 24,018.

Leprosy Control: Medak leprosy control unit covers 448,000 people. It has 15 sub-centres and 15 survey education and treatment centres. These centres are at Medak, Togita, Patvoor, Ramayanpet, Dongal, Dharamaram, Narsinghi, Wadiaram, Shankarampet, Kulcharamand Yeldurthy.

Family Planning: Facilities are provided through 845 rural and urban centres and the local bodies, voluntary organisations and private medical practitioners also have their clinics. During 1978-79 the State achieved 192,199 sterilisations and 17,575 IUD insertions.

COMMUNICATIONS: The following is the vehicular position as on March 31, 1978.

Stage carriages: 8,111; goods vehicles: 26,034; cars and jeeps: 35,423; motor cycles and scooters: 111,835; taxis: 2,924; others; 27,589.

State Transport (30.4.1977): Buses: 4,883; trailers: 10; tankers: 38; staff cars and jeeps: 179; taxis: 10; motor cycles & scooters: 9; training & demonstration vehicles: 18; mobile court vans: 4; tempos: 2; ambulance: 1; other departmental vehicles: 166; no. of passengers carried by State Transport: 2,115,000 per day.

The total road kilometerage (1977-78): 31,526 kms.; No. of routes: 1,882.

GENERAL

Mines & Minerals: Andhra Pradesh is the only State in the South having coal reserves. Coal accounts for about 80 per cent of the total value of mineral production in the State.

The name of mineral, estimated reserve (million tonnes) and location districts are as follows: *Coal* 3,904; Khammam, Adilabad, Karimnagar, Warangal and West Godavari districts; *Lime stone:* 2,028; Adilabad, Hyderabad, Mahbubnagar, Kurnool, Cuddapah, Guntur, Nalgonda and Krishna districts; *Iron Ore:* 401; Anantapur, Karimnagar, Adilabad, Chittoor, Khammam, Prakasam, Krishna, Kurnool and Cuddapah districts. *Bauxite:* 30; Visakhapatnam district; *Lead*: 6; Guntur and Khammam districts; *Clay*: 2; East Godavary and Cuddapah districts; *Manganese*: 1.81; Srikakulam, Prakasam and Adilabad districts; *Barytes*: 9.5; Cuddapah, Anantpur and Kurnool districts.

PRESS (Dailies): 1980

Name	Town
English	
Indian Express	Vijayawada
Deccan Chronicle	Hyderabad
Telugu	
Andhra Prabha	Vijayawada/Bangalore
Andhra Patrika	Hyderabad/Vijayawada
Andhra Jyoti	Vijayawada
Andhra Bhoomi	Hyderabad
Ecnadu	Hyderabad/Visakhapatnam/ Vijayawada
Urdu	
Siasat	Hyderabad
Rahnuma e Deccan	Hyderabad

Annual Plan: Budget/Annual Plan: (1979-80) (Rs. in million): Revenue receipts: 10,008.3; Public debts (net): 1,272.4; Debt, deposits etc.: 495.2; Total 11,775.7; Revenue expenditure 8,936.4; Capital expenditure 2,471.6; loans and advances (net) 704.2; Total 12,112.2. Net deficit minus 336.3.

Rivers: The Godavari, the Krishna, the Pennar, the Papagni, the Tungabhadra, the Musi, the Manjra, the Chitravati, the Vama sadhara and the Langulya.

---

*Still in the formative stage.

ARUNACHAL PRADESH

(Union Territory)

CAPITAL: Itanagar (since April 20, 1974)—a newly built township was inaugurated by former Pres. V. V. Giri; **Area of Territory:** 83,578 sq. kms. **Population** (1981 census): 628,050: **Sex Ratio:** 870 females per 1,000 males; **Density:** 7 per sq. km; **Literacy:** 20.09 per cent.

Districts: With headquarters in brackets and population (1971 Census): West Kameng (Bomdila) 50,867; East Kameng (Seppa) 35,134; Upper Subansiri (Daporijo) 32,014; Lower Subansiri (Ziro) 80,914; West Siang (Along) 59,242; East Siang (Pasighat) 49,005; Lohit (Tezu) 47,633; Dibang Valley (Anini) 15,232; Tirap (Khonsa) 97,470.

Towns and Population (1971 Census): Pasighat: 5,116, Along: 4,818, Tezu: 4,182, Bomdila: 3,172.

No. of Villages: 2,973.

Boundaries: The Territory is bound by Bhutan in the west, Tibet in the north-west, China in the north and north-east, Assam in the east and south, Burma in the east and south-east and Nagaland in the south-west.

Languages: Tribal dialects.

AGRICULTURE: Nearly 46 per cent of the population of Arunachal Pradesh is engaged in agriculture. Irrigated area forms 17 per cent of the total cultivated area of about 14,000 hectares. The traditional method of agriculture is "jumming", a kind of shifting cultivation. The forests are cleared and crops are raised for one to three years, depending on the fertility of the soil. Thereafter the cultivators move on elsewhere. However, sedentary cultivation is followed in the valleys and terraces, the methods being called Wet Rice Cultivation and Terrace Rice Cultivation respectively. The main crops are rice, maize, millets, wheat and mustard. Forests cover 61,000 sq. km. of the area.

Forests: The forest department earned Rs. 35 million during 1979-80.

Area under forests is estimated at 60,000 sq. kms. Whilst 45,116 sq. kms. had been brought under reserved forest.

Wild life: The Territory has rich fauna and flora. There are wild elephants, bisons, buffaloes, tigers, leopards and various kinds of deers, bears, pigs, snakes, and wild goats. Peculiar to the Territory are the following — musk deer, lesser panda, clouded leopard and mountain goat.

INDUSTRIES: There are no major industries in the Territory. Three medium and 34 small scale industries are functioning under private co-operative sectors. A cement factory is coming up at Tezu. Industrial Estates have since been established with small scale industrial units. Training and incentives are offered by the Government to interested enterpreneurs.

Sericulture: Schemes have been formulated to expand *Eri* and mulberry silk rearing and introduction of *muga* silk (For details see Chapter on Silk Industry).

Training & Production Centres: There are 21 training and 24 production centres which impart training in weaving, carpentry, blacksmithy, silversmithy, wood-carving, bell-metal work, carpet weaving, cane and bamboo work, tailoring, knitting, painting etc., besides producing articles on a mass scale. An Industrial Training Institute at Roing gives training in technical trades.

EDUCATION: The Territory is showing good progress in education and between 1975 and 1980 the number of primary schools increased from 184 to 874. There is now one Arts and Science College at Pasighat, 117 Middle Schools, 26 Secondary Schools, 10 Higher Secondary Schools, 2 Central Schools, one evening College with about 65,000 students on the rolls.

PUBLIC HEALTH: During the last decade development activities under the Health Programme made rapid strides and over the years the number of hospitals increased from 95 to 120. The bed strength today is 1,270 comprising 816 general beds, 122 T.B. beds and 272 leprosy beds. In 1975 there were 217 doctors, 131 nurses and 148 pharmacists.

Communications: (Jan. 1, 1978). Roads 36,780.41 kms. (both surfaced and unsurfaced), porter tracks, bridle paths etc. 5,000 kms.

GENERAL: The North-Eastern Areas (Reorganisation) Act of 1971 passed by the Parliament on December 21, 1971 changed the status and name of **NEFA.** It became Arunachal Pradesh with the status of a Union Territory. It was formally inaugurated on January 20, 1972.

The election commission has determined that the Union Territory would have 30 legislative constituencies and two parliamentary constituencies.

Rivers: The Brahmaputra (locally known as the Saing in hill sector and the Dibang when it reaches the plains), the Dibang, the Lohit and the Subansiri.

Rainfall: The monsoon sets in from May-June and continues till the end of September. The average annual rainfall at Bomdila is 1,019 mms., Pasighat — 5,792 mms., Tezu — 4,071 mms. and Changlang — 1,988 mms. The snow line starts from about 3,962 metres altitude and the whole of the northern region along the international boundary is under snow during the winter months.

Annual Plan: Approved outlay for the year 1980-81 is Rs. 262.1 million.

Tribes: About 50 distinct languages and dialects are spoken. Each tribe is divided into a number of exogenous clans. As a general rule, the tribes do not intermarry. A broad list of the main tribes district-wise is given below:

Kameng District:—Monopa, Sherdukpens, Bagni, Aka, Khowa, Miji, Sulung, Bangro. *Subansiri District*: Tangin, Nishi, Apatani, Bangro, Mikir, Hill Miri, Sulung. *Siang District:* Adi, a general name for a number of tribes such as Gallong, Minyong, Padam, Pase, Bori, Bokar, Pailibo, Romo, Milang etc. Khamba Memba and Hill Miri. *Lohit District:* Padam, Mohmi, Singpho, Khampti. *Tirap District:* Nocte, Singpho, Wancho.

ASSAM STATE

CAPITAL: Dispur. Population of the Capital: N.A

Area of the State: 78,523 sq. kms.; **Population** (1981 census): 19,902,826; **Density:** 254 per sq. km.; **Sex Ratio:** 900 females per 1,000 males; **Literacy** (1971 census): 28.1 per cent (males 36.7 per cent; females: 18.91 per cent).

Major City: (Over 100,000 population—1971 census): Gauhati: 146,026. Other cities with their population: Dibrugarh: 80,348;

Jorhat: 70,674; Tinsukia: 55,911; Silchar: 52,596; Nowgong: 52,537 and Tezpur: 3,870.

District	Head-quarters	Area in sq. kms.	Population (1971 Census)
Kamrup	Gauhati	9,863	2,854,183
Goalpara	Dhubri	10,359	2,225,103
Darrang	Tezpur	8,775	1,736,188
Lakhimpur	North Lakhimpur	5,046	711,000
Dibrugarh	Dibrugarh	7,023	1,411,119
Nowgong	Nowgong	5,561	1,680,895
Sibsagar	Jorhat	8,989	1,837,389
Cachar	Silchar	6,962	1,713,318
Mikir Hills	Diphu	10,332	379,310
North Cachar Hills	Haflong	4,890	76,047

No. of Villages: Inhabited: 21,995; un-inhibited: 1,106.

State Boundaries: The State is bound by Bhutan and Himalayan ranges in the north, Arunachal Pradesh in the north-east, Nagaland, Manipur and Burma in the east, Bangla Desh, Tripura and Meghalaya in the south and south-west and West Bengal in the west.

AGRICULTURE

The area under food crops covers 72 per cent of the total cultivated area. The principal crop is rice while the main cash crops are jute, tea, cotton, oil seeds, sugarcane, potato and fruits. Rice production and the area under it during 1978-79 was 1.94 million tonnes and 2.05 million hectares respectively. An area of 75,000 hectares was under wheat cultivation during the year. In 1978-79 due to natural calamities like drought and floods the total production of foodgrains amounted to only 2.3 million tonnes but jute production rose to 0.9 million bales. For jute production the acreage under improved seeds has been stepped up during 1980-81 from 55,000 hectares to 75,000 hectares.

Commercial Crops: Tea cultivation in the State covers an area of more than 8 per cent of the total net area sown. Most of the tea gardens are in the districts of Dibrugarh, Lakhimpur, Sibsagar, Darrang and Cachar.

Land Ceiling : 50 bighas (7.5 hectares) per family. Bill on land ceiling was passed in Assam Leg. Assembly in 1975. Upto Jan. 1978, 911,256 bighas of land out of the total 1,724,963 bighas of surplus land acquired by the Govt. had been distributed to 248,999 families.

Irrigation : The two medium irrigation schemes started during the Third Plan and which spilled over to the Fourth Plan were Jamuna and Sakla irrigation projects. The Jamuna project was commissioned in 1969, and the Sakla project in 1978. At present there are 4 medium and more than 200 minor irrigation projects in the State. Execution of one major, 9 medium and 218 minor projects has started. It has been decided to develop a gross irrigation coverage of 0.76 million hectares of land against a total net crop area of 3.17 million hectares in the State.

The Fifth Plan projects created an irrigation potential covering about 346,000 hectares; but only 14 per cent of it could be utilised owing to inadequate attention given to the command area development. Keeping this in view, the Government propose to spend Rs. 50.00 million for the development of command area. The current year Plan allocation in general and in hill areas is Rs. 95.0 million and Rs. 5.9 million respectively.

Power: The State has an installed capacity of 141.5 MW—30 MW in Lower Assam and 111.5 MW in Upper Assam. Following the bifurcation of the composite ASEB in 1975 all hydel stations with an installed capacity of 65.2 MW were handed to Meghalaya. Therefore, the State is dependent on Meghalaya for power.

Rural Electrification: Assam had only 20 electrified villages in 1951. The number has now increased to 4,226 (upto March 1979) under the rural electrification scheme.

Forestry: Forests cover 20.9 per cent of the total area of the State as against 20.5 per cent in the country as a whole. Mikir Hills and the North Cachar. Hills account for 37.3 per cent of the area under forest. About 88,000 hectares have been utilised for wild life sanctuaries.

The important timbers are: Sal, Nahar, Sam Gomari, Khair, Sissu, Tita Champa, Azar, Teak, Sanaru etc.

The forest department has proposed to expand economic plantations and rehabilitate degraded forests to raise the forest area creating revenue and employment.

Fisheries : The main sources of fish production are the rivers and their tributaries.

Minerals: Assam is rich in mineral wealth. It holds a unique position in the production of mineral oil. Other minerals found in the State are coal, limestone, refractory clay, dolomite and natural gas.

INDUSTRIES

The tea industry plays a vital role in the economy of Assam. There are nearly 750 tea plantations in the State.

The State has two oil retineries and the third with a petrochemical complex is coming up. There is also a public sector fertilizer factory at Namrup. Other industries of Assam are sugar, jute, silk, paper, plywood, manufacture, petro-chemicals, rice and oil milling. The important cottage industries are handloom, sericulture, manufacture of cane and bamboo articles, carpentry, smithy and manufacture of brass utensils.

Two paper mills at Jagi Road of Nawgong and Panchgram at Silchar at a cost of Rs. 6,000 million are expected to be commissioned in 1982-83.

Industrialisation in the State has been boosted up significantly with the setting up of five district industries centres. An export oriented handloom project has been started at Sualkuchi to export the export potentialities of Eri and Muga.

Cement Plant : The Cement Research Institute in collaboration with the State Govt. has set up a cement plant costing Rs. 616.1 million at Garampani in North Cachar district.

Cachar Sugar Mill : The Rs. 54.00 million sugar mill has a crushing capacity of 1,250 tonnes of sugarcane per day. It provides direct employment to 600 persons. 20,000 sugarcane growers are benefited by it.

Three Industrial Projects: —A jute factory at Barpeta by Assam Industrial Development Corporation, a bus body building factory and a river-vessel building unit at Gauhati by State Transport Corporation and Inland Water Transport Department respectively are being set up.

Dairy Scheme: The Indian Dairy Corpn., has earmarked Rs. 25 million for milk scheme projects viz. "The Operation Flood II".

Handlooms : The Centre had sanctioned Rs. 2.5 million to the State in 1976-77 under the intensive development project and export production project. The intensive development project is to cover 10,000 looms and export production project to cover 1,000 looms respectively.

An export oriented handloom scheme costing Rs. 7.5 million to help 500 weavers of Sulkuchi in Kamrup district is being set up.

The State Govt. in collaboration with the Central Silk Board and North-eastern Council had drawn up a Rs. 183.5 million scheme for rapid expansion and development of Mulberry, Eri and Muga silk culture.

The Govt. has also decided to upgrade the existing non-mulberry research station at Titabor in Upper Assam into a full-fledged research station.

Industrial Development Agencies : Assam Industrial Development Corporation, Gauhati; Small Industries Service Institute

(Government of India), Gauhati; Credit Guarantee Association, Gauhati; Assam Agro-industries Development Corporation, Gauhati; The Assam State Warehousing Corporation, Shillong.

Working Factories (1979): The number of factories registered during the year was 1,872 as against 1,823 in 1978.

Labour (1979): Number of disputes: 12; mandays lost 25,835.

Employment: The number of registered job-seekers which was 0.29 million in Dec. 1978 increased to 0.31 million in Aug. 1979. The number of educated job-seekers rose from 0.12 million in Dec. 1978 to 0.15 million in Aug. 1979.

EDUCATION

According to 1981 census, the literacy was 36.7 per cent—male 18.91 per cent, female 28.1 per cent.

In 1978-79 the State had 21,615 primary and Junior basic schools, 3,656 middle and senior schools, 1,699 high and higher secondary schools, 137 general education colleges, 3 universities, 3 medical colleges, 3 engineering colleges, 1 agricultural college, 1 veterinary college, 1 ayurvedic college and 7 polytechnics.

The proposed annual plan allocation for general education for 1981-82 is Rs. 56.62 million.

Expenditure on education during 1979-80 excluding primary was Rs 28.82 million.

Universities: Assam Agricultural University, Jorhat 785004; Gauhati University, Jalukbari, Gauhati 781014; Dibrugarh University Dibrugarh.

PUBLIC HEALTH

During the year 1979-80, existing activities continued to function both in rural and urban areas. The significant activities were: 146 Primary Health Centres, five 30-bed rural Hospitals, 432 Subsidiary Health Centres, 778 Sub-Centres and 6 Ayurvedic subsidised dispensaries in rural areas and hospitals in District and Sub-divisional headquarters. During 1979-80, for expansion of health relief measures in rural areas, 13 Subsidiary Health Centres and 115 Sub-Centres were established.

COMMUNICATIONS

Roads : Please see chapter on 'Roads'.

Inland Waterways: The length of internal waterways is more than 9,600 kms. of which 1,600 kms. is navigable by steamers and large country boats.

Airports: The important airports are Borjhar (Gauhati), Mohanbari (Dibrugarh), Salani (Tezpur), Rouriah (Jorhat), Lilabari (Lakhimpur) and Kumbirgram (Silchar).

PRESS

Leading dailies	Town	Language
The Assam Tribune	Gauhati	English
Assam Express	Gauhati	English
Dainik Asom	Gauhati	Assamese
Dainik Janmabhumi	Jorhat	Assamese

GENERAL

Rainfall: The normal rainfall in the plains is 2,380 mms. and that of the hills is 2,550 mms.

Rivers : The Brahmaputra and her tributaries: the Subansiri, the Bhareli, the Dhansiri, and the Manas.

Housing: The State Govt. has spent Rs. 800,000 on housing schemes for 1977-78.

The Sixth Plan: Outlay for the State is Rs. 11,150 million which will be distributed as follows: (Rs. million): Agriculture: 2,583; irrigation, flood control and power: 4,552; industry and mining: 4,747.5; transport and communication: 1,045; social and community services: 2,080; economic services: 90.

Annual Plan: (1980-81): An outlay of Rs. 1788.7 million has been earmarked for the Annual Plan.

High Court: The Gauhati High Court serves Meghalaya, Assam, Manipur, Nagaland and Tripura.

Science Museum: The Assam Science Society is planning to set up a Science and Technology museum in Gauhati. Another project the society has taken up is the Institute of Advanced Study in Science and Technology.

BIHAR STATE

CAPITAL: Patna. **Area:** 71.69 sq. kms. **Population (1971 Census):** 475,300.

Area of the State: 173.876 sq. kms. **Population of the State (1981 Census):** 69,823,154. **Density:** 402 per sq. km. **Sex Ratio:** 947 females per 1,000 males. **Literacy:** 26.01 per cent.

No. of Districts: 31; **No. of Sub-divisions:** 76; **No. of Towns:** 202; **No. of Development Blocks:** 587; **No. of Villages:** 77,967; **Police Stations:** 611; **Panchayats:** 10,852.

Major Cities (over 100,000 population — 1971):

Name	Area (sq. kms.)	Population
Bhagalpur	30.17	172,202
Bihar Sharif	19.34	100,046
Darbhanga	19.18	132,059
Gaya	28.62	179,884
Jamshedpur	63.81	341,576
Monghyr	17.50	102,474
Muzaffarpur	18.57	126,379
Patna	71.69	475,300
Ranchi	48.61	175,934

Administrative Divisions with Headquarters respectively are: 1. Patna (Patna); 2. Tirhut (Muzaffarpur); 3. Darbhanga (Darbhanga); 4. Kosi (Saharsa); 5. Bhagalpur (Bhagalpur); 6. North Chotanagpur (Hazaribagh); and 7. South Chotanagpur (Ranchi).

State Boundaries: The State is bound by Mirzapur, Ghazipur, Ballia and Deoria districts of Uttar Pradesh in the north-west; Nepal in the north; Jalpaiguri, Malda, Birbhum and Purulia districts of West Bengal in the east; Mayurbhanj and Sundargarh districts of Orissa in the south and Surguja district of Madhya Pradesh in the south-west.

State Language: Hindi. Other prominent languages spoken in the State are Urdu and Bengali. The prominent dialects of the State are Bhojpuri, Maithili, Magahi and Santhali.

AGRICULTURE: The main crops of the State are rice, wheat, barley, maize, jute, potato and sugarcane. Rice and wheat occupy an area of 8.10 million hectares out of the total net sown area of 11.28 million hectares in 1978-79.

(See chapter on 'Food & Agriculture' for details.)

Ceiling on Land: A ceiling of 6.0705 hectares to 18.211 hectares for a family of five and an additional allowance of one tenth to each additional member subject to a maximum of one and a half of the ceiling limit to each additional member. The Bihar Government acquired 93,997.8 hectares of surplus land and distributed over 52,594.8 hectares among 137,567 landless till April, 1978.

Livestock (1972 census): cattle: 14,911,112; buffaloes: 3,678,647; sheep: 982,878; goats: 7,363,977; horses and ponies: 98,858; donkeys: 30,717; mules: 483; camels: 191; pigs: 878,965; poultry: 12,560,070.

Fisheries: (See chapter on "Fisheries").

Power Projects: Major power projects are the Patratu thermal power station, Barauni thermal power station and Subernarekha hydro-electric power station under Bihar State Electricity Board and Bokaro and Chandrapura thermal power stations and Tilaiya, Maithon and Panchet hydel power stations under the Damodar Valley Corporation.

As per the cabinet decision (April 14, 1981) the State Govt. is going to set up a Hydel Corporation for the proper management of all the hydel projects in the State. The projects are: Sankh (65 MW), Karhar (120 MW), Gandak (45 MW), South Karo (42 MW), Karkatgarh (25 MW), Sone (16 MW) and North Karo (25 MW).

The State Govt. proposes to set up 6,000 gobar gas plants during 1981-82.

Districts	Head-quarters	Area in 'ooo sq. kms	Population (million)
Aurangabad	Aurangabad	3.3	1.016
Begusarai	Begusarai	1.9	1.147
Bhagalpur	Bhagalpur	5.7	2.091
Bhojpur	Arrah	4.0	1.995
Darbhanga	Darbhanga	2.3	1.517
Dhanbad	Dhanbad	3.0	1.466
East Champaran	Motihari	4.3	1.956
West Champaran	Bettiah	4.9	1.587
Gaya	Gaya	6.5	2.547
Giridih	Giridih	6.9	1.374
Gopalganj	Gopalganj	2.0	1.107
Hazaribagh	Hazaribagh	11.1	1.645
Katihar	Katihar	4.0	1.136
Madhubani	Madhubani	3.5	1.892
Monghyr	Monghyr	7.9	2.745
Muzaffarpur	Muzaffarpur	3.2	1.909
Nalanda	Biharsharif	2.3	1.306
Nawadah	Nawadah	2.5	1.110
Palamau	Daltonganj	12.7	1.504
Patna	Patna	3.2	2.250
Purnea	Purnea	7.0	2.804
Ranchi	Ranchi	18.3	2.611
Rohtas	Sasaram	7.2	1.943
Saharsa	Saharsa	5.9	2.350
Samastipur	Samastipur	2.9	1.824
Santal Parganas	Dumka	14.1	3.186
Saran	Chapra	2.7	1.709
Singhbhum	Chaibasa	13.4	2.437
Sitamarhi	Sitamarhi	2.6	1.582
Siwan	Siwan	2.2	1.462
Vaishali	Hajipur	2.0	1.348

Source: Director of Census Operations, Bihar, Census of India, 1971.

INDUSTRIES (with no. of units): Steel plants 3, cement plants 7, oil refinery 1, copper smelter 1, lead smelter 1, carbonisation plant 1, paper factories 2, uranium and copper complex 1, pottery 1, glass works 5, ceramic works 4, asbestos plant 1, coal washeries 11, locomotive factory 1, tobacco factory 1, jute mills 3, sugar mills 29, cold storages 144, fertiliser plants 2, modern bakery 1, explosive plant 1, electric equipment 1, agro-industry (tractor) 1, scooter factory 2, refractories 45, gun factory 1 and gun manufacturing units in the private sector 36.

INDUSTRIAL DEVELOPMENT AGENCIES: (See chapter on State Govt. Undertakings.)

LABOUR: Employment in Factories (1976): No. of registered factories: 27,290; no. of working factories: 25,816; no. of workers: 346,306; no. of workers employed daily: men: 336,777, women: 15,360; adolescents: 1,300; children: 400.

Employment in Government: Central Government establishments: 194,600; State Government establishments: 425,845; quasi-government establishments: 493,000; local bodies: 172,000.

Employment Exchanges (1980): The total number of unemployed registered with various employment exchanges was 2.2 million. Of these 999,951 are educated and 67,138 are technicians. 1,065 disabled have also registered with the special branch of Employment Exchange at Patna. Govt. has decided to give Rs. 50 to each of the educated unemployed.

No. of Industrial Disputes (1978): 400; workers involved: 190,800; man-days lost: 800,510.

EDUCATION: The State Government provides free education for all children upto Matriculation standard. There are 58,300 primary schools with 4,780,700 pupils and 109,600 teachers. The number of pupils in the middle schools, in the age-group of 11-14, is 2,274,000 and teachers 71,918. The number of high schools is 3,000, attending pupils 1,002,100 and teachers 34,000. There are about 1,200 specialised schools and 49 engineering institutions having 14,222 students and 1,518 teachers. The Adult Literacy Programme has been started in the State since 1978. About 200,000 adults (age group 15-35) have been made literate. At present (1980) 62 projects of adult literacy are functioning in the State.

Universities: Bhagalpur University, Bhagalpur; Bihar University, Muzaffarpur; Kameshwar Singh Sanskrit University, Darbhanga; Magadh University, Bodh Gaya; Patna University, Patna 800005; Ranchi University, Ranchi 834001; Mithila University, Darbhanga 864004; and Rajendra Agricultural University, Pusa 848125, Dist. Samastipur. There are 264 science and arts and 243 other colleges. The total number of teachers and scholars is 10,940 and 244,244 respectively.
(See chapter on "Education" for more particulars.)

PUBLIC HEALTH: Government institutions (1977-78): No. of hospitals 140; dispensaries 670; no. of beds 16,434; no. of doctors in govt. service 3,615; no. of nurses 3,115; no. of auxiliary midwive 2,200; no. of lady health visitors 587; no. of sanitary inspectors 610; no. of pharmacists and compounders 710; no. of non-allopathic medical practitioners 54,384 (homoeopathic 28,090; vaids 23,668; hakims 2,626); no. of medical colleges 10 (govt. 8, private 2). Annual intake of the medical colleges 670.

There are three Employees State Insurance Corporation hospitals, and 27 dispensaries in the State.

There is a leprosarium at Brambay near Ranchi with a provision of 150 beds and a leprosy hospital at Tetumani in Dhanbad dist. Two leper asylums one at Gaya and the other at Deoghar with bed capacity of 150 and 100 respectively, and a subsidy centre at Monghyr with 30 beds are also functioning. Santal Pahariya Seva Mandal manages and controls one leprosy centre at Fatehpur in Santal Parganas district and 13 other clinics.

COMMUNICATIONS: Motor vehicles (1975-76): motor cycles and scooters: 42,274; auto rickshaws and tempo: 1,689; jeeps and cars: 32,062; taxicabs: 4,211; buses: 4,390; trucks: 16,214; tractors: 8,434; trailers: 4,912; other vehicles: 1,174; total 115,360.

Roads (surfaced): 21,593 kms.; (unsurfaced): 72,439 kms.

Electricity (1976-77): Installed capacity 590.50 MW; electricity generated: 2,488 million Kwh; no. of villages electrified: 17,311; no. of towns electrified: 202; State tubewells energised: 3,430; private tubewells: 150,422; industrial connections: 38,800; no. of distribution substations: 16,761.

Per Capita Income: At current prices Rs. 718

PRESS (1977).

Leading dailies	Town	Language
Indian Nation	Patna	English
Aryavarta	do-	Hindi
Searchlight	do-	English
Pradeep	do-	Hindi

GENERAL: Minerals: Bihar has the largest mineral resources and mineral production in India. Almost the entire production of copper ore (98 per cent), kyanite (86 per cent) and apatite (90 per cent) in the country is from Chota Nagpur region. It accounts for 50 per cent of the bauxite, 34.5 per cent of fire-clay, 50 per cent of coal, 32.6 per cent of China clay (crude) and 16.0 per cent of iron in India.

There are 21 coalfields and the best metallurgical coal comes from Jharia coalfield with reserves of 3,017 million tonnes. All coalfields were nationalised by the Government of India in 1972.

A 153 metre thick coal seam, said to be the thickest coal seam in the world, has been discovered in Jhinguda Colliery of the Central Coal Fields Ltd.

The mica belt which has a large supply of high quality block mica is 145 kms. long and 25 kms. wide running from Nawadah in the west to Bhagalpur district in the east through Giridih, Hazaribagh and Monghyr districts.

The sole producer of copper is Singhbhum district. This belt extends for about 130 kms. from Duarpuram in the west to Bahragora in the east.

Bauxite and aluminium are located in Ranchi and Palamau districts. Apatite and kyanite are located in Singhbhum. Limestone deposits are found in Rohtas, Hazaribagh, Palamau, Ranchi and Singhbhum districts. Pyrite deposits are located in Anjhore in Rohtas district.

Chota-Nagpur also contains rich deposits of atomic minerals such as chromite, manganese, asbestos, barytes, dolomite, feldspar, quartz, graphite, ochre, uranium, phosphorites, soap stones etc.

Places of Interest: Remains of the Royal City of Pataliputra (Patna), the ancient International University of Nalanda (Nalanda), the Ashoka pillars at Vaishali, Areraj Lauriyanandangarh, the birth place of Lord Mahavira (Vaishali), the ancient temples at Bodhgaya (Lord Buddha temple), Deoghar (Lord Shiva), Parasnath and the Sikh Gurudwara in Patna city and the cyclopean walls of Rajgir.

Sixth Plan: The total outlay for the Sixth Plan has been fixed at Rs. 32,250 million distributed mainly to power and irrigation: Rs. 16,500 million; agriculture and allied services: 5,800 and community and social services 4,420 million. The outlay for the Annual Plan for 1981-82 has been fixed at Rs. 5,600 million.

Important Rivers: The Ganga, the Gandak, the Kosi, the Kamla, the Sone, the Barakar, the Damodar, the Koel, the Baghmati and the Subarnarekha.

Wild Life: There are 85 tigers and over 200 bisons as also partridges, nakta, spotted bull, pin-headed ducks, swamp partridges, ortolans etc. in the State.

There are two national parks one in Hazaribagh and another in Palamau districts and 16 game sanctuaries.

CHANDIGARH

(Union Territory)

AREA: 114.00 sq. kms. **Population:** 450,061 (1981). **Density:** 3,948 per sq. kms. **Sex Ratio:** 770 females per 1,000 males. **Literacy:** 64.68 per cent.

Area of Chandigarh City: 46.6 sq. kms. **Population of Chandigarh City:** 218,743 (1971). **Sex Ratio:** 752 females to 1,000 males.

Early in 1948 it was decided to build a new capital for the Punjab at a site about 388 kms. north of Delhi. This afforded an ideal opportunity to town planners and architects. A team of experts planned the city under the overall guidance and direction of Charles Edouard Jeannert, the French architect popularly known as 'le Corbusier' (meaning 'A man with a crow's eye').

The city was inaugurated as the capital of the Punjab by President Dr. Rajendra Prasad on October 7, 1953.

FORMATION

On November 1, 1966 the Punjab was divided into three units, Punjab, Haryana and Chandigarh. Punjab and Haryana are separate States, while Chandigarh remains a Union Territory. Following is the text of the official announcement of the Central Cabinet on June 9, 1966: "Chandigarh Capital Project, which does not form part of either of the two regions (Punjab and Haryana) shall be constituted into a Union Territory. The Central Government will also acquire powers to give directions to the Governments of the two States to regulate land use in the surrounding areas declared as "controlled areas". Chandigarh will continue to be the capital of both the States of Punjab and Haryana". On November 1, 1966 the Union Territory of Chandigarh came into being in accordance with the Constitution (18th Amendment) Act providing for the linguistic re-organisation of the Punjab.

Subsequent to this the Central Cabinet announced a decision on January 29, 1970 providing for the transfer of the capital project area of Chandigarh to the Punjab within the next five years. Pending the construction of a new capital by Haryana, Chandigarh will remain a Union Territory.

Administration: Union Territory of Chandigarh is administered by a Chief Commissioner who is vested with powers of the State Government in respect of laws in force in the Territory and with financial powers analogous to those exercised by the other administrators of Union Territories. It has one member in the Lok Sabha.

EDUCATION

There are 16 nursery, 41 primary, 26 middle and 45 high/higher secondary schools in the Territory. Rural areas are given 100 per cent educational facilities, and education upto 10th class is free.

GENERAL

Annual Plan (1980-81): The Annual Plan outlay for Chandigarh (1980-81) is Rs. 190 million of which Rs. 32.65 million has been allotted for housing, Rs. 0.42 million for animal husbandry, Rs. 3.18 million for industry, and Rs. 6.16 million for general development of villages.

Govt. Undertakings: Modern Bakeries' new unit has been set up in the Territory. The project machinery is gifted by Australian Govt. under the Colombo Plan. The unit started production on Dec. 10, 1975.

DADRA AND NAGAR HAVELI

(Union Territory)

HEAD QUARTERS: Silvassa. **Area of the Territory:** 491 Sq. Kms. **Population of the Territory** (1981 census): 103,677 (52,514 males and 51,163 females). **Sex Ratio:** 974 females per 1000 males. **Density:** 211 person per Sq. Km. **Literacy:** 26.60 per cent. **District.: Dadra and Nagar Haveli. Major City:** None. **No. of villages:** 72 (Seventy-two only).

Boundaries: Dadra and Nagar Naveli is near west coast surrounded by the States Gujarat & Maharashtra. It consists of two pockets namely Dadra and Nagar Haveli and these two pockets are intercepted by the territory of Gujarat.

Dadra and Nagar Haveli was assigned to the Portuguese by Maratha Government in 1779 for an aggragated revenue of Rs. 12,000/-. The Portuguese ruled this territory till its liberation in 1954. The integration of Dadra and Nagar Haveli with the Indian Union was effected on 11-8-1961.

State language: As per 1971 Population Census, 83 per cent of the population speak Bhilli/Bhilodi language, 12 per cent speak Gujarati, 2.29 per cent speak Marathi, and 1.58 per cent speak Hindi.

Agriculture: Agriculture is the principal occupation of *adivasis* who represent about 90 per cent of the total population. Paddy and ragi are two major food crops, while wheat is also grown in some areas. About 25,558 hectares of land are under cultivation. Agriculture depends almost entirely on rainfall. Average rainfall for the year 1979-80 was 2200 mm. About 905 hectares were irrigated during 1979-80.

Soil Conservation: The main work of soil conservation is bench terracing. Under the scheme 50% subsidy is given to the farmers on the cost of soil conservation work. In case of landless, agricultural land is allotted by the Administration and is developed through the Soil Conservation Department, the rate of subsidy is 75%. The department has taken up the treatment of catchment area of Damanganga Project from December 1979.

Forests: Forests of the Territory contain valuable trees species like teak, Khair, sadad, etc.

The present forest area is 19,908.81 hectares which forms about 40.73% of the total area of the Territory. During 1979-80, Khair and Teak Plantations were raised over an area of 495 hectares. It is proposed to cover 490 hectares under various Plan schemes during 1980-81. Revenue earned by the Forest Department forms the major part of the total revenue of the Territory. Due attention is also being paid to ecological balanced to the roadside plantation.

Animal Husbandry, Poultry, and Dairying. There is one Veterinary Hospital at Silvassa and five Veterinary Aid Centres located in this territory. Free treatment is given to the livestock of the territory by these centres. During 1979-80, 440 animals were castrated, about 83,267 animals were treated, 26,400 animals were innoculated against various diseases and 148 cows were given artificial insemination.

There is one Govt. dairy demonstration farm with 45 buffaloes, one bull rearing farm and one piggery unit at Silvassa. 4 Jersey bulls are kept for Artificial Insemination activities at the Veterinary Hospital, Silvassa. In addition to this, there is fodder demonstration farm run by the Animal Husbandry department.

The Poultry Farm at Silvassa provides sufficient number of improved variety of birds to the people. There are 32 small Poultry Units and 3 big Poultry Farmer's Co-operative Societies are functioning in different villages.

Medical & Public Health: There is one (Cottage Hospital with 40 beds), two Primary Health Centres, five dispensaries and five subcentres. There is also one mobile dispensary. The entire territory is covered under Multi Purpose Health Workers Scheme and Community Health Volunteers Scheme and all rural health programmes including family welfare programme are being implemented through them.

Irrigation: There is no major irrigation project in this territory. However, Damanganga Reservoir Project, a joint venture with Govt. of Gujarat, and Govt. of Goa, Daman and Diu, is being executed by Govt. of Gujarat. With the completion of the project, costing about Rs. 540 million, about 8,280 hectares of land will be brought under irrigation.

The minor irrigation activities include 22 lift irrigation schemes, 6 open irrigation wells, and 15 check-dams, 8 lift irrigation schemes and 10 open irrigation wells are under progress.

Power: There is no generation of electricity in this territory. Power is purchased from Gujarat Electricity Board through their Vapi Sub-Station to Silvassa Sub-Station on 66 KV line. Out of 72 villages, 52 villages are electrified. The work is under progress for electrifying 13 villages, and the rest of the villages are to be submerged due to the Damanganga Reservoir Project.

Power connection was given to 180 industrial and commercial units during the year 1979-80. So far 8 H.T. connections, 2,940 lighting connections, 228 pump sets and 20 Lift irrigation schemes were connected with electricity.

Education: There are 141 Government primary schools, 12 Govt. aided and one unaided mission primary school. The total strength of the primary schools is 14,962 (9,270 boys, and 5,692 girls). The Administration is also running 11 pre-primary schools where 478 children are enrolled.

There are 2 higher secondary schools one each at Silvassa and Naroli. There are two high schools, one each at Dadra and Khanvel with total strength of 995 students. There is no college imparting higher education. The Administration provides free education upto Higher Secondary level, and free mid-day meals are provided at Pre-primary and Primary Schools. There are 7 public libraries. An Industrial Training Institute trains wiremen, welders, fitters, and electricians.

Communication: There is no state highway passing through this Territory. Nearest Railway Stations are Bhilad and Vapi on Western Railway, which are 15 to 17 Km. from Silvassa.

The length of surfaced roads at the end of March, 1980 was 182.20 Km. and unsurfaced village roads, 34 Km.

Industries: There is no large-scale Industry in the Territory. A co-operative and a Government Industrial Estate are located near Silvassa and in Masat village. There are 88 industrial units of which 63 are in the Industrial Estate and 25 are outside. These small-scale industries, including two medium scale industries, employ 2,000 persons. Total production exceeds Rs. 200 million. The products manufactured include spectacle frames and parts, cotton and art silk fabrics, crimped yarn, foam products, detergent powder, confectionary, biscuits, chemical and various engineering products, candles, fruit juice, wrist watches, flooring tiles, spun pipes, corrugated boxes, containers, stainless steel utensils, fountain pen nibs, watch straps, plastic bags, Katha, tannin, cotton narrow tapes, etc. The entire territory is declared as backward area.

DELHI

(Union Territory)

AREA: 1,485 sq. kms.; **Population (1981 Census):** 6,196,414; **Density:** 4,178 per sq. km.; **Sex Ratio:** 810 females per 1,000 males; **Literacy:** 61.06 per cent.

Administration: The Lt. Governor is the Administrator. The entire Territory is covered by three Local Bodies viz. Delhi Municipal Corporation, New Delhi Municipal Committee and Delhi Cantonment Board.

Boundaries: Delhi is surrounded by Uttar Pradesh in the east, and by Haryana in the south, west and the north.

AGRICULTURE: The Delhi Landholders (Ceiling) Bill passed in August, 1960, fixed the ceiling on land holdings at 12.15 hectares for a family of five. Leases in future have been prohibited except by small owners holding less than 3.24 hectares and persons suffering from a disability. Future tenants will have a minimum term of five years.

The total cropped area (1978-79) was 117,000 hectares and the total crop production was 134,700 tonnes.

Livestock:

In 1977, the Territory had a livestock population of 215,731 and Poultry population of 216,911.

Milk Supply (1979):*Delhi Milk Scheme* distributed 235 kilo-litres of milk through its 1,101 milk depots. *Mother Dairy*, distributed 350 kilo-litres through 260 milk depots.

INDUSTRIES (1978-79): There are about 41,000 industrial units functioning in Delhi. These units produce goods worth Rs. 14,250 million, provide employment to 350,000 persons and have an investment of Rs. 6,500 million.

The main industries of Delhi are electronics, electrical appliances and accessories, lathe machines and drilling machines, small tools, cycle and cycle parts, paints and varnishes, rubber goods, plastic goods, auto-parts and batteries, precision instruments, cotton mills, hand and powerloom weaving, imitation jewellery, copper and brass utensils, sports goods, pottery and hosiery.

Labour (1979): No. of workers unions in Delhi: 1,018. There were 52 industrial disputes which involved 45,173 workers resulting in the loss of 2,431,863 mandays. Average daily employment in all working factories which numbered 3,199 was 136,000. (N.B.—All figures are provisional.) The no. of employment exchanges in the Territory were 16, with a registration of 185,000. Out of the 72,000 vacancies notified, 60,000 applicants were placed.

The number of registration on the live-register of the Regional Employment Exchange, at the end of 1979, was 281,000.

EDUCATION (1978-79): The number of higher secondary institutions during the year was 660.

The number of institutions, primary, middle and higher secondary was 2,602 and the total enrolment was 1,175,120.

Number of arts and science colleges in Delhi stood at 62. There were 17 colleges of engineering and technology during the year.

Universities: *University of Delhi*, Old Viceregal Lodge, Delhi 110007—is a teaching and affiliating university. The medium of instruction is English.

Jawaharlal Nehru University, New Meharauli Rd., New Delhi 110057—has jurisdiction over the whole of India. It is a teaching and research University.

PUBLIC HEALTH (1979): There are 62 hospitals, 108 clinics, 445 dispensaries and 8 primary health centres. The total bed strength is 13,941. Birth rate, death rate and infant mortality during 1978 were 23.8, 6.9 and 47.7 respectively (per thousand).

COMMUNICATIONS: During the year 1978, the number of vehicles plying on the roads of Delhi was: Motor cycles and scooters: 302,874; auto rickshaw: 18,874; cars & jeeps: 110,775; taxis: 5,894; commercial vehicles (goods): 33,325; buses: 7,530.

The Delhi Transport Corporation had 2,454 buses and 637 private buses under D.T.C. operation, as on March, 1980, which carried 944.1 million passengers over 209.08 million Kms. during the year.

PRESS: The major dailies in Delhi are as follows:

English: Hindustan Times; Hindustan Times Evening News: Indian Express; Morning Echo; National Herald (Lucknow & New Delhi); Patriot; Statesman (Calcutta & New Delhi); Times of India.

Hindi: Hindustan; Nav Bharat Times; Vir Arjun.

Urdu: Milap; Pratap.

ANNUAL PLAN: The Planning Commission has recommended an outlay of Rs. 1,203.8 million for the Annual Plan for 1980-81 for the Territory against administration's demand of Rs. 1,441.15 million.

Priority has been given to power, water supply and sewage disposal, education and housing in Plan allocations.

The Annual Plan Outlay envisages Rs. 230.1 million for power, Rs.202.6 million for water supply and drainage, Rs.132.5 million for education, Rs.123.5 million for housing including police quarters.

Per Capita Income: (1978-79): Rs.2,445.

Delhi Development Authority, Vikas Bhavan, Indraprastha Estate, New Delhi 110001—is responsible for planning and implementing the 20-year Delhi Master Plan. Over 8,723 hectares have been developed by the DDA for setting up new residential, industrial and commercial enclaves. Over 43,785 houses, flats had been constructed and allotted by August 1980. About 71 million people have been resettled in 27 well laid out colonies.

GOA, DAMAN AND DIU

CAPITAL: Panaji; **Urban Agglomeration Area:** 37.00 sq. kms., **Population:** 59,258 (1971 Census). **Area of Territory:** 3,813 sq. kms. **Population of Territory** (1981 Census): 1,082,117; **Density:** 284 per sq. km.; **Sex ratio:** 981 females per 1,000 males; **Literacy:** 55.86 per cent. **Districts:** Goa, Daman and Diu with Panaji as headquarters. *Goa:* area 3,701 sq. kms.; population 795,120· *Daman:* area 72 sq.kms.; population 38,730; *Diu:* area 40 sq. kms.; population 23,912. **Important Towns:** with their population: Panaji urban agglomeration 59,258; Margao urban agglomeration 48,593; Mormugao 44,065; Mapusa 20,001. **Other Towns:** Ponda, Pernem, Chauri, Quepem, Bicholim, Sanguem, Valpoi, Daman and Diu. **No. of Villages:** 429 revenue villages or 409 census villages (excluding 8 uninhabited villages as per 1971 census). **State Boundaries:** The entire territory of Goa, Daman and Diu comprises of three districts of different land blocks.

Goa is bound in the north by the Terekhol river which separates it from Maharashtra, in the east and south by Karnataka and in the west by the Arabian Sea.

Daman is bound in the north by the Bhagwan river, in the east by Gujarat State, in the south by the Kalam river and in the west by the Arabian Sea.

Diu, a tiny island in the Gulf of Cambay near Veraval Port, is separated from the southern extremity of the Saurashtra peninsula by a narrow channel running through a swamp.

Language: The predominant language of Goa district is Konkani and Daman & Diu is Gujarati.

AGRICULTURE: Net area sown in Goa, Daman & Diu is 128,429; 4,353 and 793 hectares respectively. The food crops commonly grown include paddy, nachini (ragi) and pulses. Vegetables of all types are grown as rainfed crops in Kharif and as irrigated crops in Rabi season. The main commercial fruit crops grown in Goa are coconut, cashewnut, betelnut (arecanut) and mango. The other common fruits available in this territory are pineapple, jackfruit, breadfruit, various types of citrus, papaya, and bananas.

During the year 1979-80, area covered under high-yielding variety of paddy was 29,539 hectares and achievement in paddy production was 1,42,934 metric tonnes. The area under Wheat pulse and ragi during 1979-80 was 55,000 hectares, 6,500 hectares and 7,000 hectares respectively, and sugarcane occupied 1,472 hectares. The fertiliser consumption of NPK was 4,309 tonnes in 1979-80. Under Horticulture Development 45,174 coconut seedlings, 336,510 cashew seedlings, 10,186 mango grafts, 57,200 banana suckers and 63,500 pineapple suckers and 21,350 of other fruit stock plants were supplied. Under Plant Protection an area of 12,230 hectares was covered.

Poultry Production:

(Eggs by Government Poultry Farm)

1977-78	575,094
1978-79	571,093
1979-80	497,634

Dairy Production (Government Scheme)

	Milk Production	Butter	Ghee
1977-78	3,810,702 litres	5,530 kgs.	1,155 kgs.
1978-79	4,163,257 litres	3,781 kgs.	1,022 kgs.
1979-80	4,362,479 litres	7,298 kgs.	1,904 kgs.

Fisheries: During 1979 the estimated marine fish landing amounted to 39,488 tonnes worth Rs. 81.8 million.

The Territory has a coastline of about 140 kms. (divided into 3 separate units: Goa 105 kms., Daman 22 kms. and Diu 13 kms.) and small fresh water ponds numbering about 126. The coast is full of creeks and estuaries which provide a good shelter for fishing crafts.

Forest: The total forest area of the territory is 130,895 hectares out of which State forest area constitutes 105,295 hectares. The revenue earnings from forest for 1978-79 was Rs. 6.688 million. The per capita forest area comes to 0.15 hectare.

Electricity: Power for distribution in the Territory is obtained from Karnataka and Maharashtra to Goa and from Gujarat to Daman and Diu. The aggregate maximum power demand during 1978-79 was 67.7 M.W. and the units sold were 176.53 million kwh.

In all 13 towns and 351 villages have been electrified as on 31st March, 1979.

Irrigation: Irrigation projects and area (hectares) expected to be irrigated on completion are: Salaulu: 14,500 (Sanquem-Quepem-Salute) and Anjuna: 1,468 (Sattari). A number of other minor irrigation schemes are under implementation.

INDUSTRIES: There are 31 projects in large and medium scale sectors with a capital investment of approximately Rs. 1,440 million, providing employment to over 6,737 persons. All the large and medium scale industries are located in rural areas.

Industrial Estates: (Names of Govt. Estates)—1. Corlim Industrial Estate, Corlim, Ilhas-Goa; 2. Margao Industrial Estate, St. Jose de Areal, Margao-Goa; 3. Sancoale Industrial Estate, Sancoale, Marmugao; 4. Daman Industrial Estate, Daman; 5. Mapusa Industrial Estate, Mapusa; 6. Tivim Indl. Estate, Bardez Tivim; 7. Bicholim Indl. Estate, Bicholim.

Small-Scale Industries Sector includes industries such as capacitors, zip fasteners, fishing nets, wick stoves, paints, cutting tools, castings, carbon papers, stern gear and propellers, spectacle frames, drugs and pharmaceuticals, rubber tyres, plastic articles, cashew nuts, assembly of wrist watches, coconut shell powder, industrial furnaces etc.

Industrial Development Agencies: Directorate of Industries and Mines, Govt. of Goa, Daman & Diu, Udyog Bhavan, Panaji 403001; Small Industries Service Institute, Audhi Mapari Bldg., Margao 403 601; Maharashtra Small Scale Industries Development Corpn., Margao 403 601; Maharashtra State Financial Corpn., Panaji 403 001 (with branches at Margao and Daman); Goa, Daman and Diu Industrial Development Corpn., Panaji 403 001; and Economic Development Corpn. of Goa, Daman and Diu, Panaji 403 001.

Labour (1979): No. of unions: 71; no. of workers: 40,200; strikes: 223; man days lost: 126,194.

Exports: The export earning during 1979-80 was Rs. 49.6 million. Main export items are: pesticides, pellets from pelletisation plant, cotton yarn, sugar, rubber tyres, canned and frozen fish, canned fruits, processed cashew nuts, industrial furnaces, flooring tiles, wick-stoves, silk fibres, plastic goods, liquor etc.

EDUCATION (1978-79)

Schools	No. of Schools	No. of Pupils	Boys	Girls
Primary	1,202	124,840	66,804	58,036
Middle	375	67,660	38,313	29,347
Secondary	242	37,312	21,338	15,974
Higher Secondary	17	6,465	3,768	2,697

No. of Colleges	No. of Students	Boys	Girls
Arts, Science snd Commerce 9	4,387	2,564	1,823
Professional 7	2,080	1,672	408
Below degree 5	1,286	710	576

University	No. of Students	Men	Women
Post Graduates Centre, Panaji	751	447	304

Education is free upto S.S.C. in all Government and aided schools.

An independent territorial Secondary School Certificate Board has been set up since Aug. 15, 1975.

PUBLIC HEALTH (As on 1.1.1980): No. of Hospitals: Private including nursing homes: 55, Government 33, No. of beds 2,261 (Government), 810 (private); no. of doctors: 941; no. of nurses: N.A.; no. of non-allopathic medical practitioners: 53 (provisional); no. of medical college: 1; amount spent on medicines (1979-80); Rs. 5,446 million (provisional).

COMMUNICATIONS (As on 31.3.1980): The total number of motor vehicles registered in Goa, Daman and Diu is 35,552. Buses: 1,052; Goods vehicles: 6,927; Taxis: 999; Tractors: 202; Private cars and jeeps: 6,960; Motor cycles and Scooters: 18,293; Auto rickshaws: 328; Govt. vehicles: 791.

Length of motorable roads: Goa 2,539.50 kms., Daman 81.64 kms., Diu 21.182 kms. A bridge connecting Jua island with Marcela has been constructed. Construction of bridge across Zuari river is nearing completion and the work of Colvale Bridge has been started. The total length of the national highways nos. 4A, 17 and 17A, which pass through this territory, is 223.95 kms. There is a direct train service between Vasco-da-Gama, Pune and Bombay with a change at Miraj. Goa is also connected with luxury and semi-luxury buses with neighbouring States. Coastal steamer services operate between Bombay and Panaji. Mormugao is one of the major harbours on the west coast of India. It permits ocean-going vessels of various sizes. Cargo ships mainly from Japan, America and Europe call at the port. Goa is criss-crossed by as many as half a dozen rivers and rivulets, and internal waterways are being developed fully for transport of men and goods.

Post and Telegraph Facilities: At present there are 219 post offices, 68 combined offices, and two departmental telegraph offices. There are 27 telephone exchanges with equipped capacity of 7,220 lines. The number of public call offices is 70 and it has three telex exchanges. There are also 4 microwave stations.

Ferries: Over Mandovi: Panaji-Betim-Verem; Panaji-Britona; Panaji–Piedade–Naroa; Ribandar–Chorao; Old Goa–Piedade; Aldona–Corjuem; Pomburpa–Chorao; and Sarmanas–Tonca.

Over Zuari: Dona Paula-Marmagoa and Agacaim-Cortalim.
Over Chapora: Siolim-Chopdem and Colvale-Macazana.

Over Daman Ganga: Moti Daman-Nani Daman.

Village Panchayats: There are 193 village panchayats.

Housing: The Goa, Daman and Diu Housing Board was constituted on March 20, 1969. During the Five-Year Plan Rs. 22.5 million has been earmarked for housing schemes entrusted to the housing board as follows: subsidised industrial housing Rs. 0.45 million; low income group Rs. 3.6 million; middle income group Rs. 6.3 million; land acquisition and development Rs. 11.5 million; slum clearance scheme Rs. 0.65 million.

PRESS

Leading Dailies:

Name	Town	Language
Navhind Times	Panaji	English
Navprabha	Panaji	Marathi
Gomantak	Panaji	Marathi
Rashtramat	Margao	Marathi
O Heraldo	Panaji	Portuguese–Roman Konkani
West Coast Times	Margao	English

Annual Plan: The outlay for 1980-81 was Rs. 312.5 million, which was allocated under major heads as follows: Agriculture and allied services: Rs. 45.1 million; Cooperation: Rs. 6.5 million; Water and power development: Rs. 89.5 million; Industry and Mines: Rs. 16.7 million; Transport and communication: Rs. 45.9 million; Social and community services: Rs. 107.4 million; Economic services: Rs. 1.2 million; and General services: Rs. 0.2 million.

Rivers: The Tirakol, the Chapora, the Naroa, the Mandovi, the Kandepar, the Sinquerim, the Mapusa, the Cotorem, the Bicholim, the Sanquelim, the Zuari, the Paroda, the Sal, the Talpona and the Galgibaga.

Historic Dates: Occupation of Goa by Alfonso de Albuquerque: November 25, 1510; Occupation of Diu by Portuguese: 1535; Occupation of Daman by Portuguese: 1559; Establishment of Inquisition in Goa: 1560; Naval Treaty between Shivaji, founder of the Maratha Empire, and the Portuguese: December 11, 1667; Maratha war with Portuguese for conquest of Bassein: 1737-1739; Proclamation of the Portuguese Republic: October 5, 1910; Civil Disobedience Movement for Goa's Liberation: June 18, 1946; Liberation of Dadra: July 22, 1954; Liberation of Nagar Haveli: August 2, 1954; Judgement of the Hague Court regarding the case concerning the right of passage over Indian territory (Portugal vs. India): April 12, 1960; Liberation of Goa, Daman & Diu and appointment of Military Governor: December 19, 1961; Installation of Civil administration: June 8, 1962; First democratic elections: December 9, 1963; Installation of the first popular Ministry: December 20, 1963.

GUJARAT STATE

CAPITAL: Gandhinagar; **Area:** 649 sq. kms.; **Population** (1971 census): 24,055.

Area of the State: 195,984 sq. kms.; **Population** (1981 census): 33,960,905; **Density:** 173 per sq. km. **Sex Ratio:** 942 females per 1,000 males; **Literacy:** 43.75 per cent.

Major Cities: With population over 100,000 and area (municipal) in sq. kms.: Ahmedabad 1,591,832; 92.98; Surat 471,656; 35.65; Vadodara 467,487; 78.13; Rajkot 300,612; 60.15; Bhavnagar 225,974; 90.16; Jamnagar 214,816; 25.90; Nadiad 108,269; 28.58.

No. of Villages: 18,275; **Uninhabited:** 422; **No. of Talukas:** 184; **No. of Towns:** 217; **No. of Municipal Corpns.:** 4; **District Panchayats:** 19; **Taluka Panchayats:** 182; **Nagar Panchayats:** 92; **Gram Panchayats:** 12,859.

State Boundaries: The State is bound by Jalor, Sirohi, Udaipur, Dungarpur and Banswara districts of Rajasthan in the north and north-east; Jhabua district of Madhya Pradesh, Dhule and Nasik districts of Maharashtra in the south; and Arabian Sea and Pakistan in the north-west.

State Language: Gujarati is the language of administration, law courts and university, and Hindi for communication with the Union Government

Districts	Headquarters	Area Sq. kms.	Population
Ahmedabad	Ahmedabad	8,707	2,910,307
Vadodara	Vadodara	7,788	1,980,065
Banaskantha	Palanpur	12,702	1,265,383
Bharuch	Bharuch	9,045	1,109,601
Mehsana	Mehsana	9,027	2,092,468
Panch Mahals	Godhra	8,866	1,848,804
Surat	Surat	7,745	1,786,924
Dangs	Ahwa	1,683	94,185
Sabarkantha	Himatnagar	7,390	1,187,637
Jamnagar	Jamnagar	14,125	1,111,343
Bhavnagar	Bhavnagar	11,155	1,405,285
Amreli	Amreli	6,760	848,730
Junagadh	Junagadh	10,607	1,656,677
Kutch	Bhuj	45,612	849,769
Rajkot	Rajkot	11,203	1,624,072
Surendranagar	Surendranagar	10,488	845,454
Gandhinagar	Gandhinagar	649	200,642
Kheda	Kheda	7,194	2,451,387
Valsad	Valsad	5,238	1,428,742

AGRICULTURE

Estimated foodgrain production during 1978-79 was 4.49 million tonnes and area sown was 4.58 million hectares. (Pl. see the chapter "Food and Agriculture" for particulars.)

Forests: 19,662 sq. kms. (Provisional as on 31-3-1978). The forest area in the State is barely 10 per cent of which a large portion is barren and divided. The State Govt. had prepared an ambitious programme for the extension of forestry during the Fifth Plan. An amount of Rs. 90 million had been proposed in the Plan against Rs. 35.5 million in the Fourth Plan.

Fisheries: The State coast line is about 1,600 kms. long. The production of fish during 1978-79 was 246,000 tonnes. The total number of fishermen's co-operatives in the State was 149 during 1978-79. Fish production was expected to increase to 280,000 tonnes by the end of the Fifth Plan. (Please see chapter on 'Fisheries' also.)

Major Irrigation and Power Projects: Irrigation facilities are most inadequate. Out of 12.5 million hectares of cultivable land only 1.5 million hectares get assured irrigation. During 1975-76 the State government had created irrigation potential for 81,000 hectares at a cost of Rs. 448.5 million and also provided in the 1976-77 budget Rs. 481.3 million for additional irrigation potential of 83,000 hectares. There are 1,187 government tube wells and the Government has also set up the Gujarat Water Resources Development Corporation for the development of ground and surface water resources. The corporation proposed to drill 3,200 tube wells during the Fifth Five-Year Plan. This will help create additional irrigation potential of 256,000 hectares. The power grid potential was 1,676 mw as on June 1976. (See chapter on 'Energy').

INDUSTRIES (1978)

The major industries of the State are: Textile including ginning and pressing of cotton, general and electrical engineering, vegetable oils, chemicals (including salt) soda ash and cement.

Particular regarding number of working factories and average number of workers employed therein daily respectively under each category are as follows:—

Textile: 1,261; 242,889; food products: 1,018; 55,162; non-metallic mineral products: 960; 39,650; machinery and machine tools and parts except electrical : 1,010; 38,284; chemical & chemical products except products/petroleum and coal: 899; 48,167; transport equipment and parts: 98; 8,164; basic metal and alloys industries: 504; 14,880; beverages, tobacco & tobacco products: 260; 9,256; metal products and parts except machinery and transport equipment: 804; 21,936.

During the year 1978-79, 10 licences were issued under the Industries Development and Regulation Act 1951.

Production of selected industries (1978—provisional): Vegetable oil products: 50,900 tonnes; cement: 2,036,000 tonnes; caustic soda: 74,100 tonnes; cotton yarn: 197.4 million kgs; sulphuric acid: 223.600 tonnes; cotton cloth: 1,364.7 million metres; super phosphate: 15,500 tonnes; power driven pumps: 77,000; refractories: 11,700 tonnes; salt: 3,555,500 tonnes.

Major Public Sector Undertakings: Indian Petro-Chemical Corporation; Oil & Natural Gas Commission; Hindustan Salts; Indian Oil Corporation and Modern Bakeries, Ahmedabad.

New Industrial Projects: The new projects envisaged include heavy water project by Atomic Energy Commission at Vadodara and telephones, machine tools, ordnance items, tractors and D.D.T.

Small-scale Industries: The number of small-scale industrial units registered with the Commissioner of Industries has increased from 32,192 at the end of 1977 to 35,160 at the end of 1978.

Industrial Estates: Gujarat Industrial Development Corporation had 86 industrial estates at the end of 1978-79. Out of these 51 estates were in urban areas and 35 in rural areas.

Labour: Workers by Industries: total no. of workers: 8,395,546 (males: 7,072,557; females: 1,322,989); cultivators (male: 3,173,204; females: 446,793); agricultural labour (males: 1,248,027; females: 639,633); livestock, forestry, fishing, hunting & plantation orchards and other activities (males: 155,130; females: 11,388); mining and quarrying (males: 29,518; females: 5,254); manufacturing, processing, servicing and repairs: (a) household industry (males: 209,123; females: 27,449); (b) other than household industry (males: 737,008; females: 39,266); construction (males: 103,593; females: 16,316): trade and commerce (males: 561,928; females: 20,689); transport and communications (males: 233,875; females: 5,824); other services (males: 621,151; females: 110,377); non-workers (males: 6,729,937; females: 11,571,992).

Factories: (1978): No. of factories: 9,836; average daily no. of workers employed: 588,594.

Employment Exchanges: During 1978-79, about 21,000 persons were placed in employment as against the total registration of 222,000.

No. of Industrial disputes (1978): 174; no. of workers involved: 33,147; no. of man-days lost: 341,108.

EDUCATION (1978-79)

Schools	Number	Pupils	Teachers
Primary	23,000	4,627,000	116,000
Secondary	2,907	1,031,000	370,000

Engineering Institutes	Number	Intake Capacity	Sanctioned Seats	Actual Admissions
Degree	7	1,963	2,028	1,685
Diploma	20	3,320	3,410	4,090

Universities: *Gujarat Agricultural University,* Sardar Krushinagar (Dantiwada) 385506. Banaskantha Dist. *Gujarat Ayurved University,* Dhanvantari Mandir, Jamnagar 361001. *Gujarat University,* Ahmedabad 380009. *Gujarat Vidyapith* (National University of Gujarat), Ahmedabad 380014. *Maharaja Sayajirao University of Baroda,* Vadodara 390002. *Sardar Patel University,* Vallabh Vidyanagar. *Saurashtra University,* Rajkot 360001. *South Gujarat University,* Univ. Campus, Udhna-Magdalla Rd., Post Box No. 49, Surat 395007.

PUBLIC HEALTH 1977 (Estimated):

Hospitals and dispensaries: 1,547; beds: 19,881; doctors: 2,199; nurses: 5,328; Primary health centres: 251; sub-centres: 786.

Under family welfare programme 54,195 vasectomies, 143,172 tubectomies and 35,301 (IUCD) insertions were done during 1978-79.

COMMUNICATIONS (as on March 31, 1978-79): Length of roads: 43,256 kms.; National highways: 1,425.; State highways: 9,058 kms; major dist. roads: 10,043 kms.; other dist. roads: 9,834 kms.; village roads: 12,896 kms.

Post & Telegraph (1978-79): No. of post offices: 7,554; Telegraph offices: 1,322.

Railways (1978-79): 5,616 kms.; broad gauge: 1,155. kms.; metre-gauge: 3,326 kms.; narrow gauge: 1,135 kms.

Motor Vehicles: (March 31, 1979): Motor cycles: 170,929; motor cars: 41,038; taxi cubs: 1.449; auto-rickshaws: 20,467; stage carriages: 7,681; trailers: 12,052; tractors: 18,405; others: 1,365

PRESS: Leading dailies:

English: Times of India, Ahmedabad; Indian Express, Ahmedabad; Western Times, Ahmedabad.

Gujarati: Gujaratmitra and Gujaratdarpan, Surat; Janasatta, Ahmedabad; Loksatta, Vadodara; Phulchhab, Rajkot; Sandesh, Ahmedabad; Gujarat Samachar, Ahmedabad; Jai Hind, Rajkot; and 'Pratap', Surat.

GENERAL

Annual Plan: The outlay for 1980-81 Annual Plan is Rs. 5,025 million. The sector-wise distribution is as follows: Agriculture and allied sectors: Rs. 744.6 million; cooperative sectors: Rs. 58.1 million; irrigation: Rs. 1,260.9 million; power: 1,100 million; industries and minerals; Rs. 284.3 million; transport and communications; Rs. 494 million; social and community services: Rs. 797.4 million; projects aided by World Bank and other international agencies: Rs. 930 million; and Narmada multi-purpose project: Rs. 306.6 million.

Rivers: The Banas, the Mahi, the Sabarmati, the Shetrunji, the Tapti, the Luni, the Narmada and the Saraswati.

Minerals: Gujarat is rich in minerals like salt, limestone, manganese, gypsum, china clay, calcite, bauxite, etc. Large deposits of bauxite of very good grade are located in Saurashtra and Kutch. The reserves of bauxites are about 17 million tonnes. The fluorite deposit located near Chhota-Udepur in Vadodara district is one of the largest in Asia and has reserves of 11.6 million tonnes. Limestone reserves run into several thousand million tonnes with the best quality located in Saurashtra and Kutch. The State also has deposits of lignite, china clay and other clays, glass and sand quartz, dolomite, agate, calcite etc.

Production (1978):

Type of minerals	Quantity (tonnes)	Value (thousand Rupees)
Agate	2,055	475
Bauxite	220,088	6.446
Chalk	72,840	3.386
Quartz & Silica	35,337	282
Limestone & other materials (Estimated)	2,472	26.121
Fluorite Crude Fluorite Grades	14,209	22,177

HARYANA STATE

CAPITAL: Chandigarh; **Area of State:** 44,222 sq. kms. **Population of State** (1981 census): 12,850,902. **Density:** 291 per sq. km. **Sex Ratio:** 877 females per 1,000 males. **Literacy:** 35.84 per cent.

Districts	Area Sq Kms.	Population †
Ambala	3,833.00	1,098,405
Bhiwani	4,664.33	726,233
Gurgaon	2,769.83	664,882
Hissar	6,625.39	1,160,835
Jind	3,224.22	752,379
Karnal	3,765.74	1,007,084
Kurukshetra	3,734.61	862,899
Mohindergarh *	3,221.67	761,605
Rohtak	3,748.96	1,072,821
Sirsa	4,285.04	533,604
Sonepat	2,192.74	680,529
Faridabad	2,156.47	715,532

(District headquarters have the same name)

* The name of the headquarter is Narnaul.

†Figures relate to 1971 census.

Cities: With over 100,000 population (1971 census). Rohtak (Area: 11.66 sq. kms.) 124,755; Ambala Cantt. (Area: 36.26 sq. kms.) 102,493. **No. of Towns:** 65. **No. of Villages:** 7,064 (Inhabited: 6,731).

State Boundaries: The State is bound by Punjab in the west, Himachal Pradesh in the north, Uttar Pradesh and Delhi in the east and Rajasthan in the south and west.

State Language: Hindi.

AGRICULTURE

The target fixed for the production of foodgrains during 1979-80 was 6.01 million tonnes.

Area under forests during 1978-79 was 0.110 million hectares; net area sown: 3,654 million hectares. Area sown more than once: 1.872 million hectares. (See chapter on "Food & Agriculture" for details.)

Irrigation: The total gross irrigated area is 2.78 million hectares. Main irrigation schemes are the Western Jamuna Canal, Bhakra Canal and Gurgaon Canal. While the Gai Canal, Loharu Canal, Siwani Canal (Stage I to IV) and Pandit Jawaharlal Nehru Canal are lift irrigation schemes. Besides, Agra Canal, which is maintained by the U.P. Irrigation authorities also provides irrigation facilities in Gurgaon district.

Dairying: Seven Cattle development projects are in existence in the districts of Karnal, Gurgaon, Kurukshetra, Jind, Bhiwani, Ambala and Sirsa. A jersey cross-breeding station has been functioning at Jagadhri.

The Indo-Australian cattle breeding project at Hissar and the frozen semen bank at Gurgaon have been set up in collaboration with Australian and Danish Governments respectively for supporting cross-breeding programme.

Out of 2.25 million breedable cattle 0.78 million were covered under the breed improvement work. During 1978-79, under the desert development programme of the Govt. of India, it was proposed to establish three new intensive cattle development projects in Fatehabad and Tohana tehsils of Hissar dist. and Dabwali tehsil of Sirsa dist.

The Haryana Dairy Development Corporation has been active in processing milk, providing a selling outlet to producers and helping consumers get milk and milk products at reasonable prices.

Milk Plants at Bhiwani, Ambala and Rohtak have been leased to Haryana Dairy Development Coop. Federation for further development. The corporation has commissioned a milk plant at Faridabad. With this the total production of all plants in the public sector amounts to 235 million litres per day. A milk product plant at Sirsa with a handling capacity of 100,000 litres expandable to 150,000 litres per day at an estimated cost of Rs. 30 million is under review. Funds for this project will come from the desert development programme of the Government of India.

The State had provided Rs. 12.4 million for various animal husbandry programmes during the year 1978-79.

Animal Husbandry: The State's livestock population according to 1977 census is 6.90 million, out of which 2.44 million are cattle, 2.94 million buffaloes, 540,000 sheep, 520,000 goats, 200,000 pigs and 450,000 other animals.

The department is popularising cross-breeding of cows and selective breeding in buffaloes. There is one sheep breeding farm at Hissar and 29 sheep and wool extension centres in the State. A wool-grading-cum-marketing centre was established with the assistance of U.N.D.P. to provide marketing facilities to sheep breeders. For the development of pigs the department has two pig breeding farms at Hissar and Ambala.

There are 231 veterinay hospitals, 128 veterinary dispensaries, 63 artificial insemination centres/semen banks and 601 artificial insemination sub-centres/stockman centres, and four mobile dispensaries.

Poultry: The State has about 1.39 million poultry population. One poultry farm at Ambala and 17 poultry extension centres are working in the State.

Piggery: Population: 200,000. Two pig breeding farms (Hissar and Ambala) and 13 piggery development blocks are functioning.

Forests: (Area in hectares): Reserved: 22,398; protected:76,603; unclassified: 28,061; private: 36,039; total: 163,101.

During 1979-80 Rs. 16.202 million had been spent for intensive afforestation schemes extending to 8,280 kms. and 5,385 hectares.

The State Government maintains a bird sanctuary at Sultanpur, a mini zoo at Pinjore, and a deer park at Hissar.

The expenditure for the development of forest during 1979-80 was about Rs. 34.975,190

Electricity

Distribution	As on 31-3-1967	As on 30-6-1980
No. of villages electrified	1,251	6,731
No. of irrigation tube-well connections	20,190	207,537
No. of electric connections (consumers)	211,914	1,120,332
Per capita consumption of electricity (units)	57	201

INDUSTRIES: Haryana produces industrial goods worth Rs. 11,000 million every year according to a study conducted in 1977. As many as 302 large and medium units and 16,500 small scale units are engaged in the manufacture of a wide range of goods.

There are ten textile mills in Haryana located at Bhiwani, Hissar, Faridabad. Sirsa and Panipat. Five sugar factories at Karnal, Panipat, Rohtak, Sonepat and Yamuna Nagar and two cement factories at Surajpur and Dalmia-Dadri.

A shoe factory, 14 mini steel plants, five largescale cycle assembly and cycle component units and eight rerolling mills are functioning in different parts of the State. The number of rolling mills have gone up from 11 (at the time of reorganisation) to 74 as at present (1978-79) whilst the number of wire-drawing units has risen from 7 to 50. Besides, 12 tube manufacturing units have been established recently.

Over 896 industrial licences and letters of intent have been granted under large and medium scale industries to manufacture items such as tractors, sulphuric acid, paper and paper boards, carbonless copying paper, vegetable ghee, electronic components, television sets, refrigerators etc.

Labour: No. of registered trade unions: 605. No. of registered factories: 3,244; no. of workers engaged in the registered factories: 160,166.

Industrial Disputes (1979): Disputes handled by conciliation: 3,222; disputes settled: 725; cases rreferred for arbitration: 5; referred for adjudication: 722; man-days lost: 569,743.

EDUCATION

Schools	Govt.	Non-Govt.
1980-81		
Primary schools	4,981	88
Middle schools	835	27
High schools	1,144	218
Hr. sec. schools	82	24
1978-79		
Total no. of teachers	53,857	
Trained	53,159	
Untrained	698	
Total no. of students in schools	1,745,768	

Universities: Haryana Agricultural University, Hissar, for research and extension education. The University follows the trimester system, as in the Land Grant Universities in the United States. The University has four constituent colleges all of which are residential institutions.

Kurukshetra University, Kurukshetra, for the encouragement of research especially in Sanskrit, Prakrit, Indian philosophy etc. It has developed into a multifaculty institution with 24 departments.

Colleges (1980-81)	Govt.	Non. Govt.
General Education		
Arts & Science colleges	25	73
Teacher training colleges		19
(i) Graduate level	1	—
(ii) Undergraduate level	—	—
Medicine	—	—
Agriculture	—	4
Engineering	—	1
Physical training	—	1
Veterinary science	—	2
Technology	—	1
Dairy science	—	1
Home science	—	1

Rohtak University has started functioning since 1976 and 12 colleges within a radius of 16 kms. are affiliated to it. Government has decided to transfer all the colleges of Rohtak, Gurgaon, Mohindergarh, Bhiwani and Sonepat Dists., from Kurukshetra University to Rohtak University.

PUBLIC HEALTH (1979-80)

Hospitals, dispensaries and primary health centres	425
Total No. of beds	8,612
Per capita expenditure	Rs. 18.05

A provision of Rs. 181.2 million was earmarked for various health schemes for the year 1979-80.

Family Planning:

No. of family planning clinics	117
Sterilisation operations performed during the year (1979-80)	26,943
IUCD insertions done (1979-80)	26,487

Housing: The housing board has constructed 4,938 houses for economically backward people upto Oct., 1980. It was expected that another 1,027 houses would be constructed the following year.

COMMUNICATIONS

Roads (31.3.79): Metalled 16,550 kms. maintaining link with 5,700 villages.

During the year 1979-80, Haryana Roadways has recorded a net profit of Rs. 261 million. Fleet strength 2,300 buses; staff strength 12,500; daily kms. operated 0.633 million; no. of passengers carried daily about 700,000.

GENERAL

Annual Plan (1979-80): The outlay is Rs. 2,273 million of which Rs. 1,421.7 million has been proposed for irrigation and power sector. Agriculture and allied sectors account for Rs. 291.9 million; transport and communications Rs. 207.4 million; social and community services Rs. 298.0 million.

Press: Some Hindi dailies are registered in the State, but their publication has been erratic.

Tourism: Haryana Govt. has set up tourist complexes in different parts of the State where facilities like restaurants, motels, accommodation, angling, boating, conference rooms, games etc. have been provided.

Lakes: There are four lakes in the State. They are Badkhal lake, 51.40 hectares, about 32 kms. from New Delhi and 5 kms. from Faridabad; Peacock lake at Suraj Kund, about 18 kms. from New Delhi; Karnal lake at Uchana, near Karnal on Delhi-Ambala national highway, about 124 kms. from New Delhi; Tilyar lake at Rohtak on Delhi-Ferozepur highway, about 72 kms. from Delhi.

HIMACHAL PRADESH STATE

CAPITAL: Simla; **Population** (1971 Census): 55,368; **Area of State:** 55,673 sq. kms.; **Population of State:** (1981 Census): 4,237,569.; **Density of Population:** 76 per sq.km.; **Literacy;** 41.94 per cent; **Sex ratio:** 988 females per 1,000 males; **Decennial growth rate** (1961-71): 23.04 per cent; **Per Capita income** (1978-79): Rs. 1,267 (at current prices).

Boundaries: The State is bound by Jammu and Kashmir in the north, Punjab in the west and south-west, Haryána in the south, Uttar Pradesh in the south-east and Tibet in the east.

District	Headquarter	Area sq.kms.	Population (1971 Census)
Bilaspur	Bilaspur	1,167	1,94,786
Chamba	Chamba	6,515	2,51,203
Hamirpur	Hamirpur	1,118	2.65,011
Kangra	Dharamsala	5,739	8.00,863
Kinnaur	Kalpa	6,553	49,835
Kulu	Kulu	5.503	1.92,371
Lahaul-Spiti	Keylong	13,693	27,568
Mandi	Mandi	3,951	5,15,180
Simla	Simla	5,131	4,19,844
Sirmur	Nahan	2,826	2,45.033
Solan	Solan	1,937	2,37,403
Una	Una	1,540	2.61,337

State Language: Hindi.

No. of Villages: 16,916; **No. of towns:** 38.

AGRICULTURE

Seventy-five per cent of people are engaged in agriculture and horticulture. Irrigated area forms 15.87 per cent of the net area sown. Fruits, such as potatoes, ginger, vegetable seeds, apples, stone fruit etc., and wheat, maize, and paddy are the major crops under cultivation. The production of foodgrains during 1978-79, was about 1.054 million tonnes. During 1978-79, production of potatoes and ginger has gone upto 70,725 and 1,322 tonnes respectively.

Horticulture: Himachal Pradesh is an ideal region for growing many kinds of fruits. Area under fruits and production of fruits have been increased to 80.343 hectares and 137.23 thousand tonnes respectively during 1979-80.

There is potential for the development of crops like hops, mushrooms, olives and figs etc. An UNDP project with a provision of Rs. 12.77 million is already under implementation for the development of mushroom. A bulk Pasteurization plant is being set up for the manufacture of mushroom compost to be distributed to mushroom growers on subsidized rates. During the year 1979-80, 55 tonnes of mushroom compost was distributed among 12 small marginal farmers which helped in additional production of 5 tonnes of mushrooms:

Sarda Melon will also be developed as a new cash crop in the tribal dry areas of the State.

For solving marketing problems a project worth Rs. 163.1 million is under implementation with the assistance of World Bank. Construction work of the fruit processing factory at Parwanoo under the World Bank Project is also in hand, This factory shall have a capacity of processing about 20 thousand tonnes of fruits per annum

Area (in hectares) and production (in '000 tonnes) of fruits (1978-79) respectively: Apples — 40.655, 121.90; other temperate fruits: 15,235, 6.18; nuts and dry fruits: 5,401, 0.70; citrus: 11,062, 4.18; other sub-tropical fruits: 7,990, 4.27.

Animal Husbandry: Himachal Pradesh has got small, fragmented holdings in hill terrain. As such, only bullocks are used extensively for agricultural purposes. Besides, rearing of goat and sheep also assumes importance to provide wool, hair and meat. Livestock population for (1977) census is given hereunder; (in '000): Cattle: 2,106, buffaloes: 560, sheep: 1,055, Goats: 1,035, horses and ponies: 15, mules and donkeys: 14, pigs: 5, other livestock, poultry: 330.

With a view to providing remunerative rates to the milk producers and wholesome milk at reasonable rates to the consumers, five milk supply schemes are functioning at Mandi, Nahan, Simla, Kangra and Chamba.

Forests: Forests cover an area of 21,716 sq.kms. which accounts for 39.01 per cent of the total geographical areas of the State. Most of forests belong to Government. *Deodar, Kail, Chil, Spruce,* Silver fir, *Neoza* pine and the coniferous species are growing in the forests. *Neoza* pine which produce edible nuts grows in Kinnaur District. These are the only forests of *Neoza* in India. Among the broad leaved species *Sal, Ban, Oak, Mohru* Oak, *Kharsu* Oak, Walnut, Malpe, Horse chestnuts, *Poplam, Seemal, Tun and Shisham* are the important species.

Minerals: Important minerals of Himachal Pradesh are salt, slate, gypsum, limestone, barytes, dolomite pyrites etc. The Pradesh is also known to have iron ores, copper, lead, phosphate and several other minerals which await proper investigations and surveys for their exploitation. Rock salt deposits are located in Mandi district and gypsum in Sirmur district. Vast deposits of slate are found in Mandi, Chamba and Kangra districts. Limestone is found in abundance in Sirmur, Bilaspur, Kangra, Mandi and Simla districts. Sirmur, Bilaspur and Kangra deposits of limestone are of a quality suitable for cement industry.

Power: Himachal Pradesh has vast hydel potential which is estimated to be nearly 9,000 MW at 60 per cent load-factor. The projects now in hand and under investigation promise to yield surplus power to the State. Giri Hydel Project, the first major project in the State, went into commercial production during 1978-79.

By the end of March, 1979, out of 16,916 inhabited villages in the State 8,329 villages had been electrified.

Generation and consumption of electricity (in Million KWH) respectively (1978-79): 397.70, 191.28.

INDUSTRIES

The number of registered small scale industrial units, at the end of the year 1979, was 4,640 providing employment to about 18,990 persons, besides various numerous cottage and village industrial units. Some of the major and medium scale industries are Nahan Foundry, Nahan, Rosin and Turpentine Factories at Bilaspur and Nahan and Mohan Meakin Breweries at Solan. In the year 1979, three such units viz. M/s Gabriel India, Parwanoo, Cement Corporation of India Ltd., Rajban and M/s. Ranger Breweries India Ltd., Mehtapur went into production. District Industries Centres were established in all the 12 districts. The Government provides land/industrial sheds to the industrialists in industrial areas/industrial estates. Industrial area at Parwanoo, Barotiwala, Paonta Sahib, Bilaspur, Nagrota, Bhagwan Shamshi and Mehatpur and industrial estates at Solan, Dharampur, Kangra, Jawali, Dehra Gopipur and Peo have been established.

Drinking Water Supply: The State Government has given priority to provide hygienic drinking water to the people. Out of 16,916 villages of the State, 5,124 villages had been provided with hygienic drinking water facilities by the end of March, 1979, thereby serving 1,256.896 persons.

Education: Himachal Pradesh ranks 15th in literacy percentage among the States and Union Territories of India with a percentage of 31.96. Establishment of an Agricultural University at Palampur and Sainik School at Sujanpur are two important achievements in the field of education.

The following are the number of schools and students (in '000) & teachers respectively (1978-79) Primary: 4,416; 495; 8,518, Middle: 981; 162; 8,280; High/Higher secondary 614; 66; 10,607. Colleges of Gen. Ed. 27; 13; 626.

University: H.P. University, Summerhills, Simla, and H.P. Agriculture University, Palampur.

Public Health (1979): Hospitals;: 45; Primary Health Centres: 77; allopathic dispensaries: 404; family Planning Clinics: 73, Beds available: 5,524; Doctors: N.A. Vaids: N.A.; Nurses, Dais etc. N.A.

Communications (1978-79): Buses: 781; Trucks: 51; Other vehicles: 42; No. of routes under operation: 557; distance covered ('000 kilometre): 43,131; Passengers carried (million): 33.5 (estimated).

Roads: (1978-79): Metalled Roads: 3,837 kms. un-metalled roads: 7,565 kms., Including National Highways motorable double lane: 1,994 kms., motorable single lane: 9,408 kms., Jeepable: 634 kms., less than jeepable: 3,772 kms.

Employment (1979): No. of employment exchanges 14; No. of candidates registered: 49,484; No. of vacancies notified: 7,347; No. of candidates placed: 4,935; No. on live-register: 117,532.

Sixth Plan Outlay (1978-83): (Rs. in million) Agriculture and allied services: 1,163,397; Co-operation: 56.450; Water and power development: 1,237.10; Industry and minerals: 161.225; Transport & Communications: 927.800; Social and community services: 843.428; Economic services: 4.50; General services: 76.10. Total 4,470.00.

GENERAL

Rivers: The Sutlej, The Beas, The Ravi, The Chenab, The Yamuna.

Lakes: Govind Sagar, Renuka, Rewalsar.

JAMMU AND KASHMIR STATE

CAPITAL: Summer—Srinagar; Winter—Jammu; **Area of the State:** 222,236 sq. kms. (provisional geographical area figures supplied by the Surveyor-General). Of this 78,932 kms. are under illegal occupation of Pakistan and 5,180 kms. illegally handed over by Pakistan to China. This also includes 37,555 kms. under illegal occupation of China (1971 Census).

Population of the State (1981 Census): 5,981,600.

Religion-wise break-down of population in the State (1971 Census): Muslims: 3,040,129; Hindus: 1,404,292; Christians: 7,182; Buddhists: 57,956: Sikhs: 105,871: Jains: 1,150.

Sex Ratio (1981 Census): 953 females per 1,000 males.

Districts (14)	Area (in sq. kms.)	Population (1971 Census)
I. Kashmir province		2,540,997
Anantnag	1,207.0	518,122
Baramulla	1,458.4	517,900
Leh (Ladakh)	394.0	51,891
Srinagar	502.9	558,669
★Pulwana	962.5	314,158
★Badgam	777.3	269,033
★Kupwara	667.6	257,824
★Kargil	183.1	53,400
II. Jammu province		2,075,640
Doda	11,691.0	342,220
Jammu	3,165.0	731,743
Kathua	2,651:0	274,671
Poonch	1,658.0	170,787
Rajouri	2,681.0	217,373
Udhampur	4,549 0	338,846
	Total	4,616,637

★These districts have been newly created, and came into being on July 1, 1979

The District headquarters are of the same name.

The total area of the districts, figures do not tally, as these are derived from the figures of the Revenue Department as per Census Report of 1971.

Major cities: (Population and area—1971 Census): Srinagar 403,413: 47.08 sq. kms.; Jammu 155,338: 20.46 sq. kms.

No. of towns: 45, **No. of villages:** 6,742, **No. of Tehsils:** 49.

State boundaries: The State is bound by Pakistan in the west, Afghanistan and USSR in the north-west, China in the north, Tibet in the east and Himachal Pradesh and Punjab in the south.

State Languages: (a) Official: Urdu; (b)Regional: Kashmiri, Dogri, Balti, Dardi, Pahari, Ladakhi and Punjabi.

AGRICULTURE: Agriculture employs about 80 per cent of the population. The major crops are paddy, maize and wheat. Barley, bajra and jawar are also grown in some parts. Gram is grown in Ladakh.

The area under food crops in 1978-79 was over 900,000 hectares. Of this paddy was sown on 267,238 hectares, wheat on 207,200 hectares and maize in 273,000 hectares. Area under other crops was 237,000 hectares. Gross irrigated area in 1978-79 was 404,686 hectares.

The foodgrains production in 1980-81 was targeted at 137 million quintals. The State expects self-sufficiency in foodgrains by the Sixth Plan and the production is likely to touch 1.750 million quintals.

The offtake of fertiliser touched 35,000 tonnes in 1980-81, against 20,000 tonnes in the previous year.

Agrarian Reforms: Jammu and Kashmir State was the first in the country to have introduced fundamental agrarian reforms in 1948-50 abolishing all jagirdari and feudal institutions. The Agrarian Reforms Act (dealing with land reforms), the Debtors' Relief Act (concerning the problem of rural indebtedness) and the Restitution of Mortgaged Properties Act (providing restitution of mortgages made in distress), have been enacted by the State Legislature recently. The Agrarian Reforms Act came into force in July 1978.

In over 2,000 villages, basic work regarding the implementation of the reforms has been completed.

Horticulture: The area under fruit-growing touched 104,000 hectares in 1979-80, against 100,000 hectares in 1978-79. Fruit exports during 1980-81 is expected to be 360,000 tonnes against 344,000 tonnes in 1979-80. The fruit production in 1980-81 is expected to be 500,000 tonnes.

An integrated Rs. 250 million horticulture development project is under execution with the assistance of World Bank, to provide services for apple and walnut growers. Another Rs. 6.3 million apple grading project is under execution at Nowapora, Sopore with the assistance of Australian Government

Dairying and poultry: Poultry population stood at 2,039 million

Milk production crossed 230,000 litre mark in 1979-80. Egg production touched 20.01 million during 1979-80. Meat production in 1980-81 is expected to go up to 7.6 million kgs., 200,000 kgs more than last year's.

Irrigation and Power: The installed capacity of power has risen from 6.5 MW in 1947 to 208.78 MW. The number of villages electrified by 1979-80 end was 4,633 against 2,983 in 1976-77. The important power project under execution include the Rs. 3,500 million Salal Hydro Electric Project, undertaken by the Central Government. The project is designed to generate 345 MW of power. The Lower Jhelum Hydel Project generates 105 MW. The Upper Sindh Project has a generating capacity of 22.6 MW. The work on Stakna Hydel Project in Ladakh (4 MW) is apace. Work on the Dool Husti Project in Kishtwar is about to commence.

The major and medium irrigation potential at the end of 1979-80 was. 253 million hectares supplemented by an equal potential of the minor irrigation. The first phase of the prestigious Rs. 610 million Ravi Tawi irrigation complex has been completed at a cost of Rs. 174.9 million creating a potential of 12,880 hectares. The project is likely to be completed by the Sixth Plan end, creating a total potential of 28,000 hectares. One new major scheme namely Malali-Thang canal is proposed to be taken up during Sixth Plan period. The scheme, which will irrigate 285 hectares, is estimated to cost Rs. 6 million. About 12 new major schemes are in progress.

The outlay for the minor irrigation schemes for 1980-81 is about Rs. 71.0 million and for major and medium schemes Rs. 34.4 million. Moreover, Rs. 5.26 million are being spent on centrally sponsored minor schemes.

COMMUNICATIONS: The total road length at the end of 1979-80 was 7,723 Kms. including surfaced and unsurfaced roads and in 1980-81, 143 kms. are being added to it.

Work on the centrally sponsored Rs. 200 million Batore Kishtwar road is apace. The 98-kilometre road length is being upgraded to the National Highway standard. Other major road projects include the inter-state Bhaderwah-Chhambha road and inter-regional Moughal and Sympthan-Chatru roads connecting the Kashmir valley with the Jammu division.

Road Transport: The State had 2,410 buses and mini-buses in 1979-80, both in public and private sectors, as against 2,031 in 1977-78. Trucks numbered 6,141 and taxis 2,129. The strength of private cars and station wagons stood at 4,411. The number of motor-cycles and scooters was 12,661 and jeeps 2,289. Auto-rickshaws numbered 1,762 and other vehicles 238 in 1979-80.

EDUCATION: Free at all levels. The State has two universities, each in Jammu and Srinagar. It has 22 general education colleges and 8 colleges for oriental education. The strength of professional colleges is 12.

Institutions: 1978-79 (Provisional):

	No. of institutions	No. of teachers	No. of students
Primary schools	7,034	9,885	518,000
Middle schools	1,997	12,306	167,000
High/Higher secondary schools	784	13,856	268,000
Total	9,715	36,047	953,000
University teaching depts.	37	273	3,243
Colleges for general education (including 7 colleges for women)	22	1,085	14,677
Colleges for professional education	12	635	4,294
Colleges for oriental education (including 2 colleges for women)	8	97	1,375
Total	79	2,090	23,589

The per capita expenditure on education has gone up from Re. 0.80 in 1950-51 to Rs. 60.90 in 1978-79. The spendings on education against Rs. 40.075 million in 1975-76 has increased to Rs. 69.110 million in 1979-80.

INDUSTRIES: The medium and small sector receives emphasis as the geographical constraints do not favour large scale industries. While preference is being given to the local entrepreneurs, industrialists from outside the State are encouraged for investment in areas where local entrepreneurship is not forthcoming or where technical expertise is absent.

In Bani Bharmana industrial complex in Jammu, the biggest in the State, the following industries have come up: a detergent plant of Hindustan Levers, a cigarette factory, a scooter factory, three resin-based factories for down-stream products, 2 pencil factories, a joinery mill, 2 vanaspati mills, a precast cement factory and an annealed wires manufacturing unit. The units in the pipeline for the complex include steel re-rolling mills, flour mills, textile mills, rear-axle shaft project, export-oriented joinery mills, calcination factory for bauxite, piston and piston rings project and 2 agro-based factories. A Rs. 20 million gypsum-based wall board factory, 2 paper mills, extension by 10,000 tonnes of Hindustan Levers detergent plant, a plant nutrients factory and additional 25,000 spindlage in Chinab Textile Mills, Kathua stand cleared for implementation. Land for raising an industrial complex in Udhampur has been identified as part of the programme to disperse industry in other districts.

In the Kashmir Division an industrial area for large and medium horticulture-based industries has been set up. The division had no such industrial area. M/s. Cadbury India Limited have recently put up a project in the area. The area will also provide facilities to small scale units for fruit processing. Another industrial complex is coming up at Khanmuh and a Rs. 6 million export-oriented joinery mill by a local entrepreneur will shortly go in production there. Other units to come up at all the complex include woven sacks factory, a match factory, and a hollow silica bricks factory. These involve an investment of Rs. 15 million. A roofing tiles unit, a cattle feed plant, a canning unit and a honey processing unit are other industries slated for being established in the complex. A sports goods complex is also coming up at Bijbehara.

The 600-ton-a-day capacity cement plant at Khrew is likely to go on stream in March, 1981. A Rs 65 million spun silk project is also coming up. The units that have already come up include the UNDP, wool combing and utilisation project. Other projects on the anvil for the division include manufacturing of calcium carbide, acetylene black and cardboard boxes project to replace the traditional wooden packing cases for fruit.

An electronics complex was recently inaugurated at Rangreth in Srinagar. The complex will go a long way in the promotion of electronics industry in Kashmir. A 30-tonne per day paper manufacturing project has been cleared by the centre.

District industries centres have been set up in all the districts. These centres provide all the needed facilities to the entrepreneurs under one roof.

In the small scale sector, the number of units registered has risen from 1,039 in 1973-74 to 6,386 in 1979-80. Their turnout has increased from Rs. 116.2 million to Rs. 661.380 million in the same period. These units provided direct employment to over 34,000 people in 1979-80.

The handicraft sector has witnessed remarkable progress. The handicraft production this year is likely to touch Rs. 578.2 million with carpets alone accounting for Rs. 270 million. The massive handicraft training programme started by the Government has thrown up an additional force of 24,000 since 1976-77. The co-operative scheme in the handicraft sector has also registered progress.

A separate directorate of handlooms has been created for greater emphasis on the development of the handloom sector. In the small scale sector, the number of units registered has risen from [illegible],039 in 1973-74 to 6,386 in 1979-80. Their turnout has increased from Rs. 116.277 million to Rs. 661.38 miillion in the same period. These units provided direct employment to over 34,000 people in 1979-80.

PUBLIC HEALTH (1979-80): Main hospitals 2; general hospitals 2; women's hospital 1; special type hospitals 8; chest diseases hospitals 2; children's hospitals 2; mental hospitals 2; leprosy hospitals 2; district hospitals 14; sub-district hospitals 3; ayurvedic hospital 1; primary health centres 79; sub-centres 279; allopathic dispensaries 356; unani/ayurvedic dispensaries 365; medical aid centres 120; V.D. clinics 12; T.B. clinics 11; leprosy control centres 5; surveillance education and treatment centres of leprosy 35; No. of beds in hospitals: (i) state headquarters 2,780; (ii) district level 2,334; (iii) others (those run by private agencies, municipal corporations and corporate bodies) 246.

Staff: Doctors 1,800, dentists 96, nurses 966, mid-wives/dais 879, compounders 768, *dawa sazs* 367, inspectors 124, basic health workers 593, lady health visitors 135 and extension educators 90.

The Rs. 165.2 million National Institute of Medical Sciences (600 bed) at Soura in Srinagar is coming up.

The outlay for public health which was Rs. 13.36 million in 1979-80 jumped to Rs. 27.15 million this year.

Rehbar-i-Sahat Project, a mobile experiment has been introduced in 2 blocks (Ganderbal and Kotibalwal) where teachers are trained by doctors to provide simple health facilities to rural people. This is being extended to more blocks this year.

Press: The State has 31 dailies, 123 Weeklies, 27 fortnightlies and 8 monthlies.

(a) Srinagar—(Urdu) Khidmat, Aftab, Srinagar Times, Aaeena, Hamdard, Zamindar, Wullar, Navjeewan, Martand and Iqbal, Nawai-i-Subhuh, Madar-i-Kashmir.

(b) (English) Excelsior and Kashmir Times. (Urdu) Qaumi Awaz, Sandesh, Imarat, Sharda, Ujala, Advice, Waqt Sach, Raftar and Times of Cartoon.

GENERAL:

Important Rivers: The Jhelum, the Sindh (Kashmir), the Tavi, the Chenab and the Ravi (Jammu).

Important Lakes: Dal Lake, Wullar, Manshal, Nagin Lake (Kashmir), Surinsar, Mansar and Sansaar (Jammu).

Tourism: Tourism is a premier industry of the State. The number of tourists to the valley in 1979-80 rose to over 553,000. This included over 55,600 foreigners (42,000 from abroad).

Forests: The State has a forest area of 21,080 sq kms. of which 7,477 sq. kms. are available for timber exploitation and rest function as protective forests. The State earned over Rs. 231.1 million as forest revenue in 1979-80. Resin production was over 258,000 quintals and the revenue from resin was over Rs. 81.3 million. More than 5 million saplings were planted during 1978-79. The export of timber in 1978-79 was about 26.1 million cubic mtrs. The outlay for the sector was Rs. 45 million in 1980.

Water Supply: The number of villages covered under piped water supply by the end of March, 1979, was about 1,525 with a population of 1.529 million. 369 more villages, with a population of 310,000 are being covered in 1980. In the urban sector, all the 45 towns are being provided potable water. The supply to Jammu and Srinagar is being augmented under a Rs. 360 million Master Plan.

Annual Plan: The annual plan for 1980-81 is of the size of Rs. 1,474.8 million: Sectorwise break up (in Rs. million): Agriculture and allied sectors: 263.8; industries and minerals: 120.5; water supply: 165.0; power: 212.5; road development: 111.0; general education: 62.5; irrigation & flood control: 160.0; village and small scale industries: 50.0; development of backward and hilly areas: 85.5.

KARNATAKA STATE

CAPITAL: Bangalore. **Area:** 174.71 sq. kms.; **Population** (1971 census): 1,653,779.

Area of State: 191,773 sq. kms. **Population of State** (1981 census): 37,043,451. **Density:** 193 per sq. km. **Sex Ratio:** 963 females per 1,000 males. **Literacy:** 38.41 per cent.

Districts: The names of the districts with area and population are tabulated below. The headquartes of the districts are of the same name except for the following districts where the name of the headquarters are given in the brackets: Dakshin Kannada (Mangalore); Kodagu (Mercara); Uttara Kannada (Karwar).

Districts	Area in '000 sq. kms.	Population (1971 census)
Bangalore	8.0	3,365,515
Tumkur	10.6	1,627,721
Chitradurga	10.9	1,397,456
Kolar	8.2	1,516,646
Bellary	9.9	1,122,686
Mysore	11.9	2,077,238
Dakshin Kannada	8.4	1,939,315
Kodagu	4.1	378,291
Hassan	6.8	1,102,370
Shimoga	10.5	1,301,485
Chikmagalur	7.2	736,647
Mandya	5.0	1,154,374
Belgaum	13.4	2,423,342
Bijapur	17.1	1,985,591
Uttara Kannada	10.3	849,105
Dharwar	13.7	2,342,213
Gulbarga	16.2	1,739,220
Bidar	5.5	824,059
Raichur	14.0	1,415,740

No. of Villages: Inhabited 26,826; uninhabited 2,707; total 29,533.

State Boundaries: The State is bound by Kolhapur, Sangli, Solapur, Osmanabad and Nanded districts of Maharashtra in the north, Medak, Hyderabad, Mahbubnagar, Kurnool, Anantapur and Chitoor districts of Andhra Pradesh in the east, Salem and Nilgiri districts of Tamil Nadu in the south-east, Cannanore district of Kerala in the south and Arabian Sea in the west.

State Language: Kannada.

MAJOR CITIES (Over 100,000 population)

Name	Area in sq. kms.	Population (1971 census)
Bangalore	174.71	1,653,779
Hubli-Dharwar	182.30	379,166
Mysore	37.30	355,685
Mangalore	45.43	215,122
Belgaum	34.84	213,872
Gulbarga	13.97	145,588
Bellary	27.71	125,183
Davangere	19.42	121,110
Bijapur	14.50	103,931
Shimoga	5.96	102,709
Bhadravati	12.21	101,358
Kolar Gold Fields	65.73	118,861

Area under Land Utilisation in ('000) hectares: Net area sown: 10,315; fallow land: 1,592; area sown more than once: 818; total cropped area: 11,036; area under forests: 3,015.

AGRICULTURE (1979-80)

Principal Crops	Area (thousand hectares)	Production (thousand tonnes)
Rice	1,081	2,400
Ragi	1,115	1,500
Jowar	1,965	1,875
Maize	160	542
Bajra	602	314
Wheat	374	234
Minor Millets	414	190
Tur	308	189
Pulse	713	322
Gram	187	77
Commercial Crops:		
Groundnut	775	649
Other Oil-seeds	420	118
Sugarcane	148	11,120
Cotton	985	823*
Tobacco	440	29

*Production of cotton in bales of 170 kgs.

Land Reforms: Ceiling per family: 4.047 hectares of 'A' and 'B' class of land, 8.094 hectares of 'C' class land and 16.187 of 'D' class land. Plantations are exempted.

No person who has an annual income of Rs. 12,000 or more from any non-agricultural source can acquire agricultural land after March 1, 1974. From the same date all tenanted lands have been transferred to the Govt. and the traditional tenant-landlord relationship has been snapped. No agricultural land can be sold for non-agricultural purposes.

Each taluka has a land tribunal. The tribunals are conferring ownership on tenants and distributing surplus lands to the landless.

Upto 1979, over 532 thousand applications were disposed of conferring occupancy rights on 321 thousand tenants in respect of 501 thousand hectares. Some 300 thousand applications were pending. A surplus of 53,000 hectares has been determined and 15,000 hectares distributed to 7,215 landless persons.

Animal Husbandry: Cattle: 10,221,960; Buffaloes: 3,279,128; Sheep: 4,536,481; Goats: 3,388,139; Poultry: 9,696,012; Veterinary Institutions: 1,214. Fish Catch: 231,122 tonnes.

Irrigation (1979-80): Total area under irrigation: 2.116 million hectares. Irrigation is 21 per cent of the sown area. The cultivable area is 12.77 million hectares and the net sown area is 10.31 million hectares. The ultimate irrigational potential is estimated at 5.5 million hectares. Karnataka has invested nearly Rs. 8,000 million in irrigation since the beginning of Five-Year Plans.

Power (1978-79): Total installed capacity 1,148.8 (Thousand Kws); Electricity generated: 5,878.9 million Kws; towns, hamlets and villages electrified: 20,161; pumpsets energised: 290.308.

MAJOR INDUSTRIES

Type of Industries	No of factories existing	Production in ('000) tonnes
Iron and Steel	1	296
Cement	6	1,726
Sugar	20	539
Paper	6	94
Vanaspati	5	2
Soap	1	747

No. of registered factories: 9,905; No. of textile units: 3,469; No. of chemical factories 311; No. of Engineering factories: 1,205. Employment in registered factories: 434,202.

Sericulture is the most important of rural industries providing employment to about 2 million people.

Industrial Estates: No. of Government estates: 27.

Industrial Development Agencies: See chapter on "State Govt. Undertakings".

Labour: No. of Unions: There were 1,100 trade unions on register in 1980, covering 361,000 workers.

Education(1980): Primary schools: 34,431; high schools: 2,184; Polytechnics: 34; Colleges: 409 (General and Profesional).

Enrolment: Standard I to IV — 1,520,148; higher primary: 3,575,000; secondary: 638,650; colleges: 188,000.

No. of Teachers: Lower primary 32,900; higher primary 72,000; secondary 28,000.

No. of Medical Colleges: 21.

Technical education: No. of engineering colleges 29; No. of polytechnics: 35.

Universities: Bangalore University, Bangalore 560001; Karnataka University, Dharwar 580003; University of Agricultural Sciences, Bangalore 560003; University of Mysore 570001; Indian Institute of Science, Bangalore 560012; Gulbarga University, Gulbarga 585101; Mangalore University, Mangalore 575001.

Public Health (1979-80): No. of hospitals including State, Central, ESI, Municipal and private: 233; no. of dispensaries: 215; beds in hospitals and dispensaries: 21,914; primary health centres and units: 1,420; Strength of beds in hospitals and dispensaries 34,582; no. of medical colleges: 12.

COMMUNICATIONS (1979-80): Length of roads 95,363 kms.; national highways 1,968 kms.; State highways, major district roads and other district roads 31,002 kms.; village roads 34,000 kms.

Total length of railway: 3,125 kms. including the Bangalore-Salem rail link and the Hasan-Mangalore railway opened to goods traffic. Broad gauge 546 kms.; metre gauge 2,788 kms.; narrow gauge 153 kilometres.

Registered motor vehicles: 367,773.

No. of airports: 3 (Bangalore, Belgaum and Mangalore); no. of airstrips: 4.

No. of ports: 20.

Coastal belt: 287 kms.

Post and Telegraphs (1979): No. of radios: 1,409,036; post offices: 9,390; telegraph offices: 2,329; telephone exchanges: 508; telephones in use: 137,124.

Co-operation: No. of co-op. societies: 21,512; agricultural co-op. societies: 4,994; membership: 7,644,000; loans advanced by agricultural co-operative societies short terms: Rs. 717.533 million; medium: Rs. 73.011 million.

PRESS (Major daily newspapers): *English*: Deccan Herald, Bangalore 560001; Hindu, Bangalore 560001; Indian Express, Bangalore 560001; *Kannada*: Prajavani, Bangalore 560001; Kannada Prabha, Bangalore 560001; Samyukta Karnataka, Bangalore 560025 and Hubli; Nev Bharat, Mangalore 575003; Janavani, Bangalore 560001; Udayavani, Udipi 576101.

GENERAL: Rivers: There are two great river systems in Karnataka, that of the Krishna in the north and the Cauvery in the south. The only streams flowing west to the Arabian sea are those in the north-west, which, uniting in the Sharavati, hurl themselves down the Ghats in the magnificent Gersoppa or Jog Falls.

Rivers that flow into the Krishna the Tunga, the Bhadra, both these uniting in the Tungabhadra and the Hagari (or Vedavati).

Rivers that flow into the Cauvery: the Hemavati, the Lokapavani, the Shenisha, the Arkavati, the Lakshmantirtha, the Kabbani or Kapila and the Honnuhole or Suvarnavati.

Other Rivers: The Varada, the Kalinadi, the Gangavali, the Tadri, the Netravati, the Kumaradhari, the Gurpur, the Swarnanadi, the Sitanadi, the Malprabha, the Dharma, the Don, the Bhima and the Ghatprabha.

Housing: As on March 1978, 785,000 building sites had been distributed. Over 83,700 houses have been completed under the People's Housing Programme.

Minerals: Gold, silver, iron ore, chromite, china clay, limestones, corundum, garnet, emery, asbestos, bauxite, fuller's earth, quartz, ochre, fellspar and silica.

Forests: Forests occupy 15.3 per cent land area divided into evergreen, semi-green, moist deciduous, dry deciduous, scrub and thorny species.

Annual Plan: 1978-79: Rs. 3,603.9 million.

Rs. 250 million has been provided for Cauvery Basin projects and another Rs. 250 million as committed expenditure on the non-Plan side — altogether making a grand total of Rs. 4,103.9 million. The distribution in Rs. million is as follows: Agriculture and allied services: 519.0; co-operation: 73.2; power: 750.0; irrigation: 1,039.5; industries and minerals: 257.5; transport and communications: 223.8; social and community services: 723.1; economic services: 17.8; Cauvery Basin projects: 250.0; Committed expenditure: 250.0.

KERALA STATE

CAPITAL: Trivandrum; **Area:** 44.52 sq. kms.; **Population** (1971 census): 409,627.

Area of the State: 38,855 sq. kms.; **Population of the State** (1981 census): 25,403,217; **Density:** 654 per sq. km; **Sex Ratio:** 1,034 females per 1,000 males; **Literacy:** 69.17 per cent.

No of Talukas: 57; revenue villages: 1,334; municipal towns: 36; corporations: 3; panchayats: 990.

State Boundaries: The State is surrounded by South Kanara, Mercara and Mysore districts of Karnataka State in the north, Nilgiris, Coimbatore, Madurai, Ramanathapuram, Tirunelveli and Kanyakumari districts of Tamil Nadu in the east and south, and by the Arabian Sea in the west.

State Language: Malayalam.

Districts	Area in sq.kms.	Population (million) (1971 census)
Trivandrum	2,192	2.19
Quilon	4,623	2.41
Alleppey	1,884	2.12
Kottayam*	2,195	1.53
Ernakulam*	2,379	2.16
Trichur	3,032	2.12
Palghat	4,400	1.68
Malappuram	3,638	1.85
Kozhikode	3,729	1.82
Cannanore	5,706	2.23
Idukki*	5,127	0.76
Wynad	2,124	0.41

Major Cities: (Over 100,000 population)

Name	Area in sq.kms.	Population (1971 census)
Cochin	82.00**	439,066**
Trivandrum	44.52	409,627
Calicut	30.61	333,979
Alleppey	46.62	160,166
Quilon	16.34	124,208

(*Provisional; **Combined area and population for Cochin-Ernakulam-Alwaye Town group).

AGRICULTURE: The per capita extent of cultivated area is 0.10 hectare (1976-77).

Food Crops: Rice, Jowar, ragi, tur, sugarcane, pepper, chillis, ginger, turmeric, cardamom, arecanut, mango, citrus fruits, banana, cashewnut, tapioca, sweet potato and onion.

Main Crops are paddy, coconut, tapioca, arecanut, pepper, turmeric, ginger, sugar, tea, coffee, rubber etc.

No. of Plantations: rubber: 140,777; tea: 4,093 and coffee: 46,424.

Dairying: At present there are six dairy plants in operation. The location, capacity and daily production (in litres) respectively are: Calicut-6,000, 8,500; Trivandrum-20,000, 27,000; Ernakulam-10,000, 19,000; Kottayam 6,000, 6,000; Palghat 6,000, 3,000; and Alleppey 3,000, 4,000.

Poultry: With a view to promoting poultry breeding 476,000 chicks were hatched and distributed through the departmental farms during 1977-78. The egg production in the departmental farms during the year stood round 2.27 million.

Fisheries: See chapter on Fisheries.

Forests (1979): Total area under forests as on 31-3-1979 was 11,270.659 sq. kms. which formed 29 per cent of the geographical area. Out of this area, State forests occupied 9,335.619 sq. km. and vested forests 1,905,040 sq. km. Till the end of August 1980, man-made forests covered 144,330 hectares which consisted of teak (75,325 ha.), eucalyptus (34,412 ha.), soft wood (22,878 ha.), cashew (4,816 ha.), and miscellaneous species (6,899 ha.).

Industries: As on 31st December, 1978 there were 7,784 registered working factories. Total value of production increased to 121.4 million in 1978-79. The no. of registered small scale industrial units on 31-3-1979 was 13,386. The total number of full time workers engaged in Khadi & Village Industries in 1978-79 stood at 72,274.

Joint Stock Companies: As on 31-3-1979 were 1,622, of which 472 were public companies and 1,150 private companies.

Paper Factory: A new packing paper manufacturing factory is being established at Kullakadavu in Alleppey dist. under private sector. The cost is estimated at Rs. 90 million and the factory is expected to produce 15,000 tonnes of pulp and 30,000 tonnes of wrapping paper annually.

Handlooms Industry: The total number of looms in the State stood at 95,000 in 1979. The production in the co-operative sector was 23.4 million metres in 1978-79. The production of handloom cloth outside the co-operative sector was 58 million metres in 1978-79. The export of handloom fabrics and readymade garments from Kerala increased to Rs. 27.32 million in 1978-79 against Rs. 20.4 million during 1977-78.

INDUSTRIAL DEVELOPMENT AGENCIES (See chapter on 'State Govt. Undertakings').

LABOUR (1978): No. of registered factories; 8,104; no. of working (registered) factories: 7,784; no. of working factories which submitted their annual returns: 3,926; average daily employment in the working factories submitting returns: 176,673; total average daily employment (estimated) in all the registered working factories: 272,397; no. of accidents (including fatal cases) in registered factories: 5,441; no. of fatal accidents: 4.

Total employed: 776,593; employed in industries: 224,436; employed in agriculture: 87,328; employed otherwise: 464.829

Total no. of work seekers on live register of employment exchange (at the end of Dec. 1975): 776,593; total employment in public and private sectors (30-6-1974): 782,502 (public sector 368,132 and private sector 414,368).

EDUCATION: Particulars showing the number of students in schools run by Government and private bodies for 1979-80 are as follows:

Number of students under instruction 5.58 million. Distribution of institutions: High schools (including post basic and Anglo Indian schools): 1,680; upper primary schools: 2,739; lower primary schools: 6,970; nursery schools: 189; basic training schools: 92. Hindi training institutes: 2; language teachers training centres: 12.

Colleges and Student enrolment 1977-78: *Arts and Science Colleges:* (Including Sanskrit Colleges and evening colleges). Government Colleges: 27 (including 3 evening colleges); No. of Private Colleges: 103.

Students in Govt. Colleges: 30,045; in Private Colleges: 162,755.

Teachers in Govt. Colleges: 1,416; in Private Colleges: 6,944.

Training Colleges: No. of Govt. Training Colleges: 4; no. of Private Trg. Colleges: 15.

Students: No. of students in Govt. training colleges: 560; in private training colleges: 1,784.

Teachers in Govt. training colleges: 53; private training colleges: 123.

Music Colleges and Academics: No. of Colleges 3; students: 660; teachers: 88.

Universities: Kerala Agricultural University, Mannuthi, Trichur; University of Kerala, Trivandrum; University of Calicut, Calicut: Cochin University, Thrikkakara, Cochin.

PUBLIC HEALTH (1-4-1980): Hospitals 144; beds 24,543; Health/MCH centres 163, beds 1,895; TB centres and clinics 20, beds 318; MCH centre 1, beds 20; dispensaries 563, beds 1,426. Total No. 891, beds 28,202.

Per capita expenditure on health services during 1976-77: Rs. 16.71.

COMMUNICATIONS: Kerala has 16 postal divisions, two RMS divisions, two postal stores Depot units and one mail motor service unit. As on 1-4-1979, 4,352 post offices were functioning. These comprise 34 head offices, 1,954 sub-offices and 2,365 branch post offices. 134 new post offices were opened during 1978-79. Kerala has 126 mobile post offices.

Motor Vehicles (1978-79): Goods vehicles: 17,907; stage carriages: 8,120; taxi cabs: 15,195; motor cars: 49,882; Jeeps: 6,919; motor cycles: 43,633; auto rickshaws: 566; tractor/trailers: 1,794; others: 5,426; total: 154,595.

State Transport 31-3-1980): No. of buses: 3,038; no. of lorries: 15; other vehicles: 125; no. of routes: 3,580; route Kms. 153,690; no. of employees: 28,320; average no. of passengers carried per day: 1.93 million.

Roads (1-4-1979): The State had a total road length of 90,440 kms. which included National Highways. Roads maintained by the P.W.D.: 1,612 kms; Panchayat roads: 63,264 kms; Corporation roads: 1,217 kms. Municipal roads: 3,308 kms. Others 6,692 kms.

Railways: The total length of line is 919 kms. of which 806 kms. are broad gauge and 113 kms. metre gauge.

PRESS

Leading Dailies (1978): Major newspapers in Malayalam: 'Chandrika', Kozhikode; 'Deepika', Kottyam and Trichur; 'Desabhimani', Kozhikode and Cochin; 'Express', Trichur; 'Kerala Kaumudi', Trivandrum; 'Malayalam Manorama', Kottayam and Kozhikode and Cochin; 'Mathrubhumi', Kozhikode & Cochin.

GENERAL

The draft Sixth Plan, approved by the Government accords primacy to generation of optimum employment opportunities in the economy. The Rs. 41,000 million Plan envisages an investment of about Rs. 20,000 million by the state, Rs.16,000 million through private sector and Rs. 5,000 million as direct Central investment during the Plan period of 1980-85.

Annual Plan: The outlay for 1980-81 Annual Plan is Rs. 2,904.1 million.

Rivers: The rivers provide an extensive system of inland waterways of great commercial importance. The longest are the Bharatapuzha, 267 kms. and the Periyar, 228 kms.

Other chief rivers are the Valapattanam, the Chaliyar, the Kadalundi, the Chalakudi, the Pampa, the Achan Koil and the Kallada.

Fresh Water Lakes: Enamakkal, Manakkodi, Vellayani, Sasthankotta and Vembanad.

Mineral Development: A detailed investigation of mineral resources is being made for graphite, lime-shell, lime stone, magnesite and brick and tile clays.

The Kerala Mineral Exploration and Development Project established with the assistance of U.N.D.P. started functioning from April, 1977.

LAKSHADWEEP

(Union Territory)

THE Lakshadweep group of coral islands lying between 8° and 12° north latitude and 71° and 74° east longitude in the Arabian sea, 320 kms. off the west coast of Kerala constitute the smallest Union Territory.

Headquarters: Kavaratti island. **Area:** 3.6 sq. kms; **Total Area of the Territory:** 32 sq. kms; **Total Population** (1981 census): 40,237 (Males: 20,367, Females: 19,870); **Decennial population growth rate** (1971-81): 26.49 per cent; **Density:** 1,257 per sq. km. **Sex ratio:** 976 females for 1,000 males; **Literacy:** 54.72 per cent.

Administration: The head of the administration is the Administrator, appointed by the Union President. The Collector-cum-Development Commissioner is in overall charge of the developmental activities and law and order.

The entire Territory has been divided into 4 tehsils, each under a Tehsildar, with headquarters at Minicoy, Androth, Kavaratti and Amini islands.

Total No. of Islands: Inhabited: 10; **Uninhabited:** 17. The area and population (1971 census) of the inhabited islands is as follows:

Island	Area in sq. kms.	Population
Agatti	2.7	3,155
Amini	2.6	4,542
Androth	4.8	5,425
Bitra	0.1	112
Chetlat	1.0	1,200
Kadmat	3.1	2,416
Kalpeni	2.3	3,152
Kavaratti	3.6	4,420
Kiltan	1.6	2,046
Minicoy	4.4	5,342
Total	32.0*	31,810

* Includes area of unihabited islands.

AGRICULTURE: Coconut is the main crop. The average production of nuts per hectare per year is .043 million from a total cultivated area of 2,776 hectares.

Fruits like banana, papaya, guava, sopota and some citrus varieties and drum-stick, chillies, tomato, brinjal, sweet potatoes are grown as inter-crops.

Dairy: There are two dairy units, one at Kavaratti and another at Minicoy.

Poultry: There are seven units one each at Kavaratti, Androth, Minicoy, Kadmat, Kalpeni, Agatti and Kiltan.

Fisheries: There are 215 mechanised boats of which 194 were issued to fishermen on a subsidised hire-purchase system. A unit for canning tuna fish was set up at Minicoy in 1969. The number of cans produced during 1979-80 was 58,367. An ice factory and a cold storage were also constructed at Minicoy.

Electricity: Nine out of 10 inhabited islands have been electrified. The total installed capacity of the power houses is 1,578 kw and length of distribution line is 88 kms.

Industries: Coir making, oil extracting, handloom, mat weaving, hosiery knitting and canning are some of the small industries. One handicrafts co-operative society and two handicraft training centres function at Kavaratti and Kalpeni respectively. Three coconut husk defibering units—one each at Androth, Amini and Kadmat are also operating.

Education: There are 39 schools including 7 high schools with 11,158 students and 481 teachers. To encourage education of girls, separate and free facilities have been provided. On July 15, 1972, the Jawaharlal Nehru College, affiliated to Calicut University, Kerala, was inaugurated.

Public Health: There are 7 primary health centres and 2 hospitals at Kavaratti and Minicoy and one first aid centre at Bitra. One of the achievements was the control of communicable diseases like leprosy and filaria. There are health inspectors in all the islands and medical aid is free. Acute cases are brought to the mainland and given free treatment. The total bed-strength of all the hospitals and primary centres is 120 (4 per 1,000 population).

Communications: The motor vessels of the Administration, M.V. Laccadives was launched in 1968. Since 1970 the Shipping Corporation of India has started running an all weather ship M.V. Amindivi for the Administration. One motor launch, M.L. Bitra, maintains inter-island services.

There are 10 post offices, 9 wireless stations and 4 telephone exchanges. A radio-telephones service between Kavaratti and the mainland (established in 1972) and between Chetlat and Bitra islands is also available. A satellite communication station has been established at Kavaratti in 1980. Another station is being set up at Minicoy island.

GENERAL

Annual Plan (1979-80): The Planning Commission has approved Rs. 30 million for the Annual Plan.

Tourism: Bangaram, an uninhabited island, has been developed into a tourist resort with facilities for water sports. A consortium consisting of Air India, Shipping Corporation of India, Hotel Corporation of India and Travel Corporation of India are bringing foreign tourists for a ten-day stay during the fair season. The resort has accommodation for 32.

MADHYA PRADESH STATE

CAPITAL: Bhopal; **Area:** 71.20 sq. kms.; **Population:** 392,077.

Area of the State: 443,459 sq. kms.; **Population of the State:** 52,132,000 (1981 census); **Literacy** (1981 census): 27.8 per cent; **Sex Ratio:** 943 females per 1,000 males; **Density** (1981 census): 118 per sq. km.

DISTRICTS: The headquarters of the districts are the towns of the same name except Surguja which has Ambikapur as its headquarters.

Total No. of Districts: 45; No. of Tehsils: 190; No. of Municipal Corporations: 6; No. of Municipalities: 556; No. of Notified areas: 19.

Districts	Area in sq. kms.	Population (1971 census)
Balaghat	9,200	980,161
Bastar	39,100	1,514,400
Betul	10,100	736,482
Bhind	4,500	792,093
Bhopal	2,763.4	572,169
Bilaspur	19,900	2,441,212
Chhatarpur	8,700	712,296
Chhindwara	11,800	990,341
Damoh	7,300	573,201
Datia	2,000	255,319
Dewas	7,000	593,798
Dhar	8,100	841,495
Durg	19,700	2,461,525
Guna	11,100	783,541
Gwalior	5,200	858,001
Hoshangabad	10,000	805,457
Indore	3,900	1,036,332
Jabalpur	10,200	1,686,165
Jhabua	6,800	667,944
Khandwa (East Nimar)	10,700	879,813
Districts - *Contd.*		
Khargaon (West Nimar)	13,400	1,283,170
Mandia	13,300	874,762
Mandsaur	10,300	961,526
Morena	11,600	984,461
Narsimhapur	5,100	519,565
Panna	7,100	428,121
Raigarh	12,900	1,277,954
Raipur	21,251	2,613,531
Raisen	8,400	552,680
Rajgarh	6,200	645,855
Rajnandgaon	11,003	992,774
Ratlam	4,900	625,118
Rewa	6,300	977,330
Satna	7,500	911,825
Sangor	10,200	1,062,127
Sehore	6,272	512,764
Seoni	8,800	670,901
Shajapur	6,200	677,578
Shahdol	14,000	1,029,144
Shivpuri	10,300	676,338
Sidhi	10,500	777,340
Surguja	22,300	1,321,346
Tikamgarh	5,100	568,877
Ujjain	6,100	862,777
Vidisha	7,400	656,011

State Boundaries: The State is bound by Uttar Pradesh in the north, Bihar in the north-east, Orissa in the east, Maharashtra in the south and Gujarat and Rajasthan in the west.

State Language: Hindi. Main languages spoken in the State are Hindi, Urdu, Marathi, Rajasthani, Gujarati, Sindhi and English

Major Cities (Over 100,000 population)

Name	Area in sq. kms.	Population (1971 census)
Indore	55.84	572,622
Jabalpur	132.09	533,751
Gwalior	65.00	406,755
Bhopal	71.29	392,077
Durg-Bhilainagar	103.90	245,333
Ujjain	70.48	209.118
Raipur	25.17	205,909
Sangor	33.74	154,811
Bilaspur	31.34	130,804
Ratlam	12.95	118,625
Burhanpur	10.46	105,349

AGRICULTURE: Agriculture provides about 55 per cent of net domestic product of the State, gives employment to 80 per cent of the working population, of which two-thirds are cultivators and the rest are labourers.

The State has about 5.3 million farming families cultivating 18.5 million hectares of land. Marginal farmers with less than one hectare operate 32 per cent of all holdings using only 3.40 per cent of the State cultivable land. Small farmers with holdings between 1 and 2 hectares operate 17 per cent of all holdings on 6.3 per cent of the cultivable land.

Percentage contribution to India's total production of crops is rice 8 per cent, sorghum 17 per cent, maize 9 per cent, small millets 10 per cent, wheat 11 per cent, barley 7 per cent and oil-seeds and pulses 8 per cent.

About 11 per cent of the cropped area is irrigated. The gross cropped area is 20.8 million hectares. Food production level which was a mere 8.576 million tonnes in the year 1956-57 has risen to 12.339 million tonnes in 1977-78.

Production levels in M.P.

(Million tonnes)

Crop	Production in 1977-78	Production in 1978-79	Programme for 1979-80
Food Crops			
Rice	4.438	4.0	4.0
Maize	.575	.65	.65
Jowar	1.460	1.70	1.70
Wheat	2.103	3.0	3.20
Pulses	2.044	2.60	2.60
Others	.719	.55	.50
	12.339	12.50	12.70
Commercial Crops			
Sugarcane	1.62	2.2	2.20
Oilseeds	.604	.90	.950
Cotton (million bales)	.20	.425	.450

The high yielding varieties programme for paddy, wheat, maize, jowar and bajra covered 3.05 million hectares in 1978-79 and would further expand to cover about 3.690 million hectares in 1979-80.

This is one of the few States where both *Kharif* and *Rabi* crops are grown in substantial areas, though *Kharif* covers a major portion of the total agricultural area. Against a target of 12.1 million tonnes the production of foodgrain in the State during 1980-81 was estimated at 11.8 million tonnes.

275,000 tonnes of fertilisers were consumed during 1979-80.

An area of 6.5 million hectares was covered by plant protection operation in 1978-79. The programme for 1979-80 included plant protection operations in 7 million hectares.

The State is the highest soyabean producer in the country. In 1969-70 this crop was grown on 600 hectares which shot up to about 400,000 hectares by 1980.

There is a programme to dig 500,000 new wells during the current Sixth Five Year Plan.

World Bank has sanctioned an intensive agricultural extension and research project with a financial outlay of about Rs. 187.7 million. This project has been implemented in 16 districts—Bhind, Morena, Sehore, Balaghat, Badi (Raisen), Mandsaur, Jhabua, Khandwa, Narsinghpur, Chhindwara, Bilaspur, Sagar, Chhatarpur, Satna, Gwalior and Hoshangabad. The emphasis in the programme is to reach every farmer and help him to get better yields.

Madhya Pradesh is richly endowed with varying agroclimatic zones suitable for fruits like mango, guava, lemon, orange, banana, papaya, jack fruit and cashewnut. An integrated horticulture development programme has been started under which importance will be given to training programmes, establishment of nurseries and development of existing gardens, orchards and vegetable farms, encouraging vegetable cultivation around cities, development of potato and banana cultivation and establishment of fruit-cum-preservation and canning centres.

Agricultural graduates are given incentives to establish their own farms and government allots them land and also arranges for loans of Rs. 10,000 to Rs. 15,000 from banks.

Forests: Protected 80,045 sq. kms.; reserved 84,227 sq. kms.; non-classified 667 kms.; total 164,939 sq. kms.

Varieties of Forests: Sagon 31,346 sq. kms.; sal 37,898 sq. kms.; mixed and other forests 95,695 sq. kms.

In 1977-78, Rs. 28.4 million were proposed to be spent on implementation of forestry and soil conservation schemes including State's contribution of Rs. 8.3 million to the Forest Development Corporation and implementation of Rs. 2.78 million centrally sponsored Tiger Project. Provision for 1978-79 under development scheme was Rs. 36.23 million from the State fund and Rs. 22.0 million from the Centre.

Under the Tribal Sub-Plan schemes, Rs. 14.9 million was proposed to be spent from State Plan funds and Rs. 22.0 million from the Centre.

Veterinary Services: State's cattle population is 40.30 million, out of which 26.25 million are cattle, 5.84 million buffaloes, 7.16 million poultry and 7.69 million sheep and goats, according to livestock census 1977.

Facilities are available for breeding to 1.9 million of cows/buff. Each veterinary institution is catering to the need of 20,175 animals.

Veterinary hospitals 655; veterinary dispensaries 1,355; mobile units 45; ambulatory clinics 31; disease investigation labs.: (i) State level 1; (ii) Divisional level 8; (iii) District level 10; rinderpest check posts and units 66; serum production centre1; biological production division 1.

Cattle Breeding: Cattle breeding farms 10; Jersy breeding farms 2; bull rearing farms 3; cattle breeding extension units 376; cattle breeding extn. units in tribal areas 141; H.Q. bull breeding units 57; intensive cattle development projects 13; intensive key village blocks 13; Central semen stations 10; *gosadans* 10; seed multiplication institutes 3; co-ordinated cattle progeny testing centre 1.

Cattle Development: Intensive cattle development projects 13; progeny testing centre 1.

Sheep Breeding: Sheep breeding farms 3; large sheep breeding farm 1; sheep and wool extension units 3; goat breeding farm 1; pig breeding farm 1.

Poultry Development: Egg production average is 210 eggs per bird per year. "RATNA", scientifically developed breed of bird at Govt. Poultry Farm, Bhopal is capable of producing 237 eggs per year. Poultry farms 12; co-ordinated poultry breeding farm 1; intensive poultry projects 6.

Irrigation: The irrigation in the State provides facilities to irrigate only 10 per cent of the cultivable area. In the Sixth Plan it is proposed to add 34 per cent more to the existing potentiality.

The Planning Commission has approved a multipurpose irrigation project in Bilaspur costing Rs. 1,150 million. The project envisages construction of solid gravity masonry dam 279 ft. high and 2,290 ft. long across the river Hasdeo. It includes a huge earthen dam, installation of penstocks in the mansonry dam and excavation for a power house for the generation of hydro-power and extension of canals on both banks. The project on completion will irrigate 327,842 hectares of land.

Other medium projects approved by the commission for the State during 1980 were: Bah, Sagar, Doraba Tank, Kaliasote & Tillat Dam at an estimated cost of Rs. 422 million. The projects are expected to irrigate 40,687 hectares.

Energy: The installed capacity for power generation in the State was 1,132.5 MW during Sept. 1980 which was expected to cross 1,603 MW during 1980-81.

The State Govt. has approved the 420 MW Birsingpur Thermal Power project at an estimated cost of Rs. 2,000 million during Sept. 1980. The project on installation will be linked with Piparia and Nawazabad coalfields. The State also proposes to commission an additional capacity of 1,787 MW of electricity during the Sixth Plan. This includes seven sets of 210 MW—four at Korba, two at Satpura and one at Birsingpur.

Provision has also been made for five new hydel projects—Narmada Sagar, Bargi, Sardar Sarowar, Bansagar and Bango.

INDUSTRIES: Main medium and large-scale industries with their locations:

Cotton textiles: Indore 7, Gwalior 2, Ujjain 4, Mandsaur 1, Dewas 5, Ratlam 1, Bhopal 1, Burhanpur 2, Rajnandgaon 1, Bilaspur 1, Khandwa 1, Sanavad 1.

Art Silk fabrics: Indore, Gwalior, Nagda; *Staple fabric yarn:* Nagda; *Crimped yarn:* Dewas; *Nylon filament yarn:* Ujjain; *Shoddy yarn:* Dewas; *Cement:* Kymore, Banmore, Satna, Jamul, Mandhar, Tilda; *Coal:* Bilaspur 4, Betul 1, Chhindwara 10, Surguja 11, Sidhi 1, Shahdol 8.

Refractories & firebricks: Jabalpur, Katni, Niwar; *gun carriage factory:* Jabalpur: *ordinance factory:* Katni; *asbestos cement:* Kymore: *sugar:* Jaora, Dalauda, Mahidpur, Dabra, Sehore, Kailaras; *newsprint paper:* Nepanagar; *currency and bank note press:* Hoshangabad, Dewas; *strawboard and paper:* Bhopal, Ratlam, Vidisha, Sehore, Umaria, Amlai; *particle anchor board:* Itarsi, Bhopal; *heavy electrical equipment:* Bhopal; *electrical industries:* Bhopal, Gwalior, Rewa, Jabalpur, Satna; *jute mill:* Raipur, Raigarh; *flour mills:* Indore, Bhopal, Ganj-Basoda, Raipur; *vegetable oil including solvent extraction units:* Dewas, Khandwa, Sehore, Ganj-Basoda, Bilaspur, Raipur, Indore, Ujjain; *iron & steel projects:* Bhilai, Raipur; *mini steel plants:* Indore, Jabalpur, Raipur-Dewas, Ratlam; *Govt. Post & Telegraph workshop:* Jabalpur; *Railway workshop:* Raipur; *mining of iron ore:* Bastar; *P.V.C. cables:* Satna; *textile machinery:* Gwalior; *power driven pumps:* Dewas; *Engine works:* Bhopal; *biscuits:* Gwalior; *bakery:* Indore; *steel casting foundry & re-rolling mills:* Indore, Kumhari, Dewas, Ujjain, Gwalior, Bangrod, Bhilai; *Sulphuric acid:* Birlagram (Ujjain), Kumhari, Bhilai; *pesticide formulation:* Bhopal; *carbon-di-sulphide and anhydrous sodium sulphide:* Nagda; *compressed oxygen & dissolved acetylene:* Bhopal, Gwalior, Indore, Jabalpur, Bilaspur, Kumhari; *bichromate of soda chromic acid:* Bhilai; *moped:* Gwalior; *steel forging:* Bhopal; *plates, round bars:* Indore; *mild steel and G.I. wire:* Indore, Durg, Ratlam; *caustic soda:* Amlai, Nagda, Nepanagar; *synthetics:* Ujjain; *alumina and aluminium:* Korba; *beer:* Bhopal; *plastics:* Indore; *midget electrodes:* Indore, Raipur; *dry batteries:* Bhopal, Jabalpur; *formaldehyde:* Indore; *graphite electrodes:* Mandideep, Indore and Raipur; *hydrochloric acid:* Ratlam; *tungsten filament:* Indore.

Cottage Industries: Main cottage industries with location in brackets:– Handlooms spread all over the State but best developed at Chanderi and Maheshwar; power-looms; silk (Raigarh, Champa, Bilaspur, Surguja); mulberry (Indore, Jhabua, Depalpur, Dhar); fine sarees (Chanderi, Maheshwar, Burhanpur); woodwork and lacquerware (Sheopur, Sabalgarh, Budhni, Rewa, Gwalior); wooden toys (Rewa, Bhopal, Gwalior, Ratlam); softstone (Jabalpur, Chhatarpur); lac (Seoni, Raipur, Bilaspur, Umeria and Rewa); saw milling (Betul, Bhopal, Balaghat, Bilaspur, Raipur, Indore, Jabalpur, Saugor and Mandla); brassware (Balaghat, Chhindwara, Indore, Gwalior, Raipur and Chhatarpur); textile hand printing (Ujjain, Mandla, Morena, Indore, Hoshangabad); diamond cutting and polishing (Panna); papier mache (Gwalior, Ujjain, Indore); zari embroidery (Bhopal); art metalware (Bastar, Betul, Hoshangabad, Satna, Mandla); leather toys (Indore).

Industrial Estates: There is a network of industrial estates in the following places: Indore, Gwalior, Raipur, Bhopal, Jabalpur, Bilaspur, Saugor, Ratlam, Katni, Burhanpur, Satna, Vidisha, Guna, Shahdol, Durg, Rajnandgaon, Bhilai, and Ujjain.

Besides 29 semi-urban industrial estates and 31 rural work sheds have also been constructed.

Industrial Development Agencies

(See chapter on 'State Govt. Undertakings'.)

LABOUR 1978: No. of working factories: 5,522; No. of workers: N.A.; No. of mandays lost due to industrial disputes (Pub. Sector): 74,040; No. of industrial disputes (Pub. Sector): 29; No. of workers involved (Pub. Sector): 36,192; No. of mandays lost due to industrial disputes (Pvt. Sector): 194,130; No. of industrial disputes (Pvt: Sector): 103; No. of workers involved (Pvt. Sector): 37,890.

Panchayats and Social Welfare: The State Panchayats Act envisages a three-tier system of Panchayats viz. gram panchayats at village level, janpad panchayats at block level and zilla panchayats at district level. The gram panchayats have been relimited now and there are 16,229 gram panchayats and 459 janpad panchayats.

Social Welfare: The Directorate runs 4 destitute women's homes, 2 working women's hostels, 1 home craft training centre and 13 tailoring centres, 1 rescued women's home, 2 after-care homes for boys and girls separately, 1 State institute for orphans, 7 homes for healthy children of leprosy patients, 8 *Balwadi* cum *Sanskar Kendras* and 4 foster mothers' homes. 11 Juvenile courts, 14 probation services, 9 observation homes, 1 children's home, 3 special schools, 1 after care home for children released from children's homes and special schools have been established. Besides 8 schools for blind, deaf and mute, 2 homes for orthopaedically handicapped children, 1 home for mentally retarded children, 1 workshop for adult deaf and mute and one State level institute for physically handicapped have been established.

Social Security Pension: The State Govt. has sanctioned Rs. 5.3 million for 1980-81 for paying pension to destitutes above the age of 60 at a rate of Rs. 60 per month each.

Social Education: Adult literacy classes are run by the gram panchayats, municipalities and non-official agencies for which they receive grants-in-aid. Besides this the departmental gram sevikas also run literacy classes for women in the rural areas. The scheme of farmers functional literacy classes is being run in 18 projects. Each has 300 centres and each centre has an enrolment of 30 each. The Govt. has also started 15 projects of *Nagrik Shiksha* in open areas and 17 projects in tribal areas. The projects have 100 centres each with enrolment of 30 in each centre. 12,800 libraries and 3,060 reading rooms are maintained by the gram panchayat at village level. Education through entertainment is provided by 26 Kalapathak parties and 45 cinema units. There are 6,620 radio centres in the State. 170 television sets have been installed under Territorial Television Transmission system and the programme of education is conducted in the Chhattisgarh area.

Nutrition Programme: Special nutrition programme is conducted in the slum areas of 19 cities for the benefit of children below six, pregnant women and lactating mothers. In 1980-81 this has been started in 17 more new towns. Applied nutrition programme is being implemented in rural areas of 155 blocks. Besides 4 ICDS projects for Susner Nagod and Singroli and Jabalpur blocks are also being implemented. One more ICDS project in 1980-81 has been set up.

EDUCATION (1978)

Colleges: Universities: 10; arts colleges: 93; science colleges: 6; home science colleges: 2; agriculture colleges: 7; commerce colleges: 7; music colleges: 3; fine arts colleges: 6; medical colleges: 15; dentistry college: 1; nursing college: 1; veterinary colleges: 2; physical education colleges: 2; social college: 1; colleges of education: 11; university college of education: 1; sanskrit colleges: 8.

Type of schools	No. of institutions	Enrolment (in thousands)		No. of trained teachers
		Boys	Girls	
Higher Sec. Schools	2,026	497	182	25,981
Middle/Sr. Basic Schools	8,681	1,006	366	44,528
Primary/Jr. Basic Schools	52,349	2,538	1,220	91,366
Pre-Primary Schools	426	16	13	482

Technical Education: Pre-vocational training centres: 6; secondary technical schools: 14; fine arts colleges: 6; Kala Niketan: 1; polytechnics (including Polytechnic and Kala Niketan): 23; engineering colleges: 9; Govt. women's polytechnic: 1.

Universities: *Ravi Shankar Vishwavidyalaya,* Raipur; *Jivaji Rao Vishwavidyalaya,* Gwalior; *Vikram Vishwavidyalaya,* Ujjain; *Awadesh Pratap Singh Vishwavidyalaya,* Rewa; *Indore Vishwavidyalaya,* Indore; *Jabalpur Vishwavidalaya,* Jabalpur; *Saugor Vishwavidyalaya,* Saugor; *Jawaharlal Nehru Krishi Vishwavidyalaya,* Jabalpur; *Bhopal Vishwavidyalaya,* Bhopal; *Indira Sangeet Vishwavidyalaya,* Khairagarh.

PUBLIC HEALTH: No. of hospitals & dispensaries: 761; no. of beds: 16,809; no. of allopathic hospitals: 174; no. of primary health centres: 465; no. of T. B. hospitals & T.B. sanatoria: 7; no. of leprosy homes and hospitals: 8; no. of mental hospitals: 2; no. of medical colleges: 6; dental college: 1; no. of doctors (Regd.): 6,474: no. of nurses, *dais* midwives and health visitors (Regd.): 16,270.

Total No. of patients treated during 1976: 651,889 (indoor); 18.00 million (outdoor).

Communications (As on 31st March, 1980): The M.P. State Road Transport Corporation (Habibgunj, Bhopal 462,006) operates its services on 1,241 routes including 150 inter-state, 61 night services and 7 deluxe services, 2,430 buses serving on an average 461,695 passengers per day, run 459,107 kms. Average daily income: Rs. 1,120,535; Staff: 16,485.

Roads (1978): Surfaced: 42,800 kms.; unsurfaced: 13,073 kms.; total 55,873 kms.

Length of railway lines: 5,707 kms.

Press: Leading dailies and their places of publication

Hindi: Nava Bharat, Indore/Bhopal/Raipur/Jabalpur; Nai Dunia, Indore; Deshabandhu, Jabalpur/Raipur/Bhopal; Yugadharma, Jabalpur, Raipur/Nagpur; Swadesh, Indore/Gwalior; Naveen Dunia, Jabalpur.

English: Hitavada, Bhopal/Raipur; M.P. Chronicle, Bhopal/Raipur.

GENERAL

Annual Plan: The total plan outlay for 1980-81 is Rs. 5,410.019 million. Agriculture and allied services (excluding Minor Irrigation) have been allocated Rs. 562.067 million; Major and Medium Irrigation Rs. 1,007.00 million; Minor Irrigation Rs 400 million (Agriculture Dept. Rs. 121.040 million; Irrigation Dept. Rs. 258.960 million and Micro Irrigation Rs. 20 million); power development Rs. 2.220.30 million; co-operation Rs 58.40 million; roads Rs 255 million; road transport Rs 54.50 million; tourism Rs 8.5 million; industry and minerals Rs 108.4 million; general education Rs 134 million; public health Rs. 179.875 million; water supply Rs. 200 million; housing Rs. 61.40 million; welfare of scheduled castes and scheduled tribes Rs. 65.20 million; nutrition programme Rs. 35 million; and other programmes Rs. 60.377 million.

Important Rivers: The Narmada, The Mahanadi, The Tapti.

Minor Rivers: The Chambal, The Kshipra, The Betwa, The Ken, The Sone, The Indravati.

MAHARASHTRA STATE

CAPITAL: Greater Bombay. **Area:** 603.0 sq. kms.; **Population** (1981 census): 8.203 million.

Area of the State: 307,762 sq. kms. **Population of the State** (1981 census): 62,693,898. **Density:** 204 per sq. km. **Sex Ratio:** 939 females per 1.000 males. **Literacy:** 47.37 per cent.

DISTRICTS: 27 (232 tehsils excluding 3 tehsils in Gr. Bombay Dist., 225 Municipal towns). The names of the districts with headquarters in brackets, area in square kilometres and population (as per 1971 census) is as follows:-

Greater Bombay (Bombay), 603.0, 5,970,575; Thane (Thane), 9,553.0, 2,281,661; Raigad, (Alibag), 7,198, 1,263,003; Ratnagiri (Ratnagiri), 13,040, 1,990,583; Nasik (Nasik), 15,582, 2,369,221; Dhule (Dhule), 13,143, 1,662,181; Ahmadnagar (Ahmadnagar), 17,035, 2,269,117; Pune (Pune), 15,640, 3,178,029; Satara (Satara), 10,492, 1,727,276; Sangli (Sangli), 8,563, 1,539,820; Kolhapur (Kolhapur), 8,059, 2,048,049; Solapur (Solapur), 15,021, 2,253,840; Jalgaon (Jalgaon), 11,771, 2,123,121; Aurangabad (Aurangabad), 16,200, 1,971,006; Parbhani (Parbhani), 12,489, 1,506,771; Beed (Beed), 11,227, 1,286,121; Osmanabad (Osmanabad), 14,117, 1,896,687; Nanded (Nanded), 10,492, 1,397,762; Buldhana (Buldhana), 9,745, 1,262,978; Akola (Akola), 10,567, 1,501,478; Amravati (Amravati), 12.210, 1,541,209; Yavatmal (Yavatmal), 13,925, 1,423,677; Wardha (Wardha), 6,307, 779,562; Nagpur (Nagpur), 9,928, 1,942,688; Chandrapur (Chandrapur), 25,641, 1,640,137; Bhandara (Bhandara), 9.214, 1,585,580; Jalna (Jalna) N.A., N.A

No. of Villages: 35,778 inhabited (1971 census).

State Boundaries: It is surrounded by the Arabian Sea in the west; by Gujarat in the north-east; Madhya Pradesh in the north; Andhra Pradesh in the south-east; and Karnataka and Goa in the south.

AGRICULTURE*: Classification of land and area in '000 hectares for 1976-77 respectively are:

Total Geographical area 30,758; area under forests 5,327; net area sown 18,280; gross cropped area 19,723; barren and uncultivable land 1,734; land put to non-agricultural uses 974; culturable waste 997; land under miscellaneous tree crops etc. 194; permanent pastures and other grazing lands 1,593; current fallows 843; other fallows 817; area sown more than once 1,442.

State Language: Marathi.

Major Cities		Population (1971 census)	Area In sq. kms.
Greater Bombay	...	5,970,575	603.00
Nagpur	...	866,076	217.56
Pune	...	856,105	138.85
Solapur	...	398,361	23.23
Kolhapur	...	259,050	66.82
Amravati	...	193,800	36.34
Malegaon	...	191,847	12.95
Nasik	...	176,091	58.28
Thane	...	170,675	26.16
Akola	...	168,438	20.88
Ulhasnagar	...	168,462	13.34
Aurangabad	...	150,483	40.79
Dhule	...	137,129	26.75
Nanded	...	126,538	12.17
Ahmadnagar	...	118,236	19.87
Sangli	...	115,138	20.90
Jalgaon	...	106,711	12.30

---

*Source: Director of Agriculture, Pune 411001

Area Irrigated: by Sources ('000 hectares), 1974-75: Government canals 936; tanks 232; wells 936; other sources 105; net irrigated 1,612; gross irrigated 1,933.

Area Irrigated: by Crops during 1974-75 (In '000 hectares): Rice 349; Wheat 371; Jowar 372; Sugarcane 248; cotton 76; groundnut 21.

Land Ceiling: The revised ceiling law came into force in the State on Oct. 2, 1975. The ceilings for various categories of land (in hectares) are as follows: Perennially irrigated land: 7.2; seasonally irrigated land: 10.8; land with unassured irrigation or land under paddy crop in assured rainfall area: 14.569; other dry crop land: 21.853.

Surplus Land: A total of 150,000 hectares of land was expected to be declared surplus under the New Ceiling Act. Till Dec. 1976, 90,917 returns were received and enquiry in respect of 86,783 returns covering an area of 132,000 hectares of land was completed. Nearly 99,000 hectares were distributed to 6,454 landless persons.

(See main chapter on 'Food & Agriculture' for details of production etc.)

Livestock: (1978) (in million): Cattle 15.17; buffaloes 3.89; sheep 2.61; goats 7.57; horses and ponies 48,095; pigs .225; poultry 18.18.

DAIRY DEVELOPMENT: There are 31 government milk schemes functioning at Bombay, Pune, Dhule, Nasik, Vani, Mahad, Khalapur, Ratnagiri, Chiplun, Kankavali, Chalisgaon, Ahmadnagar, Satara, Mahableshwar, Miraj, Solapur, Kolhapur, Nandura, Akola, Amravati, Aurangabad, Nagpur, Wardha, Gondia, Beed, Parbhani, Nanded, Udgir, Bhoom, Chandrapur and Dapchari. The dairy development activities in Jalgaon and Kolhapur districts are looked after by the district cooperative federations. There are 76 chilling centres in various districts of the State with a total capacity of .84 million litres of milk.

Milk Procurement: The average quantity of milk procured daily under all the Government Milk Schemes (except Great Bombay Milk Scheme) during November, 1979 was 940 kilolitres as against 896 kilolitres procured during November, 1978.

Greater Bombay Milk Scheme: All the three dairies at Aarey, Worli and Kurla under Greater Bombay Milk Scheme put together received 809 kilolitres of milk daily in 1979 as against the receipt of 811 kilolitres in 1978. In November, 1979 the Greater Bombay Milk Scheme distributed about 890 kilolitres of milk daily as against 813 kilolitres distributed in November, 1978. The scheme also manufactures and markets ice cream, shrikhand, paneer, cheese and flavoured sweetened milk called "Energee".

Dairy Science Institute: The Institute (at Aarey Milk Colony) imparts training to students leading to Diploma in Dairy Technology.

Milk Powder Plants: There are three milk powder manufacturing plants in the public sector at Miraj, Udgir and Nagpur with capacity to produce 10, 10 and 5 tonnes respectively of milk powder daily. Two milk powder plants are functioning in cooperative sector at Jalgaon and Warananagar each having capacity to produce daily 5 tonnes milk powder.

New Milk Schemes: Of the total 31 milk schemes, 5 new dairies were commissioned at Satara, Parbhani, Nandura, Gondia (Bhandara) and Chandrapur in 1979-80.

Worli Dairy: The dairy started functioning from 7th Nov., 1961. It has pasteurising capacity of 66,000 litres per hour, while the total handling capacity is of 450,000 litres per day. There are two packaging systems in operation viz. bottling and satchet filling. The bottling capacity is 112,000 litres per hour and the satchet filling capacity is 10,000 litres per hour.

Kurla Dairy: The dairy was commissioned on 9th Feb., 1976. It has a packing capacity of 300,000 litres per day, in fill-packs. The dairy caters to the needs of consumers in central suburbs and other towns viz. Thane, Kalyan, Dombivli, Ulhasnagar, Bhiwandi.

Central Dairy, Aarey: This dairy was commissioned on 3rd March 1951. This dairy, catering to the needs of consumers in western suburbs from Bandra to Dahisar and Vasai, has a capacity to pasteurise 32,000 litres of milk per hour with total handling capacity of 250,000 litres per day.

FISHERIES: See chapter on 'Fisheries'.

IRRIGATION AND POWER: See Chapter on 'Energy'.

Electricity Supply: Installed capacity (Thousand Kilowatts) as at the end of March 1978 and 1979: Steam 1,721; 2,141; Hydro 1,197; 1,277; Nuclear 210; 210; Total 3,128; 3,628.

Consumption during 1978-79 (Million Kwh) was: Domestic light and small power 1,418; Commercial light and small power 913; Industrial power 7,758; Public lighting 133; Traction 811; Irrigation and dewatering 1,380; Water works 256; Miscellaneous 182; Total 12,851.

Village Electrification: Out of 38,661 villages in the State, 26,575 had been electrified upto March, 1980.

INDUSTRIES: Textiles, food industries, general and electrical engineering, petroleum, transport and transport equipment; sugar factories and refineries, rubber products, basic industrial chemicals, paints, varnishes, lacquers and miscellaneous chemical products are the major industries of the State.

Working Factories: No. of registered factories: 14,927; No. of working factories: 13,162; Average daily employment (in thousands): 1,101.

Large and Medium Industries: Distribution of working factories (1975) district-wise is as follows:

Greater Bombay 5,930; Thane 1,199; Raigad 144; Ratnagiri 73; Nasik 242; Dhule 119; Jalgaon 249; Ahmednagar 95; Pune 1,149; Satara 101; Sangli 148; Solapur 244; Kolhapur 443; Aurangabad 162; Parbani 53; Beed 22; Nanded 54; Osmanabad 26; Buldana 61; Akola 103; Amravati 89; Yavatmal 67; Wardha 42; Nagpur 423; Bhandara 134; Chandrapur 53; Maharashtra State Total 11,425.

According to 1975 statistics, the number of working factories in major group of industries is:

Agricultural production: 2; agricultural services: 3; forestry and logging: 6; mining: 5; manufacture of food products: 1,316; beverages, tobacco and tobacco products: 54; cotton textiles (including cotton ginning and baling): 1009; wool, silk and synthetic fibre textiles: 465; jute, hemp and mesta textiles: 3; textile products (including wearing apparel other than footwear): 386; wood and wood products, furniture and fixtures: 323; paper and paper products and printing, publishing and allied Industries: 928; leather and fur products (except repair): 52; rubber, plastic, petroleum, and coal products: 680; chemical and chemical products (except products of petroleum and coal): 813; non-metallic mineral products: 706; basic metal and alloys industries: 577; metal products and parts except machinery and transport equipment: 1,240; machinery, machine tools and parts except electrical machinery: 1,133; electrical machinery, apparatus, appliance and supplies & parts: 583; transport equipment and parts: 229; other manufacturing industries: 325; electricity: 83; gas and steam: 13; water works and supply: 41; construction: 2; activities allied to construction: 1; wholesale trade in fuel, light chemicals, ceramics, etc.: 2; wholesale trade in wood, paper hide and skin and inedible oils: 10; wholesale trade in miscellaneous manufacture: 2; retail trade in others: 3; land transport: 1; water transport 1; air transport: 6; services incidental to transport: 1; storage and warehousing: 17; communications: 1; real estate and business services: 5; sanitary services: 16; education and scientific services: 1; medical and health services: 1; recreational and cultural services: 20; personal services: 30; repair services: 322; international and other services: 2; services not elsewhere classified: 5; activities not adequately defined: 1; Total: 11,425.

Joint Stock Companies: No. of joint stock companies at work: 11,612†, as on 31st March, 1979: paid-up capital: 153.9† million

Industrial Estates: 76 estates have been approved in the State. The developments works were in progress in 51 areas by the end of 1978-79 and by the end of September, 1979 Maharashtra Industrial Development Corporation had allotted 7,175 plots.

---

† Figures are provisional.

Industrial Development Agencies: See chapter on 'State Govt. Undertakings'.

LABOUR

Trade Unions: No. of registered trade unions: *3,476.* Total membership of registered trade unions: *2,091,913.* No. of registered trade unions affiliated to Indian National Trade Union Congress: *160,* with membership of *398,135.* No. of registered trade unions affiliated to All India Trade Union Congress: *87,* with membership of *108,212.* No. of registered trade unions affiliated to Hind Mazdoor Sabha: *61,* with membership of *358,648:* No. of registered trade unions affiliated to Hind Mazdoor Panchayat *4,* with membership of *47,422.* No. of registered trade unions affiliated to C.I.T.U.: *29,* with membership of *39,725.* No. of registered trade unions affiliated to United Trade Union Congress: *3,* with membership of *3,703.* No. of registered trade unions affiliated to Bharatiya Mazdoor Sangh: *121,* with membership of *179,647.*

Industrial Disputes during 1979, (Provisional): During the year 1979 there were *383* work-stoppages (strikes & lockouts) involving *204,794* workers with a time loss of *1.54* million mandays. Figures for 1978 were *351* work-stoppages (strikes & lockouts) involving *2,07,754* workers with a time loss of *2.18* million mandays.

Employment Exchange Statistics (1979-80): No. of registrations 550,372; no. of placements 34,140; no. of vacancies notified 83,251; no. on live register as on 31st March, 1980 1,115,811.

Educational Break-up of unemployed (No. on live register at the end of June, 1980): Non-matric including illiterate: 522,318; matriculates: 427,903; intermediates: 51,737; engineering diploma holders: 3,438; I.T.I. passed and apprentices trained under Apprenticeship Act: 28,082; engineering graduates: 835; other graduates: 90,364; total graduates: 91,199; engineering post-graduates: 12; other post-graduates: 9,367; total post-graduates: 9,379; Grand total: 1,134,056.

The table below gives the average daily number of workers employed in various industries (as on Dec. 31, 1976).

Industry	Average daily no. of workers employed
Ginning and pressing	27,322
Food (except beverages, sugar factories and refineries)	38,543
Sugar factories and refineries	38,497
Tobacco, tobacco products & beverages	6,891
Textiles—Cotton, silk & synthetic	301,937
Printing, publishing and allied industries	35,494
Rubber, plastics, petroleum and coal products	35,326
Chemicals and chemical products	94,672
Products of petroleum and coal	5,263
Non-metallic mineral products	40,312
Basic metal and alloy industries	52,881
Metal products and parts (except machinery and transport equipment)	51,497
Machinery, machine tools and parts (except electrical machinery)	86,099
Electrical machinery, apparatus, appliances, parts and supplies	57,019
Transport equipment and parts	70,055
Other industries	106,279
All industries	1,048,087

Private Sector employment: The total employment was 1.3 million at the end of 1980.

Public Sector employment: The total employment was 2.5 million at the end of March, 1980. Of this 42.2 per cent was in State Govt.; 19.6 per cent in local bodies; 19.2 per cent in Central Govt.; and 19.0 per cent in quasi-Govt.

Employment Promotion Programme: The State Govt. provided Rs. 35.5 million as financial help to 13,514 educated unemployed since 1972 to start their own enterprises (industrial or business) and thereby 12,964 units were established uptil September 1976.

EDUCATION

Teaching Institutions (as on Sept. 30, 1979).

Type	Number	Enrolment
Schools		
Pre-Primary	855	74.389
Primary	49,877	8,270,686
Secondary	6,026	3,092,000
Colleges		
Teachers Training	213	25.614
Higher Education	666	547,522
Professional		
Professional and Special Education	1,066*	128,071

*51 Institutions for Bachelor of Education and 7 for Bachelor in Physical Education are included in Teachers Training and excluded from Higher Education.

Technical Education (1978-79): Category-wise number of institutions: Engineering colleges: 8; other degree colleges: 4; autonomous governing bodies: 9†; polytechnics: 26; other diploma institutions: 24; technical high schools: 120; industrial training institutions: 69; others: 990; Total: 1.250.

Universities

1. University of Bombay (established in 1857) has jurisdiction over Bombay. Nine colleges of Goa are also affiliated.

2. University of Poona, Pune (established in 1948) has jurisdiction over Pune, Ahmednagar, Jalgaon, Dhule, Thane, Nasik and Raigad districts.

3. Nagpur University, Nagpur (established in 1925) has jurisdiction over the districts of Akola, Buldana, Amravati, Nagpur, Bhandara, Yavatmal, Wardha, Chandrapur and Rajura taluka of Vidarbha area.

4. Marathwada University, Aurangabad (established in 1958) has jurisdiction over the five districts of Marathwada area viz. Aurangabad, Beed, Nanded, Osmanabad and Parbhani.

5. Shivaji University, Kolhapur (established in 1963) has jurisdiction over Kolhapur, Solapur, Satara, Sangli and Ratnagiri districts.

6. Shrimati Nathibai Damodar Thackersey Women's University, Bombay (established in 1949), is exclusively for women and has unrestricted territorial jurisdiction.

7. Mahatma Phule Agricultural University, Rahuri, Ahmednagar district (established in 1968).

8. Punjabrao Deshmukh Agricultural University, Akola (established in 1969) has jurisdiction over revenue divisions of Nagpur and Aurangabad.

9. Konkan Agricultural University (Krishi Vidyapeeth), Dapoli, Ratnagiri Dist. (established in 1972) has jurisdiction over the districts of Thane, Raigad, Ratnagiri & Gr. Bombay.

10. Marathwada Agricultural University, Parbhani (established in 1972) has jurisdiction over five districts of Aurangabad Revenue division of Maharashtra.

(For further details of the universities see chapter on Education.)

---

†This includes four degree Institutions

PUBLIC HEALTH

Total No. of allopathic medical practitioners registered at Maharashtra Medical Council, Bombay upto Dec., 1979: 37,972. Total No. of doctors in Govt. hospitals and dispensaries: Full time: N.A.; honorary: 437; medical professors: 156; lecturers: 614; associate professors: 126; readers: 392.

Total No. of nursing staff in Govt. hospitals and dispensaries: Staff nurses: 5,255; public health nurses: 118; paediatric nurses: 60; psychiatric nurses: 43; ward sisters: 693; matrons: gazetted 58, non-gazetted 19.

Total No. of Govt. medical colleges: 7. Seats allotted: 925; Dental colleges: 2. Seats allotted: 130.

	Hospitals		Dispensaries		Total	
	No.	Beds	No.	Beds	No.	Beds
State Government	105	21,100	24	20	129	21,120
Central Government	26	2,754	15	27	41	2,781
Mun. and Local bodies	91	6,083	1,322	1,928	1,413	8,011
Others (excluding private agencies) Govt.	77	8,837	11	90	88	8,927

Non-Allopathic Medical Colleges, Hospitals and Dispensaries:

Ayurvedic: No. of Government Colleges: 3; Private Colleges: 14; total no. of seats provided in Govt. colleges (Ayurvedic): 160; total no. of seats in aided Ayurvedic Colleges: 685; no. of Government hospitals: 3; Government aided hospitals: 14; Research ward (Government): 1; total no. of beds: 1,672; Zilla Parishad dispensaries: 432; no. of licentiate doctors: 25,030.

Homoeopathy: No. of private homoeopathic colleges: 24; no. of seats provided: 1,255; no. of homoeopathic hospitals: 23; no. of Government homoeopathic hospitals: 1; total no. of beds: 30; no. of licentiate doctors: 7,778.

Unani: No. of unani colleges (private): 1; total no. of seats provided in the college: 45; no. of beds in unani hospital: 45; no. of Zilla Parishad aided unani dispensaries: 30; total no. of licentiate doctors: 390.

Family Welfare Programme (1978-79): Number of urban family planning centres as on March 31, 1979: 593; Sterilisation operations performed upto March, 1980: Vasectomy: 2,976,733; Tubectomy: 1,924,842; Total: 4,901,575; I.U.C.D. insertions done upto March, 1980: 471,985; Condoms distributed during 1979-80: 912,197 dozens.

COMMUNICATION

Nationalised Road Transport: A single transport Corporation for the entire State, known as the Maharashtra State Road Transport Corporation came into existence on 1st July, 1961. This is the biggest road transport organisation in India.

Nationalised road transport position as on 31st Dec., 1979 is as follows: No. of routes: 8,396; route distance: 536,226 kms.; average no. of vehicles on road per day: 7,072; average daily earnings: Rs. 4.564 million; average no. of passengers carried per day: 2.802 million.

Length of Motorable Roads

Item	As on 31st March, 1979
National highways	2,935
State highways	18,526
Major district roads	24,564
Other district roads	23,959
Village roads	27,314
Total	97,298

In addition the Public Works department and Z.P. maintain 38,400 kms. of road length as on 31 March, 1979, making the total road length in the State 135,660 kms.

Railways: Total (1978) length: 5,242 kms. Zone-wise: Central Railway: 2,349 kms.; South Central Railway: 676 kms; Western Railway: 351 kms.

B.E.S.T.: Bus Section (1979-80): Total Staff in the undertaking: 29,269; no. of buses: 1,929; route kilometres: 1,997.5; average no. of passengers carried per day: 3.15 million; income for the year: Rs. 474.65 million; expenditure for the year: Rs. 552.53 million.

Electric Supply Section: No. of units sold: 1,332.5 million; no. of consumers: 553,794; income for the year: Rs. 557.54 million; expenditure for the year: Rs. 510.04 million.

Number of Vehicles	As on 1st January 1980
Motor cycles	140,240
Scooters	162,308
Motor cars	213,700
Taxi cabs	29,239
Auto rickshaws	22,828
Stage carriages—	
i) Diesel engined	12,207
ii) Petrol engined	—
Contract Carriages—	
i) Diesel engined	1,259
ii) Petrol engined	—
Lorries	
A. Private Carriers—	
i) Diesel engined	22,993
ii) Petrol engined	7,664
B. Public Carriers—	
i) Diesel engined	57,850
ii) Petrol engined	10,079
Ambulances	839
School buses	574
Private services vehicles	2,053
Trailors	19,599
Tractors	20,646
Others	1,294
Total	725,352

Source: Commissioner of Transport, Maharashtra State, Bombay.

GENERAL

Housing: No. of tenements constructed by Maharashtra Housing and Area Development Authority till September 1980 in Bombay, Pune, Aurangabad and Nagpur (Combined): Old Housing Scheme: 6,768; Subsidised Industrial Housing Scheme: 38,672; Slum Clearance Scheme: 20,990; Lower Income Group Housing Scheme: 17,262; Middle Income Group: 5,016; Economically Weaker Section: 8,808; Higher Income Group: 220; Total: 97,736.

Press

Names	Place of printing
Dailies (English)	
Economic Times	Bombay
Evening News of India	Bombay
Financial Express	Bombay
Fress Press Bulletin	Bombay
Free Press Journal	Bombay
Indian Express	Bombay
Nagpur Times	Nagpur
Times of India	Bombay
(Hindi)	
Navbharat	Nagpur & Raipur
Nav Bharat Times	Bombay

Press

Names—*Contd.*	Place of Printing
(Gujarati)	
Bombay Samachar	Bombay
Janmabhoomi	Bombay
Janashakti	Bombay
(Marathi)	
Kesari	Pune
Loksatta	Bombay
Maharashtra Times	Bombay
Mumbai Sakal	Bombay
Navakal	Bombay
Navshakti	Bombay
Sakal	Pune
Sanchar	Solapur
Tarun Bharat	Nagpur
Tarun Bharat	Pune
(Sindi)	
Hindustan	Bombay
(Urdu)	
Inquilab	Bombay

State Income: According to current prices the State Income for 1978-79 was Rs. 99,086 million and the *Per Capita Income* was Rs. 1,694.

Village Panchayat: There were about 24,076 Village Panchayats in Maharashtra State at the end of 1978-79, and 296 Panchayat Samities covering 38,661 villages.

Municipal Corporations and Councils: There are five municipal Corporations viz., Gr. Bombay, Pune, Solapur,, Nagpur and Kolhapur and 222 municipal councils and seven cantonments boards.

Rivers: The Godavari, the Tapti, the Panjhra, the Girna, the Purna, the Wardha, the Wainganga, the Indravati, the Pranhita, the Penganga, the Pravara, the Manjra, the Bhima, the Sina, the Varna, the Ghatprabha, the Mula, the Dudna, the Ghod, the Kadam, the Nira, the Tirna and the Krishna.

Minerals: The State has rich reserves of manganese ore, iron ore, coal, bauxite and limestone. Besides there are appreciable reserves of minerals such as dolomite, ilmenite, kyanite, silimanite, clays silica sand etc. There also exist deposits of copper, lead, zinc, tungsten, barytes, feldspar, soapstone, mica, asbestos, graphite and corundum in small quantities. The mineral reserves are confined mainly to the districts of Yavatmal, Nagpur, Bhandara, Raigad, Kolhapur, Ratnagiri and Thane. A good quantity of salt is also produced in the State.

The Sixth Plan: Outlay for the State is Rs. 51,723.4 million which will be distributed as follows: (Rs. Million): Industry and Mining: 1,546.9; Agriculture and allied services: 4,182.7; Employment Guarantee Scheme: 3,850; Social and Community Service: 9,618.2; Water development: 10,000; Power development: 22,525.6.

Annual Plan (1980-81): The proposed outlay for the Annual Plan is Rs. 8,773.3 million.

MANIPUR STATE

CAPITAL: Imphal. **Area:** 17.48 sq. kms.; **Population** (1971 census): 100,366.

Area of the State: 22,356 sq. kms. **Population of the State** (1981 census): 1,433,691; **Density:** 64 per sq. km.; **Sex Ratio:** 972 females per 1,000 males; **Literacy:** 41.99 per cent.

Districts: Manipur has been reorganised into six districts. The area in sq. kms. and population (1971 census) respectively of each district are as follows: Manipur Central 2,230; 938,684; Manipur East: 4,400; 82,129; Manipur North: 3,417; 158,741; Manipur West: 4,344; 60,359; Manipur South: 4,581; 138,149; and Tengnoupal: 3,375; 55,629. (Source: Directorate of Economics and Statistics, Govt. of Manipur).

Major City: Imphal.

State Boundaries: Manipur is bound in the north by Nagaland, in the south by Mizoram, in the east by Upper Burma and in the west by Cachar district of Assam.

State Languages: Manipuri and English are the official languages though several different dialects are spoken. Hindi is becoming gradually prevalent.

AGRICULTURE: The principal crops are paddy and maize. After the end of the Fourth Plan considerable land has been brought under Japanese method of cultivation, double-cropping and use of improved seeds and green manure. 105 minor irrigation schemes are being taken up in the valley areas to increase food production. Gross irrigated area covers about 14 485 hectares. Foodgrain production during 1977-78 was 39.4 million tonnes against base level production of 274,000 tonnes.

Irrigation & Power: 4 irrigation projects—the Loktak Lift Irrgn. Project, the Singda Multipurpose Project, the Imphal Barrage Project and Khoupum Dam Project—are in progress. The first phase of the Loktat Lift Irrigation Project had been commissioned in May 1979 to irrigate about 4,000 hectares of land. The Khoupum Dam Project was inaugurated in 1978 and would provide irrigation to 1,200 hectares in a remote tribal area. The work on the Singda Dam Project was progressing. The Sekmai Barrage Project work was to be taken up during 1978-79

The investment during 1976-77 was Rs. 38.2 million. The total investment during the Fifth Five Year Plan on major and medium irrigation projects alone will be about Rs. 225.00 million.

The total installed capacity of power both hydel and thermal in 1976-77 was 10,838 Kw. Manipur had only 9 electrified villages before 1951. The number increased to 274 during 1978-79.

The Planning Commission has approved a scheme for taking up a multi-purpose project across the Thoubal River at Phayeng costing about Rs. 472.5 million with irrigation potential of about 33,400 hectares.

Forests: Manipur forests are rich in bamboo, cane, teak, jurjan, pine and varieties of timber. Of the total area of 22,356 sq. kms. forests occupy about 15,154 sq. kms. Bamboo and cane, over an area of 2,585 sq. kms., are available in abundance in the south-western hill ranges, especially in the Jiri and Barak river drainage area, yielding about 300,000 tonnes annually.

During 1977-78, 15 development schemes with an outlay of Rs. 4.2 million were taken up.

Revenue from forests during 1979-80 was Rs. 3.5 million.

Fisheries: More than 75 per cent of the population consume fish. The total annual consumption is estimated to be 13,935 quintals, while the total yield is about 3000 tonnes in 1979-80. There are 24 fishing units registered with the Fishery Department, Manipur.

During 1977-78, 10 schemes were taken up in the valley areas of Manipur and 8 schemes in the hill areas. The valley areas schemes are: *(i)* Fish seed production-cum-fish fry distribution, *(ii)* Applied nutrition programme, *(iii)* Commercial fish farms, *(iv)* Assistance to pisciculturists, *(v)* Fisheries extension scheme, *(vi)* Education and training, *(vii)* Supervision, *(viii)* Cage culture, *(ix)* Composite fish farm, *(x)* Preservation and marketing. The hill areas schemes are: (1) Fish seed production-cum-fry distribution; (2) Applied nutrition; (3) Assistance to pisciculturists; (4) Education & Training; (5) Supervision; (6) Cage culture; (7) Fisheries extension schemes; (8) paddy-cum-fish culture. 5.50 million fish fingerlings and

2,500 tonnes of fish were produced during 1979-80 earning a revenue of Rs. 802,000.

INDUSTRIES: The total Annual Plan 1977-78 allocation for Industries as a whole was Rs. 12.62 million excluding sericulture. Out of this amount Rs. 7.60 million had been provided for large & medium industries and Rs. 5.02 million for village & small industries sector. Another Rs. 5.287 million has been earmarked for centrally sponsored schemes.

Large & Medium Industries: In the field of large and medium industries, a *khandsari* unit with 60 tonnes per day crushing capacity started production in 1976. A spinning mill with 25,000 spindle capacity is being started. Steps have also been taken to start a mini-cement plant in each district of Manipur which will utilise the substantial limestone deposit. Action has also been taken to install a starch and glucose factory with a plant capacity of 40 tonnes per day.

Village & Small Industries: Handloom is the biggest industry in Manipur. There are more than 200,000 registered looms in the State and 500 weavers' co-operative societies.

For the development of handloom the Manipur Handloom and Handicrafts Development Corporation has been set up.

One intensive handloom development project has been taken up. Under the project 10 handloom extension centres at different places have been opened with 100 looms per centre to be expanded to 1,000 looms per centre within five years commencing from the year 1978-79. Government of India has sanctioned Rs. 18.5 million for this project.

A handloom export oriented project for production of exportable varieties/designs has been sanctioned by the Government of India. It will have 10,000 looms.

Handicrafts: One handicrafts design centre, one dolls and toys production centre and two bamboo and cane training centres have been established.

Small Scale Industries: The small industries include carpentry, blacksmithy, embroidery, brick-making, tailoring and cutting, goldsmithy, repairing and servicing of vehicles, tin smithy.

Manipur Small Industries Corpn. arranges the supply of scarce raw materials and marketing the finished products.

Training-cum-production centres in various trades have been set up both in the valley and the hill areas. Altogether 35 such training centres are functioning.

Industrial Estate: Industrial Estate at Takyelpat, Imphal provides industrial sheds at concessional rates to small scale units. 28 such sheds have been constructed and allocated.

Tribal Development (Sub-plan): For the development of tribal population a tribal sub-plan has been formulated in the industrial field. Under this plan co-operative saw mill-cum-carpentry units have been set up at Keithelmanbi, Tamonglong, Tengnoupal (Chakpi), Ukhrul and a leather training-cum-processing unit at Churachandpur.

A tribal-emporium at Imphal under the Directorate of Industries facilitates sales of tribal handloom cloth and handicrafts products.

Khadi and Village Industries: There are 121 hand pounding co-operative societies including one at the apex level, 6 pottery co-operative societies, 7 gur and khandsari co-operative societies, 6 khadi institutions and co-operatives, 5 hide flaying and leather co-operative societies, 2 non-edible oil and soap making institutions and one co-operative society, 32 edible oil crushing co-operative societies including 2 at the apex level and 2 match making co-operative societies. There are also 42 individuals in the bee-keeping trade.

The Sixth Plan: Outlay for the State is Rs. 2,400 million.

Annual Plan: The outlay for the Annual Plan 1981-82: Rs. 430 million.

Sericulture: Manipur is the first to introduce Oak *Tasar* industry. There are 54 *tasar* farms which produce about 30 million *tasar* cocoons valued at Rs. 2.0 million. About 5,000 tribals thus find subsidiary occupation.

Labour: Following are the number of workers engaged in different fields (male and female respectively).

Total no. of workers: 245,435; 125,428; cultivators: 167,038; 81,442; agricultural labourers: 8,662; 4,863; other workers: 69,735; 39,123.

EDUCATION (1977-78)

Institutions	Nos.
Primary	3,559
Middle Schools	394
Secondary Schools	241
Higher Secondary Schools	15*
Colleges for General Education	21
Govt. Polytechnic	1
Medical College	1
Law College	1
Music Colleges	2
Art Colleges	2
Teachers' Training Colleges	2
Teachers' Training Schools	4

*Including 2 central schools.

University Education: The Jawaharlal Nehru University has been merged with Manipur University on 1st April, 1981.

PUBLIC HEALTH (1978-79): There are 14 hospitals including a hospital under regional medical college. Besides, there are 21 public health centres, 55 public health sub-centres, 59 dispensaries and 6 other clinics.

COMMUNICATIONS: Manipur has no railway line and the only surface communication is the 215 km. Imphal-Dimapur road. A national highway also passes through the State. A second road is now being improved which will link Cachar district of Assam with Manipur. There are five principal private operators of motor transport in the co-operative sector, besides the Manipur State Road Transport Corporation.

Two land routes from Burma pass through the State. There are air services at regular intervals between Imphal-Silchar, Imphal-Calcutta and Imphal-Gauhati.

GENERAL: With the passing of the North-Eastern Areas (Reorganisation) Bill on 21-12-1971, Manipur became a full-fledged State, and was formally inaugurated by Prime Minister, Mrs. Indira Gandhi, on 21-1-1972.

Climate: Varied temperatures. The valleys are hot and the hills are cold. Average rainfall is 162.6 cms.

Important Rivers: The Iril, the Thoubal, the Imphal, the Barak, the Nambul, the Leimakhong and the Khuga.

Lakes: The Loktak lake covers about 104 sq. kms. during rainy season and 64 sq. kms. during dry season. The other important lakes are Walthou, Ushoipokpi, Ikop, Laidokan and Pumlen.

Minerals: Geological mapping and mineral investigation conducted by the Geological Survey of India indicated availability of high quality of limestone at different places in the State in sufficient quantities to start a small cement plant.

Tribes: Main population consists of the Meiteis inhabiting the valley with some 29 tribes and sub-tribes known by the generic name of Kukis and Nagas.

MEGHALAYA STATE

CAPITAL: Shillong. **Area:** 21.27 sq. kms.; **Population** (1971 census): 122,752.

Area of the State: 22,489 sq. kms.; **Population of the State** (1981 census): 1,327,874; **Density:** 59 per sq. km.; **Sex Ratio:** 956 females per 1,000 males; **Literacy:** 33.22 per cent.

Districts	Head-quarters	Area in sq. kms.	Population (1971 census)
East Khasi Hills	Shillong	11,168	491,209
West Khasi Hills	Nongstoin		
East Garo Hills	William-nagar	8,084	406,615
West Garo Hills	Tura	3,295	113,875
Jaintia Hills	Jowai		

Major Cities with their Population (1971 census): Tura: 15,489; Jowai: 8,929.

State Boundaries: Bound by Bangladesh in the south and west, Goalpara, Kamrup districts of Assam in the north and United Mikir and North Cachar Hill districts of Assam in the east.

State Language: English is being used for all official purposes at the State level. The State has not enacted any legislation on official language. The principal languages spoken are Khasi, Jaintia and Garo.

AGRICULTURE: Eighty-five per cent of the population lives in rural areas and depends on agricultural produce for their livelihood.

Following are some of the crops grown:

Grains: Rice, maize, millets and wheat.

Fruits: Citrus, pineapple, bananas, pears, peaches, plums and apples.

Cash & Commercial Crops: Potatoes, jute and mesta, short-stapled cotton, mustard, arecanut, ginger, turmeric, black pepper, pipul, tezpat etc.

LIVESTOCK: The State has 20,357 sheep, 39,593 buffaloes, 151,313 pigs and more than 477,306 cattle.

DAIRYING: It provides bulk of Assam's milk supply. Meghalaya has launched a Rs. 8.2 million Indo-Danish project for the development of cattle. A dairy extension unit at Jowai produces butter, ghee and cream.

IRRIGATION: A number of minor irrigation projects cover approximately 18,500 hectares of land. More projects will be taken up in phases covering both lift and flow irrigation.

POWER: The State now has five projects in hand designed to raise the generation capacity by nearly 250 MW in the next few years. The Myntdu hydel project in the west Khasi Hill (42 MW) and Kynchi near Shillong (75 MW) are being implemented.

INDUSTRIES: Some of them are: The Meghalaya Plywoods Ltd.; The Komorrah Limestone Mining Co. Ltd.; The Associated Beverages (P) Ltd.; The Meghalaya Essential Oils & Chemicals Ltd.; The Meghalaya Phyto-Chemicals Ltd.

The public-sector Mawmluh-Cherra Cements Ltd., at Cherrapunji with an installed capacity of 250 tonnes a day is being expanded to 930 tonnes per day. Further the Govt. has decided to set up two mini cement plants with a total capacity of 800 tonnes a day at Garo Hills and Jaintia Hills. A number of small industrial establishments like saw mills, food processing units, bone mill, cotton ginning, backeries, etc., are also to be found in Meghalaya.

Proposals are also afoot to set up industries based on lemon grass oil, ginger oleo-resin and emetine hydrochloride.

An industrial area in Burnihat, about 80 kms. From Shillong on the Gauhati-Shillong road, is being developed and two industrial estates, one at Shillong and the other at Mendipathar in Garo Hills district, are being established.

At present there are 644 small industrial units in the State out of which 547 are in the Khasi Hills, 43 in Garo Hills, and 54 in Jaintia Hills.

EDUCATION: The North-Eastern Hill University at Shillong offers upto post-graduate education. The Central Institute of English and Foreign Languages has also set up its branch in Shillong.

The State has at present 12 colleges, one post-graduate training college, 155 high/higher secondary schools, 382 middle/senior basic schools, one polytechnic, 2 industrial training institutes and 3,445 lower primary schools.

Percentage of literacy in the State is 29.49 which compares favourably with the all-India average of 29.35 per cent.

HEALTH: There are seven Government hospitals, nineteen primary health centres and 57 dispensaries. The number of beds in the Government hospitals is 755. There are two training institutes for nurses with 60 seats. There are also a number of private hospitals.

MINERAL WEALTH: Major mineral resources are coal, limestone, sillimanite, dolomite, fireclay, felspar, quartz and glass sand. The estimated reserves of coal are about 1,200 million tonnes. Limestone reserves are about 2,100 million tonnes and clay deposits ten million tonnes.

ANNUAL PLAN 1981-82: The outlay for the Annual Plan is Rs. 465.5 million.

GENERAL: The hill State of Meghalaya was created under the Assam Reorganisation (Meghalaya) Act 1969 of Parliament passed on December 24, 1969. It was inaugurated by the Prime Minister Mrs. Indira Gandhi on April 2, 1970 as an autonomous State and subsequently was made a full-fledged State on January 21, 1972.

The population of Meghalaya predominantly consists of the Khasi, Jaintia and Garo tribals.

Cherrapunji, one of the urban centres of the State, has the world's highest rainfall of 10,870 mms.

Rivers: The Bogapani, the Kynshi, the Kupli, the Digru, the Jinjiram and the Simsang.

MIZORAM

(Union Territory)

CAPITAL: Aizawl. **Area of the Territory:** 21,087 sq. kms.; **Population** (1981 census): 487,774; **Density:** per sq. km. 23; **Sex Ratio:** 936 females per 1,000 males; **Literacy:** 59.50 per cent

Districts: (Name, area in sq. kms. and population as per 1971 census respectively): Aizawl: 12,428; 310,656; Lunglei: 6,066; 75,760; Chhimtuipui: 2,596; 51,636

Towns: Aizawl; Lunglei.

Boundaries: The Territory is bound by Cachar district of Assam in the north, Manipur in the north-east, Burma in the east, Bangladesh in the south and west and Tripura in the north-west.

AGRICULTURE

Total geographical area: 1,101,900 hectares; gross cropped area: 70,000 hectares; net area sown: 9,000 hectares; multiple cropped area: 6,000 hectares; current fallow area: 133,290 hectares; area not available for cultivation: 474,110 hectares; other cultivated areas: 46,300 hectares; total net area under permanent irrigation: 2,500 hectares. Paddy is the principal crop. Other crops grown are maize, cotton, groundnut, potato, ginger, orange, *til*, lime, and tea. Cash crops like coffee, rubber, cardamom and cashew-nuts have recently been introduced as part of soil conservation scheme. Ginger and *til* cultivation has shown good results.

Production (1977-78): Rice: 142,506 tonnes; Ginger: 127,654 tonnes; Others: 98,557 tonnes.

Land Tenure: There is no individual land-holding in Mizoram and so far no tenure has been established. The land belongs to the village as a whole and the people practice shifting cultivation.

However, land is allotted by issue of panes for establishing gardens and terraces for permanent cultivation.

POWER: The Central Electricity Authority has decided to set up five micro-hydel projects with a total generation capacity of 3,200 Kw. Surveys being undertaken to identify and locate these projects at Sairang (200 Kw.), Dialdawl (400 Kw), Buture-Tur (1,200 Kw), Turinit (1,000 Kw) and Serchhip (400 Kw).

Forests: Reserved: 1,300 sq. kms; riverine reserved: 4,323 sq. kms.; unclassed state: 3,470 sq. kms.; supply and safety reserves: 1,200 sq. kms.; inner line reserves: 559.86 sq. kms.; roadside reserves: 362 sq. kms.; Dampa Wild Life Sanctuary: 572 sq. kms.; Taur Wild Life Sanctuary (proposed): 259 sq. kms. & Tlawing Hnar (reserved): 10.36 sq. kms.

Animal Husbandry: Livestock: 123,150; poultry: 1,123,943; veterinary dispensaries: 16; rural animal husbandry centres: 40; veterinary hospital: 1.

INDUSTRIES

There is no major industry in the Territory. A few people are occupied in traditional cottage industries. The Mizos are good weavers. They produce lovely woollen carpets, but the production is very slow and not economical. They produce cane hats and baskets. No. of cottage industry centres in Aizawl district is 106, in Chimtuipui district 14 and in Lunglei district 79 and 10 weaving centres.

Workers (1977): Total no. of workers: 201,727; cultivators: 255,705; agricultural labourers: 612; workers in mining, quarrying, livestock, forestry, fishing, hunting, plantation, orchard and allied activities: 310; manufacturing, processing & household industry: 272; construction: 2,014; trade and commerce: 1,851; transport and communications: 905; other services: 20,576; non-workers: 180,771.

Community Development: There are 20 C.D. blocks in the Territory, covering 21,087 sq. kms.

Co-operation (as on 1st January, 1978): There are 274 co-operative societies in the Territory out of which 204 are in Aizawl district and 70 in Lunglei district. There are five super markets run by co-operative societies.

Govt. Employees: (as on 1st April, 1980): There were 18,058 Govt employees in the Territory. In Class I there were 252 males and 13 females, in Class II, 650 males and 42 females, in Class III, 7.739 males and 2,392 females and in Class IV, 6,676 males and 294 females.

EDUCATION

Almost every village has a Government or a private school offering education from standards I to III in vernacular and English. There were 146 pre-primary schools, 514 primary schools, 234 middle schools, 111 high schools, six colleges for general education, two teachers' training institutes, one Hindi teaching institute, one industrial training institute and one theological college, two under graduate teachers' training institutes and one Mizoram Institute of Education—degree level. Mizoram Board of School Education was established in 1977 and it conducted H S L C Examination 1978 for the first time.

Besides general education, the Government also launched physical, social, adult and handicapped education.

PUBLIC HEALTH

No. of hospitals: 5; dispensaries: 15; no. of doctors: 51; nurses: 137; auxiliary nurses/midwives: 201; pharmacists: 130; matrons: 4; beds in hospitals/medical units: 411; T.B. hospital: one with 50 beds; and medical units: 85.

COMMUNICATIONS

Communication has been a great problem in the Territory. Motorable roads exist between Aizawl, Silchar, Lunglei, Demagiri, Champhai and Saiha.

Length of roads: 2,914 kms.; black topped 1,085 kms.

No. of vehicles (registered) as on April 1, 1977: 3,127.

Post Offices: (a) With telegraphic facilities: 2; (b) without telegraphic facilities: 145.

GENERAL

On December 21, 1971, the Lok Sabha passed the Constitution (Twenty-seventh Amendment) Bill providing for a legislature and council of ministers for the Union Territory of Mizoram (former Mizo Hills district of Assam). The Bill provides special safeguards for the minority tribal groups. Mizoram was inaugurated by the Prime Minister Mrs. Indira Gandhi on January 21, 1972.

Rivers: Tlawng (Dhaleshwari), Tuiruang, Tuirial, Kaladan, Karnafuli, Tuivai and Tiau.

Lakes: Palak, Tamdil and Rengdil.

The People: The word **Mizo** means highlander, **Mi** means person and **Zo** means Hills. The Mizos include a variety of tribes—the Lushais, Pawis, Paihtes, Raltes, Phangis, Hmars, Kukis, Maras and Riangs and their home is in the Mizo Hills and some regions of Manipur, Tripura, Burma and Bangladesh. Other Tribes in the region are the Chakmas and Tipras.

Among the Lushais the percentage of literacy is 86. The British missionaries introduced Christianity and scripted the Mizo language in Roman alphabet.

Press: 27 newspapers out of which 17 dailies, 3 weeklies and 9 monthlies, are brought out regularly. Of these 22 are published from Aizawl, 5 from Lunglei and two from Chhimtuipui.

NAGALAND STATE

CAPITAL: Kohima. **Area:** 7,209 sq. kms **Population (1971 census):** 175,204.

Area of the State: 16,527 sq. kms.; **Population of the State** (1981 census): 773,281; **Density:** 47 per sq. km.; **Sex Ratio:** 867 females per 1,000 males; **Literacy:** 41.99 per cent.

No. of Villages: 1,096.

State Boundaries: The State is bound by Assam in the west, Arunachal Pradesh in the north, Burma in the east and Manipur in the south.

Districts	Headquarters	Area in sq. kms.	Population (1971 census)
Kohima	.. Kohima	7,209	130,610
Mokokchung	.. Mokokchung	3,852	83,852
Tuensang	.. Tuensang	5,466	108,763
Zunheboto	.. Zunheboto	—	47,093
Wokha	.. Wokha	—	38,297
Phek	.. Phek	—	44,594
Mon	.. Mon	—	64,140

State Languages: English is the official language of the State for administration and education. However, the common language used is Nagamese and English.

AGRICULTURE

Rice accounts for 80 per cent of foodgrain output with cotton, jute, mesta, sugar-cane, tobacco, potatoes and sweet potatoes also cultivated substantially. Average food production: 116,300 tonnes in 1980-81.

Steps are being taken to expand the high-yielding varieties programme, popularise manures and fertilizers and improve irrigation facilities in the State.

Seed-farms: At present there are 10 Seed-farms and five fruit nurseries for distribution of improved seeds and plants to the farmers. The Agriculture Department of the State has drawn up a scheme to boost the production of coffee and cardamom at the foot-hills in Mokokchung and Dimapur. The Govt. also is planning to promote silkworm farming on a large scale.

Forest: Area: 2,876 sq. kms.; reserved forests: 286 sq. kms.; protected forests: 508 sq. kms.; unclassed village forests: 2,072 sq. kms.

Energy: The State's first hydro-electric project with an installed capacity of 1.5 MW, built in the catchment area of river Dzuza, was inaugurated on March 29, 1978. The plant is expected to meet the power requirements of the State

INDUSTRIES

A paper and pulp company, a subsidiary of Hindustan Paper Corpn. (Central Govt. Undertaking) is nearing completion. This is the first major industrial project in the State. The mill is expected to produce 33,000 tonnes (20,000 printing & writing and 13,000 industrial paper) of paper annually. It employs 1,500 people and provides 6,000 people seasonal employment.

A sugar mill also has been established at Dimapur. The Nagaland Industrial Devpt. Corpn. proposes to set up two hotels at Dimapur and Kohima and an industrial estate at Mokokchung.

There are 666 small and cottage industries at present. Under the forest department a seasoning and treating plant has been set up at Dimapur which is expected to add a few saw mills and a joinery mill (for the manufacture of doors, windows, floor and ceiling boards, wall frames etc.) and a waste board mill for the manufacture of hard-board from saw-dust.

Minerals: Deposits of coal, limestone, oil and traces of gold and platinum have been found in the State. Vast reserves of high grade limestone were located at Mini in Tuensang district (about 375 million tonnes) and in Phek district.

Labour: Cultivators: 203,341; agricultural labourers: 3,797; livestock, fishery, forestry, hunting, orchards and allied industries: 1,061; mining and quarrying: 76; household industry: 788; other than household industry: 2,087; construction: 3,277; trade and commerce: 4,725; transport, communication & storage; 2,388; other services: 38,474; non-workers: 254,335; total workers: 262,114.

EDUCATION

No. of Government institutions: lower primary schools 986; M. E. schools 238; high schools 67; colleges (private 7, Govt. 3); training institutes for teachers 3; industrial training institute 1; adult literacy centres 171.

The first agricultural college in the State was opened in Ghaspani on October 20, 1978. This institute is affiliated to North Eastern Hill Univ.

PUBLIC HEALTH

General hospitals: 27; T. B. hospitals: 2; primary health centres: 10; sub-centres (under primary health centres): 41; school health service: 3; health education programme: 1; malaria eradication programme: 1; small-pox eradication programme; 1; B.C.G. teams: 3; T.B. clinics: 3; S.E.T. (leprosy): 10; V.D. clinics: 2; beds in hospitals: 1,130.

At present one medical unit covers an average of 176.12 sq. kms. and one hospital bed is available for every 466 persons.

COMMUNICATIONS

The railway covers only 8.04 kms. in the whole State and the main railway station is Dimapur, which is the gateway to Nagaland.

Roads: State Highways: 1,114 kms.; major district roads: 253 kms.; other district roads: 608 kms.; village roads: 2,045 kms.

GENERAL

Five Year Plan: Nagaland's Annual Plan for 1980-81 has been fixed at Rs. 315 million against Rs. 260.5 million in 1979-80.

Rainfall: The rainfall in Kohima is 1,488.7 m.m.; in Tuensang 2,686.2 m.m. and in Mokokchung 730.59 m.m.

Inter-State Power Transmission Lines: The Central Govt. has sanctioned a loan assistance of Rs. 19.2 million for the construction of Loktak-Dimapur power line, Rs. 90,000 for Dimapur-Mariani and Rs. 270,000 for Dimapur-Bokajan lines.

Tribes: The main tribes in the State are: Angami, Sema, Lotha, Ao, Rengma, Chakhesang, Sangtam, Konyak Chang, Phom, Yichungar, Khemungau, Zeliang and Kuki.

ORISSA STATE

CAPITAL: Bhubaneswar. Area: 65 Sq. Kms. **Population (1971 census):** 105,491. **Area of the State:** 155,842 sq. kms. **Population of the State (1981 census):** 26,272,054. **Density:** 169 per sq. km. **Sex Ratio:** 982 females per 1,000 males. **Literacy:** 34.12 per cent.

Districts: 13 (57 sub-divisions, 27 muncipalities). Name (hqrs. in brackets), area (sq. kms.) and population (1971 census) respectively: Balasore (Balasore): 6,394; 1,830,504; Baudh Khondmals (Phulbani): 11,070; 621,675: Balangir (Balangir): 8,903; 1,263,657; Cuttack (Cuttack): 11,211; 3,827,678; Dhenkanal (Dhenkanal): 10,826; 1,293,914; Ganjam (Chhatrapur):12,527; 2,293,808; Kalahandi (Bhawanipatna): 11,835; 1,163,869; Keonjhar (Keonjhar): 8,240; 955,514; Koraput (Koraput): 27,020; 2,043,281; Mayurbhanj (Baripada): 10,412; 1,434,200; Puri (Puri): 10,159; 2,340,859; Sambalpur (Sambalpur): 17,570; 1,844,898; Sundargarh (Sundargarh): 9,675; 1,030,758.

Major Cities: Name, area in sq. kms. and population (1971 census) respectively; Cuttack: 73; 194,068; Rourkela: 122; 172,502; Berhampur: 19; 117,662; Bhubaneswar: 65; 105,491.

No. of villages: 51,639. Inhabited: 46,992; uninhabited: 4,647 (1971).

No. of Towns: 81 (including 4 cities).

State Boundaries: It is surrounded by the Bay of Bengal in the east, Madhya Pradesh in the west, Andhra Pradesh in the south, Bihar in the north, and West Bengal in the north east.

AGRICULTURE: It provides employment to about 77 per cent of the State's labour force and contributes about 56 per cent of the total income. High yielding programmes constitute the main agricultural strategy. Paddy is a major crop. The States annual foodgrain requirement is about 3.7 million tonnes and the average production is 4.4 million tonnes. Leaving 0.3 million tonnes for seeds etc. the net availability comes to 4.1 million tonnes. A foodgrain loss of 2.4 million tonnes is assumed for the year 1978-79, because of 31.5 per cent deficiency in the monsoon (1979 season) against the average rainfall of 200 mms.

Land Reform: The most remarkable and vital provisions of the 1974 amendment act is that the ceiling has been fixed at 4.047

hectares, 6.07 hectares, 12.14 hectares and 18.21 hectares of a Class-I, Class-II, Class-III and Class-IV lands instead of 8,094 hectares, 12.14 hectares, 24.28 hectares and 32.37 hectares respectively in the original act of 1973 for a family of excess of 5, subject to a total of 7.284 hectares. Over 300,000 landless farmers have been given free agricultural land in the State since the distribution of surplus land started in 1974. Nearly 211,174 hectares of Govt. waste land had been distributed among 307;623 people till April, 1979.

Fisheries: See chapter on "Fisheries"

Electricity (1978-79): Electricity generated 3,456 Mkwh; electricity consumed 2,339 Mkwh; installed capacity: 923 M.W.; percentage consumed by industries 73; per capita consumption 91 KWM; no. of villages electrified 15,568.

INDUSTRIES: A number of medium and large industries like a ferro vanadium plant in collaboration with the Central Government, an automobile tyre and tubes plant, a nylon filament yarn plant, a calcium carbide plant, a sponge iron unit, a caustic soda and chrome plant, a dichromate plant, a carbonisation plant, a formed coke and pig iron plant and soda ash and ammonium chloride plant are proposed in the joint sector.

Private entrepreneurs are also promoting a paper plant, an aluminium ingot plant and a brewery unit. The Government of India are actively considering setting up a fertiliser plant, a nickel project and a sand separation plant to produce minerals from the rich sand of the Gopalpur coast of the State.

The Industries in operation are textiles, cement, refrigerators, paper, glass, sugar, iron and steel, potteries, spinning mills, tube mill, refractories, chlorine and caustic soda, heavy structural and transmission towers, aluminium ingots, aluminium cables, prestressed concrete, cast iron products including spun-pipes, heavy equipments, ferrosilicon, ferro-manganese and fertiliser.

Industrial Development Agencies: (See chapter on State Govt Undertakings).

Labour (As on 31.12.78): No. of employment exchanges: 63; no. o registrations: 204,246; no. of vacancies notified: 35,732; no. of placements effected: 15,760; no. of applicants on live register: 383,267; no. of unions on register (1978): 535; no. of members: 243,326; no. of industrial disputes (1976): 40; no. of workers involved: 4,827; no. of man-days lost: 8,899; no. of working factories (1975): 1,005; no. of workers employed: 73,213.

Panchayat Raj (1979): No. of panchayat samities: 314; no. of gram panchayats: 3,830.

EDUCATION (1977-78)

No. of institutions—Universities 5; arts, science and commerce colleges 92; teachers training colleges 6; high, higher secondary & post-basic schools 2,030; middle & senior basic schools 6,543; primary & junior basic schools 32,027; teachers' training schools (E.T. and handicrafts) 7; schools for handicapped 2.

Medical Education: Medical colleges 3; admission capacity 300; nursing training centres 3; admission capacity 100; pharmacist training centre 1; admission capacity 64.

Universities (1977-78)

1. *Berhampur University,* Berhampur (established under Orissa Act 21 of 1966)—has 16 affiliated colleges and 13 University departments.

2. *Utkal University,* Bhubaneswar—has 67 affiliated colleges and 21 teaching departments (including two law colleges, one at Cuttack and another at Bhubaneswar).

3. *Sambalpur University,* Sambalpur—has 28 affiliated colleges.

4. *Orissa University of Agriculture and Technology,* Bhubaneswar—has 4 constitutent colleges.

5. *Shri Jagannath Sanskrit Vishwavidyalaya,* Puri.

PUBLIC HEALTH (as on Dec. 31, 1978)

No. of hospitals 266; no. of dispensaries 306; no. of special hospitals—T.B. 3, leprosy 3, maternity 4, paediatric 2, mental 1, infectious diseases 1; no. of clinics—T.B. 13, V.D. 14, dental 5; no. of blood banks 14; no. of hospital beds 12,016; no. of medical personnel—doctors 5,757, nurses 1,903, mid-wives and auxiliary nurses 1,388. Urban doctor-population ratio 1:1500; rural doctor population ratio 1:13,000; total doctor population ratio 1:9,200. Nurse-population ratio 1:26,892; nurse-bed ratio 1:8.

Indigenous system of medicine: Ayurvedic and unani hospitals 3; dispensaries 248; total 251; beds: 208; ayurvedic college 1; admission capacity 30.

Homoeopathic hospitals 2; dispensaries 158; beds 49; doctors 165; homoeopathic college 1; admission capacity 25.

COMMUNICATIONS (As on 1.4.1978): National highways 1,637 kms.; State highways 2,179 kms.; major district roads 5,049 kms.; other roads 45,894 kms.

Ports: Major Port—Paradeep (Cuttack district). Biggest in the country it can receive bulk carriers of 60,000 tonnes.

Minor ports—Chandbali (Balasore district) and Gopalpur (Ganjam district).

Railways (As on 31.3.1978): Orissa has 1,805 kms. of broad gauge and 143 kms. of narrow gauge railway line.

Press: (Leading dailies)—*English:* Amrit Bazar Patrika, Cuttack; *Oriya:* Samaj, Cuttack; Prajatantra; Matrubumi.

GENERAL

Important Rivers: The Suvarnarekha, the Vaitarni, the Brahmini, the Mahanandi, the Indravati, the Sabri, the Sileru, the Rushikulya and Budhabalanga.

Important Lakes: Chilka and Ansupa.

Minerals: Orissa's mineral potential is enormous. Her reserves of iron ore, manganese ore, chromite, limestone and graphite are among the very best in India. The minerals which are worked in large quantities include, besides those stated above, coal, dolomite galens, fire clay and china clay. Deposits of bauxite, vanadiferous magnetic, kyenite, asbestos, soapstone and mica also occur in the State.

Plan: Orissa Sixth Plan outlay has been fixed by the Planning Commission at Rs. 15,000 million almost half of it is being contributed by the Centre as its assistance.

Annual Plan; the State had been able to spend Rs. 1,985 million by the end of March 31, 1979.

PONDICHERRY

(Union Territory)

CAPITAL: Pondicherry. **Area:** 6.2 sq. kms. **Population** (1971 Census): 90,367.

Area of the Territory: 480.0 sq. kms.; **Population of the Territory (1981 Census):** 604,136; **Density:** 1,228 per sq. km.; **Sex Ratio:** 985 females to 1,000 males; **Literacy:** 54.23 per cent.

State Boundaries: The Union Territory consists of four municipalities and 11 communes (Panchayats). The capital is Pondicherry which is enclaved by South Arcot district. Karaikal region is enclaved by Thanjavur district, Mahe by Cannanore district, Kerala and Yanam by East Godavari district, Andhra Pradesh.

Districts	Area in '000 sq. kms.	Population (1971 Census)
Pondicherry	0.29	340,240
Karaikal	0.16	100,042
Mahe	0.01	23,134
Yanam	0.02	8,291

No. of villages: 388.

State Languages: French, English, Tamil, Malayalam and Telugu.

ELECTRICITY

There is no generation of power in the Territory. The entire power requirement is being purchased from the Tamil Nadu Electricity Board, Kerala State Electricity Board and Andhra Pradesh State Electricity Board for Pondicherry, Karaikal, Mahe and Yanam regions respectively.

By the end of 1971-72 all villages had been electrified. To meet the growing demands sub-stations are being established in Pondicherry and Karaikal regions.

The consumption of energy was 142.7 million units for the year 1979-80 with a peak demand of 33.3 mw.

Percentage of utilisation by various sectors: agriculture: 27.78; industries: 48.96; domestic and commercial: 17.73; public water works: 3.79; and street lights: 1.74

The per-capita consumption of electricity is 301 units in 1978-79.

AGRICULTURE

The production of food grains during 1978-79 was estimated at 117,500 tonnes. The area and production of the main crops are shown below:—

Crop	Area sown in hectares	Production in tonnes
(1) *Food Crops*		
Rice	29,500	99,000
Millet	4,400	15,500
Pulses	7,500	5,500
(2) *Oil Seeds*		
Groundnut	5,400	10,900
(3) Sugar cane	1,900	145,000
(4) Cotton	3,450	13,800*

*Bales.

Irrigation: Irrigation in Pondicherry is mainly through rain-fed tanks. In Karaikal the irrigation system depends on Cauvery water and the network of canals which are under expansion programme.

LABOUR (As on 31st December 1978): Number of registered trade unions: 98; number of workers: 14.330 (P); number of unemployed: 27.473; number employed in factories and workshops: 40.176; number of strikes: 25.

COMMUNICATION

Roads: Attempts are being made to link all villages with all-weather roads. During the Sixth Plan 110 kms. of rural roads are expected to be built.

Number of vehicles (as on 31st March 1980): 19,512.

HEALTH: No. of hospitals: 10 (Govt. 8, private 2); general hospitals: 4; maternity hospital: 1; T.B. sanatorium: 1; leprosy hospital: 1; E. S. I. hospital: 1; private maternity hospital: 1; private nursing home: 1; dispensaries: 28; E. S. I. dispensaries: 7 (including 1 part-time E. S. I. dispensary); primary health centres: 12; chest clinic: 1; T. B. sub-centres: 2; filaria control units: 2; leprosy control unit: 1; sub-centres: 40; no. of beds: 1,520; no. of doctors: 251; no. of nurses: 356; bed-population ratio: 1:250; doctor-population ratio: 1:1,500; leprosy S.E.T. centres: 20; medical depots: 17; ayurveda clinic (ISM): 4; siddha clinics: 3; cholera control unit: 1; smallpox control unit: 1; public health laboratory: 1; drug control unit: 1; mobile dental clinic: 1.

EDUCATION (As on 1st August 1978).

Amount spent on education (1977-78) Rs. 71.152 million.

	No. of Institutions	No. of students	No. of teachers
Pre-primary schools	42	4,140	78
Primary schools	259	73,047	1,043
Middle schools	83	31,669	1,071
Secondary schools	54	12,025	1,336
Higher secondary Schools	9	3,789	335
Colleges			
Colleges (General)	9	5,595	494
Medical college	1	508	119
Law college	1	196	12
Professional Institutions			
Polytechnic	1	339	48
Junior technical school	1	178	17
School for nurses	1	90	17
School for embroidery and needle work	1	369	8
Pre-vocational training centres	4	441	26
Schools for the blind, deaf and dumb	2	66	5

CO/OPERATION (1980): No. of societies 278; total membership: 134,985.

ANNUAL PLAN: Plan Outlay for 1980-81 is Rs. 135.1 million. Sector-wise allocation under various heads (Rs. in million): Agriculture and allied services 24.1; co-operation 14.8; irrigation, flood control and power 19.7; industry and machineries 07.5, transport and communications 13.2; social and community services 53.9; economic services 30.3; general services 01.6; Total 135.1.

GENERAL

Rivers: In Pondicherry: The Gingee 30.215 kms., the Pambayar 11.50 kms., the Guduvayar 13.50 kms., the Malatar 25.50 kms. the Ponniar 14.00 kms.

In Karaikal: The Nandalar 15.165 kms., the Nattar 12.60 kms., the Vanjiar 12.30 kms., the Noolar 14 kms., the Arasalar 11.76 kms., the Thirumalai Arasanar 10.65 kms., and the Pravadayanar 5.60 kms.

In Mahe: The Mahe river 114.4 m.

In Yanam: The Goringa 15.24 m., in width running for 4.00 kms. and the Godavary running for 8 kms. length in the Territory.

Lakes: Oussuteri 540.17 m.cft., and Bhour 200 m. cft.

PUNJAB STATE

CAPITAL: **Chandigarh. Area:** 100 sq. kms.; **Population** (1971 census): 233,004 (Urban).

Area of the State: 50,376 sq. kms.; **Population of the State** (1981 census): 16,669,755; **Density** per sq. km. 331; **Sex Ratio:** 886 females per 1000 males; **Literacy:** 40.74 per cent.

Districts	Area in sq. kms.	Population (1971 Census)
Amritsar	5,025	1,835,500
Gurdaspur	3,557	1,229,249
Hoshiarpur	3,887	1,052,153
Jullundur	3,396	1,454,501
Ludhiana	3,793	1,419,421
Bhatinda	5,564	1,027,293
Ferozepur	5,923	1,044,936
Patiala	4,669	1,211,303
Sangrur	5,096	1,146,650
Rupar	2,086	548,802
Kapurthala	1,634	429,514
Faridkot	5,746	1,151,738

Note: The names of the districts and district headquarters are the same.

Major Cities (Over 100,000 population.)

Name	Area in sq. kms.	Population
Amritsar	33.67	434,951
Ludhiana	19.65	401,176
Jullundur	44.03	296,106
Patiala	33.67	151,041

No. of Villages: 12,188 (inhabited).

Towns: 108.

State Boundaries: Pakistan in the west, Jammu & Kashmir in the north, Himachal Pradesh in the north-east, Haryana in the south and Rajasthan in the south-west.

State Language: Punjabi.

Land Ceiling: Seven hectares in case of irrigated land capable of producing two crops in a year, 11 hectares in case of irrigated land capable of producing one crop, 20.5 hectares in case of *barani* land and 21.8 hectares in case of *banjar* land.

Irrigation and Power Projects: Out of the total geographical area of 5.04 million hectares, the net area sown in Punjab during 1979-80 was 4.42 million hectares. The net area irrigated during the year was however 3.43 million hectares out of which 1.45 million hectares was irrigated by canal irrigation and the remaining 1.97 million hectares was mainly irrigated by tubewells. The gross area irrigated by Govt. canals and tubewells for the year 1979-80 was 2.63 million hectares.

The major projects which have been completed are Madhopur-Beas Link, Bhakra Nangal, Harike Project, Sirhind Feeder, extension of non-perennial irrigation in U.B.D.C. and remodelling of Shah Nahar Canal. The work of the following projects is under implementation: (a) Beas Project Unit I and its extension; (b) Beas Project Unit II and its extension; (c) Thein Dam; (d) Diversion of Shah Nahar Canal.

AGRICULTURE: The economy of the State is primarily agro-based and 70 per cent of its population depend upon agriculture. As against 51 per cent of India average, about 55 per cent of the area is under cultivation. Net area under cultivation is 84 per cent. (See also Chapter on "Agriculture.")

Production (in '000 tonnes during 1979-80): Wheat 7,900; maize 672; rice 3,056; oil seeds 162; sugarcane (*gur*) 404; cotton (bales) 1.2 million.

LIVESTOCK (1972): Cattle: 3,383,200; buffaloes: 3,781,400; Sheep: 386,400; goats: 786,600; horses and ponies: 50,800; donkeys: 64,400; mules: 9,300; Total 8,623,000; Poultry: 2,953,000.

Animal Husbandry & Dairy: There are 11 milk plants with total handling capacity of 870,000 litres per day. During the year 1978-79 and 1979-80 770.84 million and 837.63 million litres of milk was procured from the milk-shed area of the State through 30 milk chilling centres, 84 milk assembling centres, 1,520 village level centres and 942 milk producers, co-operative societies.

There was an increase of 40.63 per cent in milk procured during the year 1978-79 over the year 1977-78 and an increase of 8.66 per cent during the year 1979-80 over the year 1978-79.

Besides the conventional milk products such as *ghee*, butter, skimmed milk powder etc. Dairy Development Corpn. has introduced sweetened-flavoured milk, icecream powder, milk-shake powder, *lassi* powder etc.

During the year 1979-80 a profit of Rs. 2.16 million was earned through the sale of manufactured items as against profit of Rs. 2.11 million during the year 1978-79.

The total milk production in the State for the year 1979-80 has been estimated to be 3,059,000 tonnes. The contribution of buffaloes to total production is 79 per cent.

During the year 1979-80, 377,568 and 98,984 inseminations were performed in cows and buffaloes respectively as against 325,452 and 93,820 during 1978-79. During the year 1979-80, 96,560 cross-bred calves and 29,854 buffaloes were born.

Special programme benefiting small/marginal farmers and agricultural labourers was started in the State during Fifth Plan period. Under this programme subsidy is being provided to the small/marginal farmers and agricultural labourers for rearing cross-bred heifers, poultry and sheep on scientific lines.

Under Integrated Rural Development Programme, 106 veterinary hospitals-cum-A.I. centres were established at focal points during the year 1979-80 which brought up the strength of veterinary hospitals to 656.

INDUSTRIES

Major industries are: art silk, woollen and cotton textiles, fertilisers, bicycle parts, bicycles, sewing machines, sugar, cement, flour mills, electrical appliances, automobiles, ancillaries, industrial goods, agricultural tractors and a large number of small-scale industries, dry battery cells, canneries and vanaspati.

Major public sector undertakings are Fertilizer Corporation of India, breweries and pharmaceuticals.

There were 54,637 small scale units registered in the State by the end of 1979-80. These units employed 333,090 persons and contributed Rs. 8,881.9 million towards production.

There were 203 large/medium units in the State by the end of 1979-80 which provided employment to 98,376 persons and accounted for Rs. 8,859.8 million towards production.

In case of small/large/medium units goods worth Rs. 1,250 million were exported.

There were 41,127 village industrial units in the State during 1979-80 which employed 68,720 persons and produced goods worth Rs. 260 million.

HEALTH (1-4-1979): No. of hospitals: 253; no. of dispensaries: 1,274; no. of primary health centres: 129.

Population served per one (as on 1.1.1980): (a) Institution: 10,077; (b) Doctor; 1,976; (c) Bed: 848; birth rate per thousand (1978): 29.4; (1979): 29.3; death rate per thousand (1978): 9.9; (1979): 11.6; life expectancy at birth (1976-80): male: 66.8; female: 61.9.

EDUCATION:

	Schools 31-3-1980	Students 1-6-1978
Primary	12,404	2,106,055
Middle	1,514	662,193
Higher Secondary	241	262,053

Colleges: No. of arts, science and commerce colleges: 161; technical and professional colleges: 23; teachers' training colleges: 18.

Universities: Guru Nanak University, P.O. Box 111, Amritsar 143001; Punjab University, Chandigarh 160017; Punjab Agricultural University, Ludhiana 141001; Punhabi University, Patiala 147001.

Expenditure on school education during 1978-79 was Rs. 429.8 million and provision for 1979-80 accounted was Rs. 447.0 million.

Press: (Leading Dailies)

Name	Town	Language
Tribune	Chandigarh	English
Punjab Kesari	Jullundur	Hindi
Vir Pratap	Jullundur	Hindi
Ajit	Jullundur	Punjabi
Hind Samachar	Jullundur	Urdu
Pratap	Jullundur	Urdu
Indian Express	Chandigarh	English
Punjabi Tribune	Chandigarh	Punjabi
Hindi Tribune	Chandigarh	Hindi

COMMUNICATIONS: No. of vehicles: 276,748; two-wheelers; 114,439; three-wheelers: 4,695; cars: 21,204; jeeps: 4,059; tongas: 1,167; buses: 4,318; trucks: 13,371; tractors: 98,468; trailers: 22,655: others: 872.

Roads: National highways: 975 kms.; roads maintained by Public Works Department (metalled): 18,208 kms.; black topped: 14,609 kms.; cemented/concreted: nil; unsurfaced: 3,210 kms.; length of extra-municipal roads maintained by local bodies: 388 kms.; unsurfaced motorable: 1,500 kms.

GENERAL

House Sites for Landless: Up to January 1, 1976, house sites had been allotted to 302,235 eligible persons (out of a total of 304,043) and of these 300,587 had been given possession of their plots.

Rivers: The Beas, the Sutlej, the Ravi and the Saraswati.

Tourism: With a view to promote tourism, a separate dept. of Tourism, Cultural Affairs, Archaeology and Museums was created in 1974. There has been a rapid expansion of tourist facilities at Pathankot, Nangal, Shahpur, Kandi and Anandpur Sahib. New tourist facilities have been created at Ropar, Sirhind, Phagwara, Ludhiana and Amritsar. Besides a 3-Star hotel has recently been commissioned.

The Punjab Tourism Development Corpn. came into existence on 26th March, 1979. It is hoped that by mobilising institutional finance, it would be possible for the Corpn. to undertake its projected programme of development.

Sixth Plan: Total Plan outlay: Rs. 41,250 million; provision for State Sector: Rs. 19,250 million; Central Sector projects: Rs. 22,000 million.

Annual Plan (1980-81): The outlay on the Annual Plan is Rs. 2,840 million.

RAJASTHAN STATE

CAPITAL: Jaipur. **Area:** 206.06 Sq. Km.; **Population** (1971 census): 615,258.

Area of the State: 342,214 Sq. Km., **Population of the State** (1981 census): 34,102,912; **Density:** 100 per Sq. km. **Sex ratio:** 921 females per 1,000 males; **Literacy:** 24.05 per cent.

State Boundaries: In the north and north-east it is bound by Haryana, Delhi and Uttar Pradesh, in the east and south-east by Madhya Pradesh, in the south west by Gujarat and in the west by Pakistan.

No. of villages: 33,305 inhabited and 2,490 uninhabited.

Major Cities:

Name	Area in Sq. Km.	Population (1971 census)
Jaipur	206.06	615,258
Jodhpur	230.18	317,612
Ajmer	45.40	264,291
Kota	141.23	212,991
Bikaner	38.09	188,518
Udaipur	59.21	161,278
Alwar	40.47	100.378

State language: Hindi.

Agriculture: The principal crops are wheat, jowar, bajra, maize and barley. The total cropped area (including double crop) in 1976-77 was 16 90 million hectares (see chapter on 'Food and Agriculture' for other details).

The target of foodgrains production for 1979-80 has been set at 7.9 million tonnes against 7.7 million tonnes in 1978-79.

No. of Districts: 26 (82 sub-divisions and 197 tehsils).

Name	Area in Sq. Kms.	Population (1971 Census)
Ajmer	8,479	1.147.729
Alwar	8,382	1.391.162
Banswara	5,037	654.586
Barmer	28,387	774.805
Bharatpur	8,093	1.490.206
Bhilwara	10,450	1.054.890
Bikaner	27.231	573.149
Bundi	5.550	449.021
Chittorgarh	10.858	944.981
Churu	16.829	874.839
Dungarpur	3,770	530.258
Ganganagar	20.629	1.394.011
Jaipur	14.000	2.482.385
Jaisalmer	38.401	166.761
Jalore	10.640	667.950
Jhalawar	6.216	622.001
Jhunjhunu	5.929	929.230
Jodhpur	22,860	1.152.712
Kota	12.437	1.143.870
Nagaur	17.718	1.262.157
Pali	12.391	970.002
Sawai Madhopur	10.593	1.193.528
Sikar	7.732	1.042.648
Sirohi	5.135	423.815
Tonk	7.200	625.830
Udaipur	17.267	1.803.680

Irrigation: In 1977-78 the total irrigated area was 18.71 per cent of the total cropped area. Fifth Plan schemes were expected to increase the irrigated area by 3.497 million hectares.

Existence of ground-water reserves spreading over an area of 41,000 Sq. Km. with estimated reserves of 5,000 million cubic metres water every year has been discovered in the desert areas of the State.

Land Ceiling: 12.14 hectares for a family of five, if the family consists of more than five persons, every person in addition will get 2.42 hectares subject to a maximum of 24.28 hectares.

Livestock and Animal Husbandry: The milk yield of cows is currently estimated to be about 920 Kg. per cow, per year, Sheep constitute an important source of wealth. With a sheep population representing 21% of the total sheep population of India. Rajasthan accounts for 45% of all India wool production.

Irrigation & Power Projects: (See chapter Energy.)

INDUSTRIES: Large Scale and medium (1975-76): Manufacture of food products including hydrogenated oils and vanaspati ghee 16; manufacture of beverages 2; manufacture ot cotton textiles 16; manufacture of wool, silk and synthetic fabric textiles 9; manufacture of textile products (including wearing apparel other than footwear) 3; manufacture of paper and paper products and printing, publishing and allied industries 3; manufacture of rubber, plastics, petroleum and coal products 1; manufacture of chemicals and chemical products 8; manufacture of non-metallic mineral products 6; basic metals and alloys industries 11; manufacture of metal products and parts except machinery and transport equipments 1; manufacture of machinery, machine tools and plants except electrical machinery 6; manufacture of electrical machinery apparatus/appliances: supplies and parts 4; manufacture of transport equipments and parts 4, other manufacturing industries 2, electricity 66; water works and supply 2, repair services 10. **Production during 1978:** cloth 33.16 million metres; yarn 33.65 million Kgs.; cement 2.06 million tonnes; salt 462,902 tonnes; ball bearings 78.78 million; sugar 41,348 tonnes; fertilizers 241,003 tonnes; spirit (all type) 2.95 million litres, and I.M.F. wines 1.09 million litres.

Small-Scale Industries: The most important cottage and small-scale industries are tie and dye fabrics, wooden toys, *gota kinar,* hand made paper, gem-cutting, cloth printing, agriculture tools, and implements, embroidered shoes, leather bags, water bottles and handloom weaving.

Industrial Estates: Industries estates have been established at Jaipur, Makhupura (Ajmer), Bhilwara, Udaipur, Pali, Summerpur, Jodhpur, Bikaner, Bharatpur, Ganganagar and Kota.

LABOUR: No. of registered trade unions during 1977-78: 1,192; total membership 197,950; No. of Registered factories (1979) 5,754, total no. of workers in the State (1971 census) 8,048,859, workers as per cent of total population 31.24; cultivators 5,225,296; agricultural labourers 749,116, other workers 2,074,447; Non-workers 17,716,947.

Industrial Disputes: (1978-79) Strikes and lock-outs 102, workers involved 24,097; mandays lost 249,964.

EDUCATION:*(1977-78) Higher secondary and secondary schools: 1,814; middle schools: 5,031; primary schools: 19,854; schools for professional education and special education: 179.

Teachers: High/higher-secondary/multipurpose schools: 31,353; middle/senior basic schools: 43,399; primary/junior basic schools: 42,447; schools for professional education and special education: 1,546.

College:- Colleges for general education: 116; colleges for professional and other education: 143.

Employment Exchange Statistics:- (1978) No. of employment exchanges: 26. Registration: 217,837. Placements: 22,315.

PUBLIC HEALTH:-No. of hospitals during 1977 (Provisional) 161; T.B. Hospitals and sanatoria 5; No. of T.B. beds 1,300; Leprosy hospitals 2; beds 115; Mental hospitals 2; beds 439; Isolation hospitals 2; beds 263; other hospitals 148; beds 14,775; total No. of beds 19,061; (dispensaries 753; primary health centres 232; beds 1,669; mobile surgical unit beds 500.

Medical Practitioners: (1977-78) Civil Assistant surgeons 2,326; specialists 133; staff nurses: 728; midwives 3,308; compounders 3,262.

Non-allopathic hospitals and dispensaries (1977-78): Ayurvedic and unani hospitals 41; No. of beds 580; dispensaries 2,349; *Vaidyas* and *hakims* 2,504; Compounders and Nurses 2,412.

COMMUNICATIONS: Total No. vehicles (1979): 265,705; Private cars and jeeps: 40,338; motor cycles, autocycles and scooters: 121,938; taxis and contract carriages: 833; stage carriers: 13,521; public and private carriers: 32,643; tractors and trailers: 54,590; others 1,842; total 265,705.

Motorable Roads: (1978-79) Painted roads: 22,606 Kms; metalled roads: 4,400 Kms; gravelled roads: 7,889 Kms; fair weather and dressed up tracks: 2,742 Kms; national highways: 2,110 Kms; total length of roads: 39,747 Kms.

Railways: Rajasthan is served by 5,617.82 Kms of Railways out of this nearly 4,856.5 Kms are in metre gauge, 674.54 Kms in broad gauge and 86.78 Kms in narrow gauge.

Press—Dailies—Rajasthan Patrika, Rastratoot, Navjyoti. Nyay, Adhikar, Kook, Young leader, Laltedeep, Amar Rajasthan, Tej, Socialist Samachar etc.

GENERAL: Important Rivers—The Luni, the Chambal, the Banas, the Mahi and the Sabarmati. Tributaries of Luni—the Bandi and the Sarasvati. Tributaries of the Chambal—the Kali Sindh and the Parbati. Tributary of the Banas—the Berach.

Lakes: (Name and location) Sambhar-(Jaipur), Silisedh (Alwar, Jai Samand (Udaipur), Fateh Sagar (Udaipur), Pichhola (Udaipur).

Housing: The Fifth Plan marked Rs. 200 million on housing scheme. L.I.C. Loan of Rs. 12 million was allocated during 1978-79.

Free House Sites:- Free house sites have been allotted to 550,000 persons. Loan up to Rs. 4,000 to each individual repayable in easy monthly instalments with in a period of 20 years are given. So far loan amounting to Rs. 100 million have been sanctioned and 317,645 house sites have been developed.

Minerals: Rajasthan occupies the eighth place in mineral production. The total value of production in 1978 was Rs. 552 million and in 1979 Rs. 578 million. The State has rich mineral potentiality of lead concentrate, zinc concentrate, emerald, tour-maline and wollastonite. This sector provided employment to 26,240 persons per day on an average in 1979. The State produced 274.8 thousand tonnes of soap-stone during 1979.

Annual Plan: (1979-80) Provided an out-lay of Rs. 2,750 million of which Rs. 640 million had been ear-marked for irrigation schemes. The highest priority has been given to employment intensive sectors, inputs of agriculture along with the associated inputs of irrigation and power, animal husbandry, dairying and allied services, village, cottage and small industries and mining.

The outlay for the annual plan for Rajasthan for 1980-81 has been fixed at Rs. 3535.3 million. This is Rs. 283.6 million more than the outlay for last year.

SIKKIM STATE

CAPITAL: Gangtok; **Population:** 13,308 (1971 Census). The present population is estimated at around 35,000.

Area of the State: 7,208 sq. kms. **Population of the State:** (1981 Census): 315,682; **Density:** per sq. km: 44; **Sex ratio:** 836 females per 1,000 males; **Literacy:** 33.83 per cent.

Districts: Four—Gangtok, Gayzing, Namchi and Mangan.

AGRICULTURE: Main crops are cardamom, oranges, apples, potatoes, maize, millet, ginger, soyabean, wheat, barley, paddy, pulses and vegetable covering 87,493 hectares.

Electricity: There are 4 hydro-electric power stations. Possibilities of exploiting the hydel resources are being explored. Presently Central Water and Power Commission has started constructing Lower

---

***Universities:**Univ. of Rajasthan, Jaipur; Univ. of Jodhpur, Jodhpur; Univ. of Udaipur, Udaipur; *Institution deemed as Univ.:*Birla Institute of Technology & Sciences, Pilani.

Lagyap hydel project with a capacity of 12 MW power which is likely to go into production shortly. A new project to harness Chakungchu in north Sikkim, with a view to generating 12 MW of power is also in the offing.

Forests: Forests occupy about 36 per cent of the land area.

Industries: There is a distillery at Rangpo, a fruit preservation factory at Singtam, a jewel bearing factory producing industrial jewels at Gangtok, a tannery at Majitar and a watch assembly unit set up in collaboration with HMT, Bangalore. Sikkim Mining Corporation produces zinc, copper, graphite, lead, gold and silver. A Rs. 5 million Roller Flour Mills set up recently has gone into production with a capacity of 30-tonnes per day.

A number of facilities are being given to new entrepreneurs, such as subsidy on transportation of raw materials, subsidy on interest, concession in sales tax and marketing assistance, as the State has been declared as industrially backward. As a result a number of small scale industrial units have come up manufacturing consumer items like washing soaps, leather goods, coke briquettes, matches and candles.

There is also a proposal to expand dairy industry with the help of National Dairy Development Corporation. The programme envisages the setting up of a modern dairy plant the foundation of which has been laid by the Prime Minister.

Industrial Training Institute at Rangpo provides vocational training to local youngsters in seven different trades. The Government has also initiated a programme to organise vocational training camps at various places for knitting, tailoring and cutting.

Handicrafts: Local crafts include carpet weaving, handmade paper, wood carving, handloom weaving, cane and bamboo work.

EDUCATION: There are 359 primary and 8 higher secondary schools 67 junior high schools and high schools providing education to about 55,600 children. There is also a primary teachers' training institute. A University College started functioning in 1976. An evening Law College has also been set up in 1980. Education is free for both boys and girls upto Class XII and supply of textbooks on 50 per cent Government subsidy has been extended to all students upto the terminal stage of school.

PUBLIC HEALTH: There is a Central Hospital with 200 beds at Gangtok, inclusive of 70 T.B. beds. There are four district hospitals providing 160 beds. North and east districts have 4 T.B. beds and south and west districts have 10 T.B. beds each respectively. Ten primary health centres, each with 10 beds, 41 primary health sub-centres and 3 mobile dispensaries are in existence. In two districts, tuberculosis teams are functioning besides the main T.B. centre at Gangtok. A State family planning and MCH bureau is functioning. There are 81 doctors and 5 dental surgeons in service. 21 Grade 'A' nurses and 122 ANMs are in employment. All treatment and diet are free.

COMMUNICATIONS: There are 1,500 kms. of metalled roads and 48 major bridges. Public transport is nationalised. The nearest airport is at Bagdogra (121 kms.) and the nearest railway station is Siliguri (112 kms.).

GENERAL: Formerly a princely State in the eastern Himalayas and a protectorate of India, Sikkim opted by a referendum on April 14, 1975, to join the Indian Union. By the Constitution (36 Amendment) Act, 1975, Sikkim became the 22nd State on April 26, 1975.

TOURISM: A 78-bed tourist hostel at Gangtok and a 50-bed tourist lodge at Pemayangtse (W. Sikkim) have been constructed. There is also a proposal to construct a chain of tourist lodge complexes at Gangtok, Rangpo, Nayabazaar, Yoksum and Singhik.

Religion: Mainly Mahayana Buddhism and Hinduism. There are a few Christians and Muslims.

Rivers: The main river is the Tista, which is formed by the confluence of the Lachen and the Lachung Chu in the north of Sikkim.

Five Year Plan (1980-85): A final outlay of Rs. 1,220 million has been fixed for Five Year Plan in Sikkim.

TAMIL NADU STATE

CAPITAL: Madras. **Area:** 128 sq. kms.; **Population:** 2,469,449 (1971 census).

Area of the State: 130,069 sq. kms. **Population of the State** (1981 census): 42,297,456; **Males:** 24,420,228; **Females:** 23,877,228.

Decennial Population Growth Rate in the State (1971-81): 17.23 per cent. **Sex Ratio:** 978 Females per 1,000 Males, **Density:** 371 per sq. km, **Literacy:** 45.78 per cent.

Percentage of workers to total population*: 35.78 (56.02 per cent for males and 15.17 per cent for females).

Percentage to total workers: Cultivators: 31.26; Agricultural labourers: 30.46; Other workers: 38.28.

Percentage of urban population to total population: 30.26.

Birth rate for 1978 (Rate per thousand of estimated mid-year population: 20.50.

Death rate for 1978 (Rate per thousand of mid-year population: 6.44.

Infant mortality rate for 1978 (Rate per thousand of live births: 39.70.

Districts with Headquarters in brackets, Area in thousand sq. kms. and Population *respectively: Madras City (Madras) 0.1; 2,469,449; Chingleput (Kanchipuram) 7.9; 2,907,599; North Arcot (Vellore) 12.3; 3,755,797; South Arcot (Cuddalore) 10.9; 3,617,723; Dharmapuri (Dharmapuri) 9.6; 1,677,775; Salem (Salem) 8.6; 2,992,616; Coimbatore (Coimbatore) 15.7; 4,373,178; The Nilgiris (Udhagamandalam) 2.5; 494,015; Madurai (Madurai) 12.6; 3,938,197; Tiruchirapalli (Tiruchirapalli) 14.3; 3,848,816; Thanjavur (Thanjavur) 9.7; 3,840,732; Ramanathapuram (Madurai) 12.6; 2,860,207; Tirunelveli (Triunelveli) 11.4; 3,200,515; Kanyakumari (Nagercoil) 1.7; 1,222,549 (Total 14).

Major Cities: With area (in sq. kms.) and population*: Madras City: 128—2,469,449; Madurai: 20.92—549,114; Coimbatore: 23.49—356,368; Salem: 19.99—308,716; Tiruchirapalli: 21.57—307,400; Tuticorin: 13.38—155,310; Nagercoil: 24.29—141,288; Thanjavur: 24.29—140,547; Vellore: 10.54—139,082; Dindigul: 11.77—128,429; Singanallur: 8.65—112,206; Tirupur: 11.92—113,302; Kumbakonam: 11.54—113,110; Kanchipuram: 11.37—110,657; Tirunelveli: 15.33—108,498; Erode: 8.44—105,111; Cuddalore: 27.79—101,335.

No. of Revenue Villages (1979): 16,546 (provisional). **No. of Towns (1980):** 439.

State Language: Tamil. Other languages spoken, Telugu, Malayalam, Kannada, Urdu, English, Hindi and Gujarati.

Situation: The State lies between 8°5' and 13°35' of northern latitude and 76°15' and 80°20' of eastern longitude.

State Boundaries: Bound in the east by Bay of Bengal, south by the Indian Ocean, west by Kerala State and north by Andhra and Karnataka States.

AGRICULTURE

Refer to the chapter on 'Food & Agriculture'.

Land Ceiling: Reduced from 24.28 standard hectares to 15 standard hectares per family.

Fisheries: See chapter on "Fisheries."

---

*Figures relate to 1971.

Land Utilisation

Classification of Area	Area in '000 hectares 1978-79
(a) By professional survey*	12,999
(b) By village papers*	13,001
Forests	2,031
Barren and uncultivable land	610
Land put to non-agricultural uses	1,678
Cultivable waste	362
Permanent pastures and other grazing lands.	161
Land under miscellaneous tree crops and groves (not included in the nèt area sown)	193
Current fallows	1,267
Other fallow lands	448
Net area sown	6,251
Area sown more than once	1,433
Gross cropped area	7,684
Area under food crops	4,627
Area under non-food crops	2,375

*Total geographical area.

Electrification in the State: Number of towns and villages electrified as on March 31, 1979: 63,395.

Labour: No. of trade unions (at the end of 1979): 2,764; no. of strikes including lockouts 378; no. of man-days lost by strikes: 2,828,975.

No. of Persons Employed as on Sept. 30, 1978

S.No.	Category	No. of Persons (in '000)
1.	Agriculture, livestock, forestry and fishing	950.00
2.	Mining and quarrying	50.65
3.	Manufacturing	670.00
4.	Construction	23.42
5.	Electricity, gas, water and sanitary services	81.00
6.	Trade and commerce	115.42
7.	Transport, storage and communications	465.65
8.	Services	136.37
	Total Employed	2,492.61

No. of persons on live register of employment exchanges at the end of 1980: 1,005,880.

Industrial Development Agencies: (See chapter on "State Govt. Undertakings".)

FORESTS (1978-79)

Area of reserved forests	1,769,621	(area in hectares)
Percentage of total area	15.5	(-do-)
Area of reserved lands	360,243	(-do-)
Output of timber	21,219	(Cu. M)
Quantity of fuel extracted	140,790	(-do-)
Quantity of sandalwood	4,693	(Tonnes)

EDUCATION (1978-79)

Universities: Madras University, Chepauk, Madras 600005; Annamalai University, Annamalainagar, Chidambaram, South Arcot Dist., Madurai; Kamraj University, Madurai; Tamil Nadu Agricultural University, Coimbatore; Peraringar Anna University of Technology, Madras; and Gandhigram Rural Institute, Gandhigram, Madurai, is an Institute deemed-to-be an university.

Professional Institutions (1979-80)

	No. of Colleges	No. of Scholars
Medical colleges	12	9,191
Agricultural colleges	5	1,700
Law colleges	3	3,474
Veterinary college	1	740
Engineering colleges	12	15,330
Polytechnics	34	16,655
Technical, arts and industrial schools	105	17,057

Number of Educational Institutions (1979-80)

Universities	5
High/higher secondary/post basic schools	3,109
Middle/senior basic/higher elementary schools	5,682
Primary/junior basic schools	37,662
Pre/primary schools	34
Colleges for general education	189
Colleges for special education	20
Colleges for professional education	67
Schools for special education	87
Schools for vocational training and technical education	228

Number of Schools 1979-80	Number	Boys	Girls	Teachers
Elementary Schools (Lower)			1,943,831	112,535
Elementary Schools (Higher)	277,662	2,408,514	1,943,831	112,535
Indian Schools (boys)	1,999	439,267	289,130	31,991
Matriculation (High-higher Secondary) Schools	33	11,008	18,356	853
Central (higher Secondary) schools	52	37,908	18,963	2,579
Anglo Indian (Higher-high Secondary) Schools (boys)	41	18,013	17,915	1,158
Anglo Indian Primary Schools	3	632	483	29
Central High Schools affiliated to Central Board of Secondary Education	41	14,003	6,506	1,035
Kendra Vidyalaya High School	6	1,571	1,171	100
Central High Schools affiliated to Indian school certificate examination	18	3,882	3,229	469
Pre-Primary Schools	23	2,411	2,133	111
Pre-Primary Basic Sections attached to schools	11	283	288	16

MAJOR INDUSTRIES (1978)

Sl. No.	Type of Industry	No. of units	Number employed	Output (Rs, in million)
1.	Spinning, weaving and finishing of textiles	867	131.814	4,592.3
2.	Electric light and power gas	37	64,872	1,646.0
3.	Manufacture and repair of motor vehicles	334	24,963	544.5
4.	Manufacture of machinery except electrical machinery.	427	40,364	2,716.7
5.	Manufacture of miscellaneous food preparations	2,023	106.870	3,482.0
6.	Manufacture of electrical machinery apparatus, appliances and supplies.	182	14.067	714.2
7.	Manufacture of railroad equipment	13†	18,171†	524.7†
8.	Printing, publishing and allied industries (including book binding)	564	26.754	881.9
9.	Basic industrial chemicals including fertilisers	80†	11.870†	614.5†
10.	Ferrous metal industries—iron and steel basic industries	182†	19.197†	485.4†
11.	Sugar factories	21†	11.740†	465.0†
12.	Manufacture of miscellaneous chemical products except products of petroleum and coal	468	49.195	3,238.1
13.	Manufacture of rubber and rubber products	187	14,294	3,402.3
14.	Manufacture of cement (hydraulic)	8†	5.873†	387.0†
15.	Manufacture of metal products except machinery and transport equipment	333	16.341	500.0
16.	Tanneries and leather finishing plants and products	283	14.170	1,249.7
17.	Manufacture of transport equipment and parts	162	66,337	2,603.7
18.	Manufacture of grain mill products	873†	14.729†	813.8†
19.	Manufacture of non-metallic mineral products (not elsewhere classified)	156	19,894	1.170.0
20.	Manufacture of textile products	298	8,122	270.8
21.	Manufacture of basic metals and alloy industries	428	25,103	1,089.8
22.	Gas and steam	4	191	4.1
23.	Manufacture of wool and synthetic fibre	158	5.486	156.8
24.	Other manufacturing industries	82	6.689	1.646.0

†Figures relate to 1977

PUBLIC HEALTH (1979-80): No. of hospitals and dispensaries (including modern medicines, Indian medicines and homoeopathy): 1,534; No. of dispensaries (Allopathic) 655; No. of dispensaries (Ayurvedic) 500; No. of beds in Govt. allopathic hospitals: 47,062; No. of beds in Indian system hospitals 662 plus 25 Homoeopathy (687): No. of nurses 21,742; No. of Registered Doctors (Allopathic): 33,173; No. of Registered Doctors (Indian Medicine) 24,224; No. of Registered Doctors (Homoeopathy) 15,232.

PRESS: Dailies 72; weeklies 120; tri-weeklies 6; fortnightlies 125; monthlies 500; quarterlies 84; others 42; annuals 12.

Leading dailies with place of publication:

The Hindu (E): Madras, Madurai & Coimbatore; *The Indian Express* (E): Madurai & Madras; *The Mail* (E): Madras; *Daily Thanthi* (T): Madurai, Tiruchirapalli, Madras, Tirunelveli, Coimbatore, Cuddalore & Vellore, Salem and Bangalore; *Dina Malar* (T): Tirunelveli, Tiruchirapalli & Madras; *Dinamani* (T): Madurai & Madras; *Dina Madal* (T): Madras; *Malai Murasu* (T): Tirunelveli, Tiruchirapalli, Madurai, Coimbatore, Vellore, Madras & Salem; *Murasoli* (T): Tanjore & Madras; *Alai Osai* (T): Madras; *Anna* (T): Madras; *Dinakaran* (T): Madras; *Lokavani* (M): Madras; *Musalman* (U): Madras.

(E) English. (T) Tamil. (M) Malayalam. (U) Urdu.

COMMUNICATIONS (as on March 31, 1979): Motor Vehicles on road: 255,448.

Length of Motorable Roads (in kilometres): National highways 1,865; state highways 1,799; major district roads 14,948; other district roads and village roads 16,434; roads maintained by panchayat unions and panchayats 55,468; other roads maintained by municipalities and Public Works Department 8,757; total 99,271.

Post & Telegraphs (As on March 31, 1979: Rural Post Offices: 11,491; Urban Post Offices: 2,916; Telegraph offices (including licensed offices): 21,951.

Telephones (as on March 31, 1980): Telephones in use: 252,260; Telephone Exchanges: 810; PBX & PABX Brands: Manuals 2,220, Automatic 648, total 2,868; Public call offices: local 1,309; long distance 810; (T.N. circle) Exchange capacity (Direct exchange lines) 190,245; figures for Coimbatore division are not included.

GENERAL

Climate: Tropical. The maximum temperature: 43°C (110°F) and the minimum: 18°C (65°F).

Rainfall: The rainfall in the region is determined by the south-west monsoon (June to September) and the north-east monsoon (October to December). The average rainfall of the Madras division is 1,008.1 mm. with an average annual number of 53.5 rainy days, i.e. days on which 2.5 mm. or more of rain is recorded.

Soils: The three main types of soils found are red, black and alluvial. Red is however the predominant type. Along the coast line patches of arenaceous soils are also found.

Minerals: Salt, limestones, magnesite, gypsum, crude, mica, bauxite, limenite, fireclay, lignite, iron ore, etc.

Hills: The important hill ranges are the Western Ghats (Palani Hills in Madurai district and Annamalai in Coimbatore district form part of this range), the Eastern Ghats, Shevroy Hills, Javadi Hills, the Kairayans and the Pachaimalai. The Palghat gap averaging 24 kms. is the only marked break in the Western Ghats.

Important Rivers: The Ponnaiyar, Palar, the Vaigai and the Tambaraparani, Cheyyar, Meyar, Bhavani, Amaravati and Chittar.

Major Lakes: (Capacity more than 14,000 million litres) Chambarampakkam, Madurantakam and Red Hills lakes (Chingleput

District); Veeranam Tank (South Arcot District); Kaveripuk (North Arcot District); Ramnad and Rasimangalam Tanks (Ramanathapuram District).

Plan Outlay: Annual Plan for 1980-81 will be of the order of Rs. 4,110 million about Rs. 680 million more than the previous year's outlay of Rs. 3,430 million. The sectoral allocations (Rs. million) are: Agriculture and Allied services including irrigation and minor irrigation: 681.8; Co-operation: 100.2; Power Projects: 2,050.3; Industry and Mining: 253.2; Road Transport & Communications: 364.9; Education: 166.0; Water Supply & Sewerage: 341.4; Housing: 121.0; Social & Community Services: 28.5; Economic Services: 5.0; General Services: 10.0.

TRIPURA STATE

CAPITAL: Agartala **Area:** 16.97 sq. kms. **Population:** 100,028 (1971 census). **Area of the State: 10,477** sq. kms. **Population of the State** (1981 census): 2,060,189. **Density:** 196 per sq. km. **Sex Ratio:** 948 females per 1,000 males. **Literacy:** 41.58 per cent.

Districts	Area in sq. kms.	Population (1971 census)
North Tripura District	3,541	405,009
West Tripura District	3,359	751,605
South Tripura District	3,577	399,728

No. of Tehsils: 177. **No. of Sub-Divisional Towns:** 10. **No. of Villages:** 5,215.

(This former Union Territory became a full fledged State on January 21, 1972.)

State Boundaries: The State is bound in the North-West, West, South and South-East by Bangladesh and in the North-East by Assam and Mizoram.

State Language: Bengali is predominantly spoken.

AGRICULTURE: About 65 per cent of the land is forest. Only 23 per cent area is available for agricultural use and other purposes out of which 0.2470 million hectares can be put under field crops. The principal crops are paddy, wheat, jute, mesta, sugar cane, potato and oil seeds. Out of 0.2470 million hectares net available for cultivation, the State had put 0.2586 million hectares (gross) under cereals and produce 0.3100 million tonnes.

Forest: The total area of Reserved Forest and proposed Reserved Forest is at present 3,930.21 sq. km. and that of protected forest is 2,067.76 sq. km. The protected forest is mainly being used for the purpose of different Government projects for resettlement of landless people.

The extent of natural tree forests is a little more than 372 sq. km. which is 8.52 per cent of the total forest area. The rest of the forests is mostly degraded owing to jhumming.

By 1976-77, 47,827 hectares of plantations of various economic species had been raised in Tripura. Besides rubber plantation has also been taken up extensively in Tripura since 1964-65 and till 1976-77, 647.53 hectares of land had been brought under rubber. The plantation created up to 1976-77 form 12.3 per cent of the total forest area in the State.

An additional area of about 1,100 sq.km. bamboo forest has also been burned down for jhumming. However, bamboo forest, which survive, along with the new man-made forest (Plantations) are enough to feed a paper mill of 150 tonnes capacity per day.

Power: The installed capacity of this State is 14.72 MW with the firm availability of 10 MW. The additional load growth would likely to be met with by import of power from ASEB. All the three major stations: Two 132 KV substations, one at Agartala and the other at Dharmanagar have since been commissioned at 132 KV and the third one at Udaipur is operating at 66 KV. It is expected that the transmission line from Agartala to Dharmanagar would soon be commissioned to 132 KV. The total length of the line and number of consumers, being 1,300 km. and 25,000 respectively, are likely to increase by 150 % in the 6th Five Year Plan.

INDUSTRY

Tea: There are 56 registered tea gardens in Tripura covering an area of 5,527 hectares and producing 4.5 million Kgs. of tea per year. This Industry has been employing about 10,000 workers. The Tea Development Corpn. has been floated recently in Tripura to look after the interest of tea Industries and to raise new gardens. Three Co-operative Societies have taken up new plantation in different places of Tripura. It is proposed to establish a blending cum-packaging unit and a tea auction centre within the State in the near future.

Minerals: The wells drilled in the State have indicated presence of superior quality of natural gas. Deposits of white and grey coloured plastic clay, silica, and limestone have also been located.

Jute Mill: A jute mill, set up in Agartala under public sector, will produce about 1,200 tonnes of sacking and hessian and will employ about 2,000 persons.

It is proposed to set up a Paper mill at Fatikroy near Kumarghat in North Tripura District. The project will employ about 20,000 persons.

Village and Small Industries: The small scale industries, functioning in the private and public sector are aluminium utensils, steel furniture, washing soap, R.C.C. spun pipes, tyre retreading, automobiles servicing and repairing, rubber solution, grease, phenyl, leather goods, polythane tubular, film, plywood, fruit-canning, oil mill, roofing tiles, chalk crayons, pharmaceuticals, fountain pen ink, ice factory, wooden furniture, saw mill, umbrella handles, spun pipes, wire nail, truck and bus body building, welding, workshop, printing press, book binding, manufacture of note books, rice mill, cotton ginning mill, curry powder, steel trunks and bucket manufacturing, spray painting, block processing, dyeing etc. etc.

A steel re-rolling mill and two roller flour mills have also been established in the State.

Tripura Small Industries Corpn. Ltd., acting as a catalyst has been running the industrial units like fruit canning, pharmaceutical units, khandsari unit, brick kiln, wood treatment and seasoning etc. The District Industries centres set up in three districts of the State have been assisting S.S.I. Units for their growth and development.

Handloom is the single largest industry in Tripura and weaving is essentially a tribal household Industry. There are about 100,000 looms within the State. In 1979-80 handloom products worth Rs. 60 million were produced under handloom sector. The Tripura Handloom & Handicrafts Development Corpn. Ltd. marketed produce worth Rs. 6 million in 1979-80. An Apex Weavers Coop. Society has started functioning.

Tripura Khadi and Village Industries Board has been running Units for manufacturing of safety matches, carpentry, blacksmithy, *Ghani, Ambar Charkha* etc. and rendering financial and other assistance in various village Industries.

Sericulture Industry: At present about 4,000 persons are engaged for rearing of worms. The land under cultivation of mulberry plants is about 364.22 hectares and the production of cocoons is estimated to be 5,000 kg. per year.

EDUCATION: (Position as on 30.9.78.)

Category	No. of Institutions	Students
Nursing (including *Balwadi* Centre)	590	31,141
Primary Schools	1,572†(313)	209,836
Mille Schools	292†(144)	51,418
High Schools	92†(52)	21,238
H.S. Schools	52	6,202
Colleges for General Education	6	7,772
Colleges for professional & Technical Education	2	1,346
Social Education centres	859	15,430

Tripura is famous for its beautiful handicrafts. About 5,000 persons are engaged in the industry at present. During 1979-80 products worth Rs. 4 million were sold by the Tripura Handloom and Handicrafts Devpt. Corpn. Ltd.

Communication: Total no. of vehicles as on 31-3-80 were: Trucks. 2,410; buses: 458; private cars (jeeps & taxis): 1.992; contract carriage taxis: 340; contract carriage jeeps: 498; auto rickshaws: 105; motor cycles/scooters: 1,428; trailers: 529; tractors: 51, vans: 78. Total: 7,889.

Public Health: Hospitals 12; dispensaries 119; P.H.C. 26; doctors 297; nurses 459; compounders 176; beds 1,357; ayurvedic Disp. 2; homoeopathic disp. 7; antenatal clinic 1; eye clinic 1; dental clinics 3; chest clinic 1; E.N.T. 1; V.D. & skin disease clinic 1; psychiatric clinic 1; orthopaedic clinic 1; leprosy control units 2: S.E.T. centres 20; urban leprosy clinics 2; re-constructive surgery unit 1.

UTTAR PRADESH STATE

CAPITAL: Lucknow. **Area:** 103.60 sq. kms.; **Population:** 1.037 million (1981)

Area of the State: 294,413 sq. kms.; **Population of the State** (1981 census): 110.858.019. **Density:** 377 per sq. km.; **Sex Ratio:** 886 females per 1,000 males; **Literacy:** 27.38 per cent.

No. of Tehsils: 245; **No. of Towns:** 325; **No. of Villages:** 112.561.

Districts	Area (Sq. Km.)	Population (1971 Census)
Agra	4.816	2,308.638
Aligarh	5.024	2.111.829
Allahabad	7.255	2.937.278
Almora	7.023	750.038
Azamgarh	5.744	2.857.484
Bahraich	6.871	1.726.972
Ballia	**3,183**	**1,588,935**
Banda	7.645	1.182.215
Bara-Banki	4.422	1.635.593
Bareilly	4.125	1.779.867
Basti	7.309	2.984.090
Bijnor	4.852	1.490,185
Budaun	5.158	1,645.967
Bulandshahr	4.895	2.073.343
Chamoli	9.125	292.571
Dehra Dun	3.088	577.306
Deoria	5.400	2.812.350
Etah	4.449	1.570.925
Etawah	4.327	1.447.702
Faizabad	4.427	1.927.281
Farrukhabad	4.349	1.556.930
Fatehpur	4.168	1.278.254
Garhwal	5.440	553.028
Ghazipur	3.381	1,531,654
Gonda	7.331	2.302.029
Gorakhpur	6.316	3.038.177
Hamirpur	7.192	988.215
Hardoi	6.012	1.849.519
Jalaun	4.549	813.490
Jaunpur	4.040	2.005.434
Jhansi	5.027	960.000
Kanpur	6.121	2,996,232
Kheri	7.691	1.486.590
Lalitpur	5.024	471.000
Lucknow	2.528	1.617.846
Mainpuri	4.254	1.445.534
Mathura	3.797	1.290.307
Meerut & Ghaziabad	5.944	3.366.953
Mirzapur	11.301	1.541.088
Moradabad	5.946	2.428.971
Muzaffarnagar	4.245	1.802.289
Naini Tal	6.792	790.080
Pilbhit	3.504	752.114
Pithoragarh	7.217	313.747
Pratapgarh	3.730	1.422.707
Rae Bareli	4.603	1.510.812
Rampur	2.372	901.209
Saharanpur	5.526	2.054.834
Shahjahanpur	4.581	1.286.104
Sitapur	5.738	1.884.400
Sultanpur	4.424	1.642.928
Tehri-Garhwal	4.421	397.385
Unnao	4.586	1.484.393
Uttarkashi	8.016	147.805
Varanasi	5.091	2.852.459

Figures for Ghaziabad district are included in the district of Meerut.

Names of the district headquarters are the same as the names of the districts except for the districts whose headquarters are given in brackets: **Farrukhabad (Fatehgarh); Garhwal (Pauri); Jalaun** (Orai); Tehri Garhwal (Narendranagar).

Major Cities: With population over 100.000 (1971 Census)

, **Kanpur: 1,275,242; Lucknow: 813,982; Agra: 634,622; Varanasi:** 606.721; Allahabad: 513.036; Meerut: 367.754; Bareilly: 326.106; Moradabad: 272.652; Aligarh: 252.314; Gorakhpur: 230.911; Saharanpur: 225.396; Dehradun 203.464; Jhansi: 198.135; Rampur: **161,417; Shahjahanpur: 144,065; Mathura: 140,150; Firozabad:** 133.945; Ghaziabad: 128.036; Muzaffarnagar: 114.783; Farrukhabad-cum-Fatehgarh: 110.835; Faizabad: 109.806; Mirzapur-cum-Vindhyachal: 105.939.

State Boundaries: Uttar Pradesh is one of the Border States of the Indian Union. Its boundary touches Tibet and Nepal in the North; Himachal Pradesh, Haryana, Delhi and Rajasthan in the West and South-West; Madhya Pradesh joins it in the South and Bihar in the East.

State Language: Hindi.

AGRICULTURE

(See chapter on 'Food & Agriculture' for area and production of different crops.)

The State is the largest producer of food-grains and oil seeds in the country. It leads all the States in the production of wheat, maize, barley, gram, sugar-cane and potatoes.

Land Ceiling: The ceiling area was fixed at 7.30 hectares of irrigated land for a tenure-holder having a family of five members with two additional hectares of irrigated land for each additional member in excess of five, and two hectares of irrigated land for each landless adult son subject to the condition that the additional area so allowed shall not exceed six hectares.

For the purpose of determining ceiling area, the land has been classified into two broad categories—irrigated and unirrigated. One and a half hectares of unirrigated land has been deemed to be equal to one hectare of irrigated land. For grove land and *usar* land, it has been provided that two and a half hectares of grove land or *usar* land shall be equal to one hectare of irrigated land.

Irrigation : In the year 1979-80, inspite of the unprecedented drought, a record irrigation of 5.45 million hectares was achieved through State Irrigation works including canals and tubewells. A remarkable feature of the year was, construction of 50,000 *Guls* to avoid wastage of canal and tubewell water.

POWER: Uttar Pradesh increased its installed capacity from a mere 397 M.W. in 1960-61 to 3,182 M.W. in 1978-79.

In the State, hydel power generation totalled 1,068 M.W. and thermal power generation 2,077 on 31 March, 1980. As many as 38,577 villages 14,094 *harijan's bastis*, 344,145 private tubewells, 17,503 government tubewells were energised. The power is supplied to 2,089,942 consumers.

The number of power consumers increased from 1,713,534 during 1976-77 to about 1.91 million during 1978-79. The draft Sixth Plan (1978-83), as prepared by the U.P. State Electricity Board, envisages an addition of 2,606 M.W. in installed capacity of power, laying of 8,646 of main transmission lines, electrification of 26,460 villages and 25,300 *harijan bastis* and energisation of 300,000 private tubewells and pump-sets.

Animal Husbandry: After agriculture, animal husbandry is the most important economic activity in the State. In 1978 the State accounted for 26.12 million cattle, 12.592 million buffaloes, 0.230 million horses and ponies, 6.610 million goats, 1.956 million sheep and 3.920 million poultry.

Milk Processing Plants : The processing capacity of the dairy units established under different sectors (public, private and co-operative) was of the order of 854,000 litres of milk per day at the end of 1977-78.

Forest : The total area, in 1978, under forests in U.P. was about 51.136 sq. kms.

Up to the end of 1978-79 an area of over 157,791 hectares having Eucalyptus bamboo and poplars, was covered. During 1979-80, against the total target of 5,800 hectares and an outlay of Rs. 13.1 million, an area of 4,513 hectares were covered at an expenditure of Rs. 13.29 million.

Fisheries : Fisheries development programme started in the State in 1944. The bulk of the catch is exported to W. Bengal. Out of 1.165 million hectares of water area nearly 0.324 million hectares consist of confined waters. A total of 0.1413 million hectares is under pisciculture.

The total production of fish during 1979-80 was 17,792.34 quintals. There was also an increase in the production of Fingerlings from 30.145 million in 1978-79 to 32.691 million in 1979-80.

INDUSTRIES :

Sugar, cotton textiles and miscellaneous food preparations (mainly comprising edible oils including hydrogenated oils) are the three important industries in the large scale sector of the State.

Till December, 1978, 1,177 industrial licences were received from the Government of India.

In the large and medium industries sector, so far 1,194 licences with an investment of Rs. 19,320 million, were issued. During 1978-79, 26 licences involving an investment of Rs. 1,760 million have been implemented.

The trial production in Kajrahat cement factory in Mirzapur district has already started.

Handloom Industry: Provides employment to about 1.5 million persons and meets nearly one-third of the total requirement of cloth in the State. During the year 1978-79 upto December 1978, the production of handloom cloth was 222.3 million metres.

Village and Small Scale Industries : Industrial policy was given new orientation and emphasis was laid on the development of village and small-scale industries specially in rural areas, through the rural growth centres programme.

In the 60 growth centres, taken up in the first phase, 2,875 units were registered, since the inception of the scheme in March, 1978, while 1,213 units started production.

As a result of various promotional programmes the number of small-scale industrial units rose from 3,107 in 1960-61 to 36,131 in 1977-78. During 1978-79 2,000 small-scale units were established till the end of December, 1978.

Industrial Development Agencies: See chapter on 'State Government Undertakings'.

Industrial Estates : There are 61 industrial estates (excluding 10 Harijan industrial estates) with 900 sheds and 2,128 plots. Out of these 864 sheds and 1,656 plots have been allotted to the entrepreneurs, 674 sheds and 623 plots are engaged in production.

Labour : Total no. of registered factories (1976): 5,157; No. of working factories: 4,917; estimated average daily no. of workers employed: 431,000.

Total no. of workers (1971 census): 27,334,455; workers as per cent of total population : 30.94; cultivators: 15,697,866; agricultural labourers: 5,453,829; other workers: 6,182,760; non-workers: 61,006,689.

No. of Trade Unions as on December 31, 1976: 1,774.

Industrial Disputes : During 1976 there were 56 strikes/lock-outs involving 17,748 workers resulting in a loss of 1,211,961 man-days.

EDUCATION :

Institutions (1979-80): Universities 20; degree colleges 380; higher secondary schools 4,953; senior basic schools 13,127; Junior basic schools 70,292; nursery schools 125.

Universities: With the year of establishment in brackets: *Acharya Narendra Deva University of Agriculture*, Faizabad (1974-75); *Agra University*, Agra (1927); *Aligarh Muslim University*, Aligarh (1921); *Allahabad University*, Allahabad (1887); *Awadh University*, Faizabad (1975); *Banaras Hindu University*, Varanasi (1916); *Bundelkhand University*, Jhansi (1975); *Chandrashekhar Azad University of Agriculture and Technology*, Kanpur (1974-75); *Garhwal University*, Srinagar (Garhwal) (1973); *Gorakhpur University*, Gorakhpur (1957); *Govind Ballabh Pant University*, Pantnagar (1960); *Gurukul Kangri*, Hardwar (1962); *Kanpur University*, Kanpur (1966); *Kashi Vidyapith*, Varanasi (1963); *Kumaon University*, Nainital (1973); *Lucknow University*, Lucknow (1921); *Meerut University, Meerut (1966); Rohilkhand University, Bareilly (1975); Roorkee University*, Roorkee (1949); *Varanaseya Sanskrit University*, Varanasi (1958).

Note: Aligarh and Banaras are Central Universities under the Government of India.

PUBLIC HEALTH

Total no. of hospitals in 1978: Allopathic including P.H.C.: 2,876; ayurvedic/unani: 1,589; ayurvedic colleges: 9; unani colleges: 2; homeopathic dispensaries (State): 294; beds (allopathic): 51,329;

doctors in Government service: 5,859; nurses and mid-wives: 11,291; T.B. sanatoria: 4; total no. of beds in T.B. sanatoria and clinics: 3,312.

Medical colleges: 9; total no. of seats in Medical colleges: 908.

COMMUNICATIONS :

(As on March 31, 1978) Vehicles on road under U.P. State Transport Corpn.: **Buses 4,362; trucks 104; taxis 43; Vehicles other** than State Transport Corpn. buses 7,531; lorries and trucks including private carriers: 26,062; taxis: 4,460; cars: 34,951; motor cycles: 144,438.

Length of Motorable Roads (1977-78): Total mileage of metalled roads under P.W.D.: 36,350 kms.; total route length : 184,263 kms.; no. of routes operated: 1,455; daily distance covered (kms.): 884,631.

Railways : The total length of railway lines passing through the State, as on 31 March, 1976, was 8,661.23 kms. Of these 5,389,82 kms. were broad-gauge and 3,269.40 kms. were metre-gauge. The route-kilometerage of railway lines in the State railway-wise and gauge-wise was: Central Railway, broad gauge 956.55 kms. and narrow gauge 2.01 kms.: Eastern Railway, broad gauge 264.78 kms.: Northern Railway, broad gauge 4,097.17 kms. and metre gauge 0.13 kms.: North Eastern Railway, metre gauge 3,232.16 kms. and Western Railway, broad gauge 71.32 kms. and metre gauge 37.11 kms.

Press: (Leading Dailies) *English:* National Herald, Lucknow; National Herald, Delhi; Northern India Patrika, Allahabad; Pioneer, Lucknow. *Hindi:* Aj, Kanpur; Aj, Varanasi; Amar Ujala, Agra; Amar Ujala, Bareilly; Daily Jagran, Kanpur; Daily Jagran, Gorakhpur; Daily Jagran, Jhansi; Daily Jagran, Lucknow; Daily Swatantra Bharat, Lucknow. *Urdu:* Siyasat Jadeed, Kanpur; Qaumi Awaz, Lucknow.

GENERAL:

Important Rivers: The Ganga, The Yammuna and the Ghaghara.

Other rivers: The Gomati, the Kali, the Sarda, the Rapti, the Gandak, the Sone, the Ramganga, the Kosi, the Tons, etc.

Minerals: The minerals found include limestone, dolomite, magnesite and soapstone, coal, copper, gypsum, glass-sand, marble, phosphorite, morrum, sand, diaspore and prophyllite and marl.

Barytes, andalusite and bauxite have been found in Dehra Dun, Mirzapur and Banda districts, respectively. A potential reserve of nearly three million tonnes of non-plastic fire-clay has been explored in Mirzapur district. Some other minerals of less economic value found are Vindhyan sandstone, *kankar*, reh, saltpetre and sand.

The mineral deposits are concentrated in eight northern and six southern districts, *viz.*, Uttar Kashi, Chamoli, Pithoragarh, Tehri Garhwal, Garhwal, Almora, Naini Tal, Dehra Dun, Agra, Jhansi, Hamirpur, Banda, Allahabad, and Mirzapur.

WEST BENGAL STATE

CAPITAL: Calcutta. **Area:** 104 sq. kms.; **Population:** 3,148,746 (1971 census).

Area of the State: 87,853 sq. kms.; **Population of the State** (1981 census): 54,485,560. **Decennial Population Growth Rate** (1971-81): 22.96 per cent; **Density:** 614 per sq. km.; **Sex Ratio** — 911 females per 1,000 males: **Proportion of Urban Population to Total:** 25 per cent; **Literacy Rate:** 40.88 per cent.

Major Cities (with population over 100,000—1971 census): Calcutta (with 74 constituent units), 7,005,362; Durgapur, 207,232; Kharagpur, 161,911; Asansol, 157,388; Burdwan, 144,970.

No. of Villages: 38,550.

State Boundaries: The State is bound by Sikkim and Bhutan in the north, Assam and Bangla Desh in the east, Bay of Bengal in the south and Orissa, Bihar and Nepal in the west.

State Languages: Bengali and English

Districts	Headquarters	Area in sq. kms.	Population (1971 census)
Darjeeling	Darjeeling	3,075	781,777
Jalpaiguri	Jalpaiguri	6,245	1,750,159
Cooch-Behar	Cooch-Behar	3,386	1,414,183
West Dinajpur	Balurghat	5,206	1,859,887
Malda	English Bazar	3,713	1,612,657
Murshidabad	Berhampur	5,341	2,940,204
Nadia	Krishnagar	3,926	2,230,270
24 Parganas	Alipur	13,796	8,449,482
Howrah	Howrah	1,471	2,417,286
Calcutta*	Calcutta	104	3,148,746
Hooghly	Chinsura	3,145	2,872,116
Burdwan	Burdwan	7,028	3,916,174
Birbhum	Suri	4,550	1,775,909
Bankura	Bankura	6,881	2,031,039
Midnapur	Midnapur	13,724	5,509,247
Purulia	Purulia	6,259	1,602,875

*Calcutta district comprises of Calcutta city only.

AGRICULTURE: Rice, jute and wheat are the main crops produced in West Bengal. The area sown under rice was 4,765.4 thousand hectares, jute 537.9 thousand hectares and wheat 521.0 thousand hectares and the production was 6,676.9 thousand tonnes, 4,123.9 tonnes and 998.2 thousand tonnes respectively in 1978-79

About 6.5 million families in West Bengal directly depend upon agriculture, out of whom about 2.3 million families are landless agricultural labourers. 2.5 million families own less than 7½ bighas of land per family and most of them are bargadars. .95 million families have holdings (per family) between 7.5 and 15 bighas of land and they can be described as small peasants. The holding of .55 million families is between 15 and 30 bighas and they can be called middle peasants. Number of families owning more than 30 bighas of land are about 2 million.

Land Ceiling: The ceiling for a family consisting of not more than 5 members is 5.001 hectares in irrigated areas and 7.006 hectares in non-irrigated areas. The retainable limit is increased by 0.502 hectare in irrigated and 0.697 hectare in non-irrigated areas for each additional member in excess of 5, the maximum retainable area being 7.006 hectares in irrigated and 9.809 hectares in non-irrigated areas for a family consisting of 9 members or more. The ceiling for an adult unmarried person or the sole surviving member of a family is 2.502 hectares in irrigated and 3.503 hectares in non-irrigated areas.

Forests occupy 11,830 sq. km. which is only 13 per cent of the total geographical area of the State.

The types of timber found in the forests are: *Shorea robusta, tactona grandis, michelia champaka, schima walliohi, chukrasia tabularis, betula species, abies, densa, oaks, pinus*, etc.

For development of the forests the Govt. has allocated Rs. 23.7 million. The programme aims at rehabilitating diminished parts of the forest extending over 1,000 hectares with new quick growing species.

Irrigation: Area irrigated by Govt. canals under the minor, major and medium irrigation schemes of West Bengal was 858,582 and 962,646 hectares in the years 1976-77 and 1977-78 respectively.

Power Production: The total quantity of electricity generated in 1978-79 was 6,620.7 million kwh as against 6,255.2 million kwh, in 1977-78.

INDUSTRIES: The State's industrial output is about 20 per cent and coal output about 30 per cent of the country's total.

The number of registered factories (excluding Defence Factories) increased from 5,837 in 1977 to 5,967 in 1978.

Production: The major industries and their production during 1978: Jute textiles: 1,042,000 tonnes; cotton yarn: 34,937,000 kgs.; cotton cloth: 103,849,000 metres; pig iron: 1,930,000 tonnes; steel ingots: 1,827,000 tonnes; finished steel (excluding unregistered re-rollers): 1,025,000 tonnes; tea: 132,620,000 kgs.; sugar 13,000 tonnes; paper: 120,200,000 kgs.; matches: 5,338,000 gross boxes.

Small Scale Industries: The number of small scale industrial units registered with the Directorate of Cottage & Small Scale Industries was 10,944 with an estimated number of 80,143 workers at the end of 1978-79.

INDUSTRIAL DEVELOPMENT AGENCIES

West Bengal Industrial Development Corporation Ltd. (23–A, N. Subash Rd., Calcutta 700001).

West Bengal Financial Corporation (4 Kiron Sankar Roy Rd., Calcutta 700001).

West Bengal Small Industries Corporation Ltd. (6A, Raja Subodh Mullick Sq., Calcutta 700013).

West Bengal State Warehousing Corporation (6A, Raja Subodh Mullick Sq., Calcutta 700013).

Besides these the **Industrial Finance Corporation of India** (Bharat Petroleum House, Connaught Circus, Annexe II, New Delhi 100001, having its branch office in Calcutta); **Board of Industries,** under the **Cottage and Small-Scale Industries Department,** West Bengal; **State Bank of India; Life Insurance Corporation of India; National Small Industries Corporation of India; Industrial Reconstruction Corporation of India** (having headquarters in Calcutta) etc. also accord financial assistance to industrial units.

Labour (1977): The average daily number of workers in the registered working factories was 825.649 in 1977.

Average no. of employees under different heads: Factories: 839,000; coal mines: 128,000; plantations: 234,000; State Govt: 313,000; Central Govt: 426,000; quasi-Govt.: 322,000; other sectors: 458,000. People in agriculture: (cultivators & agricultural labourers) 7,227,108 (1971 census).

Employment Exchanges: The total number of persons placed in employment during 1978 was 15,500. During the year 1978, 645.5 thousand applicants were registered at the different employment exchanges as against 469.8 thousand in 1977.

No. of Unions (1979): No. of unions registered: 572; membership: 97,073.

Industrial Disputes (1978): No. of disputes disposed-6,487; no. of disputes settled-1,652; no. of strikes & lockouts-371; no. of persons involved-254 million; no. of mandays lost 11.97 million.

EDUCATION

Universities: The following are the names and addresses of the universities with number of students respectively: **University of Burdwan,** Rajbati, Burdwan 713101: 36,067; **University of Calcutta,** Senate House, Calcutta 700012: 196,257: **Jadavpur University,** Kalyani 741235: 2,074; **University of** Calcutta 700 032: 4760; **University of Kalyani, North Bengal,** Rajaram-Mohanpur, Darjeeling: 26,191; **Rabindra Bharati University,** 6/4, Dwarkanath Tagore Lane, Calcutta 700007: 3,854; **Visva-Bharati,** Santiniketan 731235: N.A.; **Bidhan Chandra Krishi Viswavidyalaya** P.O. Mohanpur, Dist. Nadia.

	No. of schools (1978-79)
Primary & Jr. Basic	41,684
Junior High	3,174
High & Higher secondary and multipurpose	3,925
No. of universities	8
No. of colleges for general education	N.A.
No. of polytechnics	21
No. of medical colleges	7
No. of engineering colleges	3
No. of technological degree colleges	4

Public Health (1978): No. of hospitals-342; no. of beds-44,553. No. of clinics-625; no. of beds-50. No. of health centres-986; no. of beds-9,248; no. of dispensaries-405.

Family Planning Centres (1975-76): Rural: 335; urban: 72; urban voluntary F.P. centres: 24; rural F.P. sub-centres: 1,005.

Calcutta Tramways Company Ltd.: During 1978-79 the number of passengers carried by tram cars was 267 million and total earnings stood at Rs. 50.1 million.

Roads: According to latest available statistics the road length per hundred square kilometres of geographical area was 64 kms. at the end of 1974-75.

The length of extra-municipal roads maintained by PWD during 1978-79: 16,353 kms.

At present West Bengal has 14,000 kms. of metalled roads under the maintenance of Government. The length of roads constructed during 5th Plan (1974-78), outlay and expenditure thereof were 788 kms. Rs. 260 million and Rs. 261 million respectively.

Housing: Number of houses constructed under different schemes and expenditure incurred upto 1978-79 respectively: Integrated Subsidised Housing Scheme N.A.; Low Income Group Housing Scheme 10,617 houses at Rs. 107.787 million; Subsidised Housing Scheme for Plantation Workers - 9,462 flats at Rs. 33.176 million, Middle Income Group Housing Scheme - 3,087 flats at Rs. 65.721 million; Rental Housing Scheme for State Govt. Employees - 5,701 flats at Rs. 108.047 million.

Annual Plan (1979-80): West Bengal's outlay for 1980-81 Plan is Rs. 5,800 million against Rs. 4,700 million for 1979-80.

Press: Leading dailies.

English: Amrita Bazar Patrika, Business Standard; Statesman (Calcutta and New Delhi).

Bengali: Ananda Bazar Patrika; Jugantar.

Hindi: Sanmarg.

GENERAL: Rivers: The Ganga, the Domoda, the Bhagirathi, the Hooghly, the Mayurakshi, the Rupnarayar, the Ajoy, the Kasai the Teesta and the Torsa.

Communications (1978-79):

	Route length (Km)	No. of vehicles in operation	Average no. of persons employed per day	Total passengers served ('000)	Total earnings (Rs. in million)
Calcutta State Transport Corporation	7,331	1,188	12,540	288,400	95.267
North Bengal State Transport Corporation	21,355	253	4,166	40,890	20.008
Durgapur State Transport Board	4,010	64	1,111	N.A.	8.708

HOUSING

Background : There were 93 million houses used for residential purposes partially or fully to house 548 million people during 1971. These included 32·2 million semi-*pucca* houses and 34·8 million *katcha* houses.

The total number of households in 1970 was 97·0 million — 78·0 million in rural areas and 19·0 million in urban areas. Their numbers rose to 103·1 million at the beginning of the Fifth Five Year Plan in 1974 — 81·4 million in rural areas and 21·7 million in urban areas. It is estimated that the growth of population alone demands 2 million dwelling units every year.

Shortage: The shortage of housing units at the beginning of the Fifth Plan (on the criterion that (*i*) every household in urban areas should have a *pucca* house or semi-*pucca* house; and (*ii*) every household in rural areas should have a *pucca*, semi-*pucca*, or serviceable *katcha* house) has been estimated by the National Building Organisation at 15·6 million units — 11·8 million in rural areas and 3·8 million in urban areas respectively at the beginning of the Fifth Five Year Plan. By March 1980 the housing shortage was expected to be 20·1 million units — 15·1 million units in rural areas and 5·0 million units in urban areas.

Rate of Construction : The net annual addition to housing stock is estimated at 1·67 million units — 0·60 million units in urban areas and 1·07 million units in rural areas.

The Problem : In the last decade there has been a large influx into urban areas. Six of the 9 large urban agglomerations, each having more than a million population, recorded between 43·5 per cent and 63 per cent increase in population during 1961-71.

Towns with population of 100,000 recorded a 52 per cent increase during the same period. Whilst on an all India basis the urban population increased at the rate of 38 per cent.

Overcrowding : The influx into urban areas has caused an acute shortage of housing facilities, resulting in overcrowding.

Household Incomes: Family incomes, naturally, play a great part in a family's ability to acquire or afford a home. Incomes of families in urban areas are much higher than families in rural areas. For instance in Greater Bombay 56 per cent families have an income of less than Rs. 350 a month and 28 per cent less than Rs. 600 a month.

In the Asansol Industrial area of West Bengal 80 per cent families earned less than Rs. 350 a month and 19 per cent less than Rs. 600.

Growth of population in larger urban centres in India

Urban Centres	Population in 1981 (in million)	Increase over 1971 (in percentage)
Calcutta (U.A.)	9·16	30·4
Gr. Bombay (U.A.)	8·20	37·4
Delhi (U.A.)	5·22	43·4
Madras (U.A.)	4·27	34·9
Hyderabad (U.A.)	2·91	76·2
Bangalore (U.A.)	2·56	42·9
Ahmedabad (U.A.)	2·51	44·4
Kanpur (U.A.)	1·68	32·2
Pune (U.A.)	1·68	48·5
Nagpur	1·29	39·6
Total	39·53	39·46

U.A. Urban Agglomeration.

Source : Census of India — 1981 — General population tables — series 1.

The average number of persons per room in some larger cities of India is given in the table below :

Cities	Average No. of persons per room	
	1961	1971
Calcutta (M.C.)	3·03	3·40
Greater Bombay	3·79	3·99
Delhi (M.C.)	3·18	3·04
New Delhi (M.C.)	2·79	2·76
Madras (M.C.)	2·93	3·01
Hyderabad	2·41	2·81
Ahmedabad	3·11	3·22
Bangalore (M.C.)	3·07	2·58
Kanpur (M.C.) and Railway Colonies	2·75	2·94
Pune	2·96	3·21

M.C. Municipal Corporations.

Source : 1. Census of India — 1961 — Housing and establishment tables Part IV (B). 2. Census of India — 1971 — Housing tables Part IV (B).

Household Expenditure : It is observed that an increasing amount of a family's income goes towards the purchase of food alone. A low income family's inability to pay for shelter can be seen from the expenditure pattern of the various income groups compiled by the Town and Country Planning Organisation, New Delhi. The survey covers South Delhi and is deemed to be representative for all major urban areas of the country.

Co-operative Housing : It is estimated that upto the end of June 1977, 28,900 co-operative housing societies with 1·8 million members would have constructed 440,000 houses.

Expenditure Pattern of Various Income Groups

Annual Income Groups	Av. Income per household in Rs.	Total expenditure in Rs.	Expenditure as % of income	Expenditure on food as % of total expenditure
Less than Rs. 2,500	1,996	2,190	109·7	72·2
Rs. 2,501–5,000	3,900	3,683	94·4	68·2
Rs. 5,001–7,500	6,288	5,302	84·3	62·9
Rs. 7,501–20,000	8,854–17,625	6,124–9,109	69·2–51·7	60·5–52·8
Rs. 20,000	22,303–48,656	10,335–14,620	46·3–30·0	48·3–46·6

HOUSING SCHEMES: 1,066,567 houses had been sanctioned for construction throughout the country under different social housing schemes upto the end of December 1979. Out of these 808,974 houses have been completed. About 13,641 hectares were acquired by the State Government and 7,161 hectares were developed for housing.

(a) Central Sector Schemes :

Subsidised Housing Scheme for Plantation Workers: This scheme was transferred from the State to the Central Sector in 1970. The Central Government provides 50 per cent loan and 37·5 per cent grant for construction of homes to be occupied by the plantation workers free of rent. This scheme is being implemented in Assam, Tripura, West Bengal, Karnataka, Kerala and Tamil Nadu.

Up to the end of December, 1979, 32,258 houses had been sanctioned and 19,405 houses completed. An outlay of Rs. 18 million was provided in the year 1979–80 Central Budget for implementation of the scheme.

(b) State Sector Schemes :

Scheme for Provision of House-sites to Landless Workers in Rural Areas: The scheme aims at providing house-sites, free of cost, to families of landless workers in rural areas, who do not own a house-site or a built-up house or a hut on land of their own. In the Sixth Plan, the scope of scheme has been widened to include assistance for construction of house on the sites provided. It is being implemented in 18 States and 6 Union Territories. They have altogether allotted house sites to 7·694 million families.

Integrated Subsidised Housing Scheme for Industrial Workers and Economically Weaker Sections of the Community: Up to December, 1979, construction of 250,670 houses had been sanctioned under this scheme, of which 186,446 had been completed.

Low Income Group Housing Scheme: The scheme provides for loan assistance up to 80 per cent of the approved cost of a house subject to a maximum of Rs. 14,500, to persons whose annual income does not exceed Rs. 7,200. Construction of 426,006 houses had been sanctioned of which 335,762 houses were completed upto the end of December, 1979.

Village Housing Projects Scheme: Under this scheme loans are granted to villagers for construction of a house to the extent of 80 per cent of the cost or a maximum of Rs. 5,000. Loans are also granted to improve the environmental hygiene of the village. Up to the end of December, 1979, construction of 101,770 houses had been sanctioned out of which 68,425 houses were completed.

Middle Income Group Housing Scheme: Loans are given to individuals earning between Rs. 7,210 – Rs. 18,000 per annum. Loans are restricted to 80 per cent of the cost of construction subject to a maximum of Rs. 27,500. Loans are also given to eligible persons for the purchase of ready built houses. Upto the end of December, 1979, construction of 52,752 houses had been sanctioned, of which 42,714 houses had been completed.

Rental Housing Scheme for State Government Employees: Under this scheme introduced in 1959, State Governments construct houses and rent them to their employees. 37,120 houses had been sanctioned of which 31,905 had been completed up to the end of December 1979.

Land Acquisition & Development Scheme: Financial assistance is given to States for large scale acquisition and development of land to make plots available at reasonable prices to house builders, particularly in the lower income group. The aim of the scheme (started in 1959) is to stabilise land prices, rationalise urban development and promote self-contained composite housing colonies. Over 13,641 hectares of land had been acquired and 7,270 hectares developed up to December 1979.

Slum Clearance/Improvement Scheme: Up to the end of December 1977 construction of 169,523 houses had been sanctioned and 129,474 houses completed.

(c) House Building Allowances to Central Government Employees :

To simplify the procedure and to cut down administrative delays, sanction of House Building Advances was decentralised from April, 1978. Ministries/Departments concerned were authorised to scrutinise and sanction advances out of funds allocated by the Housing Ministry. Out of the total Revised Budget grant of Rs. 350 million, Rs. 300 million (approx.) has been allocated to the Ministries/Departments up to the end of December 1979.

Research: National Buildings Organisation, Nirman Bhavan, Maulana Azad Rd., New Delhi 110011, is engaged in documentation and dissemination of information on building science and technology to bring about improvement in quality of building construction and reduction in cost.

It is also the co-ordinating agency for housing and building statistics as well, and sponsors and conducts studies in socio-economic aspects of housing.

Central Building Research Institute, Roorkee, U.P.: Assists the building industry by developing new materials and techniques to achieve economy and efficiency.

LIC Loan to State Governments: The Life Insurance Corpn. of India has been advancing loans to the State Governments every year in accordance with the allocations made by the Housing Ministry, for implementation of their social housing programmes. Up to 1979–80 loans amounting to Rs. 2,982·6 million had been given to various State Governments including Rs. 215·4 million made available during 1979–80.

The General Insurance Corpn. has also started advancing loans to the State Governments. During 1978–79, the GIC loans amounting to Rs. 140 million were allocated to the State Governments for the implementation of village housing projects and construction of houses for the economically weaker section of society. A similar loan of Rs. 140 million is available for disbursement to the States.

Five Year Plan (1978-83): The draft Five Year Plan (1978-83) envisages an outlay of Rs. 15,380 million for various social housing schemes. This includes Rs. 5,000 million exclusively for rural housing.

During the first two years of the Plan, the outlays for housing were: 1978–79: Rs. 1,785·2 million; 1979–80: Rs. 20,519 million.

Some Public Sector Undertakings :

Hindustan Prefab. Factory Ltd., Jungpura, New Delhi 110014.

National Buildings Construction Corporation Ltd., 44, Ring Rd., Lajpat Nagar III, New Delhi 110024.

Housing & Urban Development Corporation Ltd., 12-A, Jamnagar House, New Delhi 110011.

CIVIL AVIATION

Minister for Tourism & Civil Aviation: A. P. Sharma.

Director-General of Civil Aviation: G. R. Kathpalia. (For other officials see "Government of India Personnel".)

Sixth Plan Outlay: Rs. 8,400 million; allocation for 1976-77 was Rs. 664·8 million.

Annual Budget (1981-82): Approved outlay for the year is Rs. 1,291·3 million.

INTERNATIONAL AIRPORTS AUTHORITY OF INDIA, Yeshwant Place, Chanakya Puri, New Delhi 110021. Based at Delhi, IAAI was created as a statutory corporation with effect from February 1, 1972 for the management and development of the four international airports at Bombay, Calcutta, Delhi and Madras.

Members: S. Ramanathan, Chairman; Raghu Raj, Chairman & Managing Director, Air India; A. H. Mehta, Chairman & Managing Director, Indian Airlines; P. S. Sandhawalia, Member (Engg.); K. K. Srivastava, Director-General of Tourism; Ved Prakash, Member (Finance & Admn.), IAAI; C. M. Chaturvedi, Joint Secy., Ministry of Tourism & Civil Aviation; G. S. Sawhney, Member (Customs); F. B. Pithavadan (Madras); N. K. Somani (Bombay).

General Managers of International Airports: ***Bombay*** — Gp. Capt. R. D. Pradhan; ***Calcutta*** — K. S. Jayaraman; ***Delhi*** — Air Cdre. N. Sinha Ray; ***Madras*** — C. G. Vishwanath.

AIRPORTS: At the end of December, 1979, 85 airports were maintained by the Civil Aviation Department. By categories these are:—

Major-I Aerodromes (7): Ahmedabad, Amritsar, Gauhati, Hyderabad, Lucknow, Nagpur, Trivandrum.

Major-II Aerodromes (15): Agartala, Aurangabad, Barapani, Bhubaneshwar, Jaipur, Imphal, Bhuj, Khajuraho, Mangalore (Bejpe), Panagarh, Patna, Ranchi, Tiruchirapalli, Udaipur, Varanasi.

Intermediate-I Aerodromes (13): Baroda, Belgaum, Bhavnagar, Bhopal, Dibrugarh, Gaya, Indore, Madurai, North Lakhimpur, Port Blair, Rajkot, Raipur, Silchar.

Intermediate-II Aerodromes (7): Chakulia, Jabalpur, Kandla, Keshod, Tirupati, Vijaywada, Visakhapatnam.

Minor-I Aerodromes (29): Akola, Balurghat, Bilaspur, Coimbatore, Cooch-Behar, Cuddapah, Delhi (Safdarjang), Jharsuguda, Juhu (Bombay), Kailasahar, Kamalpur, Kanpur, Khandwa, Khowai, Kota, Kulu, Lalitpur, Malda, Muzaffarpur, Pantnagar, Porbandar, Passi Ghat, Rajamundry, Raxaul, Rupsi, Satna, Tanjore, Shella, Warangal.

Minor-II Aerodromes (14): Behala, Donakonda, Hadapsar (Gliderdrome, Pune), Hassan, Jhansi, Jobgani, Kolhapur, Mysore, Nadirgul (Guderdrome), Panna, Ramnad, Sholapur, Vellore, Palanpur (Dessa).

Navigational Aids: The Civil Aviation Department had proposed a Rs. 450 million comprehensive scheme to modernise the communication and navigational facilities at the country's major airports during the Fifth Plan period. Under the scheme, major airports were to be equipped with landing aids like ILS and precision navigational aids like VOR.

Training Centres: The Civil Aviation Training Centre, Allahabad, comprising of an Aerodrome School and Communications School, is the principal training centre in the country, where basic training and refresher courses are conducted for departmental officers. During the year 1979, 107 persons were trained in various categories.

Facilities exist for training of glider instructors and winch operators at the **Government Glider Centre,** Pune. Facilities are available at the **Fire Services Training School** at 229, N. Subash Rd., Calcutta, for training of departmental candidates for courses in "crash and fire rescue". Facilities for training foreign nationals are also available at Allahabad and other centres under various aid schemes.

The establishment of a Civil Flying Academy is under consideration of the government.

FLYING CLUBS: There are 25 subsidised flying clubs with their headquarters at Amritsar, Hyderabad, Gauhati, Banasthali, Patna, Bombay, Coimbatore, New Delhi, Bangalore, Vadodara, Lucknow, Hissar, Jamshedpur, Karnal, Trivandrum, Indore, Nagpur, Madras, Jullundur Cantt., Bhubaneshwar, Patiala, Jaipur, Behala (Calcutta), Raipur and Ludhiana.

During 1979 Government paid an amount of Rs. 2·818 million as subsidy to those clubs who logged a total of 19·898 hours for imparting training to trainees/members.

GLIDING CLUBS: Besides the Government Centre at Pune, there are 13 subsidised gliding clubs/wings at Agra, Ahmedabad, Amritsar, New Delhi, Deolali, Hissar, Jaipur, Jullundur, Kanpur, Pilani, Raipur, Patiala and Patna.

Aeronautical Communication Services: As on 31st December 1979, the Aeronautical Communication Service was operating and maintaining 83 Aeronautical Communication Stations; providing 212 aero-mobile channels in the aeronautical mobile service, 286 radio and landline circuits in the aeronautical fixed telecommunications network, 185 radio and radar navigational facilities and 9 ground to-air voice broadcast channels in the Aeronautical Broadcast Service.

RESEARCH & DEVELOPMENT DIRECTORATE

Principal functions: (*i*) Airworthiness engineering including type-certification of civil aircraft and aeronautical equipment; approval of modifications to civil aircraft, etc. (*ii*) Research, evaluation and development, including investigations on operational problems like aircraft noise, atmospheric turbulence, evaluation of performance and economics of civil transport and other aircraft, etc. (*iii*) Prototype development, including design and development of prototype light aircraft, gliders, sailplanes, winches, etc. (*iv*) Airworthiness engineering training.

AIRCRAFT DEVELOPMENTS: Modification of 'REVATHI' MK-II trainer aircraft is under way in the light of flight-evaluations by pilots. Development of the two seaters prototype tandem glider 'ARDHRA' has been completed and the type certification was issued after flight-testing. Development of a prototype glider-launching which, powered by a diesel engine, has also been completed. Work on development of indigenous fibre glass materials for gliders/aircraft is also being carried out.

Aircraft Registration: At the end of December 1979, 674 aircraft held current certificates of registration and 233 aircraft held current certificates of airworthiness. During the same period 6 new aircraft were registered while registration of 4 aircraft was cancelled. In all 233 aircraft were inspected for issue/renewal of certificates of airworthiness. The number of gliders registered was 109 of which 24 held current certificates of airworthiness.

ACCIDENTS : During the period 1st January to 31st December, 1979, there were 19 notifiable accidents in India involving 18 Indian aircraft. Three of the accidents to Indian registered aircraft proved fatal resulting in the death of 5 crew members, 40 passengers and 2 persons on the ground.

Out of 19 accidents, 6 have been investigated by the Civil Aviation department, and the remaining 13 are under investigation.

Apart from this, the **Air Safety Directorate** investigated 133 precautionary landings, 10 forced landings, 8 airmiss incidents and 401 minor accidents/incidents during the period from 1st January to 31st December, 1979.

Non-Scheduled Air Transport: As on 31st December, 1979 there were 77 flying clubs and 15 private operators holding permits for operation of non-scheduled air services. 13 operators hold permits for agricultural aerial spraying operations. The question of permitting some of these non-scheduled operators to fly on selected "non-trunk" domestic routes on a regular basis to replace Indian Airlines services is under consideration.

Scheduled Air Transport : Air India as the national flag carrier and Indian Airlines as the main domestic carrier are the two scheduled airlines. Both these companies came into being when air transport was nationalised under an Act of Parliament, Air Corporation Act, 1953. Both airlines have maintained a good record of profitability ; net profit (before tax) in fiscal year (1978-79) stood at Rs. 340·9 million (Air India) and Rs. 114·2 million (Indian Airlines).

Operational Statistics

		1977-78	1978-79
Aircraft Movement	Nos. in '000	119	123
Passengers ,,	—do.—	8,651	9,863
Cargo Handled	Tonnes '000	149	174
Mail ,,	—do.—	27	30
Revenue	Rs. in million	214·9	289·0
Operating Expenses	—do.—	138·3	201·1
Gross Profit	—do.—	76·6	87·9
Net ,,	—do.—	30·0	39·9

AIR-INDIA : Headquarters : Air-India Bldg., 218' Backbay Reclamation, Nariman Point, Bombay 400021' Has 43 online and 109 offline sales offices and representations all over the world.

Starting with just one weekly service to London in June 1948, Air-India now operates extensive scheduled passenger and cargo services from Bombay and four other Indian cities — Calcutta, Delhi, Madras and Trivandrum ; to Africa (Addis Ababa, Nairobi, Accra, Lagos, Seychelles, Mauritius, Dares-Salaam and Lusaka) ; to U.S.A. (New York) ; to Europe (London, Paris, Amsterdam, Frankfurt, Geneva, Rome, Zurich, Brussels, and Moscow).: to West Asia (Doha, Abu Dhabi, Dhahran, Dubai, Bahrain, Kuwait, Aden, Muscat, Tehran, Baghdad, Jeddah, Ras al Khaymah) and East Asia (Dacca, Bangkok, Hong Kong, Tokyo, Osaka, Kuala Lumpur, Singapore, Perth, Sydney and Melbourne). Air-India operates five all-cargo services with DC–10–63 aircraft from Bombay to Europe and one to USA.

Fleet : Air-India today has ten Boeing 747s and seven Boeing 707s.

Board of Directors: Raghu Raj, *Chairman-cum-Managing Director :* Charanjit Singh, MP : C. B. Jain, Director General of Tourism ; Air Chief Marshal I. H. Latif, Chief of Air Staff ; Field Marshal S. H. F. J. Manekshaw ; A. H. Mehta, Chairman-cum-Managing Director, Indian Airlines ; Dr. B. D. Panda ; Shri J. R. D. Tata ; S. Ramanathan and Dr. B. Venkatraman, Secretary to Government of India.

Management : Raghu Raj, *Chairman and Managing Director ;* C. L. Sharma, *Dy. Managing Director (HQs) ;* S. K. Nanda, *Director of Personnel & Industrial Relations ;* Capt. D. Bose, *Director of Operations ;* J. N. Mogrelia, *Director of Finance ;* D. P. Nimkar, *Director—Ground Services ;* M. P. Kharkar, *Director of Engineering ;* Malcolm Barretto, *Commercial Director ;* P. Jayant, *Dy. Director, Management Services ;* G. D. Dubey, *Controller of Communications ;* P. D. Marathe, *Controller of Stores & Purchases ;* P. G. Bhandarkar, *Controller of Civil Works & Properties ;* and Mr. R. K. Thadani, *Dy. Director, Inflight Service.*

Holding Companies : Air-India set up a wholly-owned subsidiary company called Air India Charters Ltd. on September 9, 1971 as a non-IATA company with a capital of Rs. 500,000.

Another wholly-owned subsidiary company called the **Hotel Corporation of India Ltd.** came into being on July 8, 1971 ; it operates the "CENTAUR" Hotel at Bombay Airport. The 300-room, 5-star Centaur Hotel at Bombay airport is the first hotel built by the Hotel Corporation of India Ltd.

The HCI proposes to construct a second 5-star hotel at Juhu Beach with an initial capacity of 355 rooms and provision for increasing it to 500 rooms later. The HCI is also planning to build a 275-room hotel in Srinagar as part of the Conventions complex being put up by the Kashmir Government and another at Delhi Airport.

The HCI also runs two Beach Resorts, one in Lakshadweep Islands and the other in Andamans, the latter in collaboration with the Travel Corporation of India.

INDIAN AIRLINES : (Head Office : Airlines House, 113, Gurdwara Rakab Ganj Rd., New Delhi 110001). The fleet as on 31st December 1978 : 8 Airbus A300 B2, 17

The following table provides comparative performance data for the two airlines for the year 1979.

	AI	IA
	1979	1979
Passenger Traffic		
Passenger carried ('000)	1,154	5,387
Passenger Kms. (million)	5,628	4,252
Load Factor (per cent)	62·8	74·8
Freight Traffic		
Freight Tonnes Carried	43,577	46,592
Freight tonne Kms. ('000) ..	253,959	44,300
Load Factor (per cent)	60·2	70·1
Productivity		
Total tonne Kms. ('000) .. .. (Scheduled & Non-Scheduled)	794,684	409,204
No. of employees	15,226	16,787
Average TKMs for employee ..	52,206	24,376
Fleet Utilisation		
No. of aircraft	17	42
Total revenue hours .. .. (Scheduled & Non-Scheduled)	54,270	109,924
Average hours per aircraft ..	3,192	2,617
Route Network		
Scheduled route network (Kms.) ..	230,850	50,842

(IATA Statistics)

Boeing 737, 8 Fokker Friendships F-27, 15 HS 748. The Airline's services extend over the entire sub-continent. including, Nepal, Sri Lanka, Afghanistan, Pakistan, Male and Bangla Desh. With operations to 69 stations, every three minutes one Indian Airlines plane is either taking off or landing at any of these airports. The operations of the Airlines have been divided into four regions ; Delhi, Bombay, Calcutta, Madras.

Board of Directors: *Chairman :* A. H. Mehta ; *Directors :* Charanjit Singh, M.P., Dr. B. Venkataraman, Raghu Raj, Raj Bahadur M. S. Oberoi, A. N. Haksar, Air Chief Marshal I. H. Latif, PVSM, K. K. Srivastava, S. Ramanathan.

Executive Heads : A. H. Mehta, *Chairman-cum-Managing Director ;* K. N. Kathju, *Dy. Managing Director ;* Kripal Chand, *Director, Finance ;* Capt. N. M. Pereira, *Director of Operations ;* S. A. Rajagopal, *Commercial Director ;* B. S. Parashar, *Director of Engineering ;* Capt. K. Chadha, *Director of Training (CTE) ;* P. Nag, *Controller of Stores and Purchases ;* Wg. Cdr. N. C. Bharma, AVSM, *Secretary.*

Regional Directors : Capt. R. A. Williams, *Bombay ;* Capt. R. K. Sen, *Calcutta ;* Capt. J. S. Sandhu. *Delhi ;* Capt. J. Joseph. *Madras.*

VAYUDOOT : Was launched on January 26, 1981 with an authorised capital of Rs. 250 million to provide airlinks initially to inaccessible areas in the North-Eastern Region. Jointly owned by the Indian Airlines and Air India on a 50 : 50 basis, the Company is operating services from Gauhati, Dibrugarh and Agartala to Barapani, Kailashahar, Rupsi, Kamalpur and Tezu by two F-27 aircraft.

The main objectives of "Vayudoot" are to plan, promote, develop, organise and operate air transport services to places not covered by the Indian Airlines network in the country.

Board of Directors: *Chairman :* K. N. Kathju ; *Directors :* K. K. Srivastava, Air Marshal M. S. D. Wollen, C. M. Chaturvedi, Miss P. Lal, Tarun Gogoi, M. P. Kharkar, M. Barretto, Capt. K. Chaddha, D. B. Braganza, R. Prasad.

COMMUNICATIONS

POST AND TELEGRAPH

HISTORY: The first postal system was introduced in 1766 by Lord Clive, for official purposes only. In 1837, it was opened to the public and the first issue of postal stamps was made in Sind in 1852. The basis of authority of the existing postal system in India, is Act 6 of 1858. The first official airmail flight was taken on 18 Feb., 1911, by M. Pequet, a French aviator.

The first experimental telegraph line from Calcutta to Daimond Harbour was laid by Dr. William B. C. Shanghnessy. The first telegraph line was opened for traffic in October, 1851. Telegraph circuits were gradually extended to all parts by 1867.

Administration: The Indian Posts and Telegraphs Department, the second largest civil employer in the country, comes under the administrative control of the Ministry of Communications. The Secretary of the Department holds charge of the office of the Director General, Posts and Telegraphs as also that of the Chairman of the Posts and Telegraphs Board.

Staff: The staff strength as on March 31, 1979 was .759 million including 248.208 extra departmental staff and 6.974 industrial workers. 32 officers and 3.699 other cadres (including 136 officials undergoing training) were on deputation to the Army Postal Service.

Pin Code: Postal Index Number code was introduced on 15-8-1972. This is a 6 digit code which identifies and locates every departmental delivery office.

No. of Post Offices: There were 134.959 post offices at the end of 1979 out of which 13.926 were in the urban areas and 121.033 in rural areas. Against a target of 5.000 post offices to be opened during 1978-79, 5.699 post offices were actually opened in the rural areas including 1.814 mobile post offices. 458 post offices were also opened in urban areas. As on 31-3-1979, 143 night post offices also continued to function. The daily delivery of post has been extended to about 230.969 villages.

Rural Mobile Post Offices: The first cycle post office was opened in Shirgaon, near Ratnagiri in 1974. There were 32.573 mobile rural post offices (March 1979) in the country. These offices cover postal counter facilities to 80.625 villages.

Postal Traffic: In the year 1978-79 an estimated 8.389.6 million pieces of articles, excluding money orders, were handled of which 231.1 million were registered articles. 108.3 million inland money orders totally valued at Rs. 11.000 million were issued. The department earned Rs. 171.8 million as commission. 10.3 million value payable articles were dealt with. 571.482 parcels were despatched to foreign countries and 740.961 were received from abroad

Letter Boxes: There were 426.553 letter boxes in the country as on 31-3-1979.

Wireless: With the commissioning of 13 wireless circuits upto December, 1979 and 15 wireless circuits during January to March, 1980 the number of wireless channels is expected to increase to 319 covering a total kilometerage of 66.650.

Mail Conveyance: Within the country mail was conveyed by surface routes over a length of 1.11 million kms.

"QMS" (Quick Mail Service) was introduced in India on August 1, 1975 interconnecting the headquarters of the State/Union Territories. As on December 31, 1979 QMS was available in 45 national and 410 regional centres. On an average more than 450.000 articles are handled per day by QMS.

Savings Bank: Over 130.000 post offices in the country offer savings bank facilities. About 45 million account holders have savings in the post offices. Total deposits were 67.688 million at the end of March 1980 as against 48.140 million as on March 31, 1978.

Postal Life Insurance: 101.707 new policies for an assured total sum of Rs. 696.329.700 were issued during 1978-79 as against 99,829 policies for Rs. 599,472,800 during the previous year. At the end of 1978-79 there were 634,444 assured policies valued at Rs. 3,154,849,895 as against 543,486 policies valued at Rs. 2,492,227,633 in the previous year.

Telegraph Office: There are 26.783 telegraph offices. 60.2 million inland telegrams were booked during 1978-79. During 1978-79, 3.806 telegraph offices were opened.

Besides 10.6 million phonograms, 4.75 million greeting telegrams and 1.768 inland and 506 outgoing and 1.033 incoming foreign photo telegrams were handled during the year. 1.77 million phonograms were delivered over the phones during 1978-79.

Devanagari Telegraph Service: The number of telegraph offices providing this service rose from 9.407 in 1977-78 to 10.748 as on 31-3-1979. 1.39 million telegrams in Devanagari script were booked.

Telex: This service is available in 70 telegraph offices in the country. At the end of 1979 direct telex was available to 40 countries and switched telex service to 169 countries. Automatic telex service to Indian telex subscribers is now available for 33 countries against 27 last year.

Telephones: The switching capacity in the country reached 2.187.585 lines with the addition of 171.000 lines in 1978-79. There was also a net addition of 141.082 direct exchange lines. 628 telephone exchanges were opened during the year bringing the total number of exchanges in India to 8,866.

International Telephone Service: Direct telephone service is now available to 43 countries. Of these 36 countries are connected through satellite telephone circuits. Switched telephone service is now available to almost all the countries of the world

Mobile Phone Exchange: A trailer-mounted mobile telephone exchange (first of its kind in the country) designed and manufactured by Indian Telephone Industries, Bangalore was commissioned on January 19, 1977. The exchange with a 1,000 line capacity, costing Rs. 200,000 will provide telephone services in any area. It has all facilities of a regular exchange.

Own Your Telephone: In view of the difficulties experienced by applicants for telephones under 'Ordinary Category' in large cities the 'OYT' registration was suspended in Bombay, Calcutta, Delhi and Ludhiana so as to ensure improved chances for subscribers registered in the general category in these cities. Rules for allotment have also been revised.

Subscriber Trunk Dialling: First STD route was introduced between Delhi and Jaipur on September 8, 1964. At present out of 368 Distt. Headquarters outside the State Capitals, 349 have been linked with State Capitals. The number of routes having STD facility from State Capitals to Distt. Headquarters has increased from 57 during last year to 68 during the year 1978-79. The routes having STD facility from Distt. Headquarters to State Capitals have gone up from 59 to 71. Additional routes with 'No Delay Service' were introduced between State Capitals and Distt. Headquarters and as on 31-3-1979 there were 254 'No Delay Service' routes from State Capitals to Distt. Headquarters and 263 in the reverse direction.

International Telex Service: Fully automatic subscriber dialled international telex service available in respect of 40 countries and switched telex service to 169 countries. Automatic telex service to Indian telex subscribers is now available for 50 countries against 27 last year. During the year direct telex service was extended to Bulgaria, Thailand, Malaysia, Kenya, Spain and Egypt on fully automatic basis through electronic type Gateway Telex Exchange, Bombay. Switched telex service was extended to New Caledonia.

Commemorative Special Stamps (Occasion & date respectively): **1979:** 4th Reunion of Punjab Regiment after independence, Feb. 20; in honour of Bhai Permanand, a great patriot, Feb. 24; International Year of the Child, 2 stamps, Mar. 5; Birth centenary of Albert Einstein, Mar. 14; in honour of Rajarshi Shahu Chhatrapati, a great champion of the labour and the downtrodden, May 1; Centenary of Post Card, India International Stamp Exhibition 1980, 2 stamps, July 2; in honour of Raja Mahendra Pratap, a great revolutionary, Aug. 15; in honour of young revolutionary Jatindra Nath Das, Sept. 13; Airmail series, 4 stamps, Oct. 15; in honour of Thomas Alva Edison, stamp on Electric Lamp, Oct. 21; National Archives, Oct. 23; Golden Jubilee Congress of the International Commission of Large Dams, Hirakud Dam, Oct. 29; India's International Trade Fair, Nov. 10; International Children's Book Fair, Nov. 10; XXIII International Atomic Energy Agency Conference, Dec. 4; Flying & Gliding, Dec. 10; Quincentenary of Guru Amar Das, a spiritual leader, Dec. 21.

1980: Third UNIDO General Conference, Jan. 21; International Philatelic Exhibition, 4 stamps, Jan. 25; Diamond Jubilee of Institution of Engineers, Feb. 17; Bicentenary of Madras Sappers, Feb. 26; International Conference on Agriculture, Feb. 29; 4th World Book Fair, Feb. 29; Welthy Fisher, Mar. 18; Centenary of Darul Uloom Deoband, Mar. 21; Keshub Chunder Sen, Apr. 15; 300th Anniversary of Chhatrapati Shivaji, Apr. 21; 5th Asian Table Tennis Championships, May 9; in honour of Narayan Malhar Joshi, father of Trade Union Movement in India, June 5; in honour of great Malayalam Poet, Ulloor S. Parameswara Iyer, June 6; 100th birth anniversary of S. M. Zamin Ali, great educationist and poet, June 25; 100th Birth Anniversary of Helen Keller, June 27; XXII Olympics Moscow, 2 stamps, July 19; 100th birth anniversary of Prem Chand, July 31; Award of Nobel Peace Prize to Mother Teresa, Aug. 28; Ist death anniversary of Earl Mountbatten of Burma, Aug. 28; 150th anniversary of Scottish Church College, Calcutta, Sep. 27; 99th birth anniversary of Rajah Annamalai Chettiar, Sep. 30; Dandi March, set of 2 stamps, Oct. 2; Ist death anniversary of Jayaprakash Narayan, Oct. 8; International Symposium on Great Indian Bustard, Nov. 1; 400th anniversary of Hijri Calendar, Nov. 3; Children's Day, Nov. 14; Ist death anniversary of hockey wizard Dhyan Chand, Dec. 3; Centenary of Gold Mining, Dec. 20; Ist birth centenary of Dr. M. A. Ansari, Dec. 15; 150th year of Govt. Mint, Bombay, Dec. 27; Brides of India series, 4 stamps, Dec. 30.

OVERSEAS COMMUNICATIONS SERVICE

The Overseas Communications Service (OCS), a Department of the Government of India, Ministry of Communications is responsible for all external telecommunication services of India. The services are provided through its four gateway centres at Bombay, New Delhi, Calcutta and Madras.

Nearly 99.5 per cent of the international telephone calls, 99.7 per cent of telex calls and 83 per cent of telegrams are carried via high quality international satellite communications system. The Vikram Satellite Earth Station at Arvi near Pune and the Ahmed Satellite Earth Station at Dehra Dun of OCS work with the INTELSAT Satellite in the Indian Ocean Region. OCS has direct satellite links to 28 countries.

OCS provides a wide variety of international telecommunication services like phototelegraph, high speed data, leased telegraph channels, PBS, news broadcasts, etc. in addition to conventional public telephone, telex and telegraph services. Telephone service is available to 210 countries, telex service to 195 countries and telegraph service to practically any destination in the world. Over a hundred customers (international trading houses, airlines, banks, etc.) are provided with international leased telegraph channels.

As on 1.4.1980 OCS operated via satellite medium 300 public telephone circuits, 495 telex circuits, 31 telegraph circuits and 103 leased telegraph circuits including 11 press bulletin service circuits.

The bulk of international telephone service is at present operated in the semi-automatic mode. ISD Telephone subscriber dialling service is available for Bombay, New Delhi, Madras and Calcutta subscribers to the whole of UK on round-the-clock basis.

Since the commissioning of the Stored Program Controlled (SPC) fully automatic International Gateway Telex Exchange (GATEX) at Bombay in Oct. 1977 and at New Delhi in 1980 direct subscribe dialling facility for Indian telex subscribers has been made to 34 countries in the world.

Net profit earned by the Govt. through OCS in 1978-79 was Rs. 326.1 million. It was expected to go upto Rs. 360 million during 1979-80. The Plan outlay on OCS projects has been fixed at Rs 702.2 million.

BROADCASTING

History: Organised broadcasting was started in India in 1927 by private, Indian Broadcasting Company from Bombay and Calcutta. This lasted till 1930. Government of India decided to run radio stations in 1932. In 1935, broadcasting was constituted into a separate department. All India Radio replaced the earlier Indian State Broadcasting Service on June 3, 1936. Real break in broadcasting came with World War II. Most of the news services and external services originated during the war years.

Akashvani: All India Radio operates this service over a network of broadcasting stations located throughout the country. It caters to the complex needs of all communities in the country.

Broadcasting constitutes the most powerful medium of mass communication covering 85 per cent of our population. At the end of February 1978, there were 84 broadcasting centres with 158 (124 medium wave, 32 short wave and 2 F.M.) transmitters in India, covering 89 per cent of population.

An outlay of Rs. 865 million has been fixed during the Sixth Plan for development projects.

Commercial Broadcasting: Commercial services were started in November, 1967.

The earnings of Commercial Broadcasting Service of Akashvani during 1979-80 were Rs. 102.9 million.

Broadcast Receiver Licences: The number of Broadcast Receiver Licences and TV licences in force as on 30-9-1979 for the three quarters of calendar year 1979 was 16,467,890 and 887,384 respectively. It was expected that the number of Broadcast Receiver Licences and TV licences may go upto 21,200,000 and 1,000,000 respectively by the end of 31-12-1979. During the calendar year 1978 the number of unlicensed sets detected was 304,773 Radios and TVs together and Rs. 3,855,230 as license fee and Rs. 3,401,409 as surcharge were collected.

TELEVISION

Television at Delhi started as an experimental service in 1959 and since then it has grown considerably. In 1961, an educational TV service was also started in Delhi with the help of the Ford Foundation and in collaboration with the educational authorities of Delhi. A regular daily service was started from Delhi in 1965. The duration of the general television programme in the evening transmission has been increased to 3 hours from July, 1970. Bombay television station started on 2nd October 1972. It started with programme time limited to 2 hours and 15 minutes daily, which has been increased to 3 hours on week days and 3½ hours on Saturdays and Sundays. Commercial TV started in India on 1st January, 1976.

At present Television has 7 full-fledged centres at Srinagar, Bombay, Madras, Calcutta, Lucknow, Delhi and Jullundur-Amritsar; 3 Programme Production Centres at Delhi, Cuttack and Hyderabad; 7 SITE on-going transmitters at Hyderabad, Muzaffarpur, Sambalpur, Raipur, Jaipur, Gulbarga and Ahmedabad; and 3 Relay centres at Mussoorie, Kanpur and Pune. The most recent station in the network was commissioned at Jullundur on April 13, 1979.

At present TV network covers an area of 0.2 million sq. km. (6.1 per cent of the total) with a population of 83.21 million out of which 48.16 million is rural and 35.05 million is urban.

The Sixth Plan of TV service envisages setting up of 3 new centres at Ahmedabad, Bangalore and Trivandrum and providing for programme production facilities at Raipur, Gulbarga, Jaipur and Muzaffarpur. Ten additional centres are also proposed to be set up.

Commercial TV was started from January 1, 1976. Ten per cent of the total transmission time is available for commercials every day.

From a revenue of Rs. 7.7 million in 1976-77 the year 1978-79 recorded a revenue of Rs. 49.7 million. The budget provision for 1979-80 was Rs. 50 million and against this TV had already earned a revenue of about Rs. 43.5 million by the end of December 1979.

PORTS

THERE are ten major ports in India, 21 intermediate ports and 152 working minor ports.

The ten major ports are Bombay, Calcutta, Cochin, Kandla, Madras, Mormugao, New Mangalore, Paradeep, Port of Tuticorin and Visakhapatnam.

State-wise distribution of intermediate ports and the number of minor ports respectively are:

Andhra Pradesh: Masulipatam, Kakinada and five minor ports. **Gujarat:** Okha, Porbandar, Bhavnagar, Navalakhi, Bedi, Veraval, Bharuch, Mandvi, Sikka, Surat and 40 minor ports. **Karnataka:** Karwar, Mangalore and 19 minor ports. **Kerala:** Alleppey, Kozhikode, and nine minor ports. **Maharashtra:** Ratnagiri, Redi, and 46 minor ports. **Orissa:** Two minor ports. **Pondicherry:** One minor port of Pondicherry only. **Tamil Nadu:** Cuddalore, Nagapattinam, Tuticorin and eight minor ports. **Andaman & Nicobar Islands:** 15 minor ports. **Lakshadweep Islands:** Seven minor ports.

Nine major ports are administered by Port Trusts, which are statutory bodies, whilst New Mangalore Port is administered directly by the Govt. of India. The intermediate and minor ports are administered by State Governments.

The National Harbour Board: The Board advises the Central Government on matters of general policy relating to port management and development including the effects on industry, commerce, shipping, railways etc. so as to ensure integrated consideration of all important port matters.

Port Development: A provision of Rs. 6,000 million has been suggested to the Planning Commission for the development of major ports in the Five Year Plan (1980-85). The Annual Plan outlay for 1980-81 for major ports is Rs. 990 million.

LIGHTHOUSES: There are 345 lighthouses, 8 lightvessels, 13 fog signals, 9 M.F. radio beacons, 2 harbour control radars, 3 Dacca navigator chains, 4 Racons and several hundreds of lighted and unlighted beacons, land marks etc. serving as aids to navigation—strewn over the coastline of approximately 7,000 kms. including Andaman, Nicobar and Lakshadweep Islands.

BOMBAY: The port of Bombay owns landed estates extending over 761 hectares from Pilot Bunder to Wadala and the docks cover an area of 283 hectares. There are 3 enclosed wet docks with a total area of 46.30 hectares, and quayage of nearly 7,776 metres inside the wet basin and 853 metres along the harbour wall. Sassoon Dock has a water area of 1.5 hectares and limited facilities for five ships of 1,000 tonnes.

Besides the docks there are a number of "Bunders" or open wharves along the harbour front with a total quayage of about 12.5 kms.

Repair facilities for shipping are provided at two drydocks—Hughes and Merewether.

The port maintains its own railway system which serves the docks, ten local stations and a large number of sidings on the Port Trust estates. It also connects the main line railways.

Of all Indian ports, the Bombay port handles the largest number of containers and their number is increasing. In 1977-78 the port handled 13,599 containers, weighing 109,142 tonnes, and in 1979-80 it handled as many as 77,832 containers, weighing 857,392 tonnes.

The number is expected to exceed 90,000 in 1980-81.

Considering the severe congestion at the port and the need for modern port facilities and a deeper port for handling larger volumes of bulk cargo traffic, the Central Govt. has cleared a proposal for commissioning a detailed project report on the construction of a satellite port at Nhava Sheva. The new port, after construction, is expected to ease congestion of the Bombay port.

Chairman: K. K. Uppal; **Dy. Chairman:** N. R. Mane; **Secretary:** R. U. Pai.

CALCUTTA: There are two impounded docks, known as Kidderpore Dock and Netaji Subhas Dock. The third and subsidiary deep water modern dock at Haldia meant for handling bulk carriers and bigger vessels has been commissioned in Feb. 1977. Ore and coal berths have started shipment. Cement, fertilisers and container ships are also being handled there. The Haldia Dock project in its first phase provided for one riverside oil jetty and two fully mechanical berths for loading ore and coal, three other berths for foodgrains, general cargo, heavy lift and containers and a finger jetty for salt and other similar type of cargo within an impounded dock

There are five dry docks—two in Netaji Subhas Dock, and three in Kidderpore Dock No. 1.

Two riverside jetties are also available at Garden Reach for sea-going vessels. Of late, containers are also being handled at

Calcutta at 'D' Netaji Subhas Dock. Taking into account the differences in size, design and mode of berthing the port can hold about 75 to 90 vessels in impounded docks, riverside jetties and river moorings.

There are six jetties with pontoons at Budge Budge, about 22.53 kms. from Calcutta.

Kidderpore Dock No. 2 has two coal berths.

The port including the new oil jetty at Haldia can handle over 14 million tonnes of traffic annually.

The chief exports from Calcutta are coal, tea, sugar, gunnies, bone and bone-meal, bunker oil, iron and steel manufactures, lac, scrap, engineering goods, ores, mica and railway wagons. The principal imports are salt, foodgrains and flour, sulphur, tinplate, machinery, petroleum, iron and steel, metals other than iron and steel, lubricating oil, cement, soda, timber, fertilisers, bricks, chemicals, oils and railway material.

Chairman: R. H. M. D'Silva; **Secretary:** K. N. Ganguly.

COCHIN: The port of Cochin is open for deep water traffic in the worst monsoons and provides a splendid anchorage at all times of the year. Any ship drawing upto 30 ft. draught can enter the port even in the roughest weather.

The Cochin Harbour Railway is connected with the broad gauge system of the Southern Railway. Inside the harbour there are 11 stream berths, 2 coal berths, 8 wharf berths, 1 boat train pier jetty, one open berth and 2 tanker jetties. Facilities for handling container cargo are provided at Q-5 berth of Ernakulam wharf.

During the Fifth Plan (1974-79) the Port authorities undertook schemes to provide container handling facilities at the open berth; facilities for handling and storage of bulk import of fertiliser raw materials for FACT at Q-10 area, acquisition of dredgers, high power tugs and cargo handling equipments and provision for additional warehouses. The south coal berth has been modified with storage facilities for bulk import of liquid ammonia for the needs of the Cochin division of FACT. During the Sixth Plan (1980-85) it is proposed to provide additional container handling facilities at Q-9, floating craft like tugs etc and improvement of infra-structural facilities. An integrated scheme for port development consisting of an oil terminal and a fertiliser berth with 40 ft. draught is one of the most important schemes of the port's Sixth Plan.

The principal imports are foodgrains, mineral oils (crude), cashewnuts, zinc concentrate, fertiliser and its raw materials. The principal exports are coir and coir products, tea, rubber, cashew kernels, seafoods, coconuts, spices, and mineral oil products.

Chairman: U. Mahabala Rao, I.A.S.

KANDLA: The major port of Kandla has now the following main facilities:

A cargo jetty with: (a) 1,166 m. of quayage and designed depth of 9.8 m. of water alongside to accommodate five large size ships or six liberty type ocean-going vessels; a marine unloader, designed to handle 500 tonnes of fertiliser and its raw materials per hour, has been installed at the fifth berth and commissioned. (This has a back-up storage facility of 30,000 tonnes and has automatic bagging and stitching arrangements); (b) three single storeyed transit sheds, each 137 m. long and 43 m. wide, with a total storage capacity of about 15,000 tonnes of general cargo; (c) broad wharves liberally served by dual gauge system of railway lines and roads; (d) 21 electric quay cranes, the most modern type of 3 tonnes, 6 tonnes and 10 tonnes capacities; (e) spacious open stacking grounds served with railway and road sidings; (f) four double storeyed warehouses, each 152 m. long and 37 m. wide with storage capacity of 60,000 tonnes, with overbridge connections to the roofs of the transit sheds, and provided with modern cargo lifts, chutes and loading platforms; (g) 'Grinnel' automatic sprinkler and fire alarm system has been provided in one warehouse as a measure for protection against fire, for the storage of cotton cargo in the warehouse, dangerous cargo sheds of 320 tonnes capacity and a calcium carbide shed of 48 tonnes capacity; two vegetable oil tanks with a total capacity of 400 tonnes; 3 sheds for storage of 10,000 tonnes fertiliser; (h) Oil jetty berths with 8 pipelines of different dimensions for handling P.O.L., edible oil and liquid chemicals; (i) 60 tonnes gantry crane in Bunder for heavy packages; (j) fishing jetty with 2 tonnes crane with cold storage facilities.

Sixty-two tanks for storage of edible oil with capacity of 141,820 tonnes have been erected in the vicinity of the port by private owners. A warehouse of 5,000 tonnes storage capacity has been built by the Central Warehousing Corporation inside the cargo jetty area.

The port is equipped with V.H.F. communication network for maintaining contact with pilot launches, survey launches and ships calling at the port.

The port is connected to its hinterland by broad gauge rail connection via Jhund-Ahmedabad and metre gauge rail connection via Disa-Palanpur. Also a national highway connects Kandla to Ahmedabad.

A Free Trade Zone has been established at Kandla.

The chief imports are mineral oil, vegetable oil, phosphoric acid, rock phosphate, fertilisers, muriate of potash, sulphur, phosphoric acid, cement, food products and machinery. Exports are sugar, bentonite, bauxite, salt, guar gum, wheat, bentonite and livestock.

Single Buoy Mooring, to handle VLCC tankers to discharge crude oil through submersible and shore based pipelines—capacity 2,000 tonnes each per hour—was commissioned in August 1978.

Chairman: S. L. Verma, I.A.S.; **Secretary:** B. S. Barot.

MADRAS: Berthing facilities: There are in all 20 berths and 3 moorings with depth ranging from 7.90m. to 14.6m. The alongside berths include an oil berth in the Bharathi Dock.

Bharathi Dock: This outer dock located on the northern side of the main harbour basin is named after Subramania Bharathi. The dock comprises an oil berth and ore berth both designed to cater to 100,000 DWT tankers.

The oil berth now catering to 88,000 DWT tankers consists of five marine loading/unloading arms, 3 for handling crude and 2 for refined products. The crude can be handled at 4,000 tonnes per hour and the refined products at 700 tonnes per hour.

A fully mechanised iron ore handling facility designed for receiving by rail, stockpiling, reclaiming, weighing, sampling and shiploading iron ore was completed and commissioned. The second stream was commissioned on March 21, 1978. The quantity to be handled per annum will be 5 million tonnes initially and 8 million tonnes ultimately. It consists of 2 streams each of 4,000 TPH capacity for shiploading operation.

Cargo Handling equipment: Modern cranes of various capacities have been provided at each berth in addition to an adequate number of mobile cranes, forklifts, platform trucks, tractors, trailors etc. In addition a floating crane 'VAIGAI' of capacity 120 tonnes also helps the handling of heavy packages overside. Palletisation on an extensive scale is also among other factors helping to achieve quicker turn-round of vessels. Pre-slinging method in cargo handling has also been introduced.

Containerisation: At Bharati Dock a container parking yard is being provided having an area of 25,500 sq. mtrs. for sorting containers and also a freight station with an area of 2,380 sq. mtrs. for stuffing and destuffing of containers.

Storage and other facilities: There are 17 warehouses and 10 transit sheds providing covered accommodation of 800,000 sq. mtrs. and 47,000 sq. mtrs. respectively with rail-road access. Bonding facilities and separate stacking area for hazardous goods are available. In addition 310,000 sq. mtrs. of open area is also available for storage.

Apart from this there are 8 storage tanks of capacity ranging from 1,000 to 10,000 tonnes with shore-to-ship and vice versa pumping facilities to handle liquid cargo.

Types of cargo handled: The main imports are coal, mineral oils, fertilisers, phosphate, sulphur, phosphoric acid, machinery, hardware, iron and steel, cement, metals and timber

The principal exports are iron ore, barytes, food grains, hides and skins, refined oil products, sugar, tobacco, oil cake, scrap, twist and granite.

Chairman: V. Selvaraj, I.A.S.; **Secretary:** P. R. Narasimhan.

NEW MANGALORE: New Mangalore port is situated 9 kms. north of the existing minor port of Mangalore and is the 9th major port in the country.

It is connected by a broad gauge railway line to Madras via Shornur and National Highway 17 connecting Bombay to Cape Comorin passes close by.

The port provides for 3 alongside berths to cater to (1) general cargo, (2) iron ore and manganese ore, (3) raw material import for fertiliser factory, (4) one shallow draught berth for export of finished fertilisers and (5) an oil jetty for handling of naphtha and petroleum products. The dredged depth available at all the alongside berths including oil jetty is 9.15 mtrs. The shallow draught berth has a draught of 5.75 mtrs.

The port has been well provided with storage facilities and cargo handling equipment, such as floating cranes, electric level luffing cranes, mobile cranes, pay loaders, tractor trailer units etc.—all of varying capacities.

Estimated annual traffic: The port was expected to handle a traffic of about 0.70 million tonnes during 1979-80 and 1.2 million tonnes in 1980-81. Main items of traffic are iron ore, manganese ore, fertilisers, tiles, cement, tapioca chips, salt, petroleum products, forest products, coffee and other general cargo.

In order to develop the port to cater to the needs of receiving 60,000 DWT ore carriers for export of Kudremukh iron ore the following developmental works at a cost of Rs. 385.3 million have been taken up.

Construction of iron ore berth, deepening the lagoon, inner and outer approach channels, protection of entrance channel by extending the break waters on either side from 3.66 mtr. contours to 5.00 mtr. contours; improving navigational aids, additional harbour rafts for berthing and unberthing of bulk ore carriers, bunkering facilities; electrical installations, water supply connections, extensions of roads, drainage and other facilities.

Chairman and Conservator of the Port: E. S. Rajabather.

MORMUGAO: A major port providing modern facilities in handling oil, iron and ferroginous manganese ores and general cargo traffic.

During the year 1979-80, the Mormugao Port Trust handled a total traffic of 14.5 million tonnes, which constituted of 12.82 million tonnes of iron ore and iron ore pellets, 0.38 million tonnes manganese ore, 0.25 million tonnes of oil cakes, sugar, calcium, alumina, molasses etc. (all in exports) and 1.05 million tonnes of imports consisting of mineral oils, phosphoric acid, fertilizers, cement, copper and other general cargo.

Modern ore handling facilities: The ore berth complex commissioned on October 1, 1979 is provided with a mechanical loading plant of a loading capacity of 8,000 tonnes per hour. This berth also has as its adjunct, an ore stacking area for about one million tonnes of ore at a time, four barge jetties with eight grab unloaders of 300 t.p.h. each for unloading barge borne ore and a wagon-tippler of 1,000 t.p.h. for receiving railborne ore. The system is provided with three stackers of 2,500 t.p.h. each, two reclaimers of 4,000 t.p.h. each and two ship loaders of 4,000 t.p.h. each. The ore handling facilities are provided with necessary surge bins, transfer houses, automatic sampling plants, belt weighers, and all other accessories.

The ore berth (Berth No. 9) is suitable for a loaded draft of 12 mtrs. which can accommodate 60,000 DWT. vessels for full loading and vessels of even about 100,000 DWT for primary loading upto 70,000 tonnes.

Chairman: Prabhakar Kamat, I.A.S.; **Dy. Chairman:** L. da Rocha.

PARADIP: The deep-water, all-weather major port of Paradip is situated on the east coast in the Bay of Bengal. The port is 210 nautical miles south of Calcutta and 260 nautical miles north of Visakhapatnam.

Paradip is connected by broad gauge railway system, national highway No. 5-A, and state express highway to other parts of India.

The port has one iron ore berth, one general cargo berth and a mooring buoy berth. The iron ore berth is equipped with a mechanical ore handling plant with a rated capacity of 2,500 tonnes per hour. It can accommodate vessels of 60,000 DWT, 260 mtrs. LOA and 11.9 mtrs. draught. The general cargo berth has a length of 290 mtrs and can accommodate vessels of 10.5 mtrs. draught. This berth is served with three 13-tonne shore cranes and is provided with transit sheds of 15,000 tonnes total storage capacity. Two additional transit sheds and five warehouses and large open stacking yards served by roads and rail are available. The port is equipped with most modern cargo handling equipments consisting of mobile cranes of 30-tonne capacity, forklifts, dumpers, etc. The mooring buoy berth can accommodate vessels of 11.9 mtrs. draught and 260 mtrs. LOA.

Traffic handled in 1978-79 was 2.2 million tonnes and traffic handled in 1979-80 was 2.3 million tonnes.

Chairman: Satya Rajan Pal.

TUTICORIN PORT: It is a major port consisting of two wings i.e. the erstwhile major port of New Tuticorin (Zone-A) and the erstwhile intermediate Port of Tuticorin (Zone-B), functioning under a single administrative set up.

The Zone-A has 4 alongside berths with total quayage of 810 m. two of which have transit sheds (each of size 150m × 36m), for handling bulk, break-bulk, general cargoes and containers. One permanent oil jetty is also available for handling POL products. The port can receive vessels with draughts upto 8.24 m. at all times and 8.85 m. at high tides. There is a hazardous cargo shed with 11 compartments (a total of 650 sq.m. of floor area) for the storage of various classes of cargo under the IMCO code. A fumigatorium for fumigating 2,000 bales of cotton at a time is available. The cargo handling equipments in this port include 13 wharf cranes with capacity varying from 3 T to 10 T, 18 fork lift trucks, 4 front end loaders and 2 diesel locos. Bunkering facilities and supply of fresh water to vessels are provided round the clock.

Zone-B, which is also called as extension port is an anchorage port having lighterage facilities to handle ships of any size and draughts. Wharves and jetties of various sizes to a total length of 1043.43m. are available for berthing lighters and barges with a draught of about 2.75 m. There is a dry dock of size 45.70 m. long, 15.20 m. wide and 2 m. of water above sill and backed with workshop facilities.

All the berths in the major port and the wharves and jetties of the extension port are served by railway lines connected to the Southern Railway on the metre gauge. The Port is also linked directly to the National Highway 7-A.

Chairman: V. Sundaram, I.A.S.

VISAKHAPATNAM: Ships drawing upto 10.21 metres having a length upto 195 metres can enter the inner harbour. Ships drawing upto 15.3 mtrs. and having a length upto 263 mtrs. can be accommodated at the outer harbour ore berth.

The inner harbour consists of six east quay berths, two west quay berths, an oil wharf consisting of two berths, one mechanised fertiliser berth, three jetty berths and one mooring berth. It can accommodate 14 ships alongside and one in moorings. All the quay berths are equipped with electric cranes, transit sheds, railway lines, road approaches etc.

The outer harbour, with an iron ore berth-finger type jetty (OB I and OB II) capable of accommodating two ore carriers, each of 100,000 DWT, simultaneously on either side of the jetty, equipped with mechanical ore handling plant capable of loading iron ore at 8,000 tonnes per hour, has been commissioned.

A dry-dock, 137.16 mtrs. long, 18.44 mtrs. wide, 5.63 mtrs. deep can accommodate ships of 122 mtrs. in length and 4.9 mtrs.

draught. A graving dry-dock is available for dry-docking ships upto 70,000 DWT.

The port has 6 transit sheds capable of accommodating 48,100 tonnes of cargo. The 2 storage sheds at the S. L. Canal area can store about 13,200 tonnes.

Two large warehouses, with a capacity of 30,500 tonnes can be used for the storage of cargo awaiting shipment.

The stacking capacity for iron ore is 600,000 tonnes. For stacking mineral ores, a vast area of about 91,273 sq. mtrs. is available.

Open space measuring about 187,881 sq. mtrs. is available for storage of pig iron, steel materials, rock phosphate, sulphur, general cargo etc.

Chairman: R. Srinivasan: **Dy. Chairman:** T. R. Prasad: **Secretary:** Y. Parthasaradhi.

GUJARAT PORTS: There are in all 42 ports in Gujarat State of which Kandla is a major port, Diu and Daman are centrally administered ports while 11 intermediate and 28 minor ports are under the administrative control of the State Government through the Director of Ports, Ahmedabad 380 016.

Cargo handled in tonnes by Gujarat group of ports (imports and exports) respectively during 1979-80 was Mandvi: 3,564, 86,377; Navalakhi: 198,565, 28; Bedi: 205,165, 670,577; Okha: 86,182, 116,864; Porbandar: 47,661, 198,919; Veraval: 112,645, 143,134; Bhavnagar: 345,992, 109,560; Mahuva: 11,893, 94,093 and Bharuch: 28,774, 570.

Intermediate Ports: Mandvi, Navalakhi, Bedi, Sikka, Salaya, Okha, Porbandar, Veraval, Bhavnagar, Bharuch and Surat (Magdalla).

Minor Ports: Koteshwar, Jakhau, Mundra, Jodya Pindhara, Rupen (Dwarka), Beyt, Kotda, Mangrol, Madhvad, Navabandar, Talaja, Gogha, Mahuva, Jafrabad, Pipavav, Rajpara, Khambhat, Dhahej, Bhagwa, Onjal, Billimora, Valsad, Umarradi, Vansiborsi, Kolak, Maroli, Umbergaon.

Development works: The work of all weather port project at Porbandar is completed and the port is being developed as a fishing harbour. Veraval and Mangrol ports are also being developed as fishing harbours with World Bank assistance costing Rs. 235 million. Developmental work on the ports of Jafrabad and Magallara is progressing. These ports are to cater the needs of cement, clinker and coal traffic. The estimated cost of the development is Rs. 120.9 million. Gogha and Dhahej ports on the Gulf of Cambay are being provided with a service ferry for transporting loaded trucks, buses, cars etc. at an estimated expenditure of Rs. 51.5 million. Hazira in Surat is also under consideration for further development.

MAJOR PORTS (1979-80)

Ports	Receipts Rs.	Expenditure Rs.	No. of Passengers embarked	No. of Passengers disembarked	Imports in Tonnes	Exports in Tonnes
Bombay	959,293,000	591,093,000	100,760	103,819	11,581,689	5,037,404
Calcutta	962,000,000	863,000,000	14,612	10,979	6,001,000	2,554,000
Cochin	177,959,000	177,810,000	4,262	6,287	4,356,499	1,108,052
Kandla	186,713,000	138,972,000	—	—	6,809,502	463,370
Madras	435,264,000	352,597,000	34,613	31,834	5,705,489	4,279,766
Marmugao	186,420,000	183,941,000	—	—	1,054,778	13,450,459
New Mangalore	28,888,000	21,648,000	—	—	674,465	227,048
Tuticorin	33,226,305	29,008,032	—	—	1,712,788	698,526
Visakhapatnam	280,904,000	344,978,000	962	1,928	4,066,920	6,162,541

EAST COAST PORTS (1979-80)

Ports	Receipts Rs.	Expenditure Rs.	No. of Passengers embarked and disembarked	Imports in Tonnes	Exports in Tonnes	Total tonnage of cargo handled
Colachel	52,976	25,525	—	—	17,000	17,000
Cuddalore	201,000	1,145,952	—	28,700	14,955	43,655
Kakinada	7,718,253	604,249	—	206,982	638,132	845,114
Kanyakumari	8,188	19,216	—	—	—	—
Kilakarai	11,646	29,535	—	896	1,816	2,712
Nagapattinam	945,000	711,577	6,823	25,850	29,909	55,760
Pamban	54,612	120,717	—	920	90	1,010
Rameswaram	708,000	224,710	156,749	184	538	722

MINOR PORTS OF MAHARASHTRA STATE (1979-80)

Group of Ports	PASSENGERS EMBARKED & DISEMBARKED		Imports in Tonnes	Export in Tonnes
	Steamer Passengers Traffic	Creek Passengers traffic by Launch & Ferry Service		
Bandra	—	3,381,239	3,561	13,522
Mora	—	1,578,906	65,551	51,734
Rajapuri	—	1,197,590	6,742	1,085
Ratnagiri	35,853	2,996,396	29,127	2,813
Vengurla	73,364	1,802,272	8,948	1,970
Vijaydurg	—	347,308	6,538	1,323,455

MINOR PORTS OF KERALA (1976-77)

Ports	Receipts Rs.	Expenditure Rs.	No. of Passengers embarked and disembarked	Imports in tonnes	Exports in tonnes	Total tonnage of cargo handled
Alleppey	61,341	463,958	—	9,750	—	9,750
Azhikkal	93,295	85,963	—	14,907	5,285	20,192
Azhikode	16,851	14,160	—	—	—	—
Badagara	1,005	14,891	—	—	—	—
Calicut (incl. Beypore)	519,730	897,691	592 & 472	59,359	75,280	134,639
Cannanore	3,727	22,731	—	180	17	197
Kasargod	1,794	10,263	—	—	—	—
Neendakara	640,512	800,214	—	66,095	17,562	83,657
Ponnani	5,427	24,796	—	—	26	26
Tellicherry	6,658	36,136	—	1,181	—	1,181
Trivandrum	5,529	80,968	—	—	—	—

RAILWAYS

HISTORY: First railway (consisting of 14 four-wheeled teak coaches carrying 400 passengers) in India ran over a distance of 33.6 kms. from Bombay to Thana on 16th April, 1853. Development of rail communications, however, took place after 1858. Upto 1857, railway was practically unknown, except for a few miles around Bombay, Calcutta and Madras.

The freedom movement highlighted the need for proper communications. Thus by 1871, a general system connecting the different provinces and the hinterland of each province with its ports was completed.

The Government of India took under direct management: The East India Railway—1st January, 1925; Great Indian Peninsular Railway—30th June, 1925; Burma Railways—1st January, 1929; Southern Punjab Railway—1st January, 1930.

Zonal Administration: The entire Government Railway system is now grouped into nine administrations (Headquarters within brackets): Southern Railway (Madras); Western Railway (Bombay); Central Railway (Bombay); Northern Railway (Delhi); Eastern Railway (Calcutta); South-Eastern Railway (Calcutta); North-Eastern Railway (Gorakhpur); North-East Frontier Railway (Maligaon, Gauhati); South Central Railway (Secunderabad).

New trains introduced during 1978-79: Madras-Ahmedabad Navjivan Express; Bhubaneswar-Secunderabad Konark Express; Secunderabad-Bombay Minar Express; Dur-Varanasi Sarnath Express (Bi-weekly); Howrah-Jammu Tawi Himagiri Express (Bi-weekly); Ahmedabad-Udaipur City Express; Ahmedabad-Bhavnagar–Porbandar Gandhigram Express and Jaipur-Bikaner Express (metre gauge). **During 1980:** Bombay VT-Varanasi Mahanagari Express; Puri-New Delhi Nilachal Express.

SOME BASIC FACTS

No. of daily passengers: 9.6 million; first sleeper accommodation for II Class (then III Class) introduced in 1954; total no. of sleeper coaches: 3,973 (2,919 broad gauge and 1,054 metre gauge); labour force: 1.52 million men and women; total route kilometerage: 60,777 kms; no. of locomotives—steam: 8,082, diesel: 2,126, electric: 944; coaching stock—passenger carriages: 26,830; electric multiple unit coaches: 2,412; rail cars: 72; other coaching vehicles: 8,328; no. of wagons: 401,880; no. of tank wagons: 31,161, no. of trains daily: about 11,000; no. of stations 7,021; amount of freight carried daily: 0.61 million tonnes; Railway Budget separated from Central Bugdet: 1,925; carrying capacity of wagons—2 axle wagons: 22 tonnes, 4 axle wagons: 55 to 65 tonnes; gross load of average freight train—conventional (2 axle wagons): 2,230 tonnes; special (4 axle wagons): 3,650 tonnes; container service introduced: January, 1966; no. of trains running over 1,000 kms.: 75; no. of trains running over 2,000 kms.: 13; fastest train: Rajdhani Express (started 1969)—Delhi to Calcutta—covers 1,445 kms. in 17 hours—permissible speed—130 kms. p.h.; first electric train 1925—Bombay V.T. to Kurla—16 kms.: first double decker train service (Bombay-Pune) inaugurated April 12, 1978; no. of rail bridges: 111,431; no. of level crossings.: 40,911; longest rail-cum-road bridge in Asia at Rajahmundry over river Godavari: 2.9 kms.; biggest marshalling yard: Mughalsarai—6,000 wagons a day; longest railway platform: Kharagpur—833 metres; total no. of seats: 2,074,106; no. of air-conditioned seats: 9,054; no. of first class seats 159,885; mandays lost due to strikes: 16.75 million; total female staff: 25,254 including 14,831 in Cl. III posts (clerks and Stenographers 8,143; nurses 2,810 and 1,545 teachers) and 11,832 in Cl. IV; total female officers: 391; no. of licensed porters: 38,710.

Railway Accidents: The number of train accidents—collisions, derailments, level crossing accidents and fires in trains—during 1964-65 and since 1970-71 onwards are tabulated below:-

Year	Collisions	Derailments	Level Crossing accidents	Fires in trains	Total
1964-65	81	1,025	146	31	1,293
1970-71	59	648	121	12	840
1971-72	57	667	118	22	864
1972-73	59	598	131	27	815
1973-74	66	578	125	13	782
1974-75	66	696	140	23	925
1975-76	64	768	105	27	964
1976-77	75	633	86	16	780
April to December					
1977	42	543	67	9	661
1978-79	55	778	86	12	931

Super fast trains: *The Frontier Mail* between Delhi and Bombay Central; *The Howrah-Kalka Mail* between Delhi and Howrah; *The Grand Trunk Express* between New Delhi and Madras Central; *The Deccan Queen* between Bombay V.T. and Pune; *The Brindavan Express* between Madras Central and Bangalore; *The Taj Express* between New Delhi and Agra Cantt.; *The Jayanti Janata Express* between Delhi and Muzaffarpur; *The Delux Express* between New

Delhi and Howrah; *The Tamil Nadu Express* between New Delhi and Madras Central; *The Andhra Pradesh Express* between New Delhi and Hyderabad; *The New Delhi-Karnataka–Kerala Express; The Jammu Tawi-Bombay Central Express; The Pink City Express* between Delhi and Jaipur; *The Coromandal Express* between Howrah and Madras; *The Gomati Express* between New Delhi and Lucknow; *The Vaigai Express* between Madras, Egmore and Madurai; *The Geetanjali Express* between Bombay VT and Howrah; *The Steel Express* between Howrah and Tatanagar; *The Kovai Express* between Madras and Coimbatore; *The Howrah-Asansal Express; The Konarak Express* between Bhubaneswar and Secunderabad & *The Minar Express* between Bombay V.T. and Secunderabad.

Ticketless Travel: In 1978-79 the railways apprehended 3.79 million ticketless travellers and 2,519 corrupt members of railway staff. The railway earned Rs. 42.80 million from (fines levied on) ticketless travellers.

Pilferage: There were 68,380 cases of pilferage during 1979-80 against 78,459 during 1978-79. The railways paid Rs. 36.39 million as compensation in 1979-80 against Rs. 43.23 million in 1978-79.

RAILWAY STATISTICS (1979-80)

		Central	Eastern*	Northern	North Eastern
Total Route Kilometrage		6,684.01	4,196.85	10,853.09	5,113.11
Broad Gauge (including electrified kms.)		5,263.83	4,065.20	7,302.77	220.21
Metre Gauge		380.04	–	3,290.76	4,892.90
Narrow Gauge		1,040.14	131.65	259.56	–
Kilometrage (electrified)		614.76	1,208.54	822.25	–
Kilometrage (under construction)		213.70	–	197.45	–
Capital at charge (Rs. million)		7,596.98	5,432.74	7,273.80	1,943.0
Gross Revenue (Rs. million)		4,120.51	2,348.75	3,676.00	949.7
Working Expenses (Rs. million)		3,099.38	2,680.27	3,402.02	1,194.9
Net Revenue (Rs. million)		1,021.13	−331.52	273.98	−245.2
No. of Locos	Steam	896	1000	1,307	808
	Diesel/Electric	379	143	271	–
	Diesel/Hydraulic	68	51	93	–
	Electric	181	224	181	–
Electric Motor Coaches		238	210	–	–
No. of Passenger Coaches (including other coaching vehicles, but excluding brake vans)		3,154	3,775	4,705	3,634
Passenger carrying capacity:	Air Conditioned (B.G.)	316	–	994	–
	Air Conditioned (M.G.)	–	–	36	78
	First Class (B.G.)	10,511	–	11,716	315
	First Class (M.G.)	–	–	2,264	5,997
	First Class (N.G.)	359	–	391	–
	Second Class (B.G.)	128,152	–	197,975	6,461
	Second Class (M.G.)		–	46,253	136,229
	Second Class (N.G.)	11,216	–	4,274	–
No. of Passengers Carried ('000)		903,998	545,337	398,038	204,352
No. of Goods Wagons (covered)		28,713	32,051	38,381	18,239
No. of Special Wagons		11,790	9,016	3,675	4,127
No. of Goods Wagons (open)		9,756	23,078	19,006	5,258
Tonnes Carried ('000)		55,973	65,209	57,037	11,000
No. of Staff		210,049	220,223	227,466	100,014

RAILWAY STATISTICS (1979-80) — *(Contd.)*

		North East† Frontier	South Central	Southern*	South Eastern	Western
Total Route Kilometrage		3,628.13	6,478.08	6,488.76	7,006.32	10,339.04
Broad Gauge (including electrified kms.)		639.40	3,164.14	1,920.22	5,527.30	3,084.91
Metre Gauge		2,901.35	3,313.94	4,420.08	–	6,119.31
Narrow Gauge		87.48	–	148.46	1,479.02	1,134.82
Kilometrage (electrified)		–	–	166.44	1,414.65	496.13
Kilometrage (under construction)		–	125.52	214.01	286.83	762.95
Capital at charge (Rs. million)		2,268.07	5,047.82	5,320.90	103,305.031	675.32
Gross Revenue (Rs. million)		647.54	2,173.29	1,564.00	3,778.025	3,847.2
Working Expenses (Rs. million)		917.27	1,859.30	1,771.00	2,952.234	2,884.3
Net Revenue (Rs. million)		268.4	313.99	207.00	825.791	962.9
No. of Locos:	Steam	464	817	792	693	1,147
	Diesel/Electric	94	303	162	236	283
	Diesel/Hydraulic	–	13	43	42	83
	Electric	–	5	20	257	89

---

*Figures are for 1978-79 †Figures are for 1977-78

RAILWAY STATISTICS (1979-80) — *(Contd.)*

		North East† Frontier	South Central	Southern*	South Eastern	Western
Electric Motor Coaches		-	–	45	43	205
No. of Passenger Coaches (including other coaching vehicles, but excluding brake vans)		2.416	2,674	4.954	3.396	5.580
Passenger carrying capacity:	Air Conditioned (B.G.)	-	220	1,318	2,714	4,250
	Air Conditioned (M.G.)	42	–	54	-	-
	First Class (B.G.)	2,718	7,870	10.819	17.846	10.526
	First Class (M.G.)	4,649	3,951	6,532	-	8.817
	First Class (N.G.)	194	–	-	595	648
	Second Class (B.G.)	23.298	86,326	141.143	163.441	103.941
	Second Class (M.G.)	64,197	50,282	133,898	-	121.889
	Second Class (N.G.)	967	-	455	10,443	8,071
No. of Passengers Carried ('000)		52.020	156,560	335.878	160.405	1.053.421
No. of Goods Wagons (covered)		6.822	17,064	16.990	18.810	40.330
No. of Special Wagons		23	6,699	4.279	64.261	12.201
No. of Goods Wagons (open)		2.263	6,857	9.505	14.508	20.449
Tonnes Carried ('000)		8.608	32,462	23.976	81.663	38.618
No. of Staff		85.928	116,630	129.472	197.550	201.744

*Figures are for 1978-79 †Figures are for 1977-78

ROADS

LENGTH of roads in 1914: 273,000 kms. **Length of roads** in April, 1979: 1,604,110 kms. (of which **Metalled roads:** 623,402 kms. **Unmetalled roads:** 980,708 kms.)

Above total includes 165,427 kms.of Community Development/ *Panchayat Samiti* roads.

National Highways: The Union Government is responsible for the system of national highways formed in 1947. There are 57 roads classified as National Highways measuring a total length of 29,340 kms. These are (1) Delhi - Amritsar, (2) Jullunder - Srinagar - Uri, (3) Batote - Doda - Kishtwar, (4) Delhi - Calcutta, (5) Agra - Bombay, (6) Thane - Pune - Bangalore - Madras, (7) Belgaum - Ponda - Panaji, (8) Baharagora - Cuttack - Bhuvaneshwar - Vijayawada - Madras, (9) Haridaspur - Paradip Port, (10) Dhule - Nagpur - Sambalpur - Bahara - Gora - Calcutta, (11) Varanasi - Mangawan - Jabalpur - Nagpur - Hyderabad - Karnool - Bangalore - Salem - Madurai - Kanyakumari, (12) Palayankottai - Tuticorin, (13) Delhi - Jaipur - Udaipur - Ahmedabad - Baroda - Bombay, (14) Ahmedabad - Limbdi - Morvi - Kandla, (15) Bamanbore - Rajkot - Porbunder, (16) Chiloda - Gandhinagar - Surkhej, (17) Pune - Sholapur - Hyderabad - Vijayawada, (18) Delhi - Hissar - Fazilka, (19) Agra - Bharatpur - Jaipur - Bikaner, (20) Jabalpur - Bhopal - Biaora, (21) Sholapur - Chitradurga, (22) Pathankot - Bhatinda - Ganganagar - Bikaner - Jaisalmer - Barmer - Samakhiali, (23) Panvel - Mahad - Panaji - Karwar - Mangalore - Cannanore - Calicut - Edapalli, (24) Cortalim - Mormugao, (25) Chandigarh - Rupar - Bilaspur - Mandi - Kulu - Manali, (26) Ambala - Kalka - Simla - Narkanda - Rampur - Chini*, (27) Chas - Ranchi - Rourkela - Talchar - Nuatta, (28) Delhi - Bareilly - Lucknow, (29) Lucknow - Kanpur - Jhansi - Shivpuri, (30) Jhansi - Lakhandon, (31) Allahabad - Mangawan, (32) Barauni - Muzaffarpur - Pipra - Gorakhpur - Lucknow, (33) Pipra - Sangauli - Raxaul*, (34) Gorakhpur - Ghazipur - Varanasi, (35) Mohania - Patna - Bakhtiarpur, (36) Barhi - Bakhtiarpur - Mokameh - Purnea - Dalkhola - Siliguri - Sivoi - Cooch Bihar - North Salmera - Pandu, (37) Sivoi - Gangtok, (38) North Salmera - river Brahmaputra near Goalpara, (39) Jamshedpur - Purulia - Dhanbad - Gobindpur, (40) Barhi - Ranchi - Chandil - Bhargora, (41) Dalkola - Behrampore - Baraset - Calcutta, (42) Baraset - Bangaon*, (43) Nowgong - Dabaka - Dimapur, (44) Pancharatna - Gauhati - Jorabat - Kamargaon - Makum - Caikhoagat, (45) Nadum - Lado - Lakhapani, (46) Mumligarh - Imphal - Palel - Morah*, (47) Jorhat - Shillong - Dawki*, (48) Kalaghat - Haldiapost, (49) Sambalpur - Angul - Cuttack, (50) Raipur - Vizianagaram, (51) Shillong - Pani - Badarpur - Agartala, (52) Madras - Tiruchirappalli - Dindigul, (53) Krishnagiri - Ranipet, (54) Salem - Coimbatore - Trichur - Ernakulam - Trivandrum - Kanyakumari, (55) Nalamangala - Hassan - Mangalore, (56) Madurai - Dhanushkhodi, (57) Nasik - Pune.

During the 32 years ending with 31st March, 1979, 4,193 kms. of missing links including diversions as well as 329 major bridges were constructed.

Sixth Plan: The Sixth Plan has targetted an outlay of Rs. 8,300 million for central schemes. Rs. 23,988.7 million for States schemes and Rs. 2,100.9 million for union territories schemes, aggregating to an outlay of Rs. 34,389.6 million. See Table II also.

Statewise length of National Highways (in Kms.): Andhra Pradesh 2,282; Assam 1,496; Bihar 2,118; Gujarat 1,425; Haryana 662; Himachal Pradesh 589; Jammu & Kashmir 593; Karnataka 1,968; Kerala 836; Madhya Pradesh 2,676; Maharashtra 2,889; Manipur 212; Meghalaya 334; Nagaland 113; Orissa 1,641; Punjab 977; Rajasthan 2,110; Sikkim 41; Tamil Nadu 1,865; Tripura 198; Uttar Pradesh 2,472; West Bengal 1,519. *Union Territories*—Chandigarh 14; Delhi 87; Goa, Daman & Diu 223.

States' Roads: The roads maintained by the States are classified as State Highways. PWD roads, *Zilla Parishad* roads, Village *Panchayat* roads, Community Development/*Panchayat Samiti* Roads. As on April, 1979, State highways were 94,099 kms., PWD 391,898 kms., *Zilla Parishads* 309,081 kms., Village *Panchayat* 292,197 kms., CD and *Panchayat samiti* 165,427 kms.

---

*These national highways extend to the nearest international border

Urban Roads measure a total length of 104,211 kms. while the project roads measure in total 217,857 kms.

The Border Roads Organisation was set up in 1960 to provide communication in sparsely developed North and North-eastern regions of the country. In all 12,708 kms. of roads are maintained by the Border Roads Organisation

Indian Road Construction Corporation: This corporation was set up on 20th December, 1976 for taking up and executing road and bridge construction works within and outside India.

World's highest Road: The road from Manali in Himachal Pradesh and Leh in Kashmir runs at an average altitude of 4,267 metres (14,000 ft.) and negotiates four very high passes varying from 4,876 metres (16,000 ft.) to 5,486 metres (18,000 ft.)

Revenue from Motor Transport: During 1979-80 Central and State governments earned Rs. 20,993.9 million (Central: 12,638.6 million, State: 8,355.3 million) from road users.

Road Traffic: The number of Motor vehicles in use in India is shown in a table in the Chapter on "Automobile Industry".

TABLE I

Road Traffic

	Volume of road traffic	Percentage share of road in total road and rail traffic
Goods Traffic (in billion tonne kms.)		
1950-51	5.5	11
1955-56	8.9	13
1960-61	35.0	29
1965-66	55.0	32
1970-71	66.0	34
1976-77	76.0	33
1977-78	77.0	32
Passenger Traffic (in billion passenger kms.)		
1950-51	23	26
1955-56	31	33
1960-61	57	42
1965-66	95	50
1970-71	169	59
1976-77	235	59
1977-78	250	59

Nationalised Transport: There are 46 State passenger transport undertakings covering every State in the country. As on 31st March, 1978 they employed a capital of Rs. 7,350 million owning 58,128 buses and handled 139.5 billion passenger kms., providing employment to 420,000 persons. While there is total nationalisation of passenger transport in Maharashtra, Gujarat, Haryana and Sikkim, the extent of nationalisation varies in other States.

The State undertakings have not entered the field of goods transport except in Assam, Orissa, Uttar Pradesh, Jammu & Kashmir, Sikkim, Tripura, and Himachal Pradesh. The number of lorries owned by the nationalised undertakings as on 1977-78 represented only 0.5 per cent of the total lorries in the country.

TABLE II

Progress in Five Year Plans

	Surfaced	Unsurfaced	Allocation (Rs. in million) *
	(Figures in kms.)		
First Plan*	183,023	315,321	1,344.7
Second Plan	262,700	464,027	2,458.0
Third Plan	342,798	720,835	4,511.2
Fourth Plan	480,705	712,448	8,710.0
Fifth Plan	532,492	842,497	13,470.0
Sixth Plan	—	—	34,389.6

***Excludes Municipal, Forest, Irrigation & M.E.S. Roads.**

Development expenditure on Roads: The current years' budget provisions for Plan schemes and the revised estimates for 1980-81 in brackets show the trend of development expenditure on central road programmes. National highways Rs. 1,019.0 million (Rs. 929.1 million); roads of Inter-state importance Rs. 44.5 million (Rs. 51.2 million); border roads Rs. 120 million (Rs. 155 million); planning and research Rs. 10.5 million (Rs. 16.0 million). Partly, the increase in plan expenditure during the current year which is budgeted to a total sum of Rs. 1,226.1 million (as compared to Rs. 1,037.7 million in 1980-81) will be on account of construction of fly-over bridges for Asian games in Delhi and higher outlay under National highways for execution of major works. The non-plan provision of Rs. 323.1 million (against Rs. 277.4 million in 1980-81) are for works undertaken by Border Roads Development and for budgetary support to Indian Roads Construction Corporation

TABLE III

Selected Data on Roads in India

(Thousand kms.)

	Main national roads	Secondary roads	Other roads	Total	Percentage paved	Density of total network in kms. per sq. km.
1970	23.8	161.3	777.9	963.0	34.7	0.295
1974	28.7	229.0	974.6	1,232.3	35.0	0.375
1979	29 3	485.8	989.0	1,604.1	38.8	0.487

TABLE IV

Total Road Length in India—1978-79

(in Kms.)

State/ U.T.	National Highways	State Highways	Other PWD Roads	Zilla Parishad Roads	Village Panchayat Roads	CD/Panchayat Simiti Roads	Urban Roads	Project Roads	Total
1	2	3	4	5	6	7	8	9	10
ALL INDIA (1978-79)	29,340	94,099	391,898	309,081	292,197	165,427	104,211	217,857	1,604,110
STATES (1978-79)									
Andhra Pradesh	2,282	5,443	20,260	29,247	—	32,613	4,794	11,169	105.808
Assam	1,496	2,159	19,389	—	—	27,371	2,562	4,006	56,983
Bihar	2,118	4,191	10,973	46,535	—	—	1,951	14,217	79,985
Gujarat	1,425	8,984	2,308	30,339	—	—	7,343	2,020	52.619
Haryana	662	3,129	14,713	—	—	—	1,003	10.157	29.664
Himachal Pradesh	589	3,413	11,419	—	—	415	389	7,599	23.824
Jammu & Kashmir	593	688	7,501	—	—	—	761	7,724	17.267
Karnataka	1,968	7,802	54,605	—	4,275	23,426	6,417	7,716	106,209
Kerala	836	2,022	14,129	—	65,455	1,211	4,638	2,049	90.340
Madhya Pradesh	2,676	11,458	44,554	—	—	680	4,878	36,659	100,905
Maharashtra	2,889	18,154	11,688	100,231	—	—	11,493	19,647	164,102
Manipur	212	650	3,552	—	1,164	2,845	208	211	8.842
Meghalaya	334	—	2,980	—	—	—	89	287	3.690
Nagaland	113	1,114	3,258	—	—	873	79	348	5.785
Orissa	1,641	2,192	13,928	—	60,358	24,356	5,367	7,769	115,611
Punjab	977	1,900	27,972	—	—	—	2,816	11,939	45.604
Rajasthan	2,110	7,499	30,138	—	—	6,103	4,568	9,666	60.084
Sikkim	41	—	952	—	2,578	—	124	41	3.736
Tamil Nadu	1,865	1.745	31,053	53,534	36,852	30,731	7,065	5,208	168.653
Tripura	198	136	3,925	—	896	1,966	153	562	7,836
Uttar Pradesh	2,472	7,981	42,030	24,890	33,850	4,168	20,221	52,566	188.178
West Bengal	1,519	2,399	12,503	24,105	84,336	—	8,981	4,988	138,831
UNION TERRITORIES									
Andaman and Nicobar Islands	—	250	326	—	—	—	—	25	601
Arunachal Pradesh	—	—	3,708	—	822	5.887	—	1,136	11,553
Chandigarh	14	12	—	—	—	2	5	—	33
Dadra and Nagar Haveli	—	—	212	—	—	—	—	—	212
Delhi	87	—	213	—	—	39	7,774	—	8.113
Goa, Daman & Diu	223	742	2,384	—	1,611	1,641	293	95	6,989
Lakshadweep	—	—	—	—	—	—	2	—	2
Mizoram	—	—	884	—	—	—	7	—	891
Pondicherry	—	36	341	—	—	1,100	230	53	1.760

MUNICIPAL CORPORATIONS (1980)

CIVIC rule in India is a little over a hundred years old. Now there are 1,500 Municipal Councils and 38 Municipal Corporations in India. They are functioning at : Agra, Ahmedabad, Allahabad, Bangalore, Bhopal, Bombay, Calcutta, Calicut, Chandranagore, Cochin, Delhi, Gangtok, Gauhati, Gwalior, Hubli-Dharwar, Hyderabad, Indore, Jabalpur, Kanpur, Kolhapur, Lucknow, Madras, Madurai, Nagpur, Patna, Pune, Raipur, Rajkot, Solapur, Simla, Surat, Trivandrum, Amritsar, Jullundur, Ludhiana, Ujjain, Vadodara and Varanasi.

As a general rule the Municipal Councils and Municipal Corporations are established in towns having a population of more than 20,000 and cities having a population of more than 300,000 respectively.

The State Government makes an assessment of the revenue and population of the town/city through the district collector prior to the establishment of the Municipal Council/Corporation.

When a city's revenue exceeds Rs. 20 million, the Council representing the city is upgraded with the concurrence and approval of the State Government.

In fact it is the responsibility of the States to establish Municipal Councils and Corporations. Schedule 7 of the Constitution of India, elucidates this point. The rules and regulations and powers of the Municipal Councils and Corporations vary from State to State.

The following table gives vital statistics of the four major Corporations — Bombay, Calcutta, Delhi and Madras.

	BOMBAY	CALCUTTA*	DELHI	MADRAS*
Established	1872	1727	1958	1888
Area of Jurisdiction (sq. km.)	437·71	104	1,484	128·83
No. of Administrative wards	21	4	10	120
,, Electoral wards	140	100	100	120
,, Cemeteries	180(*a*)	53	22	57(*f*)
,, Markets (Corpn. owned and Private) ..	73 ; 19	10 ; 155	12	21 ; 49
,, Slaughter houses	1	5	3	2
,, Labour Welfare Centres	45	N.A.	41	Nil
,, Recreation Centres	570	100	72	1
,, Slum dwellers	2,800,000	Approx. 1 million	N.A.	160,000 (approx.)
,, Pavement dwellers	N.A.	34,316	N.A.	2,170 families
,, Beggars	N.A.	41,000	N.A.	N.A.
,, Municipal employees	131,804	34,000	60,000 (approx.)	29,452
Annual wage and salary bill of Corporation (Rs. in million)	905	193	472·04 (approx.)	110
No. of Municipal Primary Schools	1,264	262	1,500	352(*g*)
,, Pupils in Primary Schools	628,000	44,217	488,000 (approx.)	159,213
,, Municipal Secondary Schools	51	Nil	Nil	35
,, Pupils in Secondary Schools	71,831	Nil	Nil	29,418
,, Student-Teacher ratio	35 to 40 : 1	22 : 1	N.A.	40 : 1
Amount spent annually on education (Rs. in million)	310·1	14·83	188·9 (approx.)	26·41
No. of General Hospitals	19(*b*)	24	14	21(*h*)
,, Beds in general hospitals	7,015	10	1,576	N.A.
,, Patients treated in general hospitals ..	304,008	450,000 (approx.)	93,102 (approx.)	N.A.
,, T.B. hospitals	1	2	1	2
,, Beds in T.B. hospitals	1,330	200	1,113	N.A.
,, T.B. patients	11,102	161	19,307	N.A.
,, Dispensaries	148(*c*)	25	120	63
,, Patients treated in dispensaries	3,581,436	250,000 (approx.)	570,708	2,600,000 (approx.)
,, Clinics	39	7	7 T.B. ; 3 V.D. & 3 Lep.	4
,, Patients	557,650	N.A.	19,477	93,452
,, Maternity homes	34 (includes 12 wards attached to 12 general hospitals)	4	9	48
No of Beds in maternity homes	1,372	126	126	487
,, Medical Colleges	4(*d*)	5	Nil	Nil
,, Seats in Medical Colleges	420(*e*)	N.A.	Nil	Nil
Birth-rate in the City	25·2	18·06	24·81	32·12
Death rate in the City	8·9	8·79	5·99	11·76

---

* Figures are for 1979. (*a*) Includes 153 private cemeteries. (*b*) Includes one communicable disease hospital. (*c*) Includes two Ayurvedic and two Unani. (*d*) Includes one dental college. (*e*) Includes 60 seats for Dental College. (*f*) Includes 36 private cemeteries. (*g*) Includes 155 Middle Schools (*h*) Includes one communicable disease hospital. N.A. — Not available.

	BOMBAY	CALCUTTA *	DELHI	MADRAS *
No. of Child Welfare Centres	N.A.	N.A.	69 + 43 (sub centres)	48
„ Family Welfare Centres	52	32	33 + 83 („ „)	24
„ Doctors in City	N.A.	N.A.	N.A.	N.A.
„ Nurses in City	N.A.	N.A.	N.A.	N.A.
Population-Doctor ratio	N.A.	N.A.	N.A.	N.A.
No. of Swimming Pools	4	10	N.A.	2
„ Hotels — Grade I	137	1,012	N.A.	N.A. (approximately)
Grade II	927		N.A.	
Grade III	4,125		N.A.	
„ Residential hotels	635		N.A.	N.A.
„ Restaurants and eating houses	11,520	8,307	N.A.	N.A.
„ Shops	128,430	182,738	N.A.	N.A.
„ Commercial establishments	70,626		N.A.	N.A.
„ Factories	31,341		N.A.	859
Density of population (per sq. km.)	18,733·86	30,276	2,649	21,858
Population of City	8,370,000	3,148,746	6,003,027	2,938,000
No. of Cars	150,000		N.A.	N.A. (In Madras Distt.)
„ Lorries	65,000		N.A.	27,213
„ Buses	1,912(B.E.S.T.)	112,810	N.A.	8,751
„ Cycles	N.A.		N.A.	N.A.
„ Motor Cycles and Scooters	48,066	N.A.	N.A.	64,318
„ Passengers carried daily by buses	4,500,000(B.E.S.T.)	350,990 (*k*)	N.A.	1,920,000 (approximately)
„ Passengers carried daily by trains ..	5,500,000	490,000	N.A.	N.A.
Tallest Building	Hotel Oberoi Towers (*i*)	N.A.	Vikas Minar	LIC Building
Height	127·71 metres		N.A.	53·95 metres
Longest Road	Swami Vivekanand Road	Acharya Jagdishchandra Road	Ring Road	Anna Salai (Mount Road)
Length in km.	25·10	6·43	55	9·5
Longest Bridge	Road overbridge on the South of Andheri Railway Station	Rabindra Setu (Howrah Bridge)	L. Lajpatrai Marg overbridge	Elphinstone Bridge
Length in metres	501·70	N.A.	838·8	233·46
No. of Telephones	N.A.	166,051	N.A.	N.A.
„ Fire Stations	19	17	15	14
„ Fire Hydrants	11,252	N.A.	7,000	N.A.

Administrative Personnel

Municipal Commissioner	D. M. Sukthankar	K. Biswas	J. N. Singh	T. K. Diwan Mohamed
Public Relations Officer	Vacant	S. Barik	Basudev Sharma	—
Chief Engineer	S. M. Parulkar (*j*)	B. C. Mitra	J. D. Goyal	G. Nandagopal

---

* Figures are for 1979. (*i*) Tallest building in India. (*j*) Designated as City Engineer. (*k*) Only State Transport Service. N.A. — Not available.

NEWSPAPER STATISTICS

BRIEF HISTORY: Press had its beginnings in India when the first newspaper, a weekly double sheet called "Bengal Gazette", was started by James Augustus Hickey on January 29, 1780 at Serampore, near Calcutta.

Many other newspapers followed in quick succession (19 were started before the end of the century). Most of these were in English and were published, edited and read by Englishmen. In spite of their interesting editorial contents which consisted of political and private scandals the newspaper circulation did not exceed 100.

The first Indian owned newspaper the "Bengal Gazette" was published by Gangadhar Bhattacharjee in 1816 (price Re. 1/-). Many independent and well-conducted papers flourished during the administration of Governor-General Lord Hastings, who adopted a liberal policy of self-censorship for the press in 1818. One such magazine was "Calcutta Journal" a bi-weekly with a circulation of 1,000.

However, a revision of policy by John Adam in 1823 necessitated the closure of "Calcutta Journal". Later under liberals like William Bentinck who replaced John Adam in 1828 and Sir Charles Metcalf who succeeded Bentinck, press in India enjoyed greater freedom.

Many other Indian language newspapers were started between 1816-1822. "Shri-Mumbai-na-Samachar", started as a Gujarati weekly in 1822, by Fardoonji Marzban. It became a daily in 1832 and is the forerunner of the oldest living newspaper today, the "Bombay Samachar".

In Bengal between 1818 and 1833 as many as 99 newspapers and periodicals were started. The average life of each of these publications was 5 years. During the same period only 10 newspapers were published in the north and an insignificant number in the south.

The first railway line in 1853 and the first telegraph line in 1851 contributed to the growth and dissemination of news.

After the mutiny of 1857 restraints on the press were reimposed by Act XV of 1857. Of the 35 publications of 1853, six survived till 1857.

Important Legislation:

1. Act XXV of 1867 - regulating printing presses and newspapers.
2. Vernacular Press Act of 1878 - to restrain the vernacular press. Repealed four years later.
3. Indian Official Secrets Act was passed in 1889.

Important Dates:

1861	Editor Robert Knight of "Bombay Times" combined with "Standard" and the amalgamated "Telegraph and Courier" to form the "Times of India".
1865	"Pioneer" was started in Allahabad.
1868	"Amrit Bazar Patrika" was started in Calcutta.
1872	"Civil and Military Gazette" began publication.
1872	Robert Knight started "The Statesman" in Calcutta.
1878	"Hindu" was founded in Madras.
1881	Bal Gangadhar Tilak started "Kesari" in Marathi and "Mahratta" in English.
1915	Press Association of India was formed.
1935	Photogravure process was first used in India to print "The Illustrated Weekly of India"
1937	Freedom of Press granted.
1938	The Associated Press of India sent its first message on a teleprinter circuit.
1939	With the outbreak of the Second World War the Defence of India Rules were framed. Rule 41 reimposed control on the press.
1947	India's independence guaranteed freedom of the press under Articles 13 and 19 of the Indian Constitution.
1948	Audit Bureau of Circulation formed.
1949	Press Trust of India started.
1951	Press (Objectionable Matters) Act No. LVI was passed.
1952	Newsprint Control Order passed by Government of India.
1975	Congress Government imposed censorship on all newspapers and publications.
1977	Janata Government revoked censorship and restored freedom of press (see "Events" for details).

PRESENT POSITION

The 23rd Annual Report of the Registrar of Newspapers for 1979 contains a study of the press in India during the calendar year 1978. The number of newspapers rose to 15,814 in 1978 from 14,531 in 1977. The daily press consisted of 992 newspapers in 1978 as against 929 in previous year.

More than 93 per cent of the total newspapers published in India were periodicals.

New Newspapers: During 1978, as many as 1,234 newspapers made their maiden appearance. Among them 42 were dailies, three tri-bi-weeklies and 1,189 periodicals.

Language Press: (A term used for Indian language newspapers and periodicals)

There were 4,196 Hindi newspapers in 1978 against 3,736 in 1977. English newspapers numbered 3,085. The Hindi dailies numbered 318, English 102, Urdu 109, Marathi 113, and Malayalam 96. As regards circulation Hindi language newspapers led with 9.7 million copies and English came next with 9.03 million. Tamil, Malayalam, Gujarati, Marathi, Urdu, Bengali, Telugu and Kannada claimed more than a million copies each for their newspapers.

Ownership Pattern: Of the 15,814 newspapers 10,162 were owned by individuals.

Circulation: The total circulation of all newspapers in 1978 was 40.85 million compared to 37.44 million in 1977.

Among the single edition papers "Ananda Bazar Patrika" daily of Calcutta had the highest circulation of 376,646.

Among the multi-edition newspapers "Indian Express" with a circulation of 523,158 was the highest. "Times of India" came second with 418,289 copies.

Among the weeklies the highest circulation was attained by "Kumudam" a Tamil journal of Madras with 504,260. "The Malayala Manorama", a Weekly from Kottayam held the second place with a circulation of 430,129 copies.

Among the non-weekly periodicals the top position was held by "Manohar Kahaniya", a Hindi monthly from Allahabad with a circulation of 286,625 copies. "The Reader's Digest" an English monthly from Bombay came second with a circulation of 187,433 copies.

State-wise: Maharashtra took the first place with 2,169 newspapers followed by Uttar Pradesh 2,089, Delhi 1,909, West Bengal 1,712, and Tamil Nadu 1,112 newspapers each. Karnataka, Kerala, Punjab, Rajasthan and Madhya Pradesh published more than 500 newspapers each. Uttar Pradesh with 146 dailies was the premier publisher state followed by Maharashtra (140), Kerala (98), Madhya Pradesh (84), Karnataka (83), and Tamil Nadu (67) as major publisher States.

The newspapers belonging to the four metropolitan cities, Delhi, Bombay, Calcutta and Madras accounted for 20.2 million copies or 49.4 per cent of the total circulation.

Citywise, Delhi had 1,909 newspapers, Bombay 1,160 and Calcutta 1,079. The cities of Madras (731), Hyderabad (492), Bangalore (450), Pune (259), Jaipur (240), Lucknow (217), Patna (198), Kanpur (195), Trivandrum (176), Ahmedabad (165), Cochin (158), Chandigarh (154), Ludhiana (142) and Jullundur (107) were the cities which published more than a hundred newspapers.

HISTORIC DATES (1900 —1979)

(Whilst attempts have been made to compile all historic dates from various records, the Editor regrets any omissions. The reader is requested to draw our attention to any missing dates.)

1900

March 5 — Indian Plague Commission submits report on Mr. Haffkine's innoculation system. **April 15** — Plague riots break out in Kanpur segregation camp. 5 constables die, troops step in and kill 10 people. Plague regulation gets modified. **December 9** — Swami Vivekananda disembarks in Bombay and entrains for Calcutta. **27-29** — Sixteenth annual session of Indian National Congress meets at Lahore. N. G. Chandavarkar presides.

1901

January 16 — Mahadeva Govinda Ranade passes away in Bombay. He was an eminent leader of Indian National Congress. **March** — Gen. Sir A. Palmer becomes Commander-in-Chief of India. **November** — M. K. Gandhi leaves Natal (South Africa) for India. **December 19** — M. K. Gandhi arrives in Bombay. **20** — Gopal Krishna Gokhale becomes additional member of Council of Governor-General of India. **22** — Rabindranath Tagore inaugurates his *Brahmacharya Ashram* (school) at Shantiniketan. **26-28** — Seventeenth session of Indian National Congress meets at Calcutta. Dinshaw E. Wacha presides.

1902

March 26 — Gopal Krishna Gokhale delivers his first budget speech in Imperial Legislative Council. **April 8** — Outlaws ambush and kill eight British soldiers. **July 12** — Swami Vivekananda passes away at the age of 39. **August 6** — Govt. published Blue Book on famine and relief operations. Figures show mortality during the year is 750,000 which includes 230,000 deaths due to cholera and plague. **December 23-26** — Surendranath Banerjee delivers 18th presidential address of Indian National Congress.

1903

January 1-3 — Coronation Durbar at Delhi proclaims King Edward VII as Emperor of India. **August 22** — Bal Gangadhar Tilak advocates boycott of articles of British manufacture in a students' meeting at Poona. **December 28-30** — 19th session of Indian National Congress meets at Madras under presidentship of Lal Mohan Ghose.

1904

April — Mahatma Gandhi establishes *Indian Opinion*, Weekly journal representing Indians' point of view, in Phoenix, South Africa. **August 8** — Lord Curzon gets extension as Viceroy of India. **August 14** — Dadabhai Naoroji criticises British Imperialistic policies in India at International Socialist Congress at Amsterdam. **November 15** — Former Viceroy Lord Northbrook passes away. **December 16-28** — Sir Henry Cotton delivers 20th Presidential address of Indian National Congress.

1905

April 13 — Earthquake wrecks towns of Sultanpur and Mandi killing about 15,000 people. **30** — In India plague kills 57,000 in a week according to reports. **July 20** — Govt. announces decision to partition Bengal despite several protests. **August 19** — King of England accepts resignation of Lord Curzon and appoints Lord Minto as Viceroy. **September 1** — Govt. of India, in a proclamation, announces partition of Bengal from October 16, 1905 — and appoints J. B. Fuller as Lieut. Governor for Eastern Bengal. **December 27-30** — G. K. Gokhale delivers 21st Presidential address of Indian National Congress at Banares.

1906

January — Prince and Princess of Wales visit India. **August 6** — Sri Aurobindo Ghose starts *Bande Mataram* under his editorship. **December 26-29** — 22nd session of Indian National Congress meets at Calcutta under presidentship of Dadabhoy Naoroji. **27** — Members of Indian deputation (G.K. Gokhale and Lala Lajpat Rai) sail for England. **30** — Muslim Educational Conference at Dacca resolves to form All India Muslim League for furtherance of its objects.

1907

January 2 — Bal Gangadhar Tilak and G.K. Gokhale embark upon nation-wide campaign to convince public of their respective party's position. **May 9** — Police arrests Lala Lajpat Rai and deports him to Mandalay. **December 26-27** — Rash Behari Ghosh presides over 23rd session of Indian National Congress at Surat.

1908

April 19 — Congress session at Allahabad adopts draft of amended constitution of Congress. **30** — Khudiram Bose, a young man of 18, kills two English ladies by throwing bomb meant for Mr. Kingsford, Dist. Judge. **June 13** — Khudiram Bose gets death sentence for murder of two English ladies—Mrs. and Miss Kennedy—in bomb attack. **21** — Bomb wrecks mail train at Barackpur and injures 3 passengers. **24** — Bombay police arrests B. G. Tilak for his article *The Country's Misfortune* in "*Kesari*" dated May 12, under sections 124-A and 153-A of I.P.C. **August 18** — Madame Cama, India's first woman revolutionary, unfurls India's National Flag in foreign country. **October 24** — Chittaranjan Das devotes himself to Sri Aurobindo's Alipore Bomb Conspiracy case. **November 2** — Govt. of India issues proclamation commemorating fiftieth anniversary of the Crown's assumption of direct rule in India. **December 29-30** — Rash Behari Ghosh presides over 23rd session of Congress at Madras.

1909

January 15 — Charan Bose kills Asutosh Biswas by shooting, public prosecutor in anarchist conspiracy case. **March 19** — Charan Bose is executed. **May 6** — Judgement in Alipore Conspiracy case awards death to two, transportation for life to 7, penal servitude to 5 and acquits 22. **August 19** — Sir Badruddin Tayabji dies. **November 13** — Viceroy Lord Minto, escapes bomb attack. **13-22** — Gandhiji sails for South Africa. He writes his 30,000-word manuscript, Hind Swaraj, on board s.s. "Kildonian Castle" **December 21**—Magistrate Jackson of Nasik court is shot dead. **27-29** — Madan Mohan Malaviya presides over 24th session of Congress held at Lahore.

1910

April 25 — Gandhiji writes to G. K. Gokhale from South Africa summarising progress of Indian struggle for equal rights. **September 30** — Plague claims 448,319 lives in 12 months according to official statistics. **November 22** — Lord Hardinge of Penhurst succeeds Lord Minto as Viceroy of India. **December 26-29** — 25th session of Congress meets at Allahabad. Sir William Wedderburn presides.

1911

March 18 — Fifth decennial census places total population of India at 315,156,396. **September 30** — Plague takes lives of 713,377 people in past 12 months according to official statistics. **December 2** — King George and Queen Mary, first British Sovereigns to visit India, arrive in Bombay. **12** — King holds Coronation Durbar at Delhi, announces shifting of capital from Calcutta to Delhi. **15** —

King lays foundation for new Govt. buildings at Delhi. **26-28** — Bishan Dhar delivers 26th presidential address of Indian National Congress at Calcutta.

1912

January 10 — King George and Queen Mary leave India for England. **June** — G.K. Gokhale sails for England. **October 22** — G.K. Gokhale arrives in Cape Town, South Africa, from England. **December 23** — Lord Hardinge escapes bomb attack by Rash Behari Bose, a Govt. servant. **26-28** — 27th Indian National Congress meets at Bankipur. R.N. Mudholkar presides. Jawaharlal Nehru attends session for first time.

1913

December 26 — 28th session of Indian National Congress meets at Karachi under presidentship of Nawab Mohammad.

1914

June — Lokmanya Tilak gets release after his term of imprisonment from Mandalay. **December 17** — Gandha Singh commits dacoity in Papali Village of Hissar district to raise funds for revolutionaries. Instead of Gandha Singh, Pandit Kanshi Ram and associates were hanged. **28-30** — Bhupendranath Basu delivers Presidential address of Indian National Congress at Madras.

1915

February 19 — Gopal Krishna Gokhale passes away. **22** — M.A. Jinnah said about Gokhale: He was a great man, respected by Muslims as much as Hindus and trusted by both. **April 30** — In Lahore Sedition case leader Bhai Para and 23 others get death sentence and 27 transportation for life. **November 5** — Sir Pherozeshah Mehta, a founder of Indian National Congress, dies. **December 27-30** — Satyendra Prasanna Sinha delivers the 30th Presidential address of Indian National Congress.

1916

February 4 — Mahatma Gandhi performs opening ceremony of Banares Hindu University. **10** — Sohan Lal Pathak was executed in Mandalay. **12** — Nawab Syed Mohammed Bahadur who presided over Karachi session of Indian National Congress, dies. **April 4** — Frederick John Napier Theisger assumes office as Viceroy. **September** — Rabindranath Tagore sails for United States. **3** — Mrs. Annie Besant founds Home Rule League. **November 19** — Pandit Bishan Narayan Dhar, who presided over Calcutta session of Congress, dies. **December 26-30** — Ambika Charan Mazumdar, delivers 31st Presidential address of Congress at Lucknow. Jawaharlal Nehru meets Mahatma Gandhi for first time.

1917

February 9 — Gandhiji addresses Imperial Citizenship Association and condemns inhuman system of indentured labour. **23** — Commissioner of Delhi serves notice prohibiting Lokmanya Tilak from entering Delhi Province. **April 10** — Gandhiji meets Dr. Rajendra Prasad at Patna and J.B. Kripalani in Muzaffarpur in connection with indigo planters of Champaran. **14** — Gandhiji receives notice from Commissioner to quit Champaran. He visits neighbouring villages and meets peasants of area. **June 30** — Dadabhoy Naoroji, Grand Old Man of India, dies. (He was a founder member of Indian National Congress and delivered presidential addresses in 1886, 1893 and 1906). **July 10** — Lord Chamberlain, Secretary of State for India, resigns. **August 20** — British Government announces Montague Scheme regarding responsible government for India as a goal of British policy. **November 29** — Air Force Constitution Act comes into force. **December 26-29** — Mrs. Annie Besant delivers 32nd Presidential address of Indian National Congress at Calcutta.

1918

February 22 — Textile Mill owners of Ahmedabad declare a lock-out. **March 22** — Viceroy unveils marble bust of Gopal Krishna Gokhale. **March 29-31** — Hindi Sammelan meets at Indore. Gandhiji presides. **April 2** — British Prime Minister appeals to Govt. and people of India to save Asia from German tyranny. **4** — Home Dept. of Govt. of India refuses passport to B.G. Tilak to proceed to England. **8** — M.A. Jinnah protests denial of passport to B.G. Tilak, at a public meeting in Bombay. **27-29** — Madan Mohan Malaviya and Gandhiji attend War Conference convened by Viceroy in Delhi. Gandhiji addresses Conference in Urdu. **May 9** — Mrs. Sarojini Naidu presides over 24th Madras Provincial Conference at Conjeevaram. **August 21** — All India Moderate Conference meets in Bombay with Sir D.E. Wacha as Chairman and Surendranath Bannerjee as President. **22** — Council of Servants of India Society resolves to abstain from Special Congress of Moderates. **31** — All India Muslim League meets at Bombay under Chairmanship of Raja Saheb of Mohmudabad. **29-September 1** — Special session of Indian National Congress meets in Bombay under presidentship of Mr. Imam Hasan. (The session was called to discuss the Montague-Chelmsford Reforms which disappointed Indians). **October 8** — Gandhiji moves *Young India* from Bombay to Ahmedabad. **November 13** — B.G. Tilak writes to British Prime Minister, Mr. Lloyd George, on behalf of Home Rule League and Indian National Congress, expressing hope for peace, liberty and human co-fraternity for India, as defined in Armistice signed on November 11, 1918. **December 26-31** — Madan Mohan Malaviya presides over 33rd Session of Indian Congress. He denounces Montague-Chelmsford Reforms.

1919

January 1 — Mrs. Annie Besant presides over All India Ladies Conference. Government publishes Rowlatt Report. **February 8** — Mopla revolt breaks out in Malabar coast of Kerala. **28** — Gandhiji issues press statement condemning Rowlatt Bill. **March 4** — Viceroy talks to Gandhiji at New Delhi about Rowlatt Bill. **23** — Gandhiji begins fast and exhorts *hartal* throughout India as protest against Rowlatt Bill. **28** — M.A. Jinnah writes to Viceroy to say Rowlatt Bill shocks all Indians. **31** — Military attacks peaceful satyagrahis in Delhi. **April 6** — Madan Mohan Malaviya resigns from Imperial Council. Whole of India observes *hartal*. **10** — Rowlatt Bill riots take place at Ahmedabad. **12** — Demonstrators clash with police at Lahore, Bombay, Calcutta and Amritsar. **13** — Gen. Dyer proclaims martial law and bans public meetings at Amritsar. Later at Jallianwala Bagh Gen. Dyer's men open fire on peaceful meeting and kill nearly 400 and injure more than 1,000. **15** — Martial law comes into force in Lahore. **16** — Serious riots break out in Gujranwala, Akalgarh, Hafizabad. **22** — Gen. Campbell orders inhabitants of Gujranwalla to salute all British officers. **26** — Govt. arrests Benjamin Guy Horniman, editor, *Bombay Chronicle* and deports him to England. **May 11** — Mrs. Annie Besant resigns presidentship of Home Rule League. **27** — Dr. Rabindranath Tagore returns to Govt. of India title "Knight" conferred on him. **June 3** — Madan Mohan Malaviya gets elected to Viceregal Council. **8** — Maulana Shaukat Ali and Mohammad Ali are lodged in Tul Jail. **24** — Gandhiji presides at Bombay meeting protesting the deportation orders on Horniman and Rowlatt legislation. **July 19** — Sir Sankaran Nair resigns membership of Executive Council of Viceroy in protest against Martial Law. **October 17** — India celebrates *Khilafat* Day. **November 8** — Nationalist Council meets in Madras. **15** — C.F. Andrews leaves for South Africa. **23** — All India *Khilafat* Conference meets at Delhi. **December 25** — Maulana Mohammad Ali joins Indian National Congress. **27** — Motilal Nehru delivers 34th Presidential address of Indian National Congress at Amritsar.

1920

January 1 — King of England orders release of Maulana Abul Kalam Azad and other political prisoners. **10** — India becomes a member of League of Nations. **18** — Maulana Abul Kalam Azad meets Gandhiji in connection with *Khilafat* movement. **19** — Gandhiji leads *Khilafat* deputation to Viceroy. **February 21** — *Khilafat* conference meets at Meerut. Gandhiji reveals his non-co-operation programme for first time. **26** — First Indian *Khilafat* deputation reaches London. **March 14** — Police raids office of Bengal Provincial *Khilafat* Committee. **20** — Congress Democratic Party brings out its manifesto. **April 28** — Gandhiji becomes president of Home Rule League. **June 2** — Govt. of India publishes revised draft rules for Provincial councils, Indian Legislative Assembly and Council of State in a Gazette Extraordinary. **August 1** — Bal Gangadhar Tilak passes away. Gandhiji returns his Kaiser-i-Hind medal and Boer War Medal to Viceroy. **September 4-9** — Congress Session meets at Nagpur; C. Vijairaghavachariar delivers 35th presidential address. **8** — AICC's special session at Calcutta passes Gandhiji's resolution on non-co-operation. **December 26-31** — 36th Annual session of Congress meets at Ahmedabad under presidentship of Hakim Ajmal Khan.

1921

January 13 — R. N. Mudholkar passes away. **19** — C. R. Das, eminent Barrister of Calcutta, suspends practice and resolves to devote life for Nation's cause. **31** — Gandhiji inaugurates Gauria Sarva Vidyayatan (Bengal National College) with Subhash Chandra Bose as first principal. **February 9** — Government serves Lala Lajpat Rai with prohibitory orders from entering North West Frontier Province to make enquiries regarding grievances of people there. **20** — Mahant Narayan Das and group of Nankana in Punjab kill 150 Akali Sikhs. **April** — Subhash Chandra Bose resigns from Indian Civil Service and joins politics as an aggressive nationalist. **1** — AICC meets at Bezwada and decides to collect Rs. 10 million for Tilak Swaraj Fund. **2** — Lord Reading assumes office as Viceroy of India. **13** — Gandhiji meets Viceroy; People all over India observe Jallianwala Bagh anniversary. **22** — A new political party "Indian Progressive Federation" comes into being under leadership of Aga Khan. **23** — Sarojini Naidu urges ladies at Bombay meeting to discard foreign clothes and take to spinning and hand-made cloth. **May 3** — Swami Govindananda receives sentence of transportation for 5 years in connection with N.C.O. work. **July** — Rabindranath Tagore returns to India from Europe. **1** — Gandhiji announces Tilak Swaraj Fund exceeds Rs. 10 million. **16** — Subhash Chandra Bose meets Gandhiji in Bombay to discuss ways and means to achieve independence. **29** — Govt. of India publishes "Agreed Summary" of Gandhi - Reading (Viceroy) interview. **31** — People light a huge bonfire of foreign cloth, worth millions of rupees, in presence of Gandhiji in Bombay. **August 20** — Mopla Rebellion breaks out at Tirurangadi, Malabar, Kerala. **24** — Govt. of India declares Martial Law in disturbed parts of Malabar, Kerala. **29** — Mrs. Annie Besant presides over Bombay Provincial Reforms Conference. **30** — Labour disturbances break out in Bombay mill areas. **September 1** — Picketing at foreign cloth shops begins at Barabazar, Calcutta. **10** — Marwari Chamber of Commerce representatives meet Gandhiji in connection with boycott of foreign cloth. **18** — Indian National Congress elects C. R. Das as its president. **20** — Dr. S. C. Banerjee was sentenced to one year's jail for N.C.O. work. **26** — Trial of Ali Bros. begins at Karachi. **October 8** — Gandhiji lights second bonfire of British cloth in Bombay. **17** — Mahant Narain Das of Nankana Sahib of Punjab and 7 others are sentenced to death and 17 others to 7 years R.I. for murder of Akali Sikhs. **30** — Police detachment attacks Mopla rebels and kills 26. In attack 7 policemen die. **November 2** — Mopla leader Ali Musaliar and 37 others are sentenced to death. **4** — AICC at Delhi authorises programmes of civil disobedience and boycott of foreign cloth. **6** — C. R. Das along with 4 others are arrested and beaten by police in Calcutta for picketing foreign cloth shops. **13** — Ahmedabad P.C.C. decides Bardoli and Kaira as venues to start Civil disobedience from November 23. **18** — Gandhiji undergoes 5-day fast. **20** — 100 Mopla prisoners carried in closed goods wagon of a train die of asphyxia. **December 6** — Mopla revolt comes to halt. (Since outbreak of revolt 1,826 Moplas were killed, 1,500 wounded, 5,400 captured and 14,000 surrendered). **7** — C. R. Das, Urmila Devi, Suniti Devi and others are arrested for selling *Khaddar*. **16** — S. Srinivasa Iyengar renounces title and seat in Council in protest against Govt. repression. **22** — Trials of Lala Lajpat Rai, Santanam, Gopi Chand and Malik Lal Khan begin at Lahore Central jail. **23** — Inauguration of Visva Bharati takes place. Properties at Shantiniketan are legally transferred to it by trust deed. Mahadev Desai gets 1-year R.I. for publishing manuscript edition of *Independent*. **24** — Prince of Wales arrives in Bombay. City observes *hartal*. **27-28** — 36th session of Congress meets at Ahmedabad. Hakim Ajmal Khan, acting president, delivers address as president; C. R. Das is in jail.

1922

January 7 — Police arrests Mopla King V. Kunhamad Harf in Malabar. **13** — Prince of Wales arrives in Madras where hartal is observed. Police opens fire on mob. **25** — Amendment of Factory Act provides 60-hour week, weekly rest day and raises minimum age of child-workers from 9 to 12 years. **29** — Gandhiji, Sardar Patel and Tyabji meet at Bardoli to formulate plan of mass Civil Disobedience. **February 4** — Gandhiji intimates Viceroy and Govt. of India about mass civil disobedience movement at Bardoli under his leadership. **5** — A mob of more than 300 non-co-operators attacks Chauri Chaura police station and kills 22 policemen. Govt. bans all Congress organisations. **10** — G. Ramachandra Rao of Cocanada refuses to take oath in court and gets S.I. for one month. **12** — Gandhiji suspends mass civil disobedience as violence creeps in. He undergoes fast for 5 days to do penance for Chauri Chaura and Bareilly tragedies. **March 9** — Gandhiji is arrested; Lala Lajpat Rai is sentenced to one-year R.I.; Montague resigns as Secretary of State for India. **17** — Prince of Wales ends tour and embarks for Far East. **April 16** — Rabindranath Tagore lays foundation for University at Shantiniketan. **May 25** — Mrs. Kasturba Gandhi presides over Gujarat political conference at Anand. **July 25** — Members of Civil Disobedience committee reach Madras; Pt. Nehru addresses public meeting. **December 26-31** — 37th Session of Indian National Congress meets at Gaya under presidentship of C. R. Das.

1923

January 1 — Deshbandhu Das and Motilal Nehru form Swarajya Party. **February 9** — Hindu-Muslim riots break out in Ahmedabad. **May 7** — Hindu-Muslim riots break out in Amritsar. **June 18** — Police arrests Jamnalal Bajaj in Nagpur. **July 4** — Jamnalal Bajaj is sentenced to 18 months' R.I. **September 25** — Congress meets at Delhi and adopts resolution to propose candidates for the Leg. Assembly and Provincial Councils in order to obstruct legislation. **October 14** — Swarajya Party issues its manifesto on "Wrecking the Constitution from within the Reformed Councils." **23** — Deshbandhu Das publishes a daily paper *Forward*. **25** — Police arrests Dhanna Singh with a live bomb who explodes it and kills himself, five policemen and an Englishman. **December 20** — Hindu-Muslim riots break out at Lahore. **28** — **January 1, 1924** — 38th Congress session meets at Cocanada under presidentship of Maulana Mohammed.

1924

January 12 — Gandhiji undergoes operation at Sassoon Hospital, Poona, for appendicitis. **March 16** — Bhupendra Nath Basu passes away. **April 4** — Gandhiji takes over Editorship of *Young India* and *Navjivan* papers. **12** — Criminal Procedure Code Amendment Act removes racial distinctions in courts. **May 25** — M. A. Jinnah delivers presidential address at Lahore session of Muslim League. **July 27** — Communal riots break out in Delhi. **August 1** — Pt. Motilal Nehru and M. R. Jayakar are elected as directors of *Bombay Chronicle*. **17** — Gandhiji arrives in Delhi in connection with Hindu-Muslim riots. **September 18** — Gandhiji undergoes 21-day fast for Hindu-Muslim Unity. **October** — Subhash Chandra Bose is arrested and lodged in Alipore jail. **8** — Gandhiji ends fast. **25** — Govt. amends Criminal Law of Bengal Ordinance to deal with revolutionary violence. **December 26-27** — Gandhiji delivers 39th presidential address of Congress session at Belgaum.

1925

January 1 — Lord Reading announces determination to end terrorism of criminal organisations in Bengal. **February 28** — Fifty-four terrorists are convicted in Lahore Conspiracy case. **March 7** — Gandhiji arrives in Madras *en route* to Vaikom. **May 1** — Gandhiji addresses meeting in Bombay and explains programmes regarding Hindu-Muslim Unity, removal of untouchability and use of spinning wheel. **2** — In a Faridpur meeting C. R. Das offers co-operation to Govt. and asks for Dominion Status for India. **June 16** — Chittaranjan Das dies at Darjeeling. **23** — Mrs. C. R. Das becomes Editor-in-Chief of *Forward* of Calcutta. **July 28** — Pt. Motilal Nehru accepts seat on Steering Committee. **August 6** — Sri Surendranath Banerjee passes away. **25** — Pt. Motilal Nehru is elected president of Lower House. He is first Indian to hold this position. **October 29** — Lord Irwin is appointed to succeed Earl Reading as Viceroy and Governor-General of India. **November 25** — A deputation leaves for South Africa to enquire into resident Indians' condition there. **December 26-28** — Sarojini Naidu delivers 40th presidential address of Indian National Congress at Kanpur.

1926

January 19 — Dwijendranath Tagore passes away at Shantiniketan. **February 7** — Elkins, A.S.P. in Madan Sub Divn. of Peshawar, is shot dead by a tribesman. **9** — Viceroy announces creation of Royal Indian Navy and reconstruction of Indian Mercantile Marine. **22** — T. Rangachariar and Pt. Madan Mohan resign from National Party. **March 25** — Trade Union Act is passed. **April 12** — Erle Handiside, Commandant of Frontier Constabulary, is murdered. **13** — Hindu-Muslim riots break out in Calcutta. **June 14** — Communal riots take place at Rawalpindi. **July** — Communal riots in Calcutta. **15** — Hindu-Muslim riots break out again in Calcutta. **17** — Viceroy appeals to communal leaders to maintain peace. **August 7** — Defying Bengal Government's orders Pt. Madan Mohan Malaviya enters Calcutta. **September 19** — Gandhiji participates in a garden party given by South African delegation, Bombay. **November** — M. A. Jinnah returns unopposed to Assembly. **December 26-28** — 41st session of Indian National Congress meets at Gauhati. S. Srinivasa Iyengar delivers presidential address.

1927

January 5 — Samuel Hoare, Secretary of State for Air, inaugurates Egypt to India Air service. **February 1** — Rai Sahib Harbilas Sarda introduces a Bill prohibiting Hindu child marriage below 12 for girls and 15 for boys. **16** — First railway, connecting India and Nepal, is inaugurated by Maharaja of Nepal. **March 14** — Abdul Rashid is sentenced to death for murdering Swami Shradhanand. **20** — Muslim leaders meet at Delhi under presidentship of M.A. Jinnah and discuss Hindu-Muslim unity. **May 7** — Communal riots in Lahore. **19** — Nagpur Satyagrahis are arrested. **June 4** — Awami, leader of Nagpur Satyagraha movement, is sentenced to 4 years R.I. **July 23** — First Commercial Broadcasting station is inaugurated by Viceroy in Bombay. **August 29** — Viceroy opens Calcutta Broadcasting station. **September 4** — Communal riots kill 19 and injure 123 in Nagpur. **October 11** — Prof. Indra, S/o Swami Shradhanand, is arrested. **November 2** — Jawaharlal Nehru visits Moscow during tenth anniversary celebrations of Russian Revolution. **December 1** — Dr. Annie Besant inaugurates Boycott Committee. **17** — Accused Ashfaquallah, Rajendra Lahiri and Ram Parshad Bismil of Kakori Conspiracy case are hanged. **26** — M. A. Ansari delivers 42nd presidential address of Congress session in Madras. **29** — Hakim Ajmal Khan passes away. **30** — Hindustan Seva Dal Conference meets at Calcutta under presidentship of Subhash Chandra Bose. **30-31** — All India Muslim League holds its session at Calcutta.

1928

January 15 — All Party Boycott Conference held at Banaras under presidentship of Dr. Ansari, decides to boycott statutory commission and observe *Hartal* throughout India on 3rd February. **30** — Subhash Chandra Bose is awarded Rs. 1,000 damage in Statesman libel case. **February 4** — Simon Commission arrives in India. **12** — Vallabhbhai Patel leads Bardoli satyagraha with Gandhiji's blessings. **19** — Maharaja of Nabha is deprived of title and allowances on charge of disloyalty to Government. **22** — Lord Irwin, Viceroy, declares Govt.'s determination to hold Simon Commission's enquiry. **March 1** — Campaign for boycott of British goods starts in Calcutta. **5** — East Indian Railway employees strike work for higher wages. **April 23** — Maganlal Gandhi, a freedom fighter, dies in Patna. **May 5** — Subhash Chandra Bose presides over Sixth Maharashtra Provincial Conference. **6** — Prof. Indra is released from jail. **28** — Jawaharlal Nehru presides over Kerala Provincial Conference at Payyanur. **31** — Simon Commission sails back. **June 24** — Non-official enquiry into Bardoli revenue settlement commences. **August 10** — Worli Socialist Congress supports India's claims for self-government. **September 13** — Subhash Chandra Bose acts as an arbitrator of Jamshedpur strike. **October 11** — Simon Commission arrives again in India. **30** — Simon Commission arrives in Lahore; Police assaults Lala Lajpat Rai and other leaders during protest meetings. **November 5** — Bardoli enquiry commences. **17** — Lala Lajpat Rai passes away as a result of police beatings on October 30. **29** — Lala Lajpat Rai day is observed throughout India and public meetings are held. **30** — Jawaharlal Nehru and students are beaten at Lucknow for black flag demonstrations against Simon Commission. **December 17** — J. P. Saunders, Asst. Supdt. of Police, is shot dead by a youth at Lahore. **22** — Nehru Committee report regarding communal representation in Legislative Assembly is out. Motilal Nehru delivers 43rd Presidential address to Indian National Congress at Calcutta.

1929

January 10 — Dr. Annie Besant bemoans Gandhiji's Non-Co-operation and Civil Disobedience programmes in an article in *New India*. **28** — Lord Irwin, Viceroy, inaugurates Legislative Assembly and pledges Br. Govt. will do everything to help India attain full national political structure. **29** — Pt. Motilal Nehru, commenting on Viceroy's speech, says door of negotiation is not closed. **February 9** — Subhash Chandra Bose addresses a youth conference in Patna and inspires youth to build a new society and nation. **18** — Black Flag demonstration greets Simon Commission in Madras; Delhi Congress Working Cttee. decides to boycott foreign cloth and picket shops. **March 1** — Rabindranath Tagore sails for Canada on invitation of National Council of Education of Canada. **8** — Gandhiji arrives in Rangoon during his Burma tour. **30** — Weekly air mail service between England and India is inaugurated. **April 8** — Bhagat Singh and Batukeshwar Dutt are arrested for throwing bomb in Assembly. **9** — National Week in memoriam of Jallianwala Bagh is observed with hoisting National Flag, meetings and processions. **14** — Simon Commission leaves for England. **June 12** — Bhagat Singh and his companion are sentenced to transportation for life. **July 5** — Gokaran Nath Misra passes away. **August 4** — Khwaja Hassan Nizami informs Dr. M. A. Ansari, that political salvation of Indian Muslims lies in their joining Indian National Congress. **9** — Gandhiji meets Jinnah and discusses communal question. **11** — Smt. Sarojini Naidu arranges a private meeting of Gandhiji with Jinnah and Ali Brothers in Bombay to amend the Nehru report and make it agreeable to all sections of Muslims. **September 14** — Jatindra Nath Das, aged 23, passes away after 64 days' hunger strike in Lahore prison. **23** — Legislative Assembly passes Child Marriage Bill prohibiting marriages of boys under 18 and girls under 14. **30** — Shivram Hari Rajguru is arrested in Poona with revolver and 13 rounds of ammunition. **November 17** — First death anniversary of Lala Lajpat Rai is observed in Lahore. **30** — Pt. Jawaharlal Nehru delivers presidential address of All India Trade Union Congress at Nagpur. **December 23** — Revolutionaries try to kill Lord Irwin, Viceroy, by blowing off train with time bomb. Viceroy receives Gandhiji, Pt. Motilal Nehru, Sir Tej Bahadur Sapru, M. A. Jinnah etc. to discuss Govt. proposals. **29** — Jawaharlal Nehru delivers 44th presidential address of Congress session at Lahore.

1930

January 5 — Earl Russell, Under Secretary of State for India, declares India will not be granted Dominion Status in near future. **February 24** — Bombay Government thank Gandhiji for getting millowners' dispute settled in Ahmedabad. **March 6** — Gandhiji proceeds to Dandi to commence Salt Satyagraha. **7** — Sardar Vallabhbhai Patel is arrested in Borsad taluk while addressing public meeting. **8** — Gandhiji addresses public meeting at Ahmedabad. **12** — Gandhiji starts Civil Disobedience with a batch of 79 satyagrahis at 6.30 in the morning. **April 1** — Child Marriage Act comes into effect. **2** — Pt. Madan Mohan Malaviya tenders resignation of Assembly seat. **4** — Riots erupt among railway strikers in Bombay. **6** — Gandhiji breaks Salt Law with 79 others by preparing salt at Dandi. **7** — Ramdas Gandhi and several other salt satyagrahis throughout India are arrested and convicted. **9** — Communal riots erupt in Nasik and kill 100 people. **11** — Pt. Motilal Nehru renames Anand Bhavan as Swaraj Bhavan and dedicates it to public. Communal riots break out in Bombay and Calcutta. **13** — Pt. Malaviya campaigns for boycott of foreign clothes in Punjab. **17** — Pt. Motilal Nehru takes charge of AICC office. **May 4** — Gandhiji is arrested and taken to Yeravda jail. **6** — *Hartal* is observed all over India in connection with arrest of Gandhiji. **15-17** — Riots take place in Bengal. **16** — Kamaladevi Chattopadhyaya is sentenced to six months S.I. **23** — Mrs. Sarojini Naidu and Manilal Gandhi sentenced to 9 months and 1 year jail for revolutionary activities. **30** — Governor-General issues ordinances to counteract picketing, non-payment of taxes and tampering with loyalty of Govt. servants. **June 3** — Muslims in Bombay take out procession in sympathy with Congress under leadership of S. A. Brelvi, Editor, *Bombay Chronicle*. **10** — Rajendra Prasad, Prof. Bari, Baldev Sahay and others injured by lathi charge on procession at Patna. **18** — Bomb explosions at Lahore, Amritsar, Lyallpur, Gujranwala, Sheikhupura and Rawalpindi. **July 1** — Motilal Nehru and Dr. Syed Mohmed sentenced to 6 months S.I. for being members of Cong. Working Cttee. *Boycott Week*. Congressmen make house to house visits and get pledges from citizens to boycott foreign goods. **5** — Maulana Shaukat Ali presides over Exec. Cttee. meeting of All Parties Muslim Conference at Simla. **10** — M. S. Aney is arrested and convicted to 6 months S.I. for breaking Forest laws. **17** — Police opens fire on volunteers picketing toddy shops and kill 3 and injure many at Madurai. Viceroy allows Sir Tej Bahadur Sapru and M. R. Jayakar to see Gandhiji, Jawaharlal Nehru and others in jail. **23** — Sir Sapru and Jayakar interview Gandhiji in Yeravda jail. **28** — Sir Sapru and Jayakar meet Nehru at Nainital jail. **August 2** — Sardar Vallabhbhai Patel, Pt. Madan Mohan Malaviya, Jairamdas Daulatram and Dr. Hardikar, arrested in Bombay. **7** — Maulana Abul Kalam Azad acts as president of Congress in place of Vallabhbhai Patel. **8** — The Depressed Classes Conference meets at Nagpur under Dr. B. R. Ambedkar. **14** — Martial law proclaimed in N.W.F. Province. **16** — Martial law proclaimed in Peshawar. **21** — Maulana Abul Kalam Azad, acting Cong. President, arrested and taken to Meerut jail. **22** — Grosby, the additional Suptd. of Police of Dacca, shot dead. **25** — Bomb attempt on Sir Charles Tagart, Commr. of Police, Calcutta. **26** — Dr. Ansari officiates as President of All India Congress Cttee. **28** — SICC declared unlawful; Vallabhbhai Patel, Pt. Malaviya and Dr. Ansari are arrested. **29** — Bengal Inspector General of Police shot and seriously injured. **31** — Ramchandra Sainik, Director of War Council, arrested at Lahore. **31** — G.V. Mavlankar and others arrested at Rampur. **September 2** — Mass arrests of Congressmen in Bombay, Calcutta, Ahmedabad, Surat for picketing foreign cloth shops. **6** — Motilal Nehru released. **15** — R.S. Pandit, son-in-law of Motilal Nehru, sentenced to one year R.I. on charges of sedition. **18** — Special Tribunal sentences Dinesh Chandra to transportation for life in Bomb outrage case on Sir Charles Tagart. Sultan Mohammad, member and Ajit Singh, Director, 'War Council' arrested at Jallianwala. **23** — Asaf Ali, third Director of "War Council" arrested at Delhi. **October 7** — In Lahore conspiracy case Bhagat Singh, Rajguru and Sukhdev sentenced to death; Kishorilal, Mahavirsingh, Vijay Kumar Sinha, Shiv Varma, Gaya Parshad and Premnath Tewari to transportation for life. **17** — Smt. Parvati Devi, D/o Lala Lajpat Rai, arrested at Lahore; The police raid Swaraj Bhavan, Allahabad. **24** — Mahadev Desai, Mahatma Gandhi's secretary, released from jail. **November 8** — Political prisoners in Banaras jail resort to hunger strike. **12** — King of England presides over Round Table Conference as King Emperor of India to discuss question of India's independence. **24** — S.A. Brelvi of *Bombay Chronicle* and Sadanand of *Free Press* arrested in Bombay. **December 1** — S.A. Brelvi sentenced to 5 months and a fine of Rs. 250. **2** — Cong. Organisations all over country are declared unlawful. **11** — Sir W. Churchill criticises Congress movement in India. **18** — Jawaharlal Nehru fasts in protest against flogging of prisoners. **21** — Forty ladies in Delhi jail resort to fast. **23** — Governor of Punjab, during convocation ceremony of Punjab University, shot and wounded. Two students arrested. **26** — Bomb explosion injures three at Delhi Central Rly. Stn. **28** — S. Satyamurti, President of Tamilnad Council of Action, arrested for defying police ban on Flag Salutation ceremony.

1931

January 1 — Smt. Kamala Nehru arrested under Criminal Law Amendment Act. **4** — Maulana Mohammad Ali passes away in London. **6** — Vallabhbhai Patel and Ramdas Gandhi convicted under Criminal Law Amendment Act. **10** — S. Satyamurti and eleven others, including a woman, convicted. **18** — Subhash Chandra Bose arrested at Berhampur. **22** — Jamnadas Dwarakadas, a congress worker of Bombay, arrested. **25** — Lord Irwin, Viceroy, cancels notification under Criminal Law Amendment Act and releases Gandhiji and other members of Working Cttee. from jail. **26** — Gandhiji released from prison along with Jawaharlal Nehru, Mrs. Sarojini Naidu and 25 others. **February 6** — Pt. Motilal Nehru expires at 6.40 A.M. at Lucknow. **17** — Gandhiji meets Lord Irwin. **19** — Gandhiji meets Lord Irwin again on invitation. **March 1** — Gandhiji negotiates truce with Viceroy. **4** — Civil disobedience movement to be discontinued, amnesty to persons convicted of non-violent offences in connection with civil disobedience, withdrawal of ordinances, restoration of confiscated or attached properties are granted by Govt. in truce agreements. **23** — Viceroy rejects Bhagat Singh's mercy petition. Bhagat Singh executed at midnight. **27** — In Navjivan Conference at Karachi, Subhash Chandra Bose, in presidential address questions usefulness of truce agreement between Gandhiji and Viceroy in view of execution of Bhagat Singh. **29** — 45th Session of Indian National Congress meets at Karachi under presidentship of Vallabhbhai Patel. **31** — Young revolutionaries greet Gandhiji with black flags because of Bhagat Singh's execution. **April 17** — Lord Willingdon, new Viceroy, arrives in India. **18** — Gandhiji bids farewell to Lord Irwin. **23** — Jawaharlal Nehru given rousing reception on landing at Colombo. **May 7** — In encounter with police at Lahore Jagdish Chandra, a revolutionary, is killed. **June 27** — B.R. Gorlic, District Session Judge of 24 Parganas, shot dead by a Bengali youth. Police kill assailant. **July 22** — A youth shoots Bombay Governor Sir Ernest Hoston. He escapes as bullet strikes metal button of pocket book. **August 1** — Congress Wkg. Cttee. approves Gandhiji's National Flag with slight modification. **27** — Gandhiji and Willingdon sign fresh agreement reserving rights of Congress to adopt defensive direct action. **29** — Gandhiji sails for London to attend Round Table Conference. **September 11** — Subhash Chandra Bose addresses Tamilnad Navjivan Conference. **12** — Gandhiji arrives in London. **15** — Gandhiji addresses Federal Structure Cttee. **30** — Lord Burnham declares Gandhiji as greatest enemy of British. **October 13** — Gandhiji addresses National Labour Club in London. **November 3** — Subhash Chandra Bose asks revolutionary elements in Bengal to rally round Congress banner and follow its programme. **5** — Gandhiji meets King George in London. **10** — Gandhiji addresses mass meeting at Friends' Meeting House in London. **December 5** — Gandhiji leaves for India. **25** — Abdul Ghaffar Khan arrested. **28** — Gandhiji lands in Bombay. **29** — Viceroy refuses Gandhiji's request for talks.

1932

January 2 — Subhash Chandra Bose arrested in Bombay. **4** — Gandhiji arrested in Bombay; Govt. declares Congress Working Cttee. unlawful. **5** — Dr. Rajendra Prasad, Congress President, arrested; Dr. Ansari becomes Cong. President. **8** — Dr. Ansari arrested. **9** — Rajagopalachari and S. Satyamurty arrested in Madras. **10** — Kasturba Gandhi and others arrested at Bardoli. **13** — The Police takes into custody "Swaraj Bhawan" in Allahabad. **22** — Congress Funds in Bombay banks frozen. **26** — Mass arrests and convictions take place all over country on Independence Day. **February 6** — Sir Stanley Jackson fired at by a girl student at Convocation in Calcutta. **19** — Morarji Desai resigns as Dy. Collector and becomes Secretary of Gujarat Cong. Cttee. **March 15** — Smt. Kasturba Gandhi arrested and sentenced to 6 months R.I. by Bardoli magistrate. **April 4** — Maulana Shaukat Ali complains against Congress picketing in front of Muslim firms in Bombay. **22** — Smt. Sarojini Naidu sentenced to one year S.I. **24** — 46th session of Indian National Congress meets at Delhi under presidentship of Amrit Ranchhoddas Seth. **30** — Robert Douglas, Dist. Magistrate of Midnapore, shot dead by a Bengali youth. **May 16** — Riots break out in Bombay in which 100 are dead and 1,000 injured. **June 17** — Viceroy talks to Tej Bahadur Sapru and M.R. Jayakar. **July 7** — J.B. Kripalani arrested in Banaras. **8** — Tej Bahadur Sapru, M.R. Jayakar and N.M. Joshi resign membership of Consultative Cttee. of Round Table Conference. **August 4** — Two persons are arrested at Dinapur for attempting to hoist National Flag on Sub-jail. **16** — Prime Minister's award on communal representation in Indian Provincial Council announced. **21** — Punjab Hindu Conference at Lahore protests Communal award. **28** — Dr. Saifuddin Kitchlew arrested and sentenced to 2 years' R.I. for violating ban on entry into Lahore and Ambala. **September 12** — Gandhiji resolves to undergo fast unto death against Govt.'s decision to give separate electorates for depressed classes. **18** — 12 temples thrown open to depressed classes in Allahabad. **19** — Meetings held all over country against communal award. **20** — Gandhiji starts fast in Yeravda jail. **24** — Bomb explosion kills several Europeans in European Club at Chittagong. **26** — Gandhiji breaks fast. **October 5** — Pt. Madanmohan Malaviya and Shaukat Ali discuss inter-communal settlement. **31** — Viceroy refuses permission to Maulana Shaukat Ali for interviewing Gandhiji in jail. **November 17** — Purushottam Das Tandon arrested in Allahabad. **December 14** — Plenary session of Unity Conference meets in Allahabad under presidentship of C. Vijayaraghavachariar.

1933

January 1 — Gandhiji announces plan to undertake fast in sympathy with Kelappan in Kerala for getting temples opened for Harijans. **4** — Civil Disobedience Day celebrated all over country, lathi charges and mass arrests take place. **6** — Rajendra Prasad, Acting Cong. President, arrested at Bankipore. **7** — Pyarelal, Gandhiji's secretary, arrested from Mani Bhavan at Bombay. **14** — Kelappan meets Gandhiji at Yeravda jail and discusses temple entry issues. **18** — Rajendra Prasad is sentenced to 15 months R.I. **26** — Many are arrested and sent to jail all over country for celebrating Independence Day. **February 3** — Govt. of India decides to drop 'Delhi Conspiracy' case. **23** — Subhash Chandra Bose sails for Europe from Bombay. **March 1** — Govt. bans Calcutta session of Congress. **31** — Madan Mohan Malaviya, his son and grandson are arrested at Asansol station on their way to Calcutta session. **April 1** — Mrs. Sen Gupta delivers 47th presidential address of Calcutta Congress in place of Madan Mohan Malaviya. Many are lathi charged and arrested since session is banned by Govt. **23** — Dr. B.R. Ambedkar meets Gandhiji. **May 8** — Gandhiji is released from jail. **13** — M.A. Jinnah addresses Indian Students Union and urges need for united front in India. **28** — Andamans prisoners go on hunger strike. **July 17** — Viceroy refuses to meet Gandhiji. **31** — Gandhiji and his 33 followers rearrested and imprisoned in Sabarmati prison. **August 18** — C.F. Andrews meets Gandhiji in prison. **23** — Gandhiji is released unconditionally. **30** — Jawaharlal Nehru is released from jail to enable him to see his ailing mother. **September 10** — Jawaharlal Nehru meets Gandhiji. **12** — All India Library conference meets in Calcutta. **20** — Dr. Annie Besant passes away. **November 7** — Gandhiji starts Harijan tour from his Satyagraha Ashram, Wardha. **10** — Vithalbhai Patel passes away in Bombay.

1934

January 15 — Earthquake in North India. **16** — Gandhiji leaves Calcutta for his South Indian tour. **February 5** — Rangaswami Iyengar, Editor of *Hindu* passes away. **28** — Sikh National Conference condemns Premier's Communal Award. **April 7** — Hindu Mahasabha Working Committee declares Communal Award constitutes grave injustice to Hindu community. **18** — Rabindranath Tagore appeals to Govt. to release all political prisoners. **24** — Sir C. Sankaran Nair passes away. **May 8** — Sir John Anderson, Bengal governor, escapes revolver shot. **31** — Sir Samuel Hoare, Secretary of State for India, condemns Winston Churchill's and Lord Lloyd's reactionary policy against India. **June 12-13** — Cong. Working Cttee. passes resolution on "White Paper and Communal Award." **25**—Gandhiji escapes bomb outrage on his car at Poona. **July 28**— Pt. Madan Mohan Malaviya and M.S. Aney form a new party styled "National Party." **August 29-30** — Provincial Kisan Conference meets at Gaya under presidentship of Purushottam Das Tandon. **October 1** — Dr. Rajendra Prasad accepts Presidentship of Congress. **26-28** — 48th Session of Indian National Congress meets at Bombay. Dr. Rajendra Prasad delivers presidential address. **November** — Subhash Chandra Bose publishes his own account of Indian Nationalism *The Indian Struggle*. **December 3** — Subhash Chandra Bose goes to Calcutta to meet his dying father Jankinath Bose. **7** — Khan Abdul Ghaffar Khan, Frontier Congress leader, is arrested at Wardha. **15** — Khan Abdul Ghaffar Khan is sentenced to 2 years R.I.

1935

January 2 — M.V. Abhyankar, Central Provinces Congress leader passes away in Bombay. **15** — Bhulabhai Desai is elected leader of Congress in Assembly. **20** — M.A. Jinnah is elected leader of Independent party in Assembly. **26** — M.S. Aney becomes leader of Nationalist Party in Assembly. **31** — Calcutta citizens protest against continued detention of Sarat Chandra Bose and demand his unconditional release. **May 6** — India celebrates H.M. King's silver jubilee. **23** — Mrs. Kamala Nehru leaves for Europe. **31** — Gandhiji meets Abdul Ghaffar Khan in Sabarmati jail; Quetta and surrounding districts are affected by earthquake shocks of severe intensity. Many die, famine prevails. **June 2** — Viceroy and Cong. President appeal for funds for relief of sufferers in Quetta earthquake. **July 8** — Sikh-Muslim tension — Curfew order in Lahore. **26** — Sarat Chandra Bose is released from prison unconditionally. **September 4** — Jawaharlal Nehru leaves for Europe after his release from jail to see his ailing wife. **22** — Indian Journalists Council condemns Criminal Law Amendment Bill at its Calcutta meeting. **23** — Conference of Harijans at Ahmedabad condemns Nasik decisions asking Harijans to change their religion. **November 28** — Golden Jubilee of Indian National Congress is celebrated all over India.

1936

January 1 — Depressed classes start mass satyagraha in United Province (Uttar Pradesh). **February 13** — Sir Dinshaw Wacha, Old Congress president, expires in Bombay. **March 12** — Jawaharlal Nehru returns to India with ashes of his late wife Smt. Kamala Nehru. **16** — Nehru meets Gandhiji at Delhi to discuss political situation. **April 12** — All India Muslim League passes resolution opposing Govt. of India Act, 1935. **12-14** — Jawaharlal Nehru delivers presidential address of 49th Session of Indian National Congress at Lucknow. **May 10** — Dr. M. A. Ansari (ex-president of Congress) expires in train while travelling from Dehra Dun to Delhi. **August 16** — Madam Cama passes away in Bombay. **October 25** — Gandhiji performs opening ceremony of Mother India temple at Banaras. **December 23** — All India Socialist Congress meets at Faizpur under presidentship of Jayaprakash Narayan. **27-28**— Indian National Congress meets at Faizpur. Nehru delivers 50th presidential address.

1937

January 1 — M.A. Jinnah makes a strong plea for Hindu-Muslim unity in Nagpur meeting. **3** — M.A. Jinnah asks Congress not to interfere in Muslim Affairs. **February** — Rabindranath Tagore delivers Convocation address of Calcutta University in Bengali (Normally this privilege had been given to Viceroys and Governor of Bengal). **March 15** — AICC decides to accept office where Congress is in majority. **17** — Subhash Chandra Bose is released from prison in Calcutta. **21** — All India Political Prisoners' Relief Conference meets at New Delhi under presidentship of Sarat Chandra Bose. **28** — Congress leaders decline to form ministries without assurance of non-interference from Governors. **April 1** — India observes *hartal* as a protest against New Constitution. **6** — Rajendra Prasad urges Muslims to join Congress. **27** — Jawaharlal Nehru and M.A. Jinnah issue counter statements regarding political conditions in India. **June 2** — Hindu-Muslim riots take place in Bombay. About 2,000 are arrested. **July 9** — Dr. Khare forms first Cong. Ministry in Central Provinces. **15** — C. Rajagopalachari forms Cong. Ministry in Madras. **20** — Congress Ministries are formed in several provinces. **30** — Andamans political prisoners go on hunger strike on rejection of their demands by Govt. **August 4** — Viceroy meets Gandhiji at New Delhi. **6** — Bihar Govt. orders repatriation of Bihar prisoners from Andamans. **27** — Congress members in Bengal Assembly stage walk out during debate on Andaman prisoners. **28** — Gandhiji urges prohibition in Indian States and provinces where Congress has majority. **29** — Gandhiji urges Andamans prisoners to give up fast. **September 5** — Dr. Khan Sahib forms Frontier Ministry. **17** — Bombay Govt. returns confiscated properties in connection with Civil Disobedience Movement. **30** — Jawaharlal Nehru seeks boycott of Japanese goods. **October 26** — Resolution demanding retention of *Bande Mataram* as *National Anthem* of India is passed at Poona meeting. **31** — Jawaharlal Nehru, Subhash Chandra Bose and other Congress leaders deliver speeches at labour rally and urge people to unite and join Congress. **November 22** — Sir Jagdish Chandra Bose passes away. **December 5** — Bengal Government releases all women detenus unconditionally. **19** — Jayaprakash Narayan condemns Bihar Congress for putting ban on Kisan Sabha. **28** — All India Educational Conference discusses Gandhiji's Wardha Education Scheme in Calcutta.

1938

January 9 — China Day is observed all over India in response to an appeal by Congress President. **10** — Smt. Motilal Nehru passes away at Allahabad. **17** — Subhash Chandra Bose is elected president of Indian National Congress. Jayaprakash Narayan feels Gandhiji's ideas are old and need to be replaced by new ones. **25** — Subhash Chandra Bose and M. N. Roy discuss political situation in India. **February 5** — Gandhiji and Nehru write to M. A. Jinnah for definite statement on Muslim League's demands. **15** — Bihar and U.P. Ministries resign on issue of release of political prisoners. **19-21** — Subhash Chandra Bose delivers fifty-first presidential address of Indian National Congress at Haripura. **22** — Lord Linlithgow, Viceroy, makes statement on Constitutional crisis in U.P. and Bihar. **24** — Govind Vallabh Pant meets U.P. Governor regarding release of political prisoners. **March 2** — Maharaja of Indore allows temple entry to Harijans in his State. **April 5** — Sardar Vallabhbhai Patel launches prohibition campaign in Saran Dist. **6** — Jawaharlal Nehru writes to M. A. Jinnah on Congress policy towards Muslims and Muslim League. **8** — Gandhiji meets political prisoners in Calcutta presidency jail in connection with their release. **28** — Gandhiji meets M. A. Jinnah at Bombay to discuss communal question. **May 1** — Congress members of Orissa Assembly pass resolution asking ministry to resign in protest against appointment of J. R. Dain as Acting Governor. **11-13** — Subhash Chandra Bose and M. A. Jinnah meet and discuss Hindu-Muslim question in Bombay. **20** — Gandhiji meets M. A. Jinnah in Bombay. **June 2** — Nehru sails for Europe. **11** — Subhash Chandra Bose, in meeting at Chittagong, appeals to youth to give up violence and strengthen Congress in work of attainment of Swaraj. **16** — C. Rajagopalachari opens All India Radio Station at Madras. **23** — Subhash Chandra Bose resigns leadership of Calcutta Congress Municipal party. **July 1** — Lord Halifax, Foreign Secretary for India, talks to Jawaharlal Nehru in London. **4** — Subhash Chandra Bose meets Khwaja Sir Nazimuddin, Home Minister of Bengal, and discusses question of Bengal detenus and political prisoners. **25** — Gandhiji writes to M. A. Jinnah on communal problems. Subhash Chandra Bose also writes to Jinnah. **26** — Congress Working Cttee. takes disciplinary action against Dr. N. B. Khare, C. P. Premier. **27** — R. S. Shukla is elected leader of C. P. Congress Assembly Party. **28** — R. S. Shukla forms C. P. Ministry. **August 16** — Subhash Chandra Bose releases for publication correspondence between him and Jinnah regarding Muslim settlement. **September 25** — Congress Working Cttee. in consultation with Gandhiji decides to take whatever action necessary in event of outbreak of hostilities. **October 2** — Congress Wkg. Cttee. expels Dr. N. B. Khare from Congress. **24** — Congress President issues appeal for funds for relief work in flood affected areas of Bengal. **November 9** — Gandhiji concludes his N.W.F. Province tour and returns to Wardha. **17** — Jawaharlal Nehru returns to India. **25** — In public meeting at Jullundur Subhash Chandra Bose declares India will resort to Satyagraha if Federal Constitution is forced. **December 3** — In an article, Gandhiji appeals to Princes to co-operate with Congress. **26-28** — 26th Session of All India Muslim League meets at Patna under presidentship of M. A. Jinnah. **29** — All India Muslim Students' Conference meet at Patna under presidentship of Raja of Mahmudabad.

1939

January 20 — Maulana Abul Kalam Azad withdraws his claim from Presidentship of Tripura Session of Congress leaving field for Subhash Chandra Bose and Dr. Pattabhi Sitaramayya. **25** — Sardar Vallabhbhai Patel, after informal consultation with Gandhiji and Nehru at Bardoli, announces it is unnecessary to re-elect Subhash Chandra Bose for presidentship of Congress. Dr. Pattabhi Sitaramayya decides to contest Presidential election. **27** — Jayaprakash Narayan and Swami Sahajanand Saraswati issue a joint statement on presidential election supporting Subhash Chandra Bose. **28** — Gandhiji in an article in *Harijan* draws attention to increasing indiscipline of Congressmen. He also deplores corruption among them. **29** — Subhash Chandra Bose is elected as Congress President. **31** — Gandhiji says that Subhash Chandra Bose has achieved a decisive victory over his opponent Dr. Pattabhi Sitaramayya. He adds defeat of Pattabhi Sitaramayya is really his (Gandhiji's) since he had supported his candidature. **February 1** — Seth Jamnalal Bajaj, leader of Prajamandal reaches Jaipur to defy the ban on his entry into State. **2** — Subhash Chandra Bose discusses with Jawaharlal Nehru at Shantiniketan implications of Congress President election. **3** — Kasturba and Maniben Patel are arrested at Rajkot on their entering State to offer Satyagraha. **5** — Seth Jamnalal Bajaj is arrested at Likri Bansi Railway Stn. **7** — Seth Jamnalal Bajaj is released at frontier of Bharatpur State. **13** — Subhash Chandra Bose meets Gandhiji at Wardha. **14** — Jawaharlal Nehru in his presidential address to All India States People's Conference at Ludhiana says Congress will intervene if States check progress of people. **21** — Congress leaders meet Gandhiji at Wardha. **22** — Thirteen out of 15 Congress members of Working Committee resign. **26** — Subhash Chandra Bose accepts resignation of 13 Working Committee members. **27** — Gandhiji arrives at Rajkot on peace mission. **March 2** — Subhash Chandra Bose replies to charge against him, made by Working Cttee. members who resigned, and others. **2** — Gandhiji writes to Thakore of Rajkot intimating his plan of fast unto death from next day. **3** — Gandhiji starts fast at noon. **7** — Gandhiji breaks fast as settlement reached in Rajkot crisis by intervention of Viceroy. **8** — Subhash Chandra Bose presides over All India Congress Working Committee meeting at Tripura. **9** — AICC expresses confidence in old Wkg. Cttee. members and urges Subhash Chandra Bose to elect new members as per Gandhiji's wishes. **10** — Subhash Chandra Bose delivers 52nd presidential address of Indian National Congress at Vishnu Nagar, Tripura. **15** — Gandhiji meets Viceroy and continues to stay at Delhi. **23** — On Gandhiji's advice Travancore civil disobedience movement is suspended. **27** — Travancore civil disobedience prisoners are released. **April 2** — Sir Maurice Gwyer, Chief Justice of India, gives his verdict on Rajkot dispute. **9-10** — Annual session of All India Kisan Conference meets under presidentship of Acharya Narendra Dev at Gaya. **18** — Dr. Rabindranath Tagore and Sir P.C. Ray send telegrams to Gandhiji and Subhash Chandra Bose requesting them to meet and discuss existing problems of Congress. **24** — Congress meeting under presidentship of Subhash Chandra Bose reiterates Congress policy of non-participation in Imperialist War. **27** — Gandhiji and Subhash Chandra Bose meet at Sodepur, near Calcutta and discuss future programmes of Congress. **29** — A.I.C.C. meets at Wellingdon Square, Calcutta. Subhash Chandra Bose resigns presidentship of Indian National Congress. Nehru requests Subhash to withdraw his resignation. **30** — Dr. Rajendra Prasad is elected President of Indian National Congress. **May 1** — New Working Cttee. members of Congress are elected. **3** — Subhash Chandra Bose decides to form Forward Bloc within Congress. **6** — U.N. Dhebar writes to Gandhiji on Rajkot concessions which Darbar Virawala is prepared to grant. **8** — Subhash Chandra Bose explains future programmes of Forward Bloc. **21** — Jawaharlal Nehru deprecates, in speech at Kanpur, formation of Forward Bloc by Subhash Chandra Bose. **24** — Ram Manohar Lohia is arrested at Calcutta. **25** — Gandhiji meets Thakore Sahib of Rajkot. **June 8** — Jayaprakash Narayan, Congress Socialist leader in Patna, criticises aims of 'Forward Bloc'. **18** — Subhash Chandra Bose is accorded great welcome in Peshawar. **26** — Congress premiers meet in Bombay during AICC session to discuss communal disharmony. **July 5** — Gandhiji leaves for his frontier tour accompanied by Mahadev Desai. **10** — Madura Meenakshi temple is thrown open to Harijans. **16** — Brihadeswara temple, Tanjore, is thrown open to Harijans. **17** — Subhash Chandra Bose declares in a meeting at Zaveriwada, Ahmedabad, that Swaraj will be achieved in a short time. **18** — Subhash Chandra Bose says ordinary Congressman is terrorised into silence by higher ranks of Congress leadership. **21** — Jawaharlal Nehru advises Indians at a Colombo meeting to cultivate goodwill of Ceylonese. **August 11** — AICC disqualifies Subhash Chandra Bose from presidentship of Bengal Provincial Congress Cttee. and debars him from membership of any elective Congress Cttee. for three years. **12** — Subhash Chandra Bose, in a statement, welcomes decision of AICC. **18** — Bengal Govt. releases political prisoners. **20** — Jawaharlal Nehru leaves for China by plane. **30** — Bengal Provincial Congress passes a resolution expressing confidence in Subhash Chandra Bose. **September 4** — Gandhiji and Viceroy discuss World War. **5** — Gandhiji in a statement says he supports Britain and France against Germany in War. **9** — Gandhiji, Subhash Chandra Bose, M.S. Aney, Acharya Narendra Dev and Jayaprakash Narayan attend Cong. Wkg. Cttee. meeting at Wardha by special invitation. **17-18** — Cong. Wkg. Cttee. and All India Muslim League pass resolution on war crisis. **26** — Gandhiji meets Viceroy at Simla. **October 4** — Viceroy meets Sardar Vallabhbhai Patel. **5** — Gandhiji and M.A. Jinnah meet Viceroy. **6** — Viceroy invites Subhash Chandra Bose for talks. **18** — Jinnah-Prasad correspondence regarding league's allegation against Congress Govt. is released. **23** — Parliamentary sub-committee instructs Congress Govt. to resign by October 31. **27** — Congress Ministry in Madras resigns. **31** — U.P. Ministry (Congress) tenders resignation. Viceroy decides to invite Congress and Muslim League for a joint discussion. Subhash Chandra Bose criticises some statements made by Gandhiji and Dr. Rajendra Prasad (Cong. Pres.). **November 1** — Gandhiji, Dr. Rajendra Prasad and M.A. Jinnah hold joint conference with Viceroy in Delhi. **4** — Viceroy meet Gandhiji and Rajendra Prasad in morning and M.A. Jinnah in afternoon. **5** — M.A. Jinnah in a statement says Musalmans of India depend upon their own inherent strength and will fight to last ditch for rights in spite of British or Congress. **19** — Gandhiji lays foundation stone of Kamla Nehru Memorial Hospital at Allahabad. **19-23** — Three-day session of Congress Working Cttee. is held at Anand Bhavan, Allahabad. It passes a resolution on "War-Crisis". **December 1** — Sir Henry Gridney, President, Anglo-Indian Domiciled European Assn. appeals to Community to offer its services to King Emperor unconditionally at Calcutta meeting. **8** — M.A. Jinnah asks Muslims to observe December 21 as "Deliverance Day" from Congress regime. **9** — Gandhiji appeals to Jinnah to desist from observing Day of Deliverance and Thanksgiving in view of communal unity talks. **14** — Jawaharlal Nehru says, in a public meeting in Bombay, that communal problem in country is not communal, in the accepted term of sense, but purely political. **22** — The Congress Working Cttee. at its session at Wardha criticises statement of Secretary of State for India regarding final settlement of Indian affairs. B.G. Kher and Mirza Ismail open All-India Swadeshi exhibition in Madras. **24** — Sikandar Hyat Khan meets Jinnah at Bombay. **26** — Sir Stafford Cripps leaves India for Burma: Sardar Patel denounces Jinnah's appeal to Muslims while addressing a gathering in Bombay. **27** — Jawaharlal Nehru inaugurates the fifteenth sessions of the All India Educational Conference at Lucknow. **27-29** — Dr. R. Paranjpe delivers presidential address at the 21st Session of National Liberal Federation.

1940

January 13 — C. Rajagopalachari meets Gandhiji at Sevagram. **15** — Subhash Chandra Bose issues instructions to members of the Forward Bloc on how to observe "Independence Day." **16** — Jawaharlal Nehru issues circular regarding the celebration of 'Independence Day.' **26** — Independence Day is celebrated all over India. **30** — Subhash Chandra Bose criticises Congress High Command in a meeting at Calcutta. **February 1** — Dr. Rajendra Prasad, Cong. President, writes to Sarat Chandra Bose regarding defiance of Bengal Cong. Cttee. **11** — Jawaharlal Nehru inaugurates Maharashtra Congress Conference in Bombay and appeals to youth to discard provincialism. **15** — In Congress presidential elections Maulana Abul Kalam Azad (1841 votes) is elected against M. A. Roy (981 votes). **March 7** — Jayaprakash Narayan appeals to leftists to maintain unity in the Congress. **11** — Maharaja Jam Sahib of Jamnagar, Chancellor of Chamber of Princes, makes a statement on the negotiations for revision of Draft Instrument of Accession. **17-19** — Maulana Abul Kalam Azad delivers 53rd presidential address of Indian National Congress at Ramgarh. **22-24** — M. A. Jinnah in his presidential address at Lahore Session of All India Muslim League demands for a separate Homeland for Muslims, and passes resolution seeking creation of Pakistan. **April 5** — C. F. Andrews passes away in a nursing home at Calcutta. **May 13** — L. S. Amery is appointed Secretary of State for India. **June 1** — Jawaharlal Nehru, at a Srinagar meeting, deprecates idea of dividing India into Hindu and Muslim States. **10** — Jawaharlal Nehru outlines position of Indian States in free India as visualised by Congress. **17-21** — Working Committee of Congress passes resolution on "War-Crisis". **29** — Viceroy meets Gandhiji at Simla. After talk Gandhiji writes in *Harijan* that he is "both happy and unhappy". **July 1** — Gandhiji appeals to every Briton to accept method of non-violence instead of war with Hitler. **2** — Subhash Chandra Bose is arrested at his Calcutta residence. Sardar Sardul Singh Caveeshar is nominated as president of the All India Forward Bloc. **3-7** — Gandhiji attends the Cong. Working Cttees. meetings in Delhi where resolution demanding complete independence for India is passed. **7** — Congress Working Cttee. deputes Bhulabhai Desai and Asaf Ali to visit Waziristan, and study problems of Wazirs arising out of tribal raids. **21** — At Wkg. Cttee. meeting of Congress at Poona C. Rajagopalachari urges formation of National Govt. at Centre. **August 8** — Viceroy, Lord Linlithgow, makes statement on expansion of Governor's Executive Council and establishment of a War Advisory Council. **14** — Viceroy writes to M. A. Jinnah regarding establishment of "War Advisory Council". **26** — Congress President issues circular to Provincial Congress Cttees. asking them to hold protest meetings against Viceregal move to establish War Advisory Council. **September 2** — Muslim League Working Cttee. welcomes Viceroy's proposal to establish War Advisory Council. **15** — In a meeting of All India Congress Cttee. at Bombay Maulana Abul Kalam Azad announces Gandhiji's agreement to lead Congress. **18** — Congress Working Cttee. meeting at Bombay passes resolution on suspension of Civil Disobedience. **25** — L. S. Amery, Secretary of State for India, hopes for establishing working arrangement in India with Gandhiji. **October 6** — Mahadev Desai, Secretary to Gandhiji, meets Subhash Chandra Bose. **13** — Working Cttee.'s session at Wardha approves Gandhiji's plan for individual Civil Disobedience by a limited number of satyagrahis chosen by him. **17** — Gandhiji selects Vinoba Bhave as his first satyagrahi for individual satyagraha movement. Vinoba Bhave in a meeting at Panam advises audience not to help British in war efforts. Vinoba is arrested. **25** — Govt. of India issues restrictive orders under Defence of India Rules. **31** — Jawaharlal Nehru is arrested at Chhiski (Allahabad) on his return from Wardha after meeting Gandhiji. **November 8** — *News Chronicle*, London, urges immediate release of Jawaharlal Nehru. **13** — Gandhiji prepares list of 1,500 congressmen for individual civil disobedience. **17** — Sardar Vallabhbhai Patel is arrested and taken to Sabarmati jail. **24** — Govind Vallabh Pant is arrested at Haldwani. **25** — Govind Vallabh Pant is sentenced to one year S.I. Maulana Abul Kalam Azad announces a Hindu-Muslim Unity Board at Karachi. **December 1** — Sarojini Naidu and Bhulabhai Desai are arrested in Bombay. **2** — Dr. Prafulla Chandra Ghosh (Wkg. Cttee. Mem.), Kumari Chandra Jaina (Midnapur Dist. Cong. Pres.) are arrested and sentenced to 1 year S.I. under D.I.R. **3** — Bubesu Sambamurti in Madras and K.M. Munshi in Bombay are arrested. **5** — Subhash Chandra Bose is released. **9** — Smt. Vijayalakshmi Pandit, Nityananda Kanungo, Asaf Ali, Dr. & Smt. Subbaroyan are arrested and sentenced each for six months' S.I. **11** — Smt. Sarojini Naidu is released from jail for health reasons. **12** — Subhash Chandra Bose issues statement in connection with disciplinary action taken against Sarat Chandra Bose by Congress executive.

1941

January 3 — Maulana Abul Kalam Azad is arrested at Allahabad on his way to Calcutta from Delhi. **8** — Maulana Abul Kalam Azad is charged under DIR having delivered prejudicial speech at Allahabad and sentenced to 18 months S.I. **27** — Subhash Chandra Bose is missing from home in Calcutta. A warrant of arrest is issued by the Addl. Chief Presidency Magistrate, Calcutta. **31** — M. N. Roy appeals to Gandhiji to persuade followers to behave less violently and more truthfully. **February 3** — Addl. Chief Presidency Magistrate, Calcutta, orders arrest of Subhash Chandra Bose and attachment of his properties. **20** — Gandhiji declines Congress participation in Central government reorganisation until Congress demands are conceded. **28** — Gandhiji performs opening ceremony of Kamala Nehru Memorial Hospital at Allahabad. **March 2** — Subhash Chandra Bose reaches Germany. **13** — Non-parties political conference issues proposals on establishment of "War Advisory Council." **April 22** — L. S. Amery makes statement on proposals of establishing "War Advisory Council." **May 19** — S. Srinivasa Iyengar, *ex*-Pres. of Indian National Congress passes away at Mylapore, Madras. **June 4** — Pt. Madan Mohan Malaviya addresses the Conference of Hindu leaders at Banaras regarding communal situation in India. **July 18** — Gandhiji discusses with Christian leaders minorities question of India. **August 7** — Rabindranath Tagore passes away in his old *Jorasanko* house. **12** — Pt. Madan Mohan Malaviya, in a statement from Banaras, recommends holding of public meetings on August 17 to protest against communal award and separate communal electorates. **September 16** — Bhulabhai Desai is released from prison for reasons of health. **19** — Dr. Satyapal resigns seat in Central Legislature. **26** — Communal riots in Dacca and Bombay. **November 8** — Smt. Vijayalakshmi Pandit inaugurates Patna Dist. Political Conference at Patna and appeals to follow programmes outlined by Gandhiji. **14** — Gandhiji appeals to Govt. on Jayaprakash Narayan's fast in Deoli. **December** — Secret station "Azad Hind Radio" is opened in Germany. **3** — Jawaharlal Nehru and Maulana Azad are released from jail. **5** — Jawaharlal Nehru says, in statement from Lucknow, that "Call of India continues to resound our ears and infuses new blood in our veins." **30** — Congress Working Cttee., at session in Bardoli, passes resolution to relieve Gandhiji from leadership of Congress.

1942

January 3 — Jawaharlal Nehru while addressing meeting in Bombay says, "We should nave no sympathy with Hitler." Rajendra Prasad, Sardar Vallabhbhai Patel, Acharya J. B. Kripalani and Dr. Profulla Chandra Ghosh also issue statements regarding Congress attitude towards war. **February 9** — Marshal Chiang Kai-shek and Madam Chiang Kai-shek arrive in Delhi. **11** — Maulana Azad and Jawaharlal Nehru meet Marshal Chiang Kai-shek and Madam Chiang Kai-shek in Delhi. Seth Jamna Lal Bajaj, treasurer and member of the Congress Working Cttee. passes away at Wardha. **17** — Sir H. P. Mody, N. R. Sarkar and M. S. Aney resign from the Viceroy's Council. **18** — Marshal Chiang Kai-shek meets Gandhiji. **March 22** — Maulana Azad addressing concluding session of Jamiat-ul-ulema Hind at Lahore advises Muslims not to stand in way of freedom of country by presenting different schemes. **23** — Sir Stafford Cripps at press conference in New Delhi says he is great admirer of India and that he wishes to settle all political problems. **25** — Sir Stafford Cripps meets Maulana Azad in New Delhi. **27** — Gandhiji meets Sir Stafford Cripps in New Delhi. **30** — Sir Stafford Cripps, in broadcast, appeals to people of India to get together and form their own constitution. **April 2** — All India Muslim League passes resolution on Cripps' proposal. **6** — Jawaharlal Nehru reports to Congress Working Cttee. about his talk with Col. Johnson, personal envoy of President Roosevelt. **7** — Sir Stafford Cripps puts forward first formula on Defence in his letter to Maulana Azad. Subhash Chandra Bose claims Cripps Mission is a failure. **29 - May 2** — AICC rejects C. Rajagopalachari's resolution on self-determination of Muslims. **May 3** — Sir Stafford Cripps in broadcasts from London says India will have complete freedom soon after war. **June 5** — Jawaharlal Nehru appeals for funds to help *National Herald*, Lucknow. **July 5** — Mahatma Gandhi speaks to Maulana Azad about "Quit India Movement" at Working Cttee. meeting at Wardha. **14** — Congress Working Cttee. releases 700-word resolution on political situation which is described as "Quit India" resolution. **August 8** — Jawaharlal Nehru speaks on Cripps' Mission and Quit India movement at AICC meeting in Bombay. **9** — Gandhiji, Maulana Azad, Jawaharlal Nehru, Vallabhbhai Patel and other prominent congressmen including members of Working Cttee. and President and Secretary of Provincial Congress Cttee. are arrested in Bombay and taken to Poona by Special train. **10** — In a police lathi charge on students' procession about 50 students of Banaras Hindu University get injured. Subhash Chandra Bose republishes his book *The Indian Struggle in Malaya*. **12** — At Assi the police open fire on students' procession killing one and injuring many. S. Satyamurthy is arrested at Arkonam. **15** — Gandhiji writes to Chiang Kai-shek. Mahadev Desai passes away in Aga Khan Palace prison. **16-20** — Working Cttee. of All India Muslim League passes resolution on "Quit India" resolution of Congress. **17** — V. V. Giri, Madras Labour Minister and President of All India Trade Union Congress, is arrested under Defence of India Act. **21** — Sir C. P. Ramaswami Aiyar resigns from Viceroy's Council. **September 7** — Smt. Kamladevi Chattopadhyaya is arrested at Bangalore under DIR. **15** — Smt. Rameswari Nehru, Vice-Pres. of the Harijan Sewak Sangh, and three other lady congress workers are arrested at Lahore under DIR. **29** — Sardar J. J. Singh of India League of America endorses Gandhiji's proposal asking Pres. Roosevelt to intervene in British India dispute. **October 18** — L. S. Amery, Secretary of State for India, reiterates Britain's pledge of freedom to India. **November 12** — C. Rajagopalachari meets Viceroy and gives interview to Indian and Foreign correspondents. **16** — Dr. Shyama Prasad Mookerjee, Finance Minister of Bengal, resigns.

1943

February — Subhash Chandra Bose arrives in Tokyo. **10** — Gandhiji decides on 21-day fast. **19** — Doctors attending on Gandhiji say his condition causes anxiety. Numerous appeals sent to Churchill, Amery and Viceroy for Gandhiji's release. **20** — All Party Leaders' Conference meets at Delhi and passes resolution urging unconditional release of Gandhiji. **26** — Gandhiji meets C. Rajagopalachari. **March 3** — Gandhiji breaks fast at 9-34 A.M. **April 21** — Commonwealth Party in England urges resumption of negotiations and release of Gandhiji unconditionally. **19** — In a broadcast Subhash Chandra Bose asks Indians to trust him. **July 4** — Subhash Chandra Bose accepts allegiance to Indian National Army. **16** — Bengal Legislative Council passes resolution urging release of Gandhiji and members of Congress Working Cttee. **August 6** — Subhash Chandra Bose assumes personal command of the I.N.A. **October 21** — Subhash Chandra Bose inaugurates Provincial Government of Free India in Cathay Cinema at Singapore. **23** — Provisional Govt. of Free India declares War on Britain and U.S.A. **November 25** — Smt. Vijayalakshmi Pandit, President, All India Women's Conference, speaks about devastating flood and food crisis in Midnapur Dist. **December 29** — Japanese

Admiral at Port Blair receives Subhash Chandra Bose in Andaman Islands.

1944

February 17 — Viceroy, Lord Wavell, addresses Central Legislature on problem of Indian Unity. **20** — Bombay Govt., in its communique, says, "Gandhiji's condition has been deteriorating and is very grave". **22** — Kasturba Gandhi passes away in Aga Khan Palace prison. **March 8** — Under leadership of Pt. Madan Mohan Malaviya about forty prominent leaders decide to raise a fund in memory of Kasturba and present it to Gandhiji on his 75th birthday. **May 5** — Leaders appeal to Viceroy to release Gandhiji. **6** — A New Delhi press communique announces release of Gandhiji unconditionally on medical grounds. Gandhiji is released at 8 A.M. **19** — Gandhiji visits Bombay. **29** — Subhash Chandra Bose collects about Rs. 5 million in cash and ornaments at public meeting in Singapore. **June 28** — Gandhiji addresses Maharashtra Congressmen in Poona. **July 1** — Viceroy refuses interview to Gandhiji. **10** — C. Rajagopalachari publishes his formula to end Congress-League deadlock. **28** — Gandhiji deplores underground activities and sabotage works. **30** — Gandhiji supports C. Rajagopalachari's formula (C.R. Formula). **August 14** — Pt. Madan Mohan Malaviya says that he is entirely opposed to the idea of Pakistan. **September 9, 11, 15, 19, 24 and 27** — Gandhiji-Jinnah meetings and discussions take place in Bombay. **October 23** — Subhash Chandra Bose leaves Singapore for Tokyo to attend Greater East Asia Conference. **November 26** — Gandhiji signs Kasturba Memorial Trust Deed.

1945

March 6 — Bertrand Russel advocates independence for India at meeting in Cambridge University. **May 21** — Subhash Chandra Bose appeals to Moscow to help India's cause. **30** — Nawabzada Liaqat Ali Khan speaks on Rajagopalachari's formula on Pakistan. **June 15** — Maulana Azad, Jawaharlal Nehru and others are released. **20** — Jawaharlal Nehru and Viceroy meet at Simla for talks. **21** — Congress Working Cttee. meets at Bombay to discuss Lord Wavell's (Viceroy's) proposals (Wavell Plan). **23** — Jawaharlal Nehru says that Wavell Plan is in nature of an interim arrangement to organise a change. **30** — Gandhiji is surprised at M.A. Jinnah's request to accept Pakistan first. **July 9** — Viceroy writes to M.A. Jinnah. **11** — Viceroy meets Gandhiji. **12** — Jawaharlal Nehru explains Congress attitude on Wavell Plan. **September 12-18** — Congress Working Cttee. passes resolution on United India and self-determination. **19** — Viceroy, Lord Wavell, speaks on general elections and plans for summoning a constitution making body.

1946

January 6 — Sardar Vallabhbhai Patel in a meeting, referring to INA trial, at Bombay, says that any subject country has right to organise its own army and overthrow ruling power. **29** — Jawaharlal Nehru in meeting at Allahabad condemns attack on Communist Headquarters in Bombay. **31** — Members of British Parliamentary delegation meet Jawaharlal Nehru at Allahabad. **February 10** — Gandhiji's *Harijan* Weekly resumes publication after a break of 42 months. **23** — Maulana Azad, in a telegram to British Govt., asks British people to abandon imperialism in India. **March 4** — Jawaharlal Nehru issues statement at Allahabad in connection with strike of Army signalmen and others at Jabalpur. **15** — Earl Attlee, in a statement to House of Commons, admits that situation in India has completely changed and requires new approach to solve it. **April 4** — British Cabinet Mission meets M.A. Jinnah and Sir Gulam Hussain Hidayatulla, Premier of Sind. **5** — British Cabinet Mission meets Sikh leaders. **10** — Sardar Vallabhbhai Patel says Congress cannot accept Muslim League's proposal of creating new State of Pakistan. **14** — All India Hindu Mahasabha submits memorandum to British Cabinet Mission. **24** — Herbert Hoover, a former U.S. President, meets Gandhiji and Jawaharlal Nehru. **28** — Congress Working Cttee. reviews an invitation extended by the British Cabinet Mission to its President, Maulana Azad, for joint meeting in New Delhi with M.A. Jinnah. **May 7** — Gandhiji and M.A. Jinnah meet Viceroy and Sir Stafford Cripps in Simla. **9** — Jawaharlal Nehru is elected president of the Indian National Congress for the fourth time. Jawaharlal Nehru meets M.A. Jinnah at Simla. **12** — Three-member British Cabinet Mission makes statement on position of Princely States in Independent India and their relations with British Crown. **24** — Congress Working Cttee. passes resolution on British Cabinet Mission's proposals stating it is unable to reach final opinion in absence of full clarification of proposed Provincial Govt. **26** — Jawaharlal Nehru meets Viceroy in New Delhi. **June 6** — Council of All India Muslim League passes resolution on formation of an Interim Govt. **16**—All India Cttee. of Hindu Mahasabha passes resolution on Cabinet Mission Plan. Cabinet Mission issues statement on formation of Interim Govt. **19**—Congress decides to join Interim Govt. under certain conditions. **20** — Jawaharlal Nehru is arrested at Domel for defying ban on his entry to Kashmir. **21** — Jawaharlal Nehru is released. **27** — M.A. Jinnah makes statement on acceptance of Cabinet Mission Plan by the Congress. **29** — Members of caretaker Govt. are announced. Cabinet Mission leaves for England. **July 3** — Viceroy accepts resignations of all members of his Executive Council on eve of formation of new caretaker Govt. **6** — Jawaharlal Nehru takes charge of Congress presidentship from Maulana Azad at meeting of AICC in Bombay. **8** — Congress decides to organise a Congress Volunteer Corps under leadership of Major Gen. Shah Nawaz Khan of I.N.A. **22** — Viceroy writes to M.A. Jinnah regarding formation of Interim Govt. **27** — Muslim League Council at its meeting in Bombay passes resolution rejecting Cabinet Mission Plan and reiterates demand for Pakistan. **31** — M.A. Jinnah replies to Viceroy's letter. **August 14** — Jawaharlal Nehru invites M. A. Jinnah to join Interim Govt. **18** — Jawaharlal Nehru submits names to Viceroy for inclusion in Interim Govt. **24** — Viceroy announces formation of Interim Govt. at Centre and appeals to Muslim League to join Interim Govt. **September 1** — Viceroy announces portfolios of new Interim Govt. **2** — Interim Govt. assumes office. **7** — Jawaharlal Nehru, in his first broadcast as Vice-President of Interim Govt. explains free India's role in world affairs. Gandhiji, in his prayer speech, appeals to M.A. Jinnah to give up violence and allow Hindus and Muslims to come closer. **14** — Dr. S. Radhakrishnan unveils Gandhiji's statue at Karachi. **16** — Wkg. Cttee. of Forward Bloc meets at Delhi and asserts that Subhash Chandra Bose is alive and will reappear at opportune time. **20** — Achyut Patwardhan elected Gen. Secretary of Cong. Socialist Party in place of Jayaprakash Narayan. **22** — AICC meets at Delhi. Jawaharlal Nehru resigns Congress presidentship. **25** — Viceroy meets Jawaharlal Nehru and Gandhiji. **October 9** — Dr. Ram Monohar Lohia released from prison. An order banning his entry into Goa is served on him. **25** — Smt. Vijayalakshmi Pandit defines India's policy in U.N. General Assembly which opposes racialism and exploitation. Names of Muslim League members of Interim Govt. are announced. **November 12** — Pt. Madan Mohan Malaviya, 85, passes away in Banaras. **23-24** — 54th plenary session of Indian National Congress meets at Pyarelal Nagar, Meerut under presidentship of Acharya J.B. Kripalani. **December 1** — Viceroy Lord Wavell accompanied by Jawaharlal Nehru, M.A. Jinnah, Liaqat Ali Khan and Sardar Baldev Singh leaves for London by air to attend London Conference. **8** — Jawaharlal Nehru and Sardar Baldev Singh return to Delhi.

1947

January 6 — Sarat Chandra Bose resigns from Congress. **7** — Gandhiji appeals to Muslims to be tolerant. **15** — Maulana Azad joins Interim Govt. as Education Member. **29** — Chamber of Princes accept recommendations of British cabinet on position of princely states in Independent India and their relations with British Crown. **February 10** — Jawaharlal Nehru in statement says Govt. is convinced Subhash Chandra Bose is dead as a result of injuries sustained in aircrash. **20** — Count Attlee, British Prime Minister, announces in House of Commons target date for transfer of power. **24** — M.A. Jinnah insists on formation of Pakistan. Gandhiji calls for Hindu-Muslim Unity. **March 7** — Jayaprakash Narayan resigns from Congress Working Cttee. **12** — Gandhiji starts tour of riot affected areas of Bihar. **15-16** — Jawaharlal Nehru accompanied by

Sardar Swaran Singh and Dr. Gopichand Bhargava visit riot affected areas of Rawalpindi, and make an aerial tour of Multan and Amritsar. **31** — Gandhiji arrives in Delhi for talks with Viceroy, Lord Mountbatten. **April 2** — Jawaharlal Nehru elected president in Provincial General Council of Asian Relations Conference. Gandhiji while addressing the Conference says that East must conquer West by message of truth and love. **5** — Gandhiji makes appeal to Hindus not to harbour ill-will against Muslim fanatics. **14** — While inaugurating 7th Session of All India Manufacturers' Organisation Jawaharlal Nehru stresses need for rapid industrialisation of India. **15** — Gandhiji and M.A. Jinnah issue joint statement denouncing violence. **17** — Acharya J.B. Kripalani, Cong. President, meets Lord Mountbatten. **28** — Dr. Rajendra Prasad while addressing Constituent Assembly, indicates House should be prepared for division of India including some provinces. **30** — Constituent Assembly votes for abolition of titles by Indian Union. **May 1-4** — Under presidentship of Acharya J.B. Kripalani Congress Working Cttee. meeting is held at Delhi. **8** — Jayaprakash Narayan arrested in Hyderabad and externed from State. **24** — Jawaharlal Nehru says M.A. Jinnah's demand for a corridor through India is unrealistic. **27** — Acharya J.B. Kripalani says in case of a division of India it should not be carried out by British. **June 3** — His Majesty's Govt. issues a statement on its final decision regarding transfer of power. Clement Attlee speaks in House of Commons outlining partition of India and date of transfer of power. **6** — Gandhiji meets Viceroy and discusses with him question of partition of Punjab and Bengal. **15** — AICC passes resolution accepting proposals for partition and transfer of power. **July 10** — Clement Attlee makes a speech in House of Commons on Indian Independence Bill. **18** — British Parliament passes an Act to set up dominions of India and Pakistan. **27** — Gandhiji requests Princes to join Indian Union. **August 8** — Nizam of Hyderabad informs Crown representative of State that he will watch relations between India and Pakistan before entering into relation with either Dominion. **12** — U.N. Asst. Secretary General for Legal Affairs brings out a memorandum on effect of Indian Independence Act, 1947. **12** — Viceroy informs Nizam that Govt. of India will not worry him. Four Jt. Councils were set up to consider matters relating to partitioning of India. A tribunal is also set up to make awards in respect of partition disputes. **12-13** — Sir Cyril Radcliff, Chairman, Boundary Commission, publishes awards on Pakistan boundaries in Bengal, Assam and Punjab. **14** — Constituent Assembly passes resolutions on assumption of power and endorses appointment of Lord Mountbatten as Governor-General of Dominion of India; Lord Mountbatten inaugurates Dominion of Pakistan. **15** — Indian Dominion born at 12 midnight. Jawaharlal Nehru broadcasts as first Prime Minister of India from All India Radio, Delhi. Lord Mountbatten as Governor-General addresses Constituent Assembly. **31** — Jawaharlal Nehru visits riot affected areas in Punjab with Liaqat Ali Khan and Sardar Patel. **September 26** — Gandhiji appeals to safeguard rights of minorities. **27-October 1** — Congress Working Cttee. meets at Delhi. Acharya J.B. Kripalani presides. **18** — Kashmir Govt. complains to Pakistan Govt of hostile acts. **26** — Maharaja of Kashmir requests Indian Govt.'s help against Pakistan raiders and offers accession of State to India. **27** — Govt. of India accepts offer of accession and sends troops to Kashmir. **30** — Pakistan Govt. blames Kashmir Govt. for Pathan attacks and refuses to recognise Kashmir's accession to India. **November 8** — Diwan of Junagadh seeks India's help to maintain law and order. **9** — Govt. of India intimates Pakistan about request made by Diwan of Junagadh and takes over administration. **14** — Pakistan declares India as a foreign territory for export and import purposes. **29** — Indian Govt. accepts standstill agreement of Nizam of Hyderabad. **December 12-30** — Letters between Prime Ministers of India and Pakistan are exchanged on Kashmir question. Various types of merger agreements are executed by States. **20** — Govt. of India declares Pakistan as a foreign territory for export of raw jute products

1948

January 1 — Indian Govt. urges U.N. Security Council to stop Pakistan from assisting raiders in Kashmir. **15** — Pakistan Govt. submits documents on Kashmir to Security Council; N.G. Ayyangar, Permanent representative of India to Security Council, suggests a plebiscite in Kashmir under international auspices. **20** — A bomb explodes near Gandhiji during his prayer meeting in Birla House, New Delhi. U.N. Security Council appoints three-man Commission to settle Kashmir question. **30** — Gandhiji shot dead by Nathuram Vinayak Godse, a member of Rastriya Swayam Sevak Sangh, at 5.10 P.M. just before his evening prayer meeting in Birla House, New Delhi. **February 4** — Indian Govt. bans Rashtriya Swayam Sevak Sangh after assassination of Gandhiji. **8** — Indian Govt. declares Muslim National Guard unlawful. **12** — Immersion of Gandhiji's ashes in holy confluence at Allahabad is witnessed by million people. **14-15** — Hindu Mahasabha passes resolution indicating its withdrawal from political works. **March 5** — Maharaja of Kashmir announces establishment of popular interim Govt. in State. **25** — AICC office is moved from Swaraj Bhavan, Allahabad to 7, Jantar Mantar Rd., New Delhi. **April 12** — Jawaharlal Nehru lays foundation stone of Hirakud Dam. Jawaharlal Nehru lays foundation stone of New capital of Orissa at Bhubaneshwar. **15-16** — Agreement with Pakistan on minority communities signed. **21** — U.N. Security Council in a resolution asks India and Pakistan to withdraw their forces from Kashmir. **May 4** — Interim agreement on Canal waters signed with Pakistan. **26** — An agreement with Pakistan on supply of essential commodities signed. **27** — Mahatma Gandhi murder case hearing starts in Red Fort, Delhi. **June 8** — French Govt. announces future of French settlements in India. **9** — Talks on accession of Hyderabad break down. **20** — Lord Mountbatten leaves India. **21** — C. Rajagopalachari assumes charge as Governor General of India. **July 1** — Ordinance bans transfer of securities held by Nizam of Hyderabad. **2** — Govt. of India bans export of Gold or currency from Hyderabad. **9** — Agreement on sterling balances between India and England signed. **August 20** — Jawaharlal Nehru addresses first meeting of Atomic Energy Commission. **September 9** — M.A. Jinnah passes away. **11** — Nizam rejects India Govt.'s terms. **12** — Indian troops enter Hyderabad territory. **17** — Nizam orders cease fire; Hyderabad army lays down arms. **18** — Hyderabad comes under military administration with Maj. Gen. Choudhury as Military Governor. **20** — Nizam orders withdrawal of case from U.N. **October 5** — Jawaharlal Nehru leaves for London to attend Commonwealth Prime Ministers' Conference. **24** — Jawaharlal Nehru's talk with Earl Attlee and Liaqat Ali Khan on Kashmir breaks down. **November 3** — Jawaharlal Nehru addresses special session of U.N. General Assembly in Paris. **4** — Dr. B.R. Ambedkar, Chairman, Drafting Cttee., presents Draft Constitution to Constituent Assembly. **8** — Nathuram Godse confesses to murder of Mahatma Gandhi but denies any conspiracy. **22** — Cyclone in Bombay paralyses city. **24** — Dr. Shyama Prasad Mukherjee resigns membership of Mahasabha executive. **29** — Constituent Assembly adopts article on equality and abolition of untouchability. **December 3** — R. R. Diwakar is appointed Minister of Information. **4** — General Cariappa appointed Commander-in-Chief of Indian Forces. **17** — Kashmir Plebiscite Commission Panel arrives. **18-19** — 55th Congress Session opens in Jaipur under presidentship of Dr. Pattabhi Sitaramayya. **23** — Govt. of India issues a communique on stoppage of Dutch flight across India.

1949

January 1 — Govt. of India orders ceasefire in Kashmir. **20** — Sir Tej Bahadur Sapru passes away. **February 10** — Nathuram Godse and accomplice are sentenced to death for murder of Gandhiji. **April 15** — United Nations Commission for India and Pakistan sends proposals regarding cease-fire line and withdrawal of troops by India and Pakistan. **May 11** — Cttee. on Minorities submits report. **21-22** — Congress Wkg. Cttee. meets at Dehradun. **June 24** — Indo-Pakistani trade agreement signed. **26** — Talks between India and Pakistan on evacuee property end in deadlock at Karachi. **July 10** — Indo-French communique on Chandernagore referendum issued. **12** — Govt. of India withdraws ban on Rashtriya Swayam Sevak Sangh. **27** — Military representatives of India and Pakistan sign agreement demarcating cease-fire line. **August 26** —

UNCIP suggests Kashmir issue be solved through arbitration. **September 9** — Indian Govt. disagrees to principle of good-will visit to U.S.A. **November 7** — Governor General rejects mercy petitions of Godse and Apte, sentenced to death in Mahatma Gandhi murder case. **15** — Godse and Apte are executed at Ambala. **23** — Nizam proclaims extension of Indian Constitution to Hyderabad. **24-25** — Raj Pramukhs of Travancore-Cochin and Mysore proclaim extension of Indian Constitution to their States. **25** — Maharaja of Kashmir extends Indian Constitution as applicable to Jammu and Kashmir. **26** — Third reading of Constitution Bill completed. **30** — Govt. of India issues communique on India's decision to establish diplomatic relations with new Govt. of China.

1950

January 4 — Friendship treaty between India and Afghanistan signed. **14** — Nehru attends Commonwealth Foreign Ministers' Conference in Colombo. **18** — Jawaharlal Nehru suggests No-war Pact between India and Pakistan. **19** — Rail traffic between India and Pakistan is suspended. Nehru lays foundation stone of National Stadium, New Delhi. **24** — Dr. Rajendra Prasad elected President of Indian Republic. **26** — India officially proclaimed as Sovereign Democratic Republic. **31** — Dr. Rajendra Prasad, President of India, delivers an address to Parliament. **February 7** — Indian "White Paper" on disruption of trade and rail traffic with Pakistan issued. **20** — Sarat Chandra Bose passes away. **March 17** — Jawaharlal Nehru declares in Parliament India is gravely concerned with plight of Hindus in East Pakistan. **April 2** — Jawaharlal Nehru and Liaqat Ali Khan (Pakistan Prime Minister) meet at Delhi. **8** — Indo-Pakistan Pact ensuring protection to minorities signed. **14** — Sri Ramana Maharshi passes away. **15** — Dr. S. P. Mookherjee (Min. for Industries) and K. C. Neogy (Min. for Commerce) resign. **25-26** — Chief Ministers of States and P.C.C. Presidents meet at a Conference in New Delhi to formulate economic programme and devise methods to implement it. **26** — Jawaharlal Nehru visits Pakistan. **May 2** — Chandernagore, a French Settlement in India, taken over by Govt. of India. **27** — Sir Owen Dixon, U.N. Mediator in Kashmir Dispute arrives in Delhi. 'Kirti Mandir' a memorial to Mahatma Gandhi inaugurated by Sardar Patel at Porbandar. **July 1** — India recognises Communist China. **2** — Socialist leader Yusuf Meherally passes away. **August 5** — Chief Minister of Assam, Gopinath Bardoloi, expires. **15** — New currency coins introduced in India. **16** — Earthquake shocks in Assam and eastern parts of India : worst in last 50 yrs. **21** — Dixon mission in Kashmir reports failure. **September 20-21** — 56th Congress session, opens at Nasik. Purushottamdas Tandon presides. **October 3** — Jawaharlal Nehru inaugurates eleventh Conference of Institute of Pacific Relations at Lucknow. **November 1** — President Dr. Rajendra Prasad, inaugurates Chittaranjan Locomotive Works. **December 5** — Sri Aurobindo Ghosh expires. India signs new treaty with Sikkim on India's defence responsibility extending to Tibetan borders. Cong. Wkg. Cttee. meets at Sardar Vallabhbhai Patel's residence under presidentship of Purushottamdas Tandon. **15** — Sardar Vallabhbhai Patel passes away. **26** — Central Cabinet reorganised; C. Rajagopalachari becomes Minister for Home Affairs.

1951

January 2 — Jawaharlal Nehru inaugurates Indian Science Conference at Bangalore. **February 9** — First Census enumeration in Independent India starts. **19** — Indo-Pakistan trade talks begin in accepts Pakistan Rupee at par value. **28** — Debate on Kashmir in Security Council begins. **March 1** — India rejects joint U. S. — U. K. plan for Kashmir settlement. **17** — Bakshi Ghulam Mohammed opposes arbitration on Kashmir. **28** — Congress of Cultural Freedom meets at Bombay, under Jayaprakash Narayan. **April 13** — Govt. of India withdraws titles and privileges of Maharaja of Baroda. **21** — Parliament passes Jallianwala Memorial Bill. **24** — Sri Aurobindo Memorial convention meets at Pondicherry. **May 17** — Acharya J.B. Kripalani resigns from Congress. **20** — T. Prakasam resigns from Congress **27** — Dr. Rajendra Prasad presents President's Colours to Indian Navy in Bombay. **June 11** — Jawaharlal Nehru charges U.S. and U.K. with aiding Pakistan in Kashmir issue. **16** — Dr. Gopichand Bhargawa resigns Chief Ministership of Punjab; Acharya J.B. Kripalani presides over new Praja Socialist Party convention at Patna. **21** — India pleads for Communist China's membership in UNESCO. **26** — Delhi-Moscow direct phone link inaugurated. **July 3** — India protests to U.N. Security Council against Pakistan raids in Kashmir. **8** — Dr. Graham, U.N. representative for Kashmir, visits Srinagar. **18** — Rafi Ahmed Kidwai and Ajit Prasad Jain resign from Central Cabinet. **24** — Jawaharlal Nehru demands "No-War" assurance from Pakistan. **26** — Liaqat Khan invites Jawaharlal Nehru to Karachi for talks. **August 18** — Jayaprakash Narayan and Railway Minister discuss Railwaymen's demands. **31** — C. Rajagopalachari introduces Press Laws Bill in Parliament. **September 7** — Nehru meets Dr. Frank Graham, U.N. Mediator on Kashmir, just before he leaves India. **9** — Nehru takes up Congress Presidentship from Purushottamdas Tandon at AICC meeting in Delhi. **27** — Dr. Ambedkar, Minister for Law, resigns. Parliament passes Aligarh Muslim and Banaras Hindu University Bills. **October 7** — Press Bill becomes an Act. **18-19** — 57th Session of Indian National Congress, presided over by Jawaharlal Nehru, meets at Satyavati Nagar, New Delhi. **28** — China-Cultural mission arrives in Calcutta. **November 1** — H.E. Chester Bowles, U.S. Ambassador, presents credentials to the President of India. **7** — M. Patanjali Sastri appointed Chief Justice of India. **20** — Interim Constitution comes into force in Kashmir. **December 5** — Dr. Abanindranath Tagore passes away in Calcutta. **14** — Indo-Turkish treaty of friendship is signed at Ankara. **19** — Dr. Graham submits report on Kashmir to U.N.

1952

February 23 — Parliament passes Employees Provident Fund Bill. **March 14** — Jawaharlal Nehru addresses Conference of Governors and Rajpramukhs in Delhi. **21-22** — Congress Working Cttee. meets at Lake Area, Calcutta, under presidentship of Jawaharlal Nehru. **April 5** — Dr. S. Radhakrishnan meets Marshal Stalin. **14** — Jawaharlal Nehru inaugurates three integrated Railway Zones — Northern, North-East and Eastern at a junction in Delhi. **24** — Dr. S. Radhakrishnan elected Vice-Pres. of India. **May 12** — First Session of India's new Parliament meets in New Delhi. **June 15** — Pakistan rejects India's offer on evacuee property. **July 16** — Sheikh Abdullah meets Jawaharlal Nehru on Kashmir issue. **August 1** — Jawaharlal Nehru inaugurates Nationalised Airways in Delhi. **5** — Indo-Pakistan trade pact is signed. **October 29** — Pakistan decides to stop import of Indian films. **November 1** — Jawaharlal Nehru inaugurates Rural University in Sevagram. **3** — U.S. Aid agreement signed. **26** — China rejects Indian Plan for Korean issue. **December 21** — Dr. Saifuddin Kitchlew awarded Stalin's Peace Prize for 1952

1953

January 2 — Jawaharlal Nehru inaugurates 40th session of Indian Science Congress at Lucknow. **15** — AICC meets in Hyderabad under presidentship of Jawaharlal Nehru. **17-18** — Jawaharlal Nehru presides over the 58th Plenary Session of Congress at Naval Nagar, Hyderabad. **February 24** — Master Tara Singh and 9 Akali leaders arrested at Amritsar. **March 7** — Jawaharlal Nehru inaugurates Railway's Centenary Exhibition. **18** — Nehru inaugurates Backward Classes Commission, New Delhi. **29** — Jawaharlal Nehru and U Nu (Prime Minister, Burma) meet at Imphal for joint tour of Indo-Burma border areas. **April 2** — Asaf Ali passes away at Berne, Switzerland. **7** — Asaf Ali's body is laid to rest in Delhi. **May 29** — Sherpa Tensing and Sir Edmund Hillary climb Everest. **August 9** — Sheikh Abdullah dismissed and arrested Bakshi Gulam Mohammed becomes Prime Minister of Kashmir. **22** — Hindu Mahasabha opposes Plebiscite in Kashmir. **27** — Parliament passes Andhra Bill unanimously. **September 15** — Smt Vijayalakshmi Pandit elected as president of the 8th session of the U.N. General Assembly. **19** — Vinoba Bhave and party are assaulted by Pandas (priests) at gate of Deoghar temple. Bil

October 1 — New Andhra State inaugurated by Jawaharlal Nehru at Kurnool. **3** — Dr. A. Krishnaswami Iyer passes away. **7** — Dr. Rajendra Prasad inaugurates Chandigarh, Capital of Punjab State. **29** — India's first Radar Training Centre opened in Bombay. **November 1** — Dr. Rajendra Prasad inaugurates Telegraph Centenary Exhibition. **December 2** — Indo-U.S.S.R. Trade pact signed in New Delhi. **21** — A trade pact between Germany and India signed to establish one steel plant in India.

1954

January 4 — Meher Chand Mahajan takes over as Chief Justice of India. **18** — An Indo-Ceylon pact on future of people of Indian origin in Ceylon signed at New Delhi. **25** — M.N. Roy passes away at Dehru Dun. **February 3** — About 500 pilgrims die in Kumbh Mela stampede at Allahabad. **March 1** — Prime Minister rejects President Eisenhower's offer of Military Aid to India. **26** — C. Rajagopalachari resigns leadership of Congress Party and Chief Ministership of Madras. **29** — Prime Minister Nehru inaugurates Institute of Public Administration in N. Delhi. **30** — K. Kamaraj Nadar elected leader of Madras Legislature Congress Party. **April 1** — Twenty-first anniversary of Indian Air Force celebrated. Air Marshal Mukherjee takes over as first Indian Chief of Air Staff. **10** — Jawaharlal Nehru opens Central Salt Research Institute at Bhavnagar. **18** — Punjab Assembly speaker Dr. Satyapal passes away at Simla. **June 1** — Andhra Assembly passes Sri Venkateswara University Bill. **12** — President gives assent to Bihar Land Reform (Amendment) Act, 1953. **25** — Chou En Lai, Chinese Prime Minister arrives in New Delhi for talks with Jawaharlal Nehru. **28** — A communique issued by Prime Ministers of India and China outlining 5 principles (Panch Shil) for regulation of relations between nations. **July 1** — Office of Indian High Commission in South Africa closed. **16** — Decision of French Govt. to transfer *de facto* power to people of Mahe is implemented. **25** — India accepts chairmanship of three Supervisory Commissions for Viet-Nam, Laos and Cambodia. **August 15** — Goan volunteers enter Portuguese possessions of Goa to offer *satyagraha*. **20** — Govt. of India accepts Bank Dispute Award with modifications. **30** — V.V. Giri, Union Min. of Labour, resigns from Central Cabinet. **September 10** — Khandubhai K. Desai sworn in as Minister for Labour in Union Cabinet. **October 1** — Jawaharlal Nehru inaugurates Stamps Centenary Exhibition at New Delhi. **14** — A two-year trade agreement signed between India and China. **23** — National Industrial Devpt. Corpn. holds first meeting in New Delhi. **24** — Rafi Ahmed Kidwai, Union Minister of Food expires. **November 1** — A *de facto* merger of French settlements of Pondicherry, Karaikal, Mahe and Yanam with Indian Union takes place. **4** — Jawaharlal Nehru lays foundation stone for Himalayan Mountaineering Institute at Darjeeling. **6** — Ministry led by T. Prakasam in Andhra resigns. **9** — Ministry led by Jai Narain Vyas of Rajasthan resigns. **27** — Acharya J. B. Kripalani resigns office of Chairman of Praja Socialist Party. Acharya Narendra Dev takes his place. **December 5** — Girja Shankar Bajpai dies at Bombay. **10** — U.N. Dhebar elected President of Ind. Nat. Congress. **15** — J.P. Srivastava dies in Lucknow. **23** — B.K. Mukherjea takes over as Chief Justice of India. **26** — Dr. B.C. Roy, Chief Min. of W. Bengal, opens Hindustan Cable Ltd. at Rupnarainpur.

1955

January 1 — Dr. S.S. Bhatnagar, Chairman of University Grants Commission dies in New Delhi. **6** — All India Forward Bloc decides to merge with Congress. **11** — India's first newsprint factory at Nepanagar (M.P.) goes into production. **21** — 60th session of Indian National Congress, under presidentship of U.N. Dhebar meets at Avadi, near Madras. **March 10** — Working Journalists (Industrial Disputes) Bill is passed by Lok Sabha. **22** — A direct radio telephone link between India and Burma is established. **April 7** — Rajya Sabha passes Hindu Guardianship Bill. **11** — An Air-India Constellation, Kashmir Princess, carrying delegates to Bandung Conference crashes into sea north of Sarawak. **12** — Col. Nasser, Prime Min. of Egypt, arrives in New Delhi on way to Bandung Conference; Lok Sabha passes Constitution (Fourth Amendment) Bill. **28** — Lok Sabha passes Untouchability (Offences) Bill. **May 5** — Lok Sabha passes Hindu Marriage Bill. **9** — Govt. of India sends a strong protest to Pakistan Govt. concerning firing by border police at Nekowal, near Jammu, in which 10 Indians were killed. **15** — Gen. S.M. Shrinagesh takes over as Chief of Army Staff. **29** — N.M. Joshi, a founder of Trade Union Movement in India, dies of heart-attack in Bombay. **June 4** — India establishes direct radio telephone link with U.S.S.R. **15** — Ministry of Iron and Steel is inaugurated. **July 10** — Govt. of India draws up a programme to replace English with Hindi. **12** — An Indo-Pakistan Conference to discuss opening of passenger traffic between India and West Pakistan begins in New Delhi. **15** — President confers *Bharat Ratna*, highest national award, on Jawaharlal Nehru. **20** — All Party Goa Liberation Cttee. decides to launch mass satyagraha on August 15. **21** — Dr. Ram Manohar Lohia suspended from P.S.P. **August 1** — Direct rail service between Calcutta and Lahore resumed. **5** — Appointment of 11-member Law Commission with C.C. Setalwad as Chairman is announced by C. C. Biswas, Union Law Minister. **8** — Dr. H. J. Bhabha is elected Chairman of International Conference on Peaceful Uses of Atomic Energy. **15** — Thirty-one Indian Satyagrahis are killed and 44 wounded by Portuguese police. **24** — Dr. Ram Manohar Lohia announces decision to form a new 'Socialist Party of India' at Allahabad. **September 7** — All India Council for Secondary Education is set up by Govt. **19** — Jt. Select Cttee. of Parliament on Hindu Succession Bill recommends equal shares for sons and daughters in respect of intestate property of father. **30** — States Reorganisation Commission submits report to Govt. **October 2** — Jawaharlal Nehru inaugurates Integral Coach Factory at Perambur. **5** — Jawaharlal Nehru inaugurates Hindustan Machine Tools Factory at Bangalore. **24** — Prohibition Enquiry Cttee. recommends nationwide prohibition in India by April 1958. **November 9** — Congress Wkg. Cttee. approves S.R.C. proposals in respect of all the areas except Bombay, Punjab and Andhra. **19** — Bulganin, the Russian Prime Minister, and Khruschev, Secretary of the Communist Party of Russia, arrive in Delhi on a goodwill visit.

1956

January 7 — Govt. of India recognises Republic of Sudan. **19** — President promulgates an ordinance bringing all life insurance companies under Govt. management; Dr. P. C. Bagchi, Vice-chancellor of Viswa Bharati Univ. passes away at Shantiniketan. **23** — A new cabinet headed by Sardar Pratap Singh Kairon sworn in by Punjab Governor. **February 1** — S. R. Das is sworn in as Chief Justice of India. **16** — Their Imperial Majesties, Shah and Queen of Iran, arrive in Delhi; Dr. Meghnad Saha, eminent scientist and a member of Lok Sabha, passes away in N. Delhi. **19** — Acharya Narendra Deva, Chairman of the P.S.P. and a noted educationist, passes away at Erode. **27** — G. V. Mavalankar, Speaker of Lok Sabha, passes away at Ahmedabad. **March 1** — C. D. Deshmukh, Min. of Finance, discloses Govt. is not in favour of taking over General Insurance business. **8** — M. Ananthasayanam Iyengar elected speaker of Lok Sabha. **20** — Sardar Hukum Singh elected Dy. Speaker of Lok Sabha. **April 6** — Shipping agreement between India and Soviet Union signed. **18** — States Reorganisation Bill introduced in Lok Sabha. **26** — Jawaharlal Nehru opens India's first newsprint factory at Nepanagar, Madhya Pradesh. **28** — India and Canada sign pact on Atomic Reactor. **May 5** — Indo-Pakistan ministerial conference on minority exodus meets at Dacca. **13** — Acharya Vinoba Bhave starts Bhoodan campaign in Tiruvellore. **15** — Jawaharlal Nehru presents Second Five Year Plan to Houses of Parliament. **June 20** — Govt. of India recognises Tunisia and Morocco as Sovereign States. **22** — Dr. John Mathai resigns office of Chairman, State Bank of India. **July 13** — Govt. of India decides to constitute a Central Harijan Welfare Board. **23** — B. G. Tilak's Centenary celebrated throughout country. **24** — President accepts resignation of C. D. Deshmukh, Union Min. for Finance. **August 3** — Dr. Zakir Hussain re-elected President of World University Service. **4** — India's first Atomic Reactor goes critical in Bombay. **6** — Union Cabinet decides on bilingual Bombay State. **18** — K. Hanumanthaiya, Chief Minister of Mysore, tenders resignation of his cabinet. **19** — A new six-member Mysore Ministry, headed by K.

Manjappa, sworn in at Bangalore. **24** — C. D. Deshmukh appointed Chairman of University Grants Commission. **31** — T. T. Krishnamachari appointed Finance Minister of India. **September 2** — 120 persons killed in a rail disaster in Hyderabad state. **5** — India and Burma sign five-year trade agreement in Delhi. **18** — Sardar K. M. Panikkar appointed India's ambassador to France. **20** — S. K. Dey sworn in as Min. for Community Devpt. B. R. Sen elected Director General of Food and Agricultural Organisation at Rome. **October 14** — Dr. B. R. Ambedkar and about 200,000 Scheduled Caste members embrace Buddhism in Nagpur. **16** — Y. B. Chavan elected leader, Cong. Legislature Party, Bombay State. **17** — Ernakulam-Quilon Railway link inaugurated by Railway Min. Lal Bahadur Shastri. **18** — Dr. Hare Krushna Mahtab sworn in as Chief Minister, Orissa. **19** — S. Nijalingappa elected leader of New Mysore Cong. Legislature Party. **November 6** — Maulana Azad elected president of Ninth Session of UNESCO in New Delhi. **14** — Morarji Desai sworn in as Minister of Union Cabinet. **24** — Dalai Lama, Panchan Lama and Maharaja of Sikkim arrive in Delhi to participate in 2,500th Buddha Jayanti celebrations. **25** — Lal Bahadur Shastri resigns following the Ariyalur train disaster. **28** — Chou En Lai, Prime Min. of China, and party arrive in New Delhi on 12-day visit. **December 6** — Dr. B. R. Ambedkar passes away in Delhi. **30** — Chou En Lai and Nehru begin their second round of talks.

1957

January 5-6 — 62nd Session of Indian National Congress meets at Laxmibai Nagar, Indore, under presidentship of U. N. Dhebar. **20** — Prime Minister Nehru inaugurates atomic reactor in Bombay. **22** — India and Pakistan sign trade agreement. **February 24** — India's Second General Elections begin. **March 11** — B. G. Kher passes away in Poona. **16** — P. S. Kumara Swamy Raja, former Governor of Orissa, passes away. **May 10** — Dr. Rajendra Prasad re-elected President of India for second term. **13** — Dr. Rajendra Prasad and Dr. S. Radhakrishnan are sworn in as President and Vice-President respectively. **20** — T. Prakasam, valiant freedom fighter and former Chief Minister of Andhra, passes away at Hyderabad. **June 2** — Twenty-two persons die in a suburban electric train collision at Wadala, Bombay. **10** — V. V. Giri sworn in as Governor of Uttar Pradesh. **14** — H. V. Pataskar sworn in as Governor of Madhya Pradesh. **August 2** — Devdas Gandhi, S/o Mahatma Gandhi, passes away in Bombay. **16** — Centenary of First War of Independence (Mutiny 1857) celebrated all over India. **26** — Nagas' convention decides at Kohima to give up demand for Independence. **28** — Jayaprakash Narayan resigns from P.S.P. **September 8** — R. R. Divakar, former Governor of Bihar, elected Chairman of Gandhi Smarak Nidhi. **October 1** — A. J. John, Governor of Madras, passes away in Madras. P. V. Rajamannar, Madras Chief Justice, is acting Governor. **16** — Justice P. Govinda Menon dies in New Delhi. **29** — Pres. Rajendra Prasad confers upon Pandit G. B. Pant the title of Bharat Ratna. **November 5** — Yuvraj Karan Singh elected Sadar-i-Riyasat of Jammu and Kashmir State. **10** — U.S.S.R. and India sign an agreement for setting up heavy industries in India. **December 5** — U.S.A. and India sign pact for eradicating malaria in 3 years. **14** — Jawaharlal Nehru inaugurates Calcutta suburban electric train.

1958

January 8 — Harold MacMillan, British Prime Minister, arrives in New Delhi. **12** — Dr. Frank Graham, U.N. Rep. for India and Pakistan, arrives in New Delhi. **18** — 63rd annual session of Indian National Congress meets at Gauhati under presidentship of U. N. Dhebar. **26** — D. K. Karve awarded Bharat Ratna. **February 5** — Ho Chi-Minh, Pres., Democratic Republic of Viet Nam, arrives in New Delhi. **12** — T. T. Krishnamachari, Union Finance Minister, resigns. **22** — Maulana Abul Kalam Azad, Union Min. for Education, passes away in New Delhi. **March 22** — Morarji Desai takes over as Union Finance Minister. **29** — S. K. Patil takes over as Minister for Transport and Communications. **April 14** — Smt. Aruna Asaf Ali elected first Lady Mayor of Delhi Municipal Corpn **18** — Dr. D. K. Karve celebrates 101st birthday. **May 13** — Discovery of natural gas at Jwalamukhi announced. **19** — Jadunath Sarkar, famous historian, passes away in Calcutta. **June 14** — Dr. C. V. Raman receives Lenin Peace Prize at Kremlin. **July 1** — S. K. Patil, Union Minister for Transport and Communications, inaugurates first direct shipping link between Calcutta and New York. **August 9** — Indian Security Forces drive Pakistan intruders from Tukergram. **September 11** — A joint communique by Prime Ministers of India and Pakistan on border disputes released in New Delhi. **14** — M. C. Chagla appointed India's Ambassador to U.S.A. **15** — N. V. Gadgil sworn in as Governor of Punjab. **18** — Dr. Bhagwan Das, eminent philosopher and scholar, passes away in Banaras. **October 12** — Periyar Hydro-electric project inaugurated. **November 10** — Oil is struck at one experimental drilling site at Vadser, near Vadodara (Baroda). **15** — National Mineral Devpt. Corpn. Pvt. set up. **17** — A Central Board of Workers' Education set up. **December 15** — Jawaharlal Nehru warns Pakistan that aggression will be met everywhere.

1959

January 10 — Dr. Rajendra Prasad inaugurates Diamond Jubilee celebration of Haffkine Institute in Bombay. **21** — Prince Phillip, Duke of Edinburgh, arrives in New Delhi on a state visit. **24** — First blast furnace of Rourkela Steel Plant commissioned. **March 10** — M. R. Jayakar, former Vice-Chancellor of Poona University, passes away in Bombay. **18** — U.N. Secretary General Dag Hammarskjoeld arrives in New Delhi and meets Jawaharlal Nehru. **April 3** — Jawaharlal Nehru makes statement in Lok Sabha regarding Dalai Lama's entry into Indian territory on March 31, and seeking political asylum. **26** — Indian Institute of Astronomical and Sanskrit Research inaugurated in New Delhi. **May 6** — Discovery of new coal seam in Madhya Pradesh announced in Lok Sabha. **June 11** — Prof. N. G. Ranga resigns from Congress and takes up leadership of newly formed Swatantra Party. **22** — Kasturi Srinivasan, editor of *Hindu*, passes away in Madras. **July 3** — Robert Menzies, Prime Minister of Australia, arrives in New Delhi on State visit to India. **August 1** — Swatantra Party's convention meets in Bombay. **22** — Saiyid Fazl Ali, Governor of Assam, passes away at Shillong. **28** — Prime Minister informs Lok Sabha of intrusion of Chinese Forces in NEFA and Ladakh. **September 10** — Govt. of India sends note to Chinese Govt. reaffirming stand on MacMohan Line as representing boundary between India and Tibet region of China. **30** — Kumari Arati Saha successfully swims English Channel. **October 21** — Chinese soldiers enter Eastern Ladakh, kill 9 patrol policemen, and capture 10. **November 2** — Dr. John Mathai, former Union Finance Minister, passes away in Bombay. **14** — China releases ten members of police patrol. **25** — A. S. Altekar, eminent Indian Historian, dies in Patna. **29** — G. S. Sardesai, an eminent historian on Maratha history, dies at Kamshet, near Poona. **December 4** — Maulana Ahmed Sayeed, President of Jamiat-ul-Ulema Hind, passes away. **9** — Dwight D. Eisenhower, President of U.S.A., arrives in N. Delhi on state visit to India. **17** — B. Pattabhi Sitaramayya, a former Pres. of Congress and former Governor of M.P., passes away in Hyderabad. **27** — Prime Minister of Cambodia, Prince Norodom Sihanouk arrives in New Delhi.

1960

January 10 — Jawaharlal Nehru lays foundation stone of Rs. 100 million rail-cum-road bridge across Brahmaputra at Pandur. **16-17** — Congress session under presidentship of Sanjiva Reddy meets at Bangalore. **20** — President Voroshilov of Soviet Russia arrives in New Delhi on state visit. **21** — Trade agreement between India and Yugoslavia signed in N. Delhi. **30** — J. C. Kumarappa, renowned scholar of Gandhian thought, passes away in Madras. **February 2** — His Holiness Sri Sankaracharya of Puri passes away in Bombay. **11** — Nikita Khruschev, Prime Minister of USSR, arrives in New Delhi. **April 19** — Chou En Lai, Prime Minister of China, arrives in N. Delhi for talks on Sino-Indian border problem; The National Defence College opened in N. Delhi. **May 1** — New States of Maharashtra and Gujarat come into being. **24** — Ida S. Scudder, founder of Vellore hospital and Medical College, passes away at Kodaikanal. **June 16** — Indo-Russian agreement for collaboration in oil and gas exploration signed in N. Delhi. **16** — International Telex Service between India and United Kingdom inaugurated. **July 1** — B. Ramakrishna Rao and V. V. Giri take charge as governors of U.P. and Kerala respectively. **10** — Canada-India reactor at Trombay attains criticality. **September 14** — M. Visveswaraya Centenary celebrations inaugurated in Bangalore. **16** — National Tuberculosis Institute of India inaugurated in Bangalore. **October 14** — Indo-Polish trade pact signed in Warsaw. **25** — Trade agreement between India and Yugoslavia signed in Belgrade. **November 6** — Prime Minister, Jawaharlal Nehru, formally inaugurates Heavy Electricals Plant at Bhopal. **9** — Air Marshal Subroto Mukherjee, India's Chief of Air Staff, dies in Tokyo. **11** — Prime Minister of Burma, U Nu and Mrs. U Nu arrive in New Delhi on a state visit. **19** — Jawaharlal Nehru inaugurates Govind Sagar Dam and Power House of Chambal Project. **29** — Crown Prince Akihito and Princess Michiko of Japan arrive in New Delhi on state visit. **December 1** — C. B. Gupta elected chief of Congress legislature in Uttar Pradesh; Air Marshal A. M. Engineer takes over Command of Indian Air Force. **3** — Lt. Gen. P. N. Thapar appointed as Chief of Army Staff. **10** — C. C. Biswas, former Union Min. for Law, dies in Calcutta.

1961

January 6 — 66th Session of Indian National Congress meets at Sardarnagar, Bhavnagar. **12** — Papers concerning Indus water treaty between India and Pakistan exchanged in New Delhi. **16** — Exchange of territories between India and Pakistan under Indo-Pakistan border agreement begins. **21** — Queen Elizabeth and Duke of Edinburgh arrive in New Delhi on state visit. **31** — Bihar's Chief Minister, Srikrishna Sinha, passes away in Patna. **February 18** — Binodanand Jha heads new ministry in Bihar. **March 2** — Queen Elizabeth and Duke of Edinburgh leave after Indian tour. **7** — Union Home Minister, Pt. Gobind Vallabh Pant, passes away in N. Delhi. **9** — K. Rama Rao, former editor of National Herald, passes away. **24** — Five-day session of World Council of Peace inaugurated in N. Delhi. **April 6** — Vice-President Radhakrishnan inaugurates Motilal Nehru Birth Centenary Celebrations at Agra. **May 2** — Tagore Birth Centenary Celebrations are inaugurated in N. Delhi. **June 24** — Hindustan Fighter (HF-24) supersonic aircraft, manufactured in India, makes inaugural flight. **29** — Sardar Baldev Singh, former Defence Minister passes away in Delhi. **July 19** — President Rajendra Prasad taken seriously ill in N. Delhi. **25** — Dr. S. Radhakrishnan sworn in as acting President of India. **August 15** — Master Tara Singh, Akali leader, begins fast unto death for demand of Punjabi Suba in Amritsar. **16** — Swami Rameshwaranand, Pres. of Punjab Hindi Raksha Samiti, begins counter fast in Delhi to oppose Akali demand for Punjabi Suba. **22** — Indo-Pakistan Conference on Punjab-West Pakistan Border begins in N. Delhi. **October 1** — Master Tara Singh breaks 48-day old fast. **November 7** — Jawaharlal Nehru meets Pres. Kennedy in Washington. **21** — Averell Harriman, Spl. representative of Pres. Kennedy, arrives in New Delhi. **29** — First Russian Cosmonaut, Yuri Gagarin arrives in New Delhi. **December 18** — India's Defence Forces march into Goa.

1962

January 1 — First state-owned oil refinery at Nunmati, Assam, inaugurated. **13** — Ajoy Ghosh, General Secretary of Communist Party of India, passes away. **14** — Air defence radar set, developed and manufactured in India, inaugurated in Poona. **March 12** — Mrs Jacqueline Kennedy, wife of Pres. John F. Kennedy of U.S.A., arrives in N. Delhi. **April 14** — M. Visveswaraya, Engineer-Statesman, passes away in Bangalore. **May 7** — Dr. Zakir Husain declared elected Vice-President of India. **11** — Dr. S. Radhakrishnan declared elected Pres. of India. **13** — Dr. S. Radhakrishnan nd Dr Zakir Husain take oath of office; Dr. Rajendra Prasad, [illegible]ing president, awarded 'Bharat Ratna'. A special postage [illegible]mp is also issued in his honour. **July 1** — Dr. B. C. Roy, eminent statesman and physician and Chief Minister of West Bengal, passes away in Calcutta; Purshottamdas Tandon, former Cong. President (Bharat Ratna), passes away in Allahabad. **August 20** — Govt. of India decides to build second nuclear power station at Rana Pratap Sagar near Kotah in Rajasthan. **29** — Lok Sabha passes State of Nagaland Bill 1962. **September 8** — Chinese make fresh encroachment on Indian territory in eastern sector. **25** — Three-member team of Gandhi Peace Foundation, headed by C. Rajagopalachari leaves for U.S.A. to appeal for ban on nuclear arms. **28** — Indian and Chinese troops exchange fire near Dhola Post. **October 12** — Heavy fighting begins on NEFA front between Indian and Chinese troops. **20** — China launches massive attack in NEFA and Ladakh areas. **31** — Prime Minister Nehru takes over Defence Portfolio and appoints Krishna Menon as Minister of Defence Production. **November 9** — Bharat Ratna D. K. Karve, eminent educationist, social worker and centenarian, passes away in Poona. **21** — China announces cease-fire from midnight along entire Sino-Indian Border. **December 18** — Yugoslav Vice-President Kardelj arrives in New Delhi. **28** — Pakistan and China decided to sign boundary agreement on basis of 'location and alignment of boundary actually existing' between Sinkiang and Pakistan occupied portion of Kashmir.

1963

January 7 — Rs. 460 million Rihand Dam, near Mirzapur inaugurated by Jawaharlal Nehru. **9** — Morarji Desai, Union Finance Minister, announces measures to control gold in India. **11** — Lala Shri Ram, a philanthropist, educationist and industrialist, passes away in N. Delhi. **15** — Pakistan delegation headed by Z. A. Bhutto arrives in New Delhi for second round of talks on Kashmir and related matters. **20** — Dr. S. Radhakrishnan, inaugurates Vivekananda Centenary celebrations in Calcutta. **February 28** — Dr. Rajendra Prasad, first President of India, passes away in Patna. **April 17** — Dr. S. Radhakrishnan presents Bharat Ratna award to Dr. Zakir Husain and P. V. Kane. **27** — An agreement with Phillips Petroleum Co. of U.S.A. for setting a refinery in India signed in N. Delhi. **May 14** — Dr. Raghuvira, President of the Jan Sangh, passes away in Kanpur. **June 2** — Dr. S. Radhakrishnan leaves for U.S.A. on a state visit. **July 14** — Swami Sivananda Saraswati, founder President of Divine Life Society, passes away at Rishikesh. **August 28** — President Dr. S. Radhakrishnan, accepts resignations of six Union ministers (who resigned under Kamraj Plan). **October 6** — Baba Kharak Singh, veteran Sikh leader, passes away in N. Delhi. **11** — Saijuddin Kitchlew, close associate of Gandhiji and Lenin Prize winner, passed away in New Delhi. **23** — Third unit of HMT inaugurated by Prime Minister Nehru at Pinjore. **November 20** — K. Kamaraj elected President of Indian National Congress. **December 1** — Dr. S. Radhakrishnan inaugurated Nagaland as 16th State of Indian Union. **10** — Sardar K.M. Panikkar, renowned scholar and diplomat, passes away in Madras. **18** — Smt. Vijayalakshmi Pandit sworn in as Governor of Maharashtra in Bombay.

1964

January 4 — Orientalists from all over the world meet in N. Delhi. **9** — Kamaraj delivers presidential address to 68th session of Indian National Congress held at Bhubaneshwar. **February 6** — Raj Kumari Amrit Kaur passes away; India rejects in U.N. Security Council Pakistan's demand for plebiscite in Kashmir. **18** — I.A.F. transport Illyushin Aircraft reported missing. Top army officials aboard are believed killed. **April 15** — National Council of Communist Party of India suspends 32 leaders from party membership. **May 27** — Jawaharlal Nehru, First Prime Minister of Independent India, passes away; Late Jawaharlal Nehru cremated in N. Delhi (Shantivana). **June 2** — Lal Bahadur Shastri elected leader of Congress Parliamentary Party. **9** — Lal Bahadur Shastri sworn in as Prime Minister. **September 10** — H. N. Sanyal, Solicitor General of India, is murdered in N. Delhi. **October 12** — Prime Minister Shastri and President Ayub Khan of Pakistan meet in Karachi. **18** — Smt. Vijayalakshmi Pandit resigns Governorship of Maharashtra.

December 2 — Millions welcome Pope in Bombay. **3** — Pope Paul confers highest decoration (Golden spur) on Dr. S. Radhakrishnan. **5** — Pope Paul leaves India. **18** — Pakistan diplomat expelled from Calcutta for spying. **31** — Chinese troops intrude into Sikkim. India sends protest note.

1965

January 8 — Prime Minister Lal Bahadur Shastri lays foundation stone of Durgapur Fertiliser Factory. **15** — Barauni Oil Refinery inaugurated. **26** — Hindi becomes official language of Union. **February 6** — S. Pratap Singh Kairon, former Chief Minister of Punjab, shot dead near Delhi. **April 16** — Namrup thermal power project commissioned. **May 12** — Lal Bahadur Shastri arrives in Moscow on 8-day state visit. **June 6** — Lal Bahadur Shastri leaves on tour of UAR, Canada, U.K. and Algeria. **23** — Presidential awards for Everest heroes are announced. **July 20** — Batukeshwar Dutt, great revolutionary, passes away, in N. Delhi. **August 5** — Jayaprakash Narayan awarded Ramon Magsaysay Award for public service. **7** — Pakistani sabotage parties infiltrate two sectors of ceasefire line in Jammu and Kashmir. **13** — Lenin Peace Prize awarded to Mrs. Aruna Asaf Ali. **15** — Television transmission begins in New Delhi. **25** — Indian security forces cross ceasefire line in Kashmir at two points and establish new positions. **September 1** — Pakistan invades Indian territory in Chhamb sector; India retaliates. **6** — President Ayub of Pakistan declares war on India. **17** — China issues 72 hours ultimatum to India to dismantle military installations on Sikkim border. Prime Minister Shastri warns China against trying to intervene militarily in India-Pakistan conflict. **18** — Soviet Union requests Prime Minister Lal Bahadur Shastri and President Ayub Khan of Pakistan to meet at Tashkent to resolve differences. **19** — Chief Minister Balwantrai Mehta of Gujarat dies in plane mishap. **22** — India and Pakistan accept ceasefire proposals of U.N. Security Council. **October 11** — First phase of Gujarat refinery at Koyali commissioned. **30** — Pakistan seizes Indian jute and tea worth Rs. 50 million from ships seized in war. **November 12** — Head of Dawoodi Bohra community Dr. Saifuddin passes away. **23** — Prime Minister Lal Bahadur Shastri accepts Soviet Prime Minister Kosygin's invitation for talks with President Ayub Khan of Pakistan in Tashkent. **December 18** — Gen. K. S. Thimayya, Commander of U.N. Peace Force in Cyprus passes away in Nicosia. **29** — First tank made in India rolls out of Avadi factory.

1966

January 7 — A five-year trade agreement is signed with U.S.S.R. **10** — Indo-Pakistani agreement signed at Tashkent. **11** — Prime Minister Lal Bahadur Shastri passes away within hours of signing Tashkent agreement. **18** — Smt. Indira Gandhi elected leader of Congress Parliamentary Party. **24** — Smt. Indira Gandhi sworn in as Prime Minister. Dr. Homi Bhabha, India's nuclear Scientist and Chairman of Atomic Energy Commission, dies in Air India crash on Mont Blanc in the Italian Alps. **February 26** — V. D. Sarvarkar, an eminent revolutionary, passes away. **March 8** — A. K. Sarkar appointed as Chief Justice of India. **May 9** — President Radhakrishnan inaugurates Gokhale birth centenary celebrations at Poona. **26** — India lifts ban on trade with Pakistan; Vikram Sarabhai appointed Chairman of Atomic Energy Commission and Secretary of Deptt. of Atomic Energy. **June 6** — Devaluation of Rupee by 36.5 per cent. **July 1** — Fourth unit of H.M.T. factory at Kalamasserry is inaugurated by Prime Minister Smt. Indira Gandhi. **September 10** — Reorganisation Bill passed. **23** — Cochin Oil Refinery inaugurated by Prime Minister Smt. Indira Gandhi. **26** — Sr. C. P. Ramaswami Aiyer, eminent educationist, passes away in London. **October 17** — Govt. appoints commission, headed by Mehar Chand Mahajan, to go into border disputes between Maharashtra and Karnataka and Karnataka and Kerala. **November 1** — States of Punjab and Haryana and Union territory of Chandigarh come into being. **9** — Gulzarilal Nanda, Home Minister, resigns. **13** — Y. B. Chavan becomes Home Minister and M. C. Chagla, External Affairs Minister. **December 1** — Parliament passes Goa Opinion poll Bill. **21** — V.K. Krishna Menon quits Congress.

1967

January 5 — India's first Ayurvedic University inaugurated. **20** — Goa rejects option for merger with Maharashtra by an impressive majority in opinion poll. **February 25** — Nizam of Hyderabad passes away. **March 13** — New council of ministers headed by Smt. Indira Gandhi sworn in. Morarji Desai becomes Dy. Prime Minister. **16** — New Lok Sabha meets. **April 9** — President Radhakrishnan decides to retire. **10** — U. N. Secretary General U. Thant arrives in Delhi. **12** —President presents Nehru Award to U. Thant. **May 6** — V. V. Giri wins Vice-Presidential election. **9** — Dr. Zakir Husain elected President of India. **15** — Bharatiya Kranti Dal is formed by non-congress leaders. **August 23** — Pakistan expels three officials of Indian High Commission. **September 1** — China takes over Indian property in Tibet. **5** — M. C. Chagla resigns from cabinet on language policy. **October 12** — Dr. Ram Manohar Lohia passes away. **November 1** — Telecommunication links with Pakistan restored. **4** — Mahajan Commission awards Belgaum to Karnataka. **22** — Master Tara Singh, Akali leader, passes away. **December 11** — A series of earth tremors in Western India wipes out entire Koyna township killing about 250 people. **12** — Mehar Chand Mahajan, former Chief Justice of India, passes away.

1968

January 26 — Dr. M. S. Aney, a prominent Congressman, passes away. **February 11** — Deendayal Upadhyaya, President of the Bharatiya Jan Sangh, found dead on railway track in Mugalsarai Railway Yard. **13** — A. B. Vajpayee elected Jan Sangh President. **17** — Dr. Kailash Nath Katju passes away. **April 6** — Prime Minister Smt. Indira Gandhi inaugurates construction work of Bokaro Steel Plant. **28** — Emperor Haile Selassie of Ethiopia arrives in New Delhi. **May 13** — India sends protest notes to China and Pakistan over Gilgit-Sinkiang road agreement. **27** — Second Nehru Award for International Understanding for 1966 is given to Rev. Martin Luther King posthumously. **July 6** — Submarine Wing of Indian Navy comes into being with arrival of INS *Kalvari*. **September 1** — President Ayub Khan of Pakistan rejects India's offer of 'No-War' pact. **November 10** — Asia's biggest mechanised iron mine at Bailadila project in Madhya Pradesh starts functioning.

1969

January 2 — Shah and Queen of Iran arrive in New Delhi. **10** — Dr. Sampurnanand, prominent Congressman and former U. P. Chief Minister, passes away at Varanasi. **February 3** — Tamil Nadu Chief Minister C. N. Annadurai (DMK leader) passes away. **16** — President Zakir Husain inaugurates week long Ghalib Centenary celebrations, Ghalib Centenary stamp is released. **22** — Dr. Gokul Chand Narang, Arya Samaj leader, passes away in Delhi. **March 9** — Sir Homi Mody, founder-member of Swatantra Party, passes away in Bombay. **25** — President Ayub Khan steps down from power. **31** — Gen. Yahya Khan assumes office of President of Pakistan. **April 5** — First India-built tanker for Navy launched. **18**— King and Queen of Afghanistan are received at Palam airport by President Zakir Husain and Prime Minister Smt. Gandhi. **22**— A Calcutta bound Indian Airlines Fokker Friendship plane crashes at Dumuria, killing all 40 passengers and crew of four. **15-28** — 72nd Congress session under presidentship of S. Nijalingappa meets at Neki Ram Sharma Nagar, Faridabad. **May 3** — President Dr. Zakir Husain dies of heart attack. V. V. Giri sworn in as acting President. **June 8** — Gen. Kumaramangalam retires as Chief of Army Staff; Gen. Manekshaw takes over. **26** —India lodges protest with Pakistan and China against construction of new road from Mor Khun in Northern Kashmir to Khunjerah pass on Kashmir-Sinkiang border **July 12** — Congress Parliamentary Board meeting at Bangalore nominates N. Sanjiva Reddy for Presidentship. **13** — V. V. Giri, Acting President, announces candidature for Presidentship. **15** — Major train accident near Jaipur, 82 killed and 123 injured. **16** – Prime Minister takes over Finance portfolio from Morarji Desai; Morarji Desai resigns. **19** — Fourteen top scheduled banks with deposits exceeding Rs. 500 million are nationalised. Acting President V. V. Giri resigns as Vice-President. **21** — V. V. Giri and N. Sanjiva Reddy file nomination papers for Presidentship. **31** — U. S. President Richard Nixon arrives in Delhi. **August 1** — Prime Minister Smt. Indira Gandhi and President Richard Nixon hold talks in New Delhi. **9** — Bank Take-over Bill becomes law after President's assent. **15** — Smt. Indira Gandhi insists on freedom of vote in Presidential election; Congress splits on issue. **18** — Prof. Humayun Kabir, former Union Min. passes away in New Delhi. **20**— V. V. Giri elected President of India and sworn in on 24th. **30** — Gopal Swarup Pathak, Congress candidate, is elected as Vice-President of India. **September 8** — Supreme Court issues limited stay of operation on Bank Nationalisation Act. **19** — Large scale communal clashes takes place in Ahmedabad. **23** — India invited to Islamic Summit Conference at Rabat and then refused entry. **October 1** — Khan Abdul Ghaffar Khan arrives in India after 23 years to take part in Gandhi Centenary celebrations. **2** — Gandhi Birth Centenary celebrations begin. The President, V. V. Giri, releases a set of coins and notes. **8** — Dr. P. V. Cherian, Governor of Maharashtra, dies of heart attack. **November 14** — Indira Gandhi donates 'Anand Bhavan' at Allahabad to Jawaharlal Nehru Memorial Fund; President V. V. Giri inaugurates Jawaharlal Nehru University in New Delhi. **23** — Quin-Centenary celebrations of Guru Nanak begin. **24** — Akali Leader, Sant Fateh Singh, threatens self-immolation if Chandigarh not merged with Punjab; Khan Abdul Ghaffar Khan addressed both Houses of Parliament. **December 1** — Jagjivan Ram chosen President of Congress (R). **3** — Atal Behari Vajpayee re-elected Jan Sangh President. **9** — G. G. Swell elected Dy. Speaker of Lok Sabha. **13** — B. Rama Rau, former Governor of Reserve Bank of India, expires. **20** — Congress Organisation session begins at Ahmedabad. **24** — Meghalaya (Assam Reorganisation) Bill passed by Parliament. **25**— Congress (Ruling) session begins in Bombay.

1970

January 8 — Tamil Nadu Govt. abolishes controls over movement and sale of foodgrains in State. **24** — Foundation stone of Rs. 180 million Gujarat Aromatic Project laid at Vadodara. **27** — Sant Fateh Singh starts six-day fast demanding merger of Chandigarh with Punjab. **29** — Union Govt. awards Chandigarh to Punjab and Rs. 200 million and 110 villages in Fazilka to Haryana. **February 3** — Foundation stone of new Rs. 700 million fertilizer plant laid at Talcher in Orissa. **9** — Prime Minister inaugurates Rs. 300 million Urea Fertilizer plant at Kota (Rajasthan). **28** — Admiral S. M. Nanda takes over as Chief of Naval Staff. **March 8** — Haryana and Uttar Pradesh agree to undertake joint construction of Kishan Dam project near Dehra Dun at cost of Rs. 1,800 million. **19** — Prime Minister inaugurates drilling of country's first offshore oil well in Gulf of Cambay. **24** — Lok Sabha passes Banking Companies (Acquisition and Transfer of Undertaking) Bill to replace Ordinance re-nationalising 14 major banks. **April 2** — Prime Minister Indira Gandhi inaugurates Meghalaya, a new autonomous Hill State in Assam. **3** — India signs Rs. 5,362.5 million iron-ore export deal with Japan. **23** — President Giri leaves for Bhutan on four-day state visit. **May 11** — Supreme court upholds election of V. V. Giri as President of India. **19** — Prime Minister Indira Gandhi lays foundation stone of 5.7 k.m. road bridge across Ganges at Patna. **23** — India and U.S.A. sign trade agreement at N. Delhi. **30** — Administrative Reforms Commission wound up. **July 19** — Kashmir police smashes Pak spy-ring in State. **22** — Floods in Alaknanda river sweeps away 22 vehicles and about 200 persons at Belakuchi, 40 miles from Badrinath. **August 2** —Dr. Telo Mascarenhas arrives in N. Delhi, after serving ten-year term in Portuguese jails. **9** — Trilokyanath Chakravarty Maharaj, revolutionary leader from East Bengal, passes away. **23** — Union Govt. asks British Broadcasting Corpn. to close down its operation in India. **29** — I. A. Fokker plane crashes in Meghalaya with 39 people aboard. **September 2** — President V. V. Giri inaugurates Vivekananda Rock Memorial at Kanyakumari. **5** — Prime Minister Indira Gandhi leaves for Lusaka to attend non-aligned summit meeting. **20** — President V. V. Giri arrives in Tashkent on 10-day State visit to Soviet Union. **October 9** — Bhabha Atomic Research Centre produces Uranium 233. **19** — First India-made MIG aircraft handed over to Air Force. **24** — India tells U.S.A. that American resumption of arms to Pakistan can seriously damage Indo-American relations. **November 4** — Jawaharlal Nehru Award for International Understanding for 1968 presented to Yehudi Menhuin in N. Delhi. **10** — Centre agrees to full statehood for Meghalaya. **21** — Dr. C. V. Raman, eminent physicist and Nobel Prize winner, passes away in Bangalore. **27** — Prime Minister Indira Gandhi presents Bharatiya Jnanpith Award for 1969 to Raghupathi Sahai 'Firaq'. **30** — Guruvayoor Sri Krishna temple ravaged by devastating fire. **December 15** — Lok Sabha passes Bill conferring statehood on Himachal Pradesh. **26** — Indo-Soviet agreement on long-term trade signed in N. Delhi.

1971

January 2 — Congress (O), Jana Sangh and Samyukta Socialist Party form alliance against Congress (R) for Fifth General Elections. **18** — P.S.P. leader Nath Pai dies of heart-attack. **30** — Indian Airlines Fokker friendship aircraft, on regular flight from Srinagar to Jammu, hijacked to Lahore. **February 2** — Hijacked plane blown up at Lahore airport. India bans overflight of Pak military aircraft across Indian territory. **18** — India establishes first satellite communication link *via* Arvi Earth Stn. with Goonbily in Britain. **March 1** — Polling in Fifth General Election begins all over country. **10** — Tenth Census begins all over country. **18** — A new Union Council of Ministers headed by Smt. Indira Gandhi sworn in. **31** — Both Houses of Parliament pass resolutions expressing solidarity with people of East Pakistan (Bangla Desh) following arrest of Sheikh Mujibur Rahman on 25th March. **April 6** — India grants asylum to two diplomats, K. M. Shahabuddin and Anjadul Haque, belonging to Pak. High Commission in Delhi. **15** — India protests to Pakistan against wanton unprovoked firing along East Bengal border. **18** — Pak. Dy. High Commission in Calcutta declares allegiance to Bangladesh. **24** — Pakistan withdraws Dy. High Commission from Calcutta and asks India to withdraw its mission from Dacca. **May 13** — President Giri promulgates General Insurance Ordinance nationalising general insurance companies. **19** — New submarine base of Indian Navy *Vir Bahu* commissioned. **June 16** — India and Soviet Union agree on five-year plan (1971-75) for joint exploration of minerals in oceans adjacent to India. **August 2** — Parliament approves Medical Termination of Pregnancies Bill legalising abortions. **5** — Pakistan President Yahya Khan threatens to unleash war on India. **6** — In a memorandum to U.N. Secretary General 500 M.Ps. appeal to save life of Sheikh Mujibur Rahman. **9** — India and Soviet Union sign 20-year Treaty of Peace, Friendship and Co-operation. **31** — Dr. M. S. Swaminathan awarded 1971 Raman Magsaysay award for community leadership. **October 5** — India and W. Germany sign 5-year agreement on developing peaceful uses of atomic energy. **November 1** — Severe cyclone hits Orissa. **7** — Rs. 48.7 million dry dock at Hindustan Shipyard, Visakhapatnam, inaugurated. **18** — Defence Ministry announces formation of India's second naval fleet — Eastern Fleet — to be based at Visakhapatnam. **22** — Indian Air Force Gnats shoot down three intruding Pak planes over Boyra near Calcutta. **December 3** — Pakistan attacks on Indian airbases in eastern and western sectors. President Giri declares state of emergency in country. Pakistan declares war on India. **4** — India informs U.N. of Pak aggression. **6** — India recognises People's Republic of Bangladesh. Pakistan snaps diplomatic ties with India. **10** — India and Bangladesh sign agreement for unified military command. **11** — Gen. Manekshaw calls upon Pak troops in Bangladesh to surrender. **16** — Lt.-Gen. Arora, G.O.C.-in-C., Eastern Command, accepts unconditional surrender of Pak forces in Dacca; Prime Minister Indira Gandhi announces unilateral ceasefire on western front with effect from 20.00 hrs. on 17th December. **17** — 14-day Indo-Pak war ends. **18** — President Giri confers Nation's highest award 'Bharat Ratna' on Prime Minister Indira Gandhi. **30** — Dr. Vikram A. Sarabhai, Chairman of Atomic Energy Commission, dies at Kovalam, near Trivandrum.

1972

January 5— India discontinues import of food grains from U.S.A. under P.L. 480. **10**—Sheikh Mujibur Rahman arrives in New Delhi after being freed by Pakistan Govt. **20**—State of Meghalaya and Union Territory of Arunachal Pradesh are inaugurated by Prime Minister Mrs. Gandhi. **21**—States of Manipur and Tripura and the Union Territory of Mizoram are inaugurated by Mrs. Indira Gandhi. **February 11**—Union Govt. issues orders stopping payment of privy purses to former rulers from Jan. 1972. **March 5**—General election to State Assemblies begins. **19**—India and Bangladesh sign 25-year treaty of friendship, co-operation and peace. **April 14**—Eighty-five Chambal ravine dacoits lay down arms before Sarvodaya leader, Jayaprakash Narayan, in Jaura. **18**—P. V. Kane, an eminent indologist and recipient of 'Bharat Ratna', passes away. **June 2**—Union Govt. sets up Space Commission. **28**—Indo-Pakistan summit talks between Prime Minister Indira Gandhi and President Z. A. Bhutto start at Simla. **July 2**—Prime Minister Indira Gandhi and President Z.A. Bhutto sign agreement at Simla committing India and Pakistan to abjure use of force in resolving differences. **15**—Bakshi Ghulam Mohammad, former Premier of Kashmir, passes away at Srinagar. **28**—Charu Mazumdar, founder of Naxalite movement and C.P.I. (Marxist-Leninist), dies of heart attack in Calcutta hospital. **August 12**—First rocket by Indian Space Research Organisation launched from Thumba Equatorial Rocket Launching Station. **29**—Indo-Pak official level talks end in Delhi agreeing to delimitation of line of control. **September 6**—Ustad Allauddin Khan, 110-year-old sarod maestro, passes away. **October 2**—Bombay T.V. Centre commissioned. **30**—Akali leader, Sant Fateh Singh, expires in Amritsar. **November 27**—Bangladesh President arrives in New Delhi on first State visit to India. **December 1**—India and Pakistan repatriate prisoners of war captured on western front during 1971 Indo-Pak war. **25**—C. Rajagopalachari passes away in Madras.

1973

January 2—Chief of Army Staff Gen. S. H. F. J. Manekshaw is promoted to rank of Field Marshal. **27**— Rohini-560, India's biggest rocket, launched from Sriharikota in Andhra Pradesh. **February 5**—Prime Minister Indira Gandhi presented with F.A.O. medal. **March 6**—AIR and GRD Television sign three-year protocol on exchange of T.V. programmes. **25**—Oil struck at Sibsagar in Assam; Rashbehari Das, noted philosopher passes away at Midnapur. **April 1**—A Rs. 40 million programme to preserve Indian tiger is launched. **20**—Atomic Power Station at Rawat-Bhata, near Kota, starts operation. **24**—Supreme court upholds Parliament's right to amend Constitution including fundamental rights. **25**—Justice Ajit Nath Ray appointed Chief Justice of India. **May 20**—Cochin Shipyard Ltd., and a Scottish firm sign agreement to build bulk carriers of 75,000 DWT in India. **August 12**—Assam, Uttar Pradesh, Punjab and Jammu & Kashmir are ravaged by floods. **September 3**—Prime Minister Indira Gandhi leaves for Algiers to attend non-aligned nations' summit meeting. **16**—Chogyal of Sikkim arrives in New Delhi. **29**—Armed men hijack bank cash van containing Rs. 600,000 killing the security guard in New Delhi. **October 1** —Guru Gopala Panikkar, Kathakali exponent, expires at Cochin. **12**—King Birendra of Nepal arrives in New Delhi. **29**—British Centenary of Swami Ramatirtha observed. **November 11**—Dewan Chamanlal (81), Trade Unionist and Congress leader, expires in Delhi. **17**—Mother of Aurobindo Ashram expires at Pondicherry. **25**—Leonid Brezhnev, Chief of Soviet Communist Party, arrives in N. Delhi on official visit. **December 1**—Allahabad University closed following students' rampages and arson. **12**—Riots rock Maharashtra and Karnataka on boundary dispute. **18**—Muzaffar Ahmed (85), founder member of C.P.I. passes away.

1974

January 13—Mrs. Gandhi lays foundation stone at Narora in Uttar Pradesh for the fourth nuclear power station; **February 9**—President's rule imposed in Gujarat following Chief Minister, Chimanbhai Patel's resignation. Assembly suspended. **10**—Army opens fire on food rioters in Ahmedabad. **16**—Army moved out of Ahmedabad city. **March 1**—Cong.-CPI alliance gets absolute majority in Orissa Assembly elections; Congress gets absolute majority in U.P. poll. **3**—Demand raised for dissolution of Gujarat Assembly, four killed in Gujarat in police firing. **18**—Two killed, 23 injured in Patna on opening day of Assembly, price rise protest; the *Searchlight* office and printing press burnt by demonstrators. **19**—Trouble spreads to entire State of Bihar; 10 killed, 31 injured in police firing **April 12**—Eight killed, 12 injured in Gaya police firing on student-led "Paralyse the Government" demonstration. **14**—Jayaprakash Narayan forms new organisation to "save democracy." **21**—734 Pakistani prisoners of war repatriated through Wagah border post. **23**—Jayaprakash Narayan announces five-week agitation plan to press resignation of Ghafoor Ministry and dissolution of Assembly. **30**—Lt. General Niazi and the last batch of prisoners of war leave for Pakistan. **May 8**—Railwaymen begin strike all over India. **18**—India carries out first underground nuclear explosion at Pokhran in Rajasthan. **23**—Canada suspends all nuclear aid to India. **28**—20-day-old Railway strike called off. George Fernandes and other leaders released. **June 5**—Supreme Court holds the view that dissolution of an Assembly is not a hurdle in election of President. **21**—Sikkim Assembly calls for integration of Sikkim's economic and social development in India's planning. **27**—Katchativu Island transferred to Sri Lanka, agreement signed in Delhi. **August 1**—Jayaprakash Narayan launches "no tax campaign" in Bihar. **September 7**—Constitution (35th Amendment) Bill to give representation to Sikkimese in Indian Parliament passed. Ordinance promulgated to detain smugglers under MISA. **19**—India-USSR sign a protocol on economic and technical programme. **October 6**—V. K. Krishna Menon passes away. **15**—India and Pakistan resume telecommunication links which were snapped during the 1971 war. **November 1**—Mrs. Gandhi-J.P. Narayan meeting for 90 minutes ends in failure. **4**—Jayaprakash Narayan and Sarvodaya workers injured as Police lathi charge a procession trying to *gherao* Secretariat and Ministers—thousands arrested. **December 1**—Mrs. Sucheta Kripalani passes away. **7**—Indo-Pakistan trade embargo lifted. **15**—India and Bangladesh reach agreement on rail link. **31**—India and Portugal re-establish diplomatic ties.

1975

January 11—Oil struck in third Bombay High well. **20**—36 killed in quake in Kinnaur Lahaul-Spiti in Himachal Pradesh. **February 20**—Rs. 100 million said to be unearthed in unaccounted gold in Jaipur palaces. **March 6**—People's march to Parliament, J.P. presents charter to presiding officers—announces marches elsewhere in the country before April 6. **18**—Jayaprakash Narayan leads "people's morcha" to the Bihar Vidhan Sabha. **20**—The Chief Justice of India, A. N. Ray, escapes attempt on life, hand-granades thrown into his car. **April 15**—Sikkim in referendum votes for full Statehood in India and for the abolition of the institution of the Chogyal. **19**—India ushered into space age: satellite "Aryabhatta" launched from a cosmodrome in Soviet Union. **23**—Lok Sabha passes Sikkim bill. **May 11**—The Sriharikota ground station resumes test commands to "Aryabhatta". **16**—Sikkim joins Indian Union as 22nd State. **20**—Oil found in fifth Bombay High well. **June 12**—Mrs. Gandhi's election set aside by Allahabad high court, court accepts two charges of corrupt practices, disqualification order stayed for 20 days. **18**—Janata front government comes into being in Gujarat with Babhubhai Patel as Chief Minister. **20**—Supreme court agrees to special arrangements to deal with Prime Minister's appeal without automatic vacation of Allahabad high court stay order. **24**—Mr. Justice V.R. Krishna Iyer of the supreme court gives conditional stay of Allahabad high court judgement but says Mrs. Gandhi's rights as PM are not restricted. **26**—President declares emergency to meet "internal threat" to security. Jayaprakash Narayan, Morarji Desai and a number of opposition leaders and dissident congressmen arrested **27**—Presidential order bars arrested persons from moving courts **28.**—I.K. Gujral shifted to planning ministry, V.C. Shukla takes over as Minister for Information and Broadcasting. **July 1**—Mrs Gandhi announces 20-point economic programme; smugglers not to be provided with grounds of detention, new ordinance promulgated **4**—RSS, Anand Marg, Jamat-i-Islam and 23 other organisations banned; Sheikh Abdulla, Mirza Afzal Beg elected to the Kashmir Assembly. **6**—The National Conference of Jammu & Kashmir revived by Sheikh Abdulla. **24**—Parliament approves 38th Constitution amendment. **25**—Parliament approves the conservation of foreign exchange and prevention of smuggling activities bill. **29**—Parliament approves MISA bill. **August 7**—The Lok Sabha passes Constitution (39th amendment) bill, and adjourns *sinedie*. **8**—Constitution (39th amendment) bill, 1975, placing election of President, Vice-President, Prime Minister and Lok Sabha Speaker beyond the scrutiny of judiciary, approved by Parliament. The Rajya Sabha adopted bill as passed by the Lok Sabha. **9**—The Rajya Sabha adopts Constitution (41st amendment) bill extending immunity from criminal and civil proceedings to the Prime Minister. **25**—Mrs. Indira Gandhi's poll case hearing begins in supreme court. **October 9**—Mrs. Gandhi's case; Supreme Court reserves judgement on constitution and poll law amendments. **10**—Oil struck in Bengal basin (second offshore well at 130 kms. east of Balasore). **24**—"Bonded" labour abolished by ordinance. **November 7**—PM's election upheld by supreme court. **12**—Supreme Court dissolves bench which held the basic structure hearings; Jayaprakash Narayan released on parole. **December 4**—Jayaprakash Narayan set free. **8**—The Government assumes special powers to prevent the publication of objectionable matter in the press, repeals immunity for press reports of Parliament and abolishes press council from New Year Day.

1976

January 2—Writer, actor, editor and political thinker Kainikkara M. Padmanabha Pillai expires at Trivandrum. **4**—Socialist Party leader N.G. Goray announces the formation of the Janata Front comprising the Cong. O, the Jana Sangh, Bharatiya Lok Dal and Socialist Party. **8**—The President issues an order suspending the right of any person to move any court for the enforcement of the rights. **13**—Tabla player Ahmed Jan Thirakwa dies at Lucknow. **14**—Dr. Jal Patel (Hon. Physician to the President of India) expires in Bombay. **15**—A bill for the Government taking over Burmah Shell is introduced in the Lok Sabha; Kannada writer B. Shivamoorthy dies at Bangalore. **18**—Punjabi leader Giani Gurumuk Singh Musafir passes away in New Delhi. **20**—A bill for the forfeiture of the illegally acquired properties of smugglers and foreign exchange manipulators is passed by the Lok Sabha. **22**—Industrialist Gujar Mal Modi expires at Bombay. **24**—Parliament approves the Maintenance of Internal Security (Amendment) Bill which replaces two MISA ordinances promulgated on the subject earlier. **25**—The nation's highest honour, "Bharat Ratna", is conferred posthumously on K. Kamaraj. **28**—The Urban Land (Ceiling and Regulations) Bill is introduced in the Lok Sabha. **31**—Tamil Nadu comes under President's rule. **February 4**—Parliament approves new bonus law. **5**—The Lok Sabha passes the bill to prevent lay-offs, retrenchment and closure of industrial units. **March 1**—The President issues two ordinances to facilitate the separation of accounts from audit both at the Union and State levels. **12**—Gujarat State is placed under President's rule. **27**—The ruling Congress Party gets two-thirds majority in the Rajya Sabha with the completion of the biennial elections all over India. **April 15**—India and China decide to upgrade their diplomatic representation in each other's country to ambassadorial level. K.R. Narayanan is appointed India's ambassador to China. **16**—Government decides to raise the minimum age of marriage from 15 to 18 for girls and from 18 to 21 for boys through suitable legislation. **May 6**—Former Chief Justice of India, Koka Subha Rao passes away in Bangalore. **14**—India and Pakistan agree to re-establish full diplomatic relations at ambassadorial level, restoration of other severed links, like airlinks (including overflights) and road and rail links. **June 9**—Lady Cowasji Jehangir dies in Bombay. **July 10**—At the ministerial conference of non-aligned countries India called for the setting up of a co-ordination council to make the press agencies pool operational as soon as possible. **12**—China names Chen Chao-Yuan as its ambassador to India. **17**—Educationist and industrialist Dr. A. Ramaswami Mudaliar expires in Madras **August 2**—India strikes oil in Bombay High and Bassein. **18**—Urdu Poet Jan Nisar Akhtar passes away in Bombay. **27**—Play-back singer Mukesh expires in Detroit (U.S.A.). **September 2**—Marathi literature & Jnanpith award winner V.S. Khandekar passes away at Miraj. **10**—Indian Airlines Boeing with 79 passengers was hijacked to Lahore. **25**—The National Development Council adopts the Fifth Plan providing for a public sector outlay of Rs. 393,300 million **27**—Educationist Beram Shapurji Saklatvala expires in London **October 5**—Educationist and mathematician Prof. P.L. Bhatnagar passes away at Allahabad. **10**—Union Minister for Law Gokhale rules out a referendum on the Constitution Amendment Bill. **18**—Poet Laureate of Andhra Pradesh Viswanatha Satyanarayana passes away at Vijayawada. **November 1**—The Lok Sabha approves all the 59 Clauses of the Constitution (44th Amendment) Bill after accepting some Government amendments. **5**—The Lok Sabha approves the Bill seeking to extend its term by another year. **December 1**—Sanskrit scholar Kashinath Shastri Abhyankar is murdered along with five members of his family in Pune. **11**—Maharashtra Governor Ali Yavar Jung expires in Bombay. **16**—Orissa Chief Min. Mrs. Nandini Satpathy resigns. State comes under President's rule. **20**—Mrs. Gandhi reshuffles her cabinet. Hitendra Desai joins the cabinet. D. P. Chattopadhyaya promoted. **24**—President's rule is lifted in Gujarat, Madhavsingh Solanki forms new government. **31**—Economist Dr. S. N. Agarwala dies in New Delhi.

1977

January 5—The Purna Kumbh began at Allahabad with 200,000 pilgrims trekking to the confluence of the Ganga, the Yamuna and the mythical Saraswati for a holy dip. **12**—Chandrashekar, member of the Rajya Sabha, and Mohan Dharia, member of the Lok Sabha, released. **18**—President dissolves Lok Sabha; Morarji Desai and L.K. Advani released. **19**—Prakash Singh Badal released; The Sarkaria Commission submits its report to Union Government against former Tamil Nadu Chief Minister, M. Karunanidhi. **20**—Govt. relaxes rules of emergency and decides not to enforce press censorship; Congress-O, Jan Sangh, Bharatiya Lok Dal and Socialist Party agree to form Janata Party. **22**—Indo-Bangladesh ministerial level talks on sharing Ganga waters end in New Delhi without agreement. **23**—Janata Party sets up National Committee with Morarji Desai as Chairman. **28**—Mr. Justice Mirza Hameedullah Beg appointed Chief Justice of India. **February 2**—Jagjivan Ram, Union Minister for Agriculture and Irrigation, resigns from Cabinet and Congress Party. **5**—Congress for Democracy formed with Jagjivan Ram as its president. **11**—President Fakhruddin Ali Ahmed dies; B.D. Jatti sworn in as Acting President. **25**—India's second earth station for satellite communication at Dehra Dun inaugurated. **March 1**—Bihar orders withdrawal of MISA warrants pending against political leaders and workers. **16**—Polling for Lok Sabha election starts in 300 parliamentary constituencies spread over 15 States and Union Territories. **18**—Vocalist Siddheshwari Devi dies in New Delhi; Second round of polling begins. **19**—Third round of polling, public holiday. **20**—Fourth round of polling begins; Mrs. Indira Gandhi in Rai Bareilly, Bansilal in Bhivani, Sanjay Gandhi in Amethi, and others defeated. **21**—Marxist leader A.K. Gopalan passes away at Trivandrum; Internal Emergency promulgated on June 25, 1975, withdrawn; Press Censorship goes; Kerala Ruling Front wins 111 out of 140 Assembly seats. **22**—Janata Party gains absolute majority in Lok Sabha; Mrs. Indira Gandhi resigns; Ban on R.S.S and 26 other organisations lifted; Y.B. Chavan elected leader of Congress Parliamentary Party. **24**—Morarji Desai elected leader of Janata Party and sworn in as Prime Minister. **25**—19-Member Union Cabinet announced; Sixth Lok Sabha session begins; Kerala Ministry headed by K. Karunakaran sworn in. **26**—Sanjiva Reddy elected speaker of the Lok Sabha; Baroda Dynamite case withdrawn. **27**—Government revokes external emergency promulgated on December 3, 1971; Jagjivan Ram joins Central Cabinet; All India Anna DMK extends unconditional support to Janata Party. **28**—Jagjivan Ram, H.N. Bahuguna, Raj Narain, George Fernandes and Brij Lal Verma sworn in as Cabinet ministers. **April 11**—Janata Front Ministry headed by Babubhai Patel sworn in in Gujarat. **12**—All inter-state restrictions on wheat movement abolished under the new ration policy. **13**—D.K. Barooah resigns as Congress President. **14**—Swaran Singh elected President of Congress Party. **16**—Vasantrao Patil replaces S.B. Chavan as

Chief Minister in Maharashtra. **27**—Kerala Chief Minister K. Karunakaran resigns and new Ministry headed by A.K. Antony sworn in; Goa Assembly dissolved. **29**—Supreme Court dismisses suits and injuction applications filed by some State Governments against proposed dissolution of Assemblies. **May 1**—Janata Party holds inaugural convention at Pragati Maidan, New Delhi; Chandrashekhar chosen president of Janata Party. **5**—Congress for Democracy at its New Delhi session decides to merge with Janata Party. **8**—Members of Sikkim Congress join Janata Party *en bloc*. **9**—Congress ministry in Mizoram headed by Ch. Chunga resigns. **11**—Election Commission recognises Janata Party as a national party. **13**—Manipur Ministry headed by R.K. Dorendra Singh resigns. **16**—Manipur is placed under President's rule. **18**—India and China decided to resume trade after a gap of nearly 15 years. **19**—Justice J.C. Shah Commission to inquire into excesses committed during the Emergency formally announced. **20**—For the first time ever AIR and Doordarshan made available to all recognised political parties at national and state level to carry their message to the people. **24**—Arunachal Congress Committee decides to merge with Janata Party. **28**—D.S. Mathur, retired Chief Justice of Allahabad High Court, appointed to inquire into affairs of Maruti concerns; National Professor Dr. Suniti Kumar Chatterjee expires in Calcutta. **June 7**—A four-member Goa Ministry headed by Mrs. Shashikala Kakodkar sworn in. **14**—Janata gains absolute majority in assembly elections in Haryana, Himachal Pradesh and Rajasthan States, and in Delhi Metropolitan Council; Akali-Janata-CPI-M alliance gets absolute majority in Punjab; **15**—Janata gets absolute majority in Uttar Pradesh, Madhya Pradesh and Orissa States; The All India Anna DMK gets absolute majority in Tamil Nadu. **16**—Janata Party gets absolute majority in Bihar and C.P.I.-M in West Bengal. **20**—Prakash Singh Badal sworn in as Chief Minister of Punjab. **July 3**—G. Narasimhan, Mg. Dir. of 'The Hindu' passes away in Madras; Sheikh Abdullah re-elected Chief Minister of Jummu & Kashmir. **13**—Sanjiva Reddy files nomination papers for presidential election after resigning as Lok Sabha Speaker; Government decides to discontinue national awards. **21**—Neelam Sanjiva Reddy elected unopposed as President of India; K.S. Hegde unanimously elected Speaker of Lok Sabha. **August 3**— 1977 Ramon Magsaysay Award for Community leadership awarded to Ela Ramesh Bhatt, organiser and teacher of self-employed women vendors in Western India. **30**—V.M. Tarkunde selected for 1978 International Humanist Award for his contribution to the defence of democracy, human rights and human values in India. **September 10**—Planning Commission decides to introduce rolling plan instead of five-year plans. **16**—S. R. Das, former Chief Justice of India expires in Calcutta. **17**—Bhaiyasaheb Ambedkar, Pres., All India Buddhist Mahasabha, expires in Calcutta. **October 3**—Mrs. Indira Gandhi arrested in New Delhi by CBI on charges of corruption. Also arrested were K.D. Malaviya, H.R. Gokhale, D.P. Chattopadhyaya and P.C. Sethi. **4**—Mrs. Indira Gandhi released unconditionally; External Affairs Minister, A.B. Vajpayee, addresses U.N. General Assembly in Hindi for the first time ever. **21**—Prime Minister Morarji Desai leaves for Russia. **29**—400th anniversary of Amritsar city celebrated. **November 1**—First world conference on Malayalam, Kerala culture and development inaugurated at Trivandrum. **4**—An Indian Air Force aircraft carrying Prime Minister, Morarji Desai, crash lands at Tatalgaon and kills five members of the crew. **5**—Tripura placed under President's Rule; India and Bangladesh formally sign Farakka agreement in Dacca. **12**—Cyclone kills over 500 in Thanjavur dist., Tamil Nadu. **19**—Cyclone hits coastal Andhra Pradesh killing thousands of people. **23**—Prakash Vir Shastri, member, Rajya Sabha, and 19 others die in train mishap near Rewari. **December 14**—Marathi writer G.D. Madgulkar expires in Pune. **16**—Bangladesh President Zia Ur-Rehman in Delhi for talks with Prime Minister Desai and others. **18**—Mrs. Indira Gandhi resigns from Congress Working Committee.

1978

January 1—Air India jumbo jetliner 'Emperor Ashoka' crashes into sea off Bombay killing all 213 passengers. **1-3**—President Jimmy Carter of U.S.A. visits India. **3**—Mrs. Indira Gandhi splits the Indian National Congress, forming Cong. (I), becomes president of the new party; Congress Working Committee expels Mrs. Indira Gandhi and her followers; Shriman Narayan (65), Gandhian economist expires in Gwalior. **6**—British Prime Minister Mr. James Callaghan visits India, agrees to sale of Jaguar defence plane; Lilawati Munshi (79) noted social worker passes away in Bombay. **7**—Bulk carrier M. V. Chandragupta, with 69 aboard is lost in the ocean off Honolulu. **16**—Janata Govt. demonetises currency notes of Rs. 1,000 denomination and over in a bid to unearth unaccounted money. **18**—Bhimsen Sachar (84), former Chief Minister of Punjab, expires. **21**—Ramniwas Ramnarain Ruia (67) a well-known industrialist dies in Bombay. **February 2**—G. Shankara Kurup (76) doyen of Malayalam poetry and recipient of first Jnanpith Award expires in Trivandrum. **3**—Shah of Iran visits India with Shahbanu. **9**—16-member Chinese trade delegation begins talks with the Commerce Ministry. **11**—Prime Minister Morarji Desai and Minister for External Affairs Atal Behari Vajpayee leave for Sydney to attend the regional conference of Commonwealth countries in Asia and Pacific. **15**—Justice Y.V. Chandrachud is appointed Chief Justice of India; **19**—Pankaj Mullick (73), eminent musician, dies in Calcutta. **20**—B.R. Shenoy (73), noted economist, dies in New Delhi. **22**—H.V.R. Iyengar (76), former Governor, Reserve Bank of India, dies in Bangalore. **25**—Election takes place in Andhra Pradesh, Assam, Karnataka, Maharashtra, Meghalaya States and Union Territory of Arunachal Pradesh. **March 10**—R. Ranga Rao (77), former Raja of Bobbili and premier of the composite Madras Province, dies in Madras. **17**—A freak cyclone hits the Delhi University area, kills 30 and injures 700. **19**—M. Ananthasayanam Ayyangar (87), former Speaker of the Lok Sabha, dies in Tirupathi. **24**—King Jigme Singya Wangchuk of Bhutan arrives on a four-day visit. **April 3**—Hirday Nath Kunzru (90), founder member of the Servants of India Society and Scholar, dies in Agra. **13**—The 42nd Constitution Amendment Act, enacted during the emergency is repealed. **16**—A tornado kills 150 people and injures several hundreds in five villages of Keonjhar district, in Orissa. **17**—"Ghatshraddha" the Kannada film is awarded the Golden Lotus for the National Best Feature Film; Satyajit Ray's "Shatranj ke Khilari" is adjudged the best feature film in Hindi. **18**—Train collision near Bassein Road station between Ahmedabad Janata and a suburban local injures 25 persons; Syrian President Hafez al Assad visits India; Tornado sweeps Karimpur in Nadia Dist. and kills 10 people. **29**—M.R.A. Baig, veteran Diplomat, dies in New Delhi. **30**—Home Minister Charan Singh resigns from working committee and Parliamentary Board of Janata Party. **May 5**—Sanjay Gandhi, accused in the 'Kissa Kursi Ka' case is lodged in Tihar jail after concellation of his bail by Supreme Court. **6**—Reserve Bank of India sells 493 kgs. gold. **9**—Renhold Messner of Italy and Peter Hebeler of Austria scale Mt. Everest without the use of oxygen. **12**—Sarkaria Commission finds Karunanidhi, former Chief Minister of Tamil Nadu, guilty of misusing power. **14**—Malujirao M. Naik Nimbalkar (82), progressive ruler of erstwhile Phaltan State, expires in Pune. **15**—Shah Commission reports that Mrs. Gandhi had declared State of Emergency in a desperate effort to continue in power despite a judicial verdict against her. **19**—Dakota crashes near Rai, Haryana and kills eight. **21**—Tukojirao Holkar III (88), former ruler of Indore, expires in Indore. **27**—Mahakavi P. Kunhiraman Nair (72), noted Malayalam poet, dies in Trivandrum. **28**—Nine bogies of the 328 Danapur Howrah fast passenger train derail and kill 10 passengers. **June 2**—Dr. P.K. Parija (87), botanist and educationist dies in Cuttack. **4**—Mrs. Ammu Swaminathan (84), a long time Parliamentarian, founder and President of All India Women's Organisation, dies in Madras. **6**—Prime Minister Desai, on a visit to Britain, regrets evidence of racial prejudice and violence against Indians settled in Britain. **10**—Sisir Gupta (49), former Indian Ambassador to Portugal and Vietnam, dies in New Delhi. **12**—Niren De (69), former Attorney General of India, dies in Stockholm. **26**—Border Security Force members scale Nun Peak. **29**—Charan Singh and Raj Narain are asked to quit the Union Cabinet. **30**—Charan Singh, Raj Narain and four other members of the Union Cabinet resign. **July 4**—The Patna High Court acquits Anand Marg Chief P.R. Sarkar and his four followers of the charges of murder and criminal conspiracy. **10**—The body of Kishan Chand, former Lt. Governor of Delhi is recovered from a well at South Delhi. **11**—Six cases are filed in Delhi local courts to prosecute Mrs. Indira Gandhi, Sanjay Gandhi and others for their part in the emergency excesses. **19**—Lok Sabha repeals MISA; Lachchu

Maharaj (77), eminent exponent of Kathak dance, dies in Lucknow. **24**—Floods in U.P. affected 5,350 villages, caused loss of life to 68 people and damaged property worth Rs. 92.00 million. **August 2**—P.R. Sarkar "Anand Murti' is released on bail from Patna Central jail. **15**—Kedarnathji (95), an eminent Gandhian and freedom fighter, dies in Bombay. **21**—Vinoo Mankad (61), famous cricketer, dies in Bombay. **26**—Shah Commission submits final report. **September 7**—Edatata Narayanan (70), editor of 'Patriot', dies in New Delhi. **10**—Delhi citizens are alerted against floods. **11**—Valerian Cardinal Gracias (78), Archbishop of Bombay dies. **13**—Army is called to evacuate flood-hit villagers in Delhi; Kun peak in the Ladakh Himalayas (7,087 metres) is scaled by nine-member W. German expedition. **26**—Ramakrishna Dalmia (85), well-known industrialist and philanthropist dies in New Delhi. **29**—Punjab Government imposes precensorship on the newspapers published from Jullundur regarding matters connected to Sikh Nirankari differences. **30**—Mirza Mohammad Afzal Beg expelled from the primary membership of the National Conference in Srinagar. **October 1**—Minimum age for marriage is raised from 15 to 18 for females and 18 to 21 for males. **3**—Calcutta scientists claim birth of world's second Test Tube baby. **11**—School girl Rohini Khadilkar (15) becomes both Queen and King of the chequered board, checkmating Karnataka's Raghuraman in the all India Chess Tournament. **12**—Jamnadas Dwarkadas (89), a close associate of Mahatma Gandhi expires in Bombay. **22**—N.S. Phadke (84), Marathi novelist and short story writer, dies in Pune. **November 7**—Dr. Jivraj Mehta (91), former Chief Minister of Gujarat, dies in Vadodara; Mrs. Indira Gandhi is elected to the Lok Sabha from Chikmagalur. **9**—K.P. Kesava Menon (95), Chief Editor of *Mathrubhumi*, dies in Kozhikode. **11**—Mizoram comes under President's rule. **19**—78 killed in I.A.F. plane crash at Leh airport; Bedi loses his captaincy following India's defeat in the cricket series with Pakistan. **27**—11-day dockmen's strike is called off; Laxmibai Kelkar, founder and Chief of Rashtra Sevika Samithi, an all India women's organisation dies in Nagpur. **December 6**—The first test match between India and West Indies ends in a draw. **7**—45th Amendment Bill is adopted by Lok Sabha. **19**—Mrs. Indira Gandhi is expelled from Lok Sabha for breach of privilege of the House and jailed. **20**—Two pro-Indira youths hijack Indian Airlines Boeing 737, carrying several ministers, which lands at Varanasi. **23**—Charan Singh addresses the mammoth rally organised by the Kisan Sammelan in Delhi. **26**—Mrs. Indira Gandhi is released from Tihar jail.

1979

January 1—The year 1979, the International Year of the Child begins; excise duty on khandsari abolished. **2**—Sunil Gavaskar sets a world record as the first batsman to score centuries in each innings thrice in Test cricket. **3**—The Seventh International Film Festival held in Delhi. **5**—Rohini-200, first monsoon experimental rocket, launched from Thumba. **10**—C.R. Krishnaswamy (76), eldest son of Rajaji and former News Editor of 'The Hindu', dies in Madras. **12**—Kanpur TV centre commissioned. **13**—Mauli Chandra Sharma (78) an elder statesman and politician dies in N. Delhi. **16**—India wins the Madras Cricket Test against the West Indies. **17**—Dr. D.C. Pavate (80), former Governor of Punjab, dies in Bangalore. **19**—Pravin Joshi (45), Gujarati actor, playwright, director, dies in Bombay. **20**—Jnanpith Award given to S.H. Vatsyayan, Hindi poet and novelist. **24**—Charan Singh and Jagjivan Ram become Dy. Prime Ministers in Union Cabinet. **30**—Mrs. Indira Gandhi is expelled from Chickmagalur seat. **February 11**—The Cellular jail in Andaman and Nicobar declared a national memorial. **12**—The External Affairs Minister, Atal Behari Vajpayee, visits China, cut short the visit and returns to Delhi after Chinese invasion of Vietnam. **27**—Sanjay Gandhi and the former Information and Broadcasting Minister V.C. Shukla, sentenced to two years in jail for the destruction of the film "Kissa Kursi Ka". **28**—Charan Singh presents rural-oriented Union budget. **March 1**—Admiral R.L. Pereira appointed the new Chief of Naval Staff; Sukhdev (46), well-known film maker, dies in N. Delhi; Jairamdas Daulatram (89), former Governor of Assam and a Rajya Sabha member, dies in N. Delhi. **7**—R.K. Khadilkar, former Union Minister, dies in Pune. **9**—Soviet Premier Alexei Kosygin arrives in India. **12**—Avalanche kills 240 people in Lahaul Valley. **14**—A long-term co-operation agreement in scientific, industrial and technical spheres, signed between Indian and USSR governments, in N. Delhi. **15**—The Grover Commission indicts the Karnataka Chief Minister Devaraj Urs, and some cabinet colleagues on several counts; Col. B.N. Kaul, a noted commentator on military affairs, dies in Pondicherry. **28**—Gopikisan Piramal, well-known industrialist and philanthropist, dies in New York. **30**—Jawahar Nagar petro-chemical complex dedicated. **April 6**—Dr. V. Raghavan (71), eminent indologist and scholar, passes away in Madras; India and USSR sign rice for crude oil barter agreement. **11**—Communal riots break out in Jamshedpur, 120 killed; Jullunder TV Centre inaugurated; Ramanatha Sethupathy (43), former Rajah of Ramanathapuram, dies in Madurai. **13**—The quincentenary birth celebration of Guru Amar Das, third guru of the Sikhs, starts. **16**—Mrs. Indira Gandhi, R.K. Dhawan and D. Sen charge-sheeted for instituting false cases against four officers investigating Maruti deals. **18**—Sarkar Commission on industrial houses wound up. **22**—Acharya Vinoba Bhave begins fast for total cow slaughter ban; ends fast on **April 26** on assurances of Constitution amendment for a national ban on cow slaughter. **29**—Raja Mahendra Pratap (93), freedom fighter and revolutionary, dies in N. Delhi. **30**—44th Constitution amendment, undoing the emergency changes in statute, gets Presidential assent; corruption charges against Morarji Desai and Charan Singh families referred to Justice Vaidyalingam for appraisal; T.S. Srinivasan (57), a leading industrialist, dies in Madras. **May 1**—K.P.S. Menon awarded Lenin Prize; S.D.Punekar (63), a noted labour economist, dies in Bombay. **9**—At least 30 persons were killed when a tourist bus and Jayanti Janata Express crashed into each other, near Akaparambu. **12**—Cyclone hits coastal Andhra Pradesh—widespread damage to life and property. **19**—Panki field gun factory begins production. **20**—Special courts set up to try Mrs. Indira Gandhi and others accused of emergency excesses. **22**—Mrs. Janakidevi Bajaj (87), widow of late Jamnalal Bajaj, dies in Wardha. **25**—Twenty-five persons believed killed and nearly 100 injured when the Army and Central Industrial Security Force clashed at Bokaro. **29**—A.K. Nadiadwala, noted film producer, dies in Bombay; Dr. T.M.A. Pai (81), founder of modern Manipal, dies in Manipal. **31**—The Gupta Commission indicts Sanjay Gandhi and others on irregular Maruti deals. **June 1**—In an open confrontation between army and policemen on the outskirts of Gandhinagar, seven policemen were injured; India and Angola decide on diplomatic ties. **3**—India finishes fourth at Asian track and field meet in Tokyo; the Soviets launch India's second satellite 'Bhaskara'. **5**—K. Ranghuramiah (67), Member of Parliament and a former Central Cabinet Minister, dies in N. Delhi. **7**—An I.A.F. Avro crashed near Leh, killing 17. **9**—Dr. S. Ramanujan (76), well-known agricultural scientist dies in Bangalore. **11**—Morarji Desai in Moscow, Warsaw (14), Prague (16), and Belgrade (18). **12**— Cases filed in special courts against Mrs. Gandhi, V.C. Shukla and others for harassment of officials investigating Maruti deals and for using government artists to design election posters. **13**—Jeep scandal case against Mrs. Gandhi and others filed in special courts. **23**—Raj Narain resigns from the Janata party; Devaraj Urs, expelled from the Congress (I), forms Karnataka Congress. **27**—Arvind Kilachand (54), a well-known industrialist, dies in Dusseldorf. **28**—Joachim Alva (73), a former Member of Parliament and a veteran journalist, dies in N. Delhi. **July 6**—Prof. M.S. Thacker (75), former Dy. Chairman of the Planning Commission, dies in Bombay. **7**—Ramesh Krishnan wins Wimbledon junior boys title. **10**—Congress Party emerges as the main opposition party in the Lok Sabha; Raj Narain emerges as the leader of a new group called Janata (S). **11**—The Congress tables no-confidence motion against the Janata Government. **15**—Morarji Desai resigns as Prime Minister. **16**—Charan Singh resigns from government to head the new Janata (S) Party launched by Raj Narain; Bhagwandas Goenka, Director of the Indian Express Group of Newspapers, dies in Bombay. **20**—M.V. Kairali disappeared without trace in the Gulf waters. Hijacking suspected. Crew of 51 missing. **23**—Floods in Rajasthan, about 113 persons dead. **27**—Morarji Desai steps down as leader of Janata Parliamentary Party making way for Jagjivan Ram, who becomes the Opposition leader of the 205-strong Janata Party in 544 member Lok Sabha. **28**—A nine-member coalition government headed by Charan Singh is formed in the Centre. **30**—Veteran Akali leader, Mohan Singh Tur (64), dies in Chandigarh. **August 2**—Mrs. Indira Gandhi gets bail in jeep scandal case; Dr. Rajnikant Arole and Mrs. Mabelle Arole win Raman Magsaysay award for community leadership. **4**—An Indian Airlines Avro crashed into a hillside on a flight from Pune to Bombay; all 45 on board perished. **10**—Satellite launch vehicle fails to put 40 kgs. payload into earth's orbit. **12**—Dam burst floods Morvi and Lilapur in Gujarat. Over 1,400 reported dead; A.V.M. Meiyappa Chettiar (72), prominent film producer, dies in Madras. **16**—Noted Marathi writer, D.R. Kavathekar (79), dies in Pune. **18**—V.P. Naik (66), former Chief Minister of Maharashtra, dies in Singapore. **20**—Mrs. Indira Gandhi withdraws support to the Charan Singh government; Charan Singh's 24-day-old govt. resigns. **21**—The President dissolves Parliament, orders year-end general elections and asks Charan Singh to head a care-taker government. **24**—Dr. J.C. Bannerjee (78), an eminent cardiologist, dies of a heart attack in Calcutta. **27-28**—Communal riots in Jamshedpur, 10 persons died and about 50 injured. **30**—Occupational therapist Mrs. Kamala Nimkar (79) dies in Pune. **31**—M. Hidayatullah sworn in as Vice-President of India. **September 6**—P.K. Mookiah Thevar (54), M.L.A. and Chairman, All India Forward Bloc, dies at Royapettah. **7**—Sunil Gavaskar hit 221, in his 20th test century, a world record for opening batsman. **12**—Devraj Urs became the new pre-split All India Congress President at 2-day deliberations at Bangalore. **14**—Dev Anand supported by filmland formed National Party. **19**—Nepal's King Birendra and Queen Aishwarya arrive in India on a 5-day state visit. **20**—Sunil Gavaskar crosses 5000 runs in tests playing at Bangalore against Australia. **21**—Nizam jewellery declared national treasure, and its auction cancelled; a devastating fire paralyses the Bombay Air port for several days and kills a family of three. **22**—Prakash Padukone beats world badminton champion Denmark's Hansen in London. **26**—The Lok Dal formed with Charan Singh as President and Raj Narain as Working Committee President. **30**—P.A. Chacko (79), one of the founder leaders of Communist Movement in Kerala dies in Kottayam. **October 1**—Dr. P.V. Rajamannar (79), an eminent jurist and former Chief Justice of Madras High Court, dies in Madras. **2**—Riots break out at Rajghat after Raj Narain and students clash over purification ceremony of the Samadhi. **6**—Mahamahopadhyaya Datto Waman Potdar (89), veteran historian, passes away in Pune. **8**—Sarvodaya leader Jayaprakash Narayan passes away. **12**—Egypt suspends air services with India. **12-16**—Riots in Ahmedabad city, one dead. **14**—Janata Parishad gets majority in Sikkim elections. **17**—Mother Teresa awarded Nobel Prize for Peace. **18**—N.B. Bhandari ministry in Sikkim sworn in at the end of 2-month President's rule. **21**—Dr. Telo Mascarenhas (77), veteran freedom fighter of Goa dies at his Kamburlin residence near Panjim. **25**—Nainar Das, President of the un-recognised T. Nadu Police Subordinate Association, called off the 10-day old strike by policemen. **26**—One day 'Bharat Bandh' organised by the All India Sales Tax Abolition Committee; Prof. C.N. Vakil (83), a noted economist, dies in Bombay. **28**—Miss Maniben Kara (74), a veteran trade union leader, dies in Bombay. **November 5**—Noted classical singer Mrs. Durgabai Shirodkar, dies in Pune. **10**—Tenneti Vishwanathan (86), the veteran freedom-fighter and Janata Party leader, dies in Vishakapatnam. **10-Dec. 9**—The First International Trade Fair in Delhi. **13**—Productivity linked bonus to railmen announced; Nelson Mandelia of S. Africa awarded Nehru Award for 1979. **15**—Indian Airlines fare hike comes into effect. **16**—Samarendra Chandra Sen (57), a noted barrister dies in Calcutta. **18**—Leading industrialist Sir Padampat Singhania (75), dies at his residence in Kanpur. **19**—Vachaspat Pathak, a noted Hindi critic, poet and story-writer, dies in Allahabad. **21**—C.F.D. merged in Cong. (I). **22**—Mrs. Sheelavati Ketkar (92), well-known sociologist, dies in Bombay. **23**—K. Brahmananda Reddy quits the Congress (U) and resigns from the care taker government as Industry Minister. **24**—R. Bhuwalka (83), an industrialist and former Rajya Sabha member, dies in Calcutta. **27**—S.A. Dange resigns the Chairmanship of Communist Party of India. **30**—Kerala Assembly dissolved. **December 2**—Eminent Gujarati writer, Kishansinh Chavada (70), passes away at Vadodara. **3**—Twenty-five killed and 50 injured in a rail accident on South Central Railway. **3-4**—Assam State paralysed following a 34-hour long 'bandh' demanding deletion of foreign names from the electoral rolls. **4**—Dhyan Chand, the Hockey wizard, passes away in N. Delhi; 23rd General Conference of the International Atomic Energy Agency opens in N. Delhi. **6-7**—Violence in Nagpur over renaming of Marathwada University. **7**—Bhogilal Laherchand (96) a prominent industrialist expires in Bombay. **7-16**—The First International Children's Film Festival held in Bombay. **12**—Babubhai Vaidya (70), founder-editor of the *Saurashtra Daily*, and a former M.L.A. from Gujarat, dies in Bombay. **18**—Well-known Urdu writer, Razia Sajjad Zaheer (62), passes away at New Delhi; reputed artist, M.R. Acharekar dies in N. Delhi. **20**—India defeated Pakistan in the 3rd Cricket Test in Bombay; Delhi High Court quashes the prosecution of Mrs. Indira Gandhi and P.K. Mukherjee for their refusal to depose before the Shah Commission. **21**—N.R. Phatak, noted historian, dies in Bombay. **23**—Eighteen persons were killed and 18 injured in a rail accident between Pathshala and Serupethia near Gauhati; K.K. Khadilkar (64), a prominent trade union leader, and a leading member of the Praja Socialist Party, dies in Bombay. **29**—Jeevanrao Yalagi (86), a freedom-fighter and a close associate of Bal Gangadhar Tilak, dies at Belgaum.

EVENTS—1980

INDIAN

January 4: Filmostav' 80 begins in N. Delhi; **6.** 7th General election polling Concludes; **7.** Karnataka Chief Minister Devraj Urs resigns; **9.** Congress (I) wins two-thirds majority in Lok Sabha; **10.** Mrs. Indira Gandhi elected leader of C.P.P. (I); President invites Mrs. Indira Gandhi to form new government; **11.** U.N. Secretary-General Kurt Waldheim arrives in N. Delhi on four-day visit; **12.** R. Gundu Rao sworn in as Chief Minister of Karnataka; **14.** Mrs. Indira Gandhi sworn in as Prime Minister; R.K. Dorendra Singh sworn in as Chief Minister of Manipur; **15.** Union cabinet decides to extend reservation of seats for scheduled castes and tribes in Lok Sabha and Assemblies for 10 years; **16.** Maruti case, Special Court, Delhi drops proceedings against Mrs. Gandhi and her aides; Pratap Singh Rane ministry sworn in Goa; **18.** Gagong Apang sworn in as Chief Minister of Arunachal Pradesh; **19.** Jagjivan Ram elected leader of Janata Parliamentary Party: **20.** Madhya Pradesh, ministry of Sunderlal Patwa sworn in; Sunil Gavaskar announces decision to relinquish captaincy of cricket team; Sadiq Ali inaugurates first international and 34th national dental conference in Bombay; India wins first cricket test match against Pakistan; Charan Singh elected leader of Lok Dal Parliamentary Party; **21**. Industrialisation of third world countries, conference under the auspices of U.N.I.D.O. begins in N. Delhi; 500-member new Lok Sabha sworn in; Kerala goes to polls for assembly election; **22.** President Zia ur Rehman of Bangladesh returns after talks on river waters and border problems with Mrs. Gandhi. Left Democratic Front wins majority in Kerala Assembly; **23**. Balram Jakhar elected Lok Sabha speaker; **24**. Bharat Ratna and other national awards revived; President confers Bharat Ratna on Mother Teresa; **25.** French President Valery Giscard d' Estaing arrives in N. Delhi; G.R. Viswanath to lead Indian cricket team in test against Pakistan at Calcutta; E.K. Nayanar sworn in as Chief Minister of Kerala; **28**. India and France sign four protocols for co-operation in various fields; Indian newspaper industry celebrates 200th anniversary; N.K. Singh, Chief Investigating Officer of 'Kissa Kursi Ka' case held; **29.** Australian Chancellor Bruno Kreisky arrives in N. Delhi; for the first time Rajya Sabha adopts an opposition amendment to the motion of thanks to the Presidential address: **30**. Swaran Singh resigns from C.W.C. and Parliamentary Board of Congress (R); **31**. Mrs. Indira Gandhi orders withdrawal of all criminal conspiracy cases against Mr. Laldenga in Delhi Courts. **February 3.** S.A. Dange quits as Communist Party of India chief; **8.** Caste war erupts at Doha village in Bihar; Resident doctors in Bombay begin indefinite strike; **9.** U.N.I.D.O. conference on industrialisation of third world countries ends; **11.** Prof. R.C. Majumdar dies in Calcutta; **14**. Justice M.S. Joshi holds creation of special courts as illegal and void; Ramlal sworn in as Chief Minister of Himachal Pradesh; **17**. Centre dissolves assemblies of nine states; **22**— President Neelam Sanjiva Reddy hails visit of King Jigme Singye Wangchuk of Bhutan; **23**. Fairchild Packet aircraft crashes in Agra, 46 defence personnel killed; **25.** Third world congress of paediatric surgery ends, Dr. R.K. Gandhi elected president; **26**. Jagjivan Ram resigns as leader of Janata Parliamentary Party. **March 4**. Chinese Ambassador Shen Jian presents credentials to President; **5**. King and Queen of Nepal arrive in New Delhi; **7**. Jagjivan Ram disassociate from Janata Party; **11**. C.B. Gupta dies in New Delhi; **14**. Badminton player Prakash Padukone wins Swedish open title; **19**. Janata Parliamentary Board takes decision not to allow members to take part in activities of R.S.S.; **21**. Delhi Metropolitan Council dissolved; **22**. Mother Teresa awarded "Bharat Ratna"; **23**. Prakash Padukone becomes the first Indian to win All-England Badminton Championship; **24**. Chhatra Parishad organises economic blockade of Assam; **26**. India accords full diplomatic status to Palestinian Liberation Organisation; Bandh paralyses life in Assam; All-Assam Students' Union and All-Assam Gana Sangram Parishad resume agitation on foreigners' issue; **27**. Centre orders winding up of two special courts; **28**. Yasser Arafat, Chairman of Palestinian Liberation Organisation arrives in N. Delhi on three-day visit; **29**. Supporters proclaim Jagjivan Ram as president of Janata Party; **31**. President Mobutu of Zaire arrives in N. Delhi. **April 2**. Raj Narain expelled from Lok Dal; **5**. Assam declared disturbed area; **6**. Bharatiya Janata Party is formed with A.B. Vajpayee as president; **8**. Jagjivan Ram joins Congress (U); **14**. Mrs. Indira Gandhi escapes knife attack, R.D. Lalwani held; **15**. Six Commercial banks nationalised; **19**. Katpadi-Villupuram passenger train accident, 16 persons killed; **22**. Mass picketing in Assam begins; **24**. Nirankari Chief Baba Gurbachan Singh shot dead; **26**. Assamese poet Birendra Kumar wins 1979 Jnanpith award. **May 1**. Best actress award winner Shobha dies in Madras; **9**. Supreme Court upholds validity of death sentence; **15**. I.N.S. Godavari, first Indian-designed frigate launched at Mazagon Docks; **19**. H.N. Bahuguna quits Congress (I); India's High Commissioner Gen. T.N. Raina dies in Ottawa; **26**. More oil found in a new sector off Bombay High; **27**. Fresh wave of violence erupts in Assam, 15 persons killed, curfew clamped in several places. **June 4**. Congress (I) back in power in 8 states; A.I.A.D.M.K. back in Tamil Nadu; V. Bhaskaran selected captain of Indian Hockey team for Olympics; **7**. Centre hikes prices of all petroleum products; Darbara Singh sworn in as Chief Minister of punjab; violence in Tripura, 20 die and 200 hurt, curfew clamped in State capital; Dr. Jagannath Mishra sworn in as Chief Minister of Bihar; **9**. M.G. Ramachandran sworn in as Chief Minister of Tamil Nadu; **10**. Lok Sabha approves resolution to extend President's Rule in Assam for another 6 months; **13**. Sanjay Gandhi appointed General Secretary of Congress (I); **23**. Sanjay Gandhi killed in plane crash; **24**. Indian Airlines raises fares; V.V. Giri passes away in Madras; **25**. Assam Bandh paralyses normal life in State; **26**. Oil and gas found in Bay of Bengal by O.N.G.C.; **28**. Train accident in Delhi, 7 persons killed. **July 7**. Godavari waters dispute ends; India recognises Kampuchea; **12**. Congress (I) gets absolute majority in Rajya Sabha; **18**. SLV-3 Rohini-I, second experimental satellite launched from Sriharikota; **23**. Farmers' agitation in Dharwar district against collection of water rate and betterment levy begins, curfew imposed in 6 towns; **24**. Film actor Uttam Kumar dies in Calcutta; **28**. Farmers' agitation spreads all over Karnataka State, death toll rises to 18; **29**. India regains Olympic Hockey title; Sadiq Ali inaugurates Premchand birth centenary celebrations in Bombay; **30**. S.L. Yadav elected Rajya Sabha Deputy Chairman; **31**. Mohammed Rafi dies in Bombay. **August 12**. Allahabad High Court dismisses election petition against Mrs. Indira Gandhi; **13**. Clash between police personnel and members of minority community erupts in Moradabad over presence of stray animals at the place of Id prayers; **15**. Violence in Moradabad spreads, death toll rises to 108; **17**. Gujarat Govt. declares Vadodara and Bhavnagar cities as "disturbed areas". **21**. Bonus ordinance; **22**. Actor-director Kishore Sahu dies in Bangkok; **23**. Jammu & Kashmir governor promulgates ordinance to amend Ranbir penal code and the code of criminal procedure to provide for deterrent punishment for offences relating to religion, rioting and communal affrays; **24**. Earthquake in Billowar and Bani tehsils of Jammu, 16 killed. **September 4**. Commonwealth heads of government conference begins in N. Delhi; **5**. V.C. Shukla's election to Lok Sabha set aside by Madhya Pradesh High Court; landslides in Darjeeling, death toll rises to 80; **8**. Manipur State declared as disturbed area; **11**. President Kenneth Kaunda of Zambia arrives in Bombay on six-day India visit; **22**. National Security Ordinance promulgated; **23**. Criminal Procedure Code Ordinance promulgated. **October 8**. Supreme Court directs Jammu & Kashmir Assembly to adopt resolution for removal of Speaker; **9**. Fire destroys Jammu & Kashmir Assembly Hall in Srinagar; **10**. T. Anjiah sworn in as Chief Minister of Andhra Pradesh; **11**. Malik Mohiuddin removed from Speakership of Jammu & Kashmir Assembly; Sunil Gavaskar reinstated as cricket skipper for tour of Australia and New Zealand; **14**. Centre takes over Maruti Ltd.; **18**. Himalayan Motor Rally flags off from Bombay; **20**. Bombay-bound Punjab Mail collides with goods train near Itarsi, 21 killed; **24**. Shekhar Mehta of Kenya wins first Himalayan Motor Rally; **25**. Kamlapati Tripathi resigns as Railway Minister; **26**. Tamil Nadu governor Prabhudas Patwari sacked; Air-India derecognises Air India Employees' Guild; **27**. Bombay-bound Saurashtra Mail collides with derailed goods train near Vadodara, 9 killed; Bandh in Assam, complete work in state paralysed; **28**. Curfew clamped on June 7 in the wake of riots in Agartala lifted; **31**. Meerut-bound Sangam Express collides with goods train near Kanpur, 34 killed . **November 3**. O.P. Mehra appointed Governor of Maharashtra; Shetkari Sanghatana launches farmers' agitation in Nagpur; **6**. National Integration Council constituted; **10**. Shetkari Sangatana begins farmers' agitation in Maharashtra for higher prices; **12**. Kamlapati Tripathi resigns from Union Cabinet; **13**. Shetkari Sanghatana suspends farmers' agitation in Nasik for 36 hours to clear transport problem; **19**. Manipur Chief Minister Dorendra Singh resigns; **22**. Ground staff of Air India call off strike in Bombay; National convention on civil liberties begins in N. Delhi to launch a new All India Organisation for the defence and promotion of civil liberties in India; **24**. Prince of Wales arrives in New Delhi; J.B. Patnaik wins Orissa assembly by-election; A.R. Antulay wins Maharashtra Assembly by-election; Jagannath Pahadia wins Rajasthan Assembly by-election; **26**. Mass blinding cases of criminals in Bhagalpur unearthed; **27**. Ruling Left Front and C.P.I. observe Bengal bandh; **28**. Shetkari Sanghatana suspends farmers' agitation in Maharashtra till December; **14**. B.N. Sircar, doyen of film makers, dies in Calcutta; **30**. Blinding of undertrials in Bhagalpur Central jail, 15 police officials suspended. **December 1**. Rasta Roko agitation, 9000 farmers held in Maharashtra; Hanumanthaiya dies in Bangalore; President Suharto of Indonesia arrives in New Delhi on four-day visit; **3**. Over 50 die after consuming spurious liquor in Haryana; **5**. Bandh in Orissa, two persons killed in police firing; **6**. President's Rule in Assam revoked; Mrs. Taimur takes over as Chief Minister; M.G. Ramachandran escapes knife attack near Tirunelveli; **7**. The 'Long March' from Jalgaon to Nagpur organised by Congress (U), Janata, P.W.P., C.P.I. and C.P.M. in Maharashtra as a part of farmers' agitation begins; **8**. President Leonid Brezhnev of Soviet Union arrives in Delhi on three-day visit; **10**. Talks between President Leonid Brezhnev and Mrs. Gandhi end; **26**. 'Long March' ends in Nagpur as Maharashtra Assembly adjourns.

FOREIGN

January 2. Soviet troops take complete control of Kabul city; **4**. Govt. of Republic of El Salvador collapses; **5**. Kuwait hikes price of liquefied petroleum gas; Lt. Col. Mohammed Khouna Ould Haidala appointed President and head of Mauritania; Nigeria hikes price of crude oil; Russia vetoes U.N. Security Council's resolution on withdrawal of foreign troops from Afghanistan; **9**. Saudi Arabia executes 63 religious fanatics who seized Grand Mosque in Mecca; **14**. Russia vetoes U.S. sponsored resolution in Security Council to impose economic sanctions against Iran for holding of American hostage; Alitalia DC-9 jetliner on flight from Rome to Tunis hijacked; **15**. Arab hijacker of Alitalia DC-9 jetliner surrenders; **21**. Bullfight stadium in Sincelejos, Colombia collapses, 146 persons killed; Boeing 727 of Iran crashes in Elbis mountains, 128 killed; **22** Russia deprives of State awards given to dissident leader Andrei Sakharov; **25**. Delta airlines jetliner on flight from Atlanta to New York hijacked, **28** Abolhassan Bani Sadr elected President of Iran; **29** Kuwait, Iraq, Qatar and United Arab Emirates hike oil prices; Prof Christian Barnard carries out first heart transplant operation at Groote Schuur Hospital, Cape Town; **31**. Queen Juliana of Netherlands announces abdication from throne in favour of eldest daughter crown Princess Beatrix; Radio Pakistan reports decision to hold annual meeting of Islamic Foreign Ministers in Islamabad on April

16. **February 1**. Iran hikes price of crude oil; **16**. Ian Smith's Rhodesian Front Party wins all white seats in executive national assembly election; **17**. Polish team scales Mount Everest; **19**. P. Trudeau returns to power in Canadian general elections; Assembly of New Hebrides approves renaming of New Hebrides into "Vanuaatu" after becoming independent; **20**. U.N. Security Council recommends U.N. membership for Saint Vincent and Grenadines Islands; **22**. Martial law clamped in Kabul following widespread rioting; **23**. Israel changes name of its currency from pounds to shekels; **25**. Army junta seizes power in Surinam; **28**. United States carries out underground nuclear test at Nevada; **29**. AC-47 Guatemalan air force transport plane crashes, 28 killed; Kriangsak Chomanan, Prime Minister of Thailand resigns. **March 2**. Stage being set by Central Committee of Chinese Communist Party to put Senior Vice-Premier Deng Xiaoping in unquestioned authority; **3**. Thai Parliament elects Gen. Prem Tinsulanond as Prime Minister; **4**. Robert Mugabe invited to form ministry in Rhodesia; **5**. Robert Mugabe sworn in as Prime Minister of coalition Government in Rhodesia; **9**. Knesset of Israel appoints Yitzhak Shamir as foreign minister; **13**. A former major-general and 15 officers held in Pakistan on suspicion of conspiring against military regime; **14**. Polish jetliner crashes at Warsaw airport, 87 persons killed; **16**. Henck R. Chin-a-Sen elected as Prime Minister of Surinam; **19**. General election in Iran, authorities order recount of votes due to complaints; **23**. Deposed Shah of Iran Mohammad Reza Pahlavi leaves Ptocumen for Egypt; **23**. President of Italy invites Fransesco Cossiga to form Government; **24**. Deposed Shah of Iran Mohammad Reza Pahlavi arrives in Cairo: **28**. Rig accident in North Sea oil fields at Stavanger. drivers' attempt to save survivors continues. **April 12**. Liberian President Mr. Tolbert killed in military coup: **17**. Free Zimbabwe is born: **24**. U.S. attempt to free hostages in Iran fails: **25**. British aircraft crashes in Spanish territorial waters. 146 persons killed. **May 4**. Marshal Tito dies in Yugoslavia: **18**. China launches I.C.B.M.; **24**. Revolutionary Council of Iran appoints Hassan Habibi as new Prime Ministet; military commission of Uganda names three-man Presidential Commission to replace deposed President Godfrey Binaisa; **27**. South Korean troops clamp tight martial law over Kwangju. **June 3**. Hungarian-Soviet Cosmonaut team returns, touches Soviet Republic of Kazakhstan; **5**. Soviet Union launches Soyuz-2 into orbit with two cosmonauts; **7**. Soviet space craft Soyuz-2 docks with orbiting Salyut-6; **12**. Angolan Airlines Yak 40 passenger jet crashes at Huila, 29 persons killed, Japanese Prime Minister Mr. Ohira dies; **22**. Soviet Union begins withdrawal of troops from Afghanistan to pave way for peace talks; **July 15**. Zenko Suzuki elected new Prime Minister of Japan; **18**. Coup in Bolivia, President Lidia Gueiler ousted; **19**. 22nd Olympic Games begin in Moscow; **26**. Mostafa Mirsalim appointed as new Prime Minister of Iran; **27**. Killer typhoon sweeps South China, 188 killed; deposed Shah of Iran Mohammad Reza Pahlavi dies in Cairo; **29**. New Hebrides gets independence. **August 3**. 22nd Olympic Games end in Moscow; 17-day old strike which led to proclamation of emergency in Sri Lanka ends; **7**. Romanian airlines Jumbo jetliner crashes in Atlantic, 144 fishermen killed; **11**. Muhammad Rajai named Prime Minister of Iran; **14**. President Jimmy Carter of U.S.A. wins Presidential re-nomination from Democratic National Convention; **16**. President Choi Kyu-hah of South Korea resigns; Dr. Henk Chin A. Sen sworn in as President of Surinam; **20**. Saudi Arabian airliner engulfed in fire forcelands at Riyadh airport, 301 persons killed; **24**. Premier Edward Babiuch of Poland sacked; **27**. Jordanian Prime Minister Kassem Reimauri resigns, King Hussein invites Modar Badran to form new Government; **31**. Strike in Poland ends, agreement signed. **September 2**. Strike begins in Poland again; **6**. Poland dismisses Communist Party chief Edward Gierek; Hua Guofeng resigns as China's Premier; **10**. Libya and Syria become one state, issue joint proclamation; China's Parliament elects Zhao Ziyang as Prime Minister; **12**. Army coup in Turkey; **15**. Saudi Arabian Air Force transport plane crashes near Medina airport, 89 persons killed; **16**. Turkey's National Security Council appoints Tuergu Ozol as new Prime Minister; **17**. Former Nicaraguan dictator Anastasio Somosa assassinated; dissident leader Kim Dae-Jung sentenced to death by South Korean military court; **20**. New military leaders of Turkey appoint Admiral Bulent Ulusu as Prime Minister; Typhoon sweeps Than Hoa province of Central Vietnam. more than 100 persons killed: war between Iran and Iraq begins; **22**. Iraqi warplanes raid Teheran's Mehrabad international airport and other eight air bases: **23**. Iraqi forces capture refinery city of Abadan; **26**. United States executes two underground nuclear tests in Nevada State; **27**. Italian Government of Francesco Cossiga resigns; **29**. Battle between Iran and Iraq for control of Iran's oil province of Khuzestan continues; President Sanjiva Reddy arrives in Moscow; Iran informs U.N. Secretary General Kurt Waldheim her acceptance of Security Council's call for stoppage of war with Iraq. **October 3**. World Boxing Council heavy-weight champion Larry Holmes retains title, succeeds champion Muhammad Ali; **4**. Ruling military Junta appoints Roberto Viola as President of Argentina; **5**. Iraqi artillery hammers Iranian positions at Khorramshahr, accuses Iran of breaking ceasefire; Left-liberal coalition of Chancellor Helmut Schmidt gets majority in Bavarian Parliamentary election; Iraq captures Iranian port city of Khorramshahr; **7**. Centre-right coalition of Fransisco Sa Carneiro gets majority in Portugal's Parliamentary election; **10**. Earthquake rocks El Asnam in Algeria; **11**. Soviet cosmonauts Leonid Popov and Valery Ryumin return to earth after spending 185 days in 'Salyut-6'; Iraq announces breaking up of relations with Syria, Libya and North Korea; **14**. Iran and Iraq claim heavy casualties; **16**. Mrs. Bandaranaike of Sri Lanka stripped of civic rights; **23**. Shafic Wazzan appointed as Prime Minister of Lebanon; explosion in local school at Ortuella in Spain results in death of 66 children; Soviet Prime Minister Alexei Kosygin resigns; **24**. Iraq announces final capture of Khorramshahr; Poland recognises biggest free trade union 'Solidarity': **30**. Senate of Italy recognises new Government of Arnaldo Forlani; **31**. Algerian President frees former President Ahmed Ben Bella after 15 years of imprisonment. **November 1**. Julius Nyerere re-elected President of Tanzania; Irish Republic declares birth control legal; **4**. Polling for Presidential election in U.S.A. begins; **5**. Ronald Reagan elected President of U.S.A.; **15**. Coup reported in Guinea Bissau; **19**. Conspiracy to overthrow Zia regime in Pakistan involving military officers and senior officials unearthed; Korean Airlines Jumbo bursts into flames at Kimpo airport, 14 persons killed; **22**. Fire in M.G.M. Grand Hotel-Casino in Nevada, 85 persons killed; **25**. Earthquake rocks southern Italy, more than 3000 persons killed; Military coup in Upper Volta, President Sangoule Lamizana ousted. **December 3**. Edward Gierek deposed party chief of Warsaw stripped of all party and public posts; **8**. Antonio Ramalho Eanes elected as President of Portugal; **13**. Milton Obote elected as President of Uganda; **14**. Fransisco Pinto Malsemao named as Prime Minister of Portugal; **18**. U.S. Pres.-elect. Ronald Reagan choses Gen. Alexander Haig as Secretary of State; People's National Congress of President Forbes Burnham gets majority in Guyana's general election; **22**. Colombian jetliner crashes near Bogota, 68 persons killed; **23**. Fransisco Pinto Malsemao designated as Prime Minister of Portugal by President Antonio Ramalho Eanes; **29**. Hearing against Mao Tse-Tung's widow Jiang Qing ends in Beijing court, sentenced for execution.

DEATHS 1980

INDIAN

January 1. Rasiklal U. Parikh, former Chief Minister of erstwhile Saurashtra State and minister of the former Bombay Province dies in Bombay; **4**. James S. Raj, well-known economist, dies at Thanjavur; **6**. Dilip Kumar Roy, noted poet, composer-singer and author of 70 books, dies in Bombay; **7**. Bhagwanthrao Janardhan Mhatre, veteran freedom-fighter, dies in Bombay; **13**. Ajit Basu, veteran freedom-fighter, dies at Rishra, Hooghly district; **20**. Kasturbhai Lalbhai, prominent industrialist dies in Ahmedabad; **24**. Barendranath Basu, novelist, dies in Calcutta; **26**. Luis J. Cordeiro, Bombay Hockey Association president, dies in Bombay; **29**. H.K

Sowami, noted lawyer and trade unionist, dies in Bombay; Triloki Singh, member of Rajya Sabha, dies in N. Delhi; 31. Som Dutt, veteran-freedom fighter killed in road accident in N. Delhi; Uma Shankar, former general manager of Bennett, Coleman & Co. Ltd., dies in Bombay. **February** 2. Dr. Manmohan Sen, noted quinologist dies in Calcutta; 4. Makhan Chatterjee, gen. secy. of All India Port and Dock Workers' Federation dies in Delhi; 5. A.S. Keluskar, former president of Mumbai Marathi Patrakar Sangh, dies in Bombay; 8. Rudra Hanji, noted sculptor and recipient of the national fellowship of the Lalit Kala Akademi, dies in Gwalior; 9. P.J. Jeejeebhoy, executive chairman of the Bombay Stock Exchange dies in Bombay; 10. Prof. K.B.L. Mathur, eminent scientist, dies in N. Delhi; 11. Dr. Ramesh Chandra Majumdar, noted historian, dies in Calcutta; 13. H.Z. Gilani, noted freedom-fighter, trade unionist and journalist, dies at Botad; 17. Prankishore Goswami, noted Sanskrit scholar, dies in Calcutta; 15. S.S. Mirajkar, former president of the All-India Trade Union Congress, dies in Bombay; 18. M.P. Amin, former advocate-general of Bombay, dies in Bombay; 20. Pandit Vishnukant Jha, renowned Sanskrit scholar dies in Patna; Atmaram Vasudev Modak, wellknown freedom fighter dies in Khanapur near Pune; 25. Smt. Girijabai Mahadeo Kelkar, noted authoress and first woman play-wright in Maharashtra, dies in Pune; Bhaiya Lal Saraf one of the founder members of Rashtriya Swayamsevak Sangh, dies in Sagar, Madhya Predesh; 28. K. Santhanam, Gandhian associate, dies in Madras. **March** 9. Subodh Ghosh, noted Bengali novelist and journalist, dies in Calcutta; 10. Commander K.P. Godrej, one of the founder members of Lions movement in India, dies in Pune; 11. C.B. Gupta, former Chief Minister of Uttar Pradesh, dies in N. Delhi; Annasaheb Sahasrabuddhe, veteran Sarvodaya leader, dies in Bombay; 14. Chandulal M. Trivedi, former governor of Orissa, Punjab and A.P. dies in Ahmedabad; 16. Neville D'Souza, former Olympian soccer star, dies in Bombay; Pannalal Tripathi, well-known Hindi litterateur, dies in Madras; 20. Ghanshyamdas S. Poddar, noted industrialist, dies in Bombay; Shantilal H. Gujar, former secretary of Bharatiya Vidya Bhavan, dies in Bombay; 21. Dattatreya Vinayak Joshi, freedom-fighter, dies at Akola; Prof. M. Mariappa Bhat, noted Kannada scholar, dies in Madras; 24. Maulana Syed Ibne Hasan Naunehravi, eminent Shia scholar, dies in Lucknow; 25. Rameshwarnath Zutshi, former editor of 'Leader', dies in Allahabad; 29. Biswanath Bose, noted tabla player, dies in Calcutta. **April** 24. Baba Gurbachan Singh, Nirankari Chief, shot dead in Punjab. **May** 1. Mrs. Shoba, best actress award winner, dies in Madras; 4. Anant Kanekar, noted Marathi writer, dies in Bombay; 19. Gen. T.N. Raina, India's High Commissioner, dies in Ottawa. **June** 5. J.P. Mahrotra, internationally distinguished standards engineer, dies in N. Delhi; 9. D.D. Desai, well-known industrialist, dies at Jakarta; 14. Shivram Ramchandra Tidke, Geographer, dies at Nagpur; 23. Sanjay Gandhi, dies in aircrash in N. Delhi; 24. V.V. Giri, former President, dies in Madras; 26. Govind Moreshwar Pendse, veteran Marathi journalist, dies in Bombay. **July** 15. Gajanan Vishwanath Ketkar, journalist and grandson of Lokmanya Tilak, dies in Pune; 20. Rai Krishan Das, noted art critic, dies in Varanasi; 24. B.C. Mohanty, sports lover and promoter, dies in Moscow; Uttam Kumar, greatest matinee idol, dies in Calcutta; 30. Ghopal Ghose, noted artist and painter, dies in Calcutta; 31. Mohammad Rafi, singer, dies in Bombay. **August** 1. Ramkinker Baiz, oustanding sculptor and distinguished painter, dies in Calcutta; 7. Vrajendra Gaur, noted film writer, dies in Bombay; 13. Purushottam Bhaskar Bhave, a towering personality in Marathi literature, dies in Bombay; 18. Debabrata Biswas, an eminent exponent of Rabindra Sangeet, dies in Calcutta; 21. G.V. Puranik, a prominent industrialist, dies in Bombay; 22. Kishore Sahu, veteran film-maker, dies in Bangkok; 27. Dr. T.P. Meenakshisundaram, first vice-chancellor of Madurai Kamaraj University, dies in Madurai; 28. Shibaram Chakrabarty, noted Bengali litterateur, dies in Calcutta; 29. Mahakavi Vennikulam Gopala Kurup, author of several books, dies in Trivandrum. **September** 9. D.N. Shikhare, prominent writer and journalist, dies in Pune; D.V. alias Tatya Amonkar, vice-president of Mumbai Marathi Sahitya Sangh, dies in Bombay; 21. N. Narkhede, noted educationist and Marathi writer, dies in Bombay; 24. K.B. Sundarambal, noted musician and actress, dies in Madras; Anand Raj Surana, well-known freedom-fighter, dies in N. Delhi. **October** 26. Sahir Ludhianvi, noted poet and lyricist, dies in Bombay. **November** 28. Guru Chengannur Raman Pillai, one of the greatest exponents of Kathakali, dies in Kottayam; Birendra Nath Sircar, doyen of film-making industry, dies in Calcutta. **December** 1. Kengal Hanumanthaiah, former Chief Minister of erstwhile Mysore State and Union Railway Minister, dies in Bangalore; Prof. Mangharam Udharam Malkani, Sindhi litterateur, dies in Bombay; 3. Godajirao Mukhare, freedom-fighter, dies in Pune; Professor Madhav Narayan Kamat, senior mycologist and plant pathologist, dies in Pune; 8. Kanubhai Desai, noted art director of Hindi films, dies in Bombay; 13. S.G. Venkataraman, prominent theosophical leader, dies in Madras; 16. Dr. Ram Subhag Singh, former Railway Minister, dies in N. Delhi.

FOREIGN

January 9. Sir Charles Curran, director-general of British Broadcasting Corpn., dies in London; 10. George Meany, one of the most well-known American trade union leaders, dies in Washington; 17. Actress Barbara Britton, who made 32 Hollywood movies, dies in New York; 18. Sir Cecil Beaton, photographer of royalty and international celebrity, dies in London; 20. Otto Mailander, German scientist, dies in Supertino, California; 28. Sir Eric Wydham-White, British economist and director of general assessment in tariffs and trade (GATT), dies in Geneva; 29. Jimmy Durante, American comedian, dies in Hollywood. **February** 2. Dr. William H. Stein, winner of Nobel Prize in Chemistry in 1972, dies in New York; 3. Harald Isenstein, German-born sculptor, dies in Copenhagen; 9. Lord Thomas of Ramenham, first world war fighter pilot who turned Britain's national airline into a profitable enterprise, dies in London; 12. Jacob A. Malik, former Soviet Ambassador to the U.N., dies in Moscow; 17. Graham Sutherland, renowned British painter, dies in London; 22. Uskar Kokoschka, Austrian-born painter and a leading exponent of expressionist art, dies in Montreux; 26. Ahmed Shukairi, founding-father of Palestine Liberation Organisation, dies in Amman, Jordan. **March** 1. Yigal Allon, former foreign minister of Israel, dies in Jerusalem; 2. Jaroslaw Iwaszkiewicz, Polish writer expires; 14. Dr. Mohammed Hatta, pioneer in Indonesia's struggle for independence, dies in Jakarta; 24. Archbishop A. Romero, assassinated by gunmen during mass at Divine Providence Hospital's Chapel in San Salvador; 27. Prince John Loewenstein, internationally-known anthropologist and archaeologist, dies in Halifax, Canada; 29. Annunzio Paolo Mantovani, orchestra leader, dies in Tunbridge Wells; 30. Ton Duc Thang, President of Vietnam, dies in Hanoi; 31. Jesse Owens, black American track star who won four gold medals at 1936 Berlin Olympics, dies in Tucson, Arizona. **April** 12. President Robert of Liberia killed in military coup. **May** 4. President Josif Broz Tito dies in Yugoslavia. **June** 8. Henry Miller, American novelist, dies in California; 12. Masayoshi Ohira, Prime Minister of Japan, dies in Tokyo; 23. Luigi Ugolini, noted Italian writer, journalist and painter, dies in Florence. **July** 1. C.P. Snow, novelist, scientist and government administrator, dies in London; 13. Sir Seretse Khama, President of Botswana, dies at Gaberone; 19. Nikolai Tsytsyn, outstanding botanist and genetist, dies in Moscow; 24. Peter Sellers, British film actor, dies in London; 26. Kenneth Tynan, British playwright and critic, dies in California. **August** 6. Marino Marini, Italian sculptor, dies in Viareggio; 8. Yahya Khan, former President of Pakistan, dies in Rawalpindi; 25. Boris Petrov, one of the foremost space scientists, dies in Moscow. **September** 8. Maurice Genevoix, French author, dies in Spain; Willard F. Libby, chemist and Nobel Laureate, dies in Los Angeles; 17. Jean Piaget, world famous child psychologist, dies in Geneva; Katherine Anne Porter, novelist and author of 'Ship of fools', dies in Maryland; 19. Sol Lesser, movie tycoon, dies in Hollywood; 23. Jim Fouche, former President of South Africa, dies in Cape Town. **October** 27. John Van Vleck, co-winner of Nobel prize for physics and "father of modern magnetism", dies in Cambridge, Massachusetts. **November** 6. Steve McQueen, U.S. actor, dies in Los Angeles; 22. Mae West, legendary Hollywood bombshell, dies in Los Angeles. **December 3**. Oswald Mosley, leading British politician, dies in Paris; **4**. Francisco Sa Carneiro, Prime Minister of Portugal expires, in plane crash near Lisbon; **8**. John Lennon, founder and driving force behind the legendary Beatles pop group, shot dead in New York; **18**. Alexei Kosygin, former Soviet Prime Minister, dies in Moscow; **29**. Kathleen Broackway, a pioneer in the training of Indian women as teachers, dies in London.

SOCIAL WELFARE*

SOCIAL welfare activities are additive and supplementary to other social services such as health, education, nutrition, housing and so on. Sizeable outlays have been made in successive Five Year Plans. Allocations have been progressively on the increase from Rs. 16 million in the First Five Year Plan to Rs. 861·30 million in the Fifth Plan. For the five years 1978-83 an outlay of Rs. 1,305 million has been provided.

The Central Social Welfare Board (Jeevan Deep Building, Parliament Street, New Delhi 110001). (*Established in* 1953) : The Board, with a network of thirty State Social Welfare Advisory Boards in all the States and Union Territories, renders financial assistance to voluntary organisations for strengthening and improving their existing welfare services and to take up new ones for the benefit of the socially and economically weaker sections of the community with emphasis on children, women and the handicapped. It also initiates pioneering welfare services in new fields and in unexplored areas. In extending these services, the Board supervises and guides and strengthens the voluntary organisations and its activities, besides evaluating the aided programmes. It coordinates the services and activities sponsored and rendered by other Government departments for better delivery of services.

National Institute of Social Defence, Ministry of Social Welfare, West Block No. 1, Wing-7, Ground Floor, Ramakrishnapuram, New Delhi 110022.

(1) Undertakes research on social defence ; (2) Compiles, processes, and analyses statistics on social defence ; (3) Develops, promotes, sponsors and undertakes training orientation in the fields of social defence ; (4) Drafts model legislation and rules in the field of social defence ; (5) Advises the Central and State Governments/Union Territory Administrations on social defence problems and provides technical service facilities for preparation of schemes, formulation of projects, drafting of legislation, etc. ; (6) Provides a forum for the exchange of information on social defence among States/Union Territories and voluntary organisations and thus serves as a clearing house for information in the field of social defence ; (7) Creates public awareness on social defence problems specially in regard to preventive and rehabilitative role of the community ; (8) Assists the Government of India for the exchange of information on social defence with other countries and with the United Nations or other specialised agencies ; (9) Establishes liaison with universities, research institutes and voluntary organisations for appropriate attention to social defence ; (10) Organises conferences/seminars/workshops on social defence ; (11) Brings out publications in the field of social defence, both popular and scientific.

Rehabilitation Services, Directorate of Social Welfare, Delhi Administration, Jamnagar House Hutments, New Delhi 110011 (Formerly Social Welfare and Rehabilitation Directorate, Govt. of India). Set up to tackle problems of destitute and economically and socially handicapped women of Delhi and war widows etc.

The main activities of the Directorate are : 1. to impart training in handicrafts. 2. one-year certificate course in tailoring & embroidery. 3. two-year teachers' training course in embroidery, tailoring, book-keeping and accounts etc. and non-diploma courses in tailoring, embroidery knitting, etc.

The Association for Social Health in India (4, Deendayal Upadhyaya Marg, New Delhi 110002). Aims at the prevention of prostitution and other evils related to it.

The main activities of the association are to give assistance in the enforcement of suppression of Immoral Traffic Act, rescue of women in immoral traffic and moral danger and their rehabilitation through institutional and non-institutional services, organising programmes like sex education, family life education and counselling centres, control of sexually transmitted diseases and mobilise public opinion against the exploitation of the fair sex, etc.

Research Institutions : *Andhra Pradesh* — Tribal Cultural Research Instt., Basher Bagh, Hyderabad 500001: *Bihar* — Tribal Welfare Research Instt., Morabadi Rd., Ranchi 834001 ; *Gujarat* — Tribal Research and Trg. Centre, Gujarat Vidyapeeth, Ahmedabad 380014 ; *Kerala* — Tribal Research & Trg. Instt., Cheveyyoor Hsg. Colony, Kozhikode 673017 ; *Madhya Pradesh* — Tribal Research and Devpt. Instt., Bhopal 462001 ; *Maharashtra* — Tribal Research & Trg. Instt., 28, Queen's Garden, Pune 411001 ; *Meghalaya* — Tribal Research & Trg. Instt., Shillong 793001 ; *Nagaland* — Naga Cultural Instt., Kohima 797001 ; *Orissa* — Tribal Research & Trg. Instt., Bhubaneshwar 751001 ; *Rajasthan* — Tribal Research & Trg. Instt., Udaipur 313001 ; *Uttar Pradesh* — Tribal Research Centre, Lucknow 266001 ; *West Bengal* — Cultural Research Instt., Calcutta 700001.

THE SALVATION ARMY

For administrative purposes the country is divided into 6 territories and one command each under a territorial commander.

The work done is evangelical, social, medical and educational. The six territories are :

Madras and Andhra : Territorial Headquarters, The Salvation Army, 15, Ritherdon Road, P.O. Box 453, Vepery, Madras 600007.

South-Eastern India : Territorial Headquarters, The Salvation Army, High Ground Road, Maharaja Nagar P.O., Tirunelveli 627011, Tamil Nadu.

South-Western India : Territorial Headquarters, The Salvation Army, Kowdiar, Trivandrum 695003, Kerala State.

Northern India : Territorial Headquarters, The Salvation Army, "Rana Place", H-14, Green Park Extension, New Delhi 110016.

Eastern India : Command Headquarters, The Salvation Army, 37, Lenin Saranee, Calcutta 700013.

---

* Please see "State Associations" for other cultural and benevolent associations/institutions

Western India : Territorial Headquarters, The Salvation Army, Sheikh Hafizuddin Marg, P.O. Box 4510, Byculla, Bombay 400008.

Home for Aged Freedom Fighters : Baba Kharak Singh Marg, New Delhi 110001.

Admission to the home is restricted to persons, who are in receipt of pension granted under the Central Freedom Fighters Pension Scheme, 1972. To be eligible for admission, a freedom fighter should not be less than 65 years of age and his annual income from all sources, including pension, should not exceed Rs. 5,000 per annum. Persons suffering from infectious or contagious diseases or persons with dependents will not be admitted. Admission, for the present, is restricted to men only.

INSTITUTIONS FOR THE HANDICAPPED

INSTITUTIONS FOR THE BLIND

ANDHRA PRADESH

Andhra Blind Model High School, Royapet, Narsapur 534276; **Disabled Blind Children's Home & School,** Anandanasamaj Bldg., Amravati Rd., Guntur 522002; **Govt. High School for the Blind,** Basanthi Haveli, Salar Jung Estate, Hyderabad 500002; **Govt. School for the Blind,** Cuddapah 516001; **Jeevana Jyothi,** C.S.I., Vidyanagar, Via Kondapalli; Post Penapaka 521226; **Lutheran School for the Blind.** Narasaraopet 522601; **Rehabilitation Centre for the Blind,** Praja Seva Samiti, P. S. S. Bldgs., Pedakkani, Guntur 522509; **Sudha Memorial Disabled & Blind Children's Home & School,** Brindavan Municipal Colony, Arundelpet, Guntur 522002; **Vocational Rehabilitation Centre for the Physically Handicapped,** C. T. I., Vidyanagar, Hyderabad 500007.

ASSAM

All Assam Federation of the Blind, C/o Paul & Co., Dhaccapatty, Nowgong 782001; **Assam Andha-Sishu Seva Samiti,** P.O. Bihupuria 784161; **Assam Blind Asscn.,** Old Circuit Home Road, Jorhat 785001; **Blind School attached to the Sreemantha Shankar Mission,** P.O. Nowgong 782001; **Janamangal Adarsha Andha Bidyalaya,** P.O. Moranhat 785640; **Jorhat Blind Institution,** Na-ali, Jorhat 785002; **National Asscn. for the Blind** (Assam State Branch), Shreemanta Shankar Mission, Nowgong 782001; **Society for the Welfare of the Blind,** Gauhati 781001.

BIHAR

Bihar Rajya Netrahin Kalyan Sangh, Park Rd., Kadam Kuan, Patna 800003; **Blind Relief Society,** P.O. Patherdih 826001; **Blind School,** Home for the Homeless, Khabra Rd., Muzaffarpur 842001; **Govt. School for the Blind,** Patna 800001; **Netraheen Chhatra Vidyalaya,** Mundichak, Bhagalpur 812001; **Prema Devi Blind School,** Topkhana Bazaar, Monghyr 811201; **Shree Kameshwari Priya Poor Home,** Darbhanga 846004; **Shri Aadinath School for the Blind,** Chandra Bhawan, Mahajantoli No. 1, Arrah 802301; **St. Michael's School for the Blind,** P.O. Box No. 1, Ranchi 834001; **Sur Vihar** (Home for Blind Boys), C/o Tata Iron & Steel Company Ltd., Jamshedpur 831001.

CHANDIGARH

Society for the Care of the Blind, 114, Sector 8-A, Chandigarh 160017.

DELHI

All India Blind Relief Society, F-Block, 2nd Lajpatnagar, New Delhi 110024; **Bharat Blind School,** 510-A, Circular Rd., Shahdara, Delhi 110032; **Bharatiya Educ. Cultural Welfare Society for the Blind,** Telewada, Shahdara, Delhi 110032; **Blind Relief Asscn.,** Kitchlew Marg, New Delhi 110003; **Blind Social Welfare Society,** 96, Panchkuin Rd., New Delhi 110001; **Delhi Public Library** (Braille Section), C/o Blind Relief Association Bldg., Lal Bahadur Shastri Marg, New Delhi 110003; **Government School for the Blind Boys,** Coronation Rd., Kingsway Camp, Delhi 110009; **Institution for the Blind,** Panchkuin Rd., Delhi 110009; **National Asscn. for the Blind** (Delhi State Branch), 12, Nizamuddin East, New Delhi 110013; **National Federation of the Blind,** 2322, Lakshmi Narayan Street, Paharganj, New Delhi 110055; **National Society for the Prevention of Blindness,** C/o Department of Ophthalmology, All India Institute of Medical Science, Ansari Nagar, New Delhi 110016; **Popular Institution for the Blind,** Shiv Mandir Marg, Lajpat Nagar, New Delhi 110024; **Rashtriya Virja Nand Andh Kanya Vidyalaya,** New Rajinder Nagar, Shankar Rd., New Delhi 110060; **Training & Rehabilitation Centre for the Blind,** C-20, Model Town, Delhi 110009; **Vocational Rehabilitation Centre for the Physically Handicapped,** C/o I.T.I. Campus, Pusa, New Delhi 110012.

GUJARAT

Adult Training Centre for the Blind, Near ATIRA, Vastrapur Rd., Ahmedabad 380015; **Ambaben Maganlal Andhjanshala,** Athwa Lines, Surat 395001; **Andh Abhudaya Mandal,** Pushpa Kunj, Ghoga Gate, Bhavnagar 364001; **Andh Kalyan Kendra,** C/o K. J. Gandhi, 20, Navrup Colony, Near Shantinagar, Ahmedabad 380013; **Andh Kanya Prakash Grih** (Light House for Blind Girls), Memnagar, Navrangpura, Ahmedabad 380009; **Andh Sarvodaya Mandal,** Dhebar Rd., Rajkot 360002; **Andhjan Madhyamik Shala,** Keshavnagar, Sabarmati, Ahmedabad 380005; **Andhjan Pushthakalaya,** C/o Kanjibhai Jamnadas Popat, Anand Bhuvan, Uganda Rd., Porbander 360575; **Baroda Asscn. for the Blind,** Mahajan Lane, Raopura, Vadodara 390001; **Blind Men's Asscn.,** Near ATIRA, Vastrapur Rd., Ahmedabad 380015; **Blind Men's Welfare Asscn.,** Thakarshi Tanti Bldg., 5, Manohar Plot, Rajkot 360002; **Blind Physiotherapist Asscn.,** Physiotherapy Clinic, Opp. Jagannath Mandir, Rajkot 360001; **Blind Welfare Asscn.,** Bhuj, Kutch 370001; **Blind Welfare Council,** 50-B, Middle Class Society, Fatehgunj, Vadodara 390002; **Govt. Blind School,** Sadar Camp, Bhuj 370001; **Govt. School for the Blind,** Madan Zampa Rd., Vadodara 390002; **Gujarat Blind Relief & Health Asscn.,** P.O. Bochasan 388140, Kheda Dist.; **Gujarat Rajya Nayanjyot Raksha Samiti,** Opp. R. C. High School, Dr. Tankaria Rd., Ahmedabad 380001; **Jyoti Trust,** Vadnagar, Mehsana Dt. 384355; **Krishnakumarsinhji School & Home for the Blind,** College Rd., Takhteshwar Plot, Bhavnagar 364001; **M. P. Shah Govt. School for the Blind,** Kalyan Gram, Mahatma Gandhi Rd., Junagadh 362001; **M. T. Doshi Andh Vidyalaya,** Near Kasturba Society, Surendranagar 363001; **Mohanbahen Bhavanilal Jain Andh Jan Vidyalaya,** Ratanlal Bhawan, Baharpura Padav, Dohad Dist., Panchmahal 389151; **National Asscn. for the Blind** (Gujarat State Branch), Near ATIRA, Vastrapur Rd., Ahmedabad 380015; **National Asscn. for the Blind** (Jamnagar District Branch), C/o Andhjan Vividhlaxi Talim Kendra, Aerodrome Road, Jamnagar 361006; **National Asscn. for the Blind** (Junagadh District Branch), 51, Meghani Nagar, Junagadh; **National Asscn. for the Blind** (Rajkot District Branch), Opp. Kanta Street, Vicas Gruh, 1, Bhaktinagar Society, Road No. 1, Rajkot 2; **Pragna Chakshu Andh Vidya Mandir,** Mangrol, Sorath; **School for the Blind,** Ashram Rd., Navrangpura, Ahmedabad 380009; **School for the Blind,** Visavdar, Junagadh Dist. 362130; **School for the Blind, Deaf & Dumb,** Opp. State Bank of Saurashtra, Bhavnagar 364001; **Sheltered Workshop for the Blind,** Jamnagar 361001; **Sheth Tribhovandas Bhimji Zaveri Blindmen's Rehabilitation Centre,** Uvarsad, Gandhinagar Dist.; **Shri Bharatiya Pragna Chaksu Gurukul,** Vagheshwari Plot, Porbandar 360575; **Shrimati M. K. Mehta School for the Blind,** Tale Baug, Palanpur, Sabarkantha Dist. 385001; **Shri V. D. Parekh Andh Mahila Vikas Grih,** Near Swaminarayan Gurukul, Dhebar Rd., Rajkot 360002; **Society for the Preservation of Eye-sight**, Virnagar 360060; **Tata Agricultural & Rural Training Centre for the Blind**, Phansa 396140.

HARYANA

Adarsh Neterheen Vidyalaya, Charkhi Dadri, Mohindergarh Dist. 123306; **Andh Kanya Pathshala**, Multani Chowk, Hissar 125001; **Blind Relief Section**, Dist. Red Cross Society, Hissar 125001; **Blind Welfare Society**, Opp. 2A/71, N.I.T., Faridabad 122001; **Govt. Instt. for the Blind**, Industrial Area, Panipat 132103; **National Asscn. for the Blind** (Haryana State Branch), 206-208, Nehru Ground, N.I.T., Faridabad; **Pragatisheel Navyuvak Netraviheen Kalyankari Sangh**, Shukla House, Hodal 121106; **S.D. Instt. for the Blind**, Ambala Cantt. 133001; **Training Centre for the Adult Blind**, Sonepat 131001.

JAMMU & KASHMIR

Abhedananda Home for Blind and Handicapped, Modern School for Integrated Educ., Silk Factory Rd., Srinagar 190001; **Akhil Bharatiya Netrahin Sangh**, Ved Mandir, Jammu 180001; **Blind Welfare Centre**, Sopore, Kashmir 193201; **Residential School for the Blind**, Ved Mandir (Town), Jammu 180001.

KARNATAKA

Belgaum Dist. Asscn. for the Blind, Kamal Kutir, 170, Belgaum Cantt. 590001; **Bharatiya Grameena Mahila Sangh** (Karnataka State Branch), Vibhutipura, H.A.L., Bangalore 560037; **Blind Relief Asscn.**, Bijapur 586101; **Divine Light School for the Blind**, Whitefield, Bangalore 562136; **Govt. School for the Blind**, Behind Alwan-g-sethi, Gulbarga 585101; **Govt. School for the Blind**, Hubli 580024; **Govt. School for Deaf & Blind Boys**, Mysore 570001; **Gramabharati Sikshana Samiti**, Shigli, Dharwar, Dist. 580001; **Institute of Ophthalmology**, Minto Ophthalmic Hospital, Bangalore 560001; **Jagadguru Sri Shrivaratheswara Maha Vidya Peetha**, Ramanuja Rd., Mysore 570004; **Karnataka Welfare Asscn. for the Blind**, Kamala Mansion, 143, Infantry Rd., Bangalore 560001; **Mahila Vidya Peetha**, Hubli 580021; **Mysore Rajya Netra Rakshana Sahayake Samiti**, Kusbad Galli, Hubli 580020; **National Asscn. for the Blind** (Karnataka Branch), 590, Indira Nagar Ist Stage, Bangalore 560038; **Shree Ramana Maharishi Academy for the Blind**, 511, Garutman Park, East-End Rd., Bangalore 562104; **Shri Ramakrishna Work-House for the Blind**, 18, 1st Block East, Jayanagar, Bangalore 560011.

KERALA

Asscn. for Welfare of the Handicapped, Sangeeth Bldgs., R.S. Rd., P.B. No. 59, Calicut 673001; **Blindmen Samithi**, Cannanore 670002; **Educl. Tech. Instt. for the Blind**, Nampiyankavu, P.O. Madayikonam 680712; **Govt. School for the Blind**, Vidyanagar, Kasargod 670121; **Govt. School for the Blind**, P. O. Olesha, Kottayam 686001; **Govt. School for the Blind, Deaf & Dumb**, Trivandrum 695004; **Kerala Blind Welfare Asscn.**, Mandakapallipuram. Angadipuram 679321; **Kerala Federation of the Blind**, Trivandrum 695017; **Kerala School for the Blind**, Kerala Deaf & Dumb Welfare Asscn., Tiruvalla 689101; **Light to the Blind**, Christu Giri, Srinivasapuram 695145; **National Asscn. for the Blind** (Kerala State Branch), 3, Prasantha Hill, Prasantha Nagar Rd., Uloor, Trivandrum 695011; **School for the Blind**, P.O. Thottumugham, Alwaye 683105; **School for the Blind**, Kunnamkulam 680503; **School for the Blind, Deaf and Dumb**, Assisi Mount Neerpara, Vadakara, P.O. Thalayolaparamba 686605.

MADHYA PRADESH

Blind, Deaf, Mute Children's Home, Near Medical Coll., Bheda Ghat Rd., Village Kogwa, P.O. Tewar, Jabalpur 482001; **Blind Relief Asscn.**, 73–13-14 South, T.T. Nagar, Bhopal 462001; **Deaf, Dumb and Blind School**, Bada Rawla, Opp. Gita Mandir, Indore 452004; **Govt. Blind, Deaf and Dumb School**, Keshar Bungalow, Parsi Bazar, Bhopal 462001; **Govt. Blind, Deaf and Dumb School**, Harsh Bhawan, Juniline Ward, Bilaspur 495001; **Govt. Home for Deaf, Dumb and Blind Children**, 102, Cherital, Jabalpur 482001; **Govt. School for Blind Children**, Kabala Park, Vivekanand Ashram, P.O. Raipur 492001; **Madhav Andh Ashram**, Jhansi Rd., Lashkar, Gwalior 474001; **Mahesh Drishtiheen Kalyan Sangh**, 170, Netaji Subhas Marg, Indore 452001; **M.P. Dhrishtiheen Kalyan Sangh**, Devas Branch, Yamuna Niwas, Bada Bazaar, Devas; **M.P. Welfare Asscn. for the Blind**, 84, Veer Savarkar Market, Indore 452004; **M.P. Welfare Asscn. for the Blind** (Khandwa Branch), C/o Shri Krishna Rao Mandloi, Hariganj, Khandwa 450001; **M.P. Welfare Asscn. for the Blind** (Ujjain Branch), C/o Apangashram Mahankal Rd., Ujjain 456001; **National Asscn. for the Blind** (M.P. State Branch), 33 B/D Industrial Estate, Fort Area, P. O. Bag No. 1, Indore 452002; **School & Rehabilitation Centre for the Blind**, C/o Evangelical Lutheran Church in M.P., Padhar Hospital, P.O. Padhar. Betul 460001; **Vocational Rehabilitation Centre for the Physically Handicapped**, Corpn. New Market, Opp. Nav Bharat Press, Napier Town, Jabalpur 482001.

MAHARASHTRA

Andh Kalyan Mandir, Pimpri-Bhosari Rd., Pimpri 411018; **Andh Vidya Mandir**, At & P.O. Wardha Maneri, Taluka Arvi, Wardha 442201; **Bassein Blind Relief Asscn.**, Eye Hospital, Azad Rd., Bassein 401201; **Blind Men's Asscn.**, B1/B3, Matru Ashish, L. Jagmohandas Marg, Bombay 400036; **Blind Men's Industrial Cooperative Producers' Society Ltd.**, 22/686, M.H.B. Tagore Nagar, Vikhroli, Bombay 400083; **Blind Men's Working Hostel**, Salvation Army, 84, Sankli St., Byculla, Bombay 400008; **Blind Progressive Society**, 12, Devkaran Bhavan, Zaver Rd., Mulund, Bombay 400080; **Blind Relief Assocn.**, Botawala Bldg., 475-83, Kalbadevi Rd., Bombay 400002; **Blind Relief Asscn.**, South Ambazari Rd., Nagpur 440003; **Blind Welfare Asscn.**, Housing Colony, Amravati 444601; **Dadar School for the Blind**, 160, Dadasaheb Phalke Rd., Dadar, Bombay 400014; **Govt. School for the Blind**, Bhandara 441904; **Govt. School for the Blind**, Latur, Osmanabad 413501; **Govt. School for the Blind**, Malvan 416606; **Govt. School for the Blind**, Mandvi, Mangaon, Kolaba Dist.; **Govt. School for the Blind**, Manji Rajuji Sanatorium, Nasik 422001; **Haji Allarakhia Sonawala Andh & Anath Stree Ashram**, 37, Gilbert Hill, Dadabhai Rd., Andheri, Bombay 400058; **Happy Home & School for the Blind**, Dr. Annie Besant Rd., Worli, Bombay 400018; **Industrial Home for Blind Women**, T.P.S. No. 6, Plot No. 35, Near Lallubhai Park, Andheri (West), Bombay 400057; **Krishanlal Jalan Charity Trust**, 339, Kalbadevi Rd., Bombay 400002; **Maharogi Seva Samiti**, Warora, P.O. Anandvan, Chandrapur Dist.; **M.N. Banajee Industrial Home for the Blind**, 280, S. V. Road, Jogeshwari, Bombay 400060; **Nab-Kaka Patil Centre for the Blind**, 18, Pandu Patil Lane, Andheri (West), Bombay 400058; **National Asscn. for the Blind**, Jehangir Wadia Bldg., 51, M. Gandhi Rd., Bombay 400023. **National Asscn. of the Instructors of the Blind**, C/o Mr. K. N. K. Jussawalla, C-202, Poonam Apartments, Worli, Bombay 400018; **National Christian Council**, Nagpur 440001; **NAB-Lion Home for Aging Blind**, "Sudder-Baug", Old Khandala Rd., Near Uttarapath Ashram, Mawal, Khandala 410301; **NAB-Mata Lachmi Nursery for the Blind**, 218, East Sion Rd., Sion, Bombay 400022; **N.S.D. Industrial Home for the Blind**, 52, B.D.D. Chawls, Worli, Bombay 400018; **National Asscn. for the Blind** (Dept. of Rehabilitation C/o Workshop for the Blind, Dr. Annie Besant Road, Prabhadevi, Bombay 400025; **National Christian Council**, Nagpur 440001; **National Society for Equal Opportunities for the Handicapped**, Chatrapati Shivaji Maharaj Market, Palton Rd., Bombay 400001; **Poona Blind Men's Asscn.**, 82, Rasta Peth, Pune 411002; **Poona School & Home for the Blind**, Koregaon Park, Pune 411001; **Pragati Andh Vidyalaya**, 18, Narayan Niwas, Ghantali Colony, Naupada, Thane 400602; **Ramabai Mukti Mission**, Khedgaon, Pune Dist.; **Rashtriya Shahakari Shikshan Prasarak Mandal Ltd.**, School for the Blind, Chalisgaon 424101; **Royal Commonwealth Society for the Blind** (South Asia Regional Office), B-1/B-3 Matru Ashish, 454, Napean Sea Rd., Bombay 400036; **Satara Andhjan Mandal**, 98, Sadashiv Peth, Satara 415001; **School for the Blind**, C/o Rashtriya Sahakari Shiksan Prasarak Mandal Ltd Chalisgaon, Jalgaon 425001; **School for the Blind**, Deopur, Dhule 424001; **School for the Blind**, Bodadi (Both Rd.), Kinwat, Nanded Dist. 431601; **Shrama Sadhana Trust**, 159, Shani Peth, Jalgaon 425001; **Shri Gadge Maharaj Andh Pangle Sadavarta**, Murtizapur.

Dist. Akola 444001; **Swami Vivekanand Medical Mission,** Sanjivani Hospital, Virar 401303; **Technical Training Institute,** The Poona Blind Men's Asscn., 109, Ramtekdi Hadapsar, Pune 411013; **Victoria Memorial High School for the Blind,** 73, Tardeo Rd., Bombay 400034; **Vocational Rehabilitation Centre for the Physically Handicapped,** C.T.I. Campus, Sion Trombay Rd., Kurla, Bombay 400070; **Workshop for the Blind,** Dr. Annie Besant Rd., Prabhadevi, Bombay 400025.

MANIPUR

Ideal Blind School, Post Box No. 24, Imphal 795001.

MIZORAM

Salvation Army School for the Blind, Kolasib 796101.

ORISSA

Red Cross School for the Blind, Near City Hospital, P.O. Berhampur 760001; **Orissa State Council for Child Welfare,** Raj Bhuvan, Bhubaneshwar 751001; **School for the Blind, Deaf & Dumb** (Orissa State Council for Child Welfare), Burla, Sambalpur 768001.

PONDICHERRY

Blind Relief Asscn., 17, Gang Shala, Pondicherry 605001; **Government School for the Blind,** Pillaicavadi, Kalapet P.O., Pondicherrv 605104; **School for Blind Children,** Pondicherry.

PUNJAB

Blind School, 541, Model Town, Jullunder 144001; **Home for the Blind,** C/o District Council for the Welfare of the Handicapped, 1, Maheshchand Library Rd., Ferozepur City 152001; **Govt. Instt. for the Blind,** Kalsion Ashram Bldg., Gill Rd., Ludhiana 141003; **Home for the Blind and the Disabled,** Opp. Bus Stand, Malerkotla 148023; **Institution for the Blind** (Andh Vidyalaya), Outside Lohgarh Gate, Amritsar 143001; **School for the Blind,** Amar Ashram, The Lower Mall, Patiala 147001; **Smt. Bhagwati Devi Memorial Society for Blind,** 6-E, Mukand Lal Rd., Civil Lines, Ludhiana 141001; **Surma Singh Ashram,** G. T. Road, Amritsar 143001; **Vocational Rehabilitation Centre for Physically Handicapped,** C.T.I. Campus, Gill Rd., Ludhiana 141003; **Vocational Rehabilitation Training Centre for Blind and Handicapped,** Gopal Lodge, Issa Nagari, Ludhiana 141001.

RAJASTHAN

Government School for the Blind, Adarshnagar, Ajmer 305001; **Government Residential School for the Blind Boys,** Bikaner 334001; **Netraheen Seva Sangh,** 95, Adarshnagar, Ajmer 305001; **Pheroze & Noshir Merwanji Rehabilitation Centre for the Blind,** "East View", Mount Abu 307501; **Pragya Chakshu Sikshan Shansthan** (Andh Vidyalaya), Udaipur 313001; **Rajasthan Netrahin Kalyan Sangh,** 1016, Nataniyon Ki Gali, Tripolia Bazar, Jaipur 303003.

TAMIL NADU

Bishop Diehl Rehabilitation Home for the Blind, Tranquebar House Compound, Tiruchirapalli 620001; **Blind Relief Association,** Fort Round Rd., Vellore 632001; **Blind Society,** Jamadhagni, 10, Telegraph Office Lane, Ootacamund 643001; **Christian Foundation for the Blind,** 9, Trust Square, Ramalingapuram, Madras 600012; **Christoffel Blinden Mission,** 1, Highways Colony, Tiruchirapalli 620020; **C. S. I. School for the Blind,** Irenepuram 629171; **Government School for the Blind,** Poonamallee; **Government School for the Blind,** Sivaganga, Ramanathapuram 623501; **Government School for the Blind,** Shivpet, Salem 636002; **Government School for the Blind,** Cuddalore 607001; **Govt. School for the Blind,** Sir T. Desikachariar Bldgs., Puthur, Tiruchirapalli 620017; **Govt. School for the Blind,** Pudukkottai 622001; **Govt. School for Blind,** Garden Rd., Ootacamund 643001; **Home for the Blind Women,** No. 36, Chinna Mettupalayam, 2nd St., Madras 600019; **Indian Evangelical Lutheran Church School for the Blind,** I.E.L.C Compound, Burgur, Dharmapuri 636701; **Light Engg. Project for the Adult Blind,** C-22, Industrial Estate, Guindy 600032; **National Asscn. for the Blind** (Tamil Nadu State Branch), 4, Hunters Rd., Vepery 600007; **ORBIT (ORGANISATION FOR REHABILITATION OF THE BLIND IN TIRUCHI),** ORBIT Workshop, Rajaji Sanatorium, Racquet Court Lane, Tiruchirapalli 620001; **Rehabilitation Centre for the Blind Women,** 6/26, Crawford Colony, Tiruchirapalli 620012; **School for the Blind,** Palayamkottai 627002; **School for the Blind,** Swedish Mission Hospital, Tirupputtur 635601; **School for the Blind & Deaf,** Cathedral Post, G. N. Cherry St., Madras 600006; **Sheltered Workshop & Training Centre for Blind Women,** 22, S. Mada St., Tiruvanmiyur 600041; **Siloam School & Home for the Blind,** 6, Gandhinagar St., Subramaniapuram 620020; **Society for Aiding the Handicapped,** Kamakoti, 36, VI Main Rd., R. A. Puram 600028; **Society for the Welfare of the Handicapped** (Blind Wing), 16, Besant Avenue, Adyar, Madras 600020; **St. Louis Instt. for the Deaf & Blind,** Canal Bank Rd., Madras 600020; **Student Service for the Blind,** C/o Madras Christian College, Tambaram 600045; **Tamil Nadu Blind Welfare Asscn.,** Vellavadu Post, Madras 602103; **Tamil Nadu Asscn. of the Blind,** 225, V. O. C. Nagar, Madras 600081; **Tamil Nadu Rehabilitation Centre for the Blind,** Madurai Medical College, Madurai 625020; **Telc Home & School for the Blind,** Podanur, Moses Gnanabaranam Eye Hospital, 55, Big Bazaar St., Coimbatore 641001.

TRIPURA

Instt. for the Visually Handicapped, Narasingarh, P. O. Bimangarh, Agartala 799015.

UTTAR PRADESH

Agra Andh Vidyalay, 1/196, Beg Farjana Rd., Civil Lines, Agra 282002; **Ahmedi School for the Blind,** Civil Lines, Aligarh 202001; **Andh Vidyalay,** Hariharnath Shastri Smarak Bhavan, Kanpur 208001; **Bundelkhand Blind Welfare Asscn.,** Banda 210001; **Blind School,** Bhadaini, Varanasi 221001; **Blind Welfare Society** (Netraheen Sahayak Sangh), G/19, Arvind Colony, Varanasi 221005; **Govt. School for the Blind,** Banda 210001; **Govt. School for the Blind,** Gorakhpur 273001; **Govt. School for the Blind,** Pirpur House, Butler Rd., Lucknow 226001; **Hanuman Prasad Potdar Andh Vidyalay,** Durgakund, Varanasi 221005; **Indumati Andh Sishu Sharanalaya,** P.O. Tehri 249001; **Jeevan Jyoti School for the Blind,** S-2/215, Bhojubir, Varanasi 221002; **Kashi Seva Samiti,** Kabir Chaura, Varanasi 221001; **Kunwarlal Singh Industrial School for the Blind,** Kacheri Rd., Mainpuri 205001; **National Asscn. for the Blind,** Civil Lines, Aligarh 202001; **National Institute for the Visually Handicapped,** Dept. of Social Welfare, Govt. of India, Rajpur Rd., Dehra Dun; **Netraviheen Kalyan Sangh,** 9-C, Civil Lines, Gorakhpur 273001; **Netra-Vihin Hitkari Sangh,** 58/4, Birhana Rd., Kanpur 208001; **Saraswati Badhit Kalyan Kendra,** Sitapur 261001; **School for the Blind, Deaf & Dumb,** 110/241, Nehru Nagar, Kanpur 208001; **School & Home for the Blind,** Naini, Allahabad 211001; **School for the Blind Attached to the Eye Hospital,** Sitapur 261001; **School & Home for the Blind,** Nainital 263001; **Sharp Memorial School for the Blind,** Rajpur Rd., Dehra Dun 248001; **Shree Ajara Nand Andh Vidyalaya,** Sapt Sarovar, Hardwar, Saharanpur 244401; **Sri Adimath School for the Blind,** Dhampara, Arrah.

WEST BENGAL

Blind Boys' Academy, Ramakrishna Mission Ashram, P. O. Narendrapur 743508; **Blind Persons Asscn.,** Bapujinagar Society, Jadavpur, Calcutta 700032; **Calcutta Blind School,** Behala, Calcutta 700034; **Govt. School for the Blind,** Directorate of Social Welfare, Nilkuthi (Negh Mandir), Cooch Behar 736101; **Lighthouse for the Blind,** 174, S.P. Mookherjee Rd., Calcutta 700026; **Mary Scott Home for the Blind,** Kalimpong 734301; **National Asscn. for the Blind,** West Bengal State Branch, C/o Union Paper & Board Mills Ltd., 18, Netaji Subhas Rd., Calcutta 700001; **School for the Blind,** Swedish Mission, Cooch Behar 736001; **Welfare Society for the Blind,** 6, Old Post Office St., Calcutta 700001.

INSTITUTIONS FOR THE DEAF AND DUMB

ANDHRA PRADESH

A. P. Assoc. of the Deaf, Room No. 22, Block No. III, Bahadur Stadium, Hyderabad 500001; **Aram Ghar,** Indian Council of Social Welfare, Katedhan, Hyderabad 500006; **Govt. High School for the Deaf and Dumb,** Kakinada 533001; **Govt. School for the Blind & Deaf,** Malakpet Jubilee P. O., Hyderabad 500036; **School for Partially Deaf Children,** Ameerpet, Hyderabad; **Training Centre for the Adult Deaf,** Malakpet, Hyderabad 500036; **Vocational Rehabilitation Centre for Phisically Handicapped,** C.T.I. Campus, Vidyanagar, Hyderabad 500007.

ASSAM

Assam Deaf & Dumb Assoc., Ambari, Gauhati 781001; **Govt. Bhawari Debi Sarawgi Deaf & Dumb School,** Kahilipara, Gauhati 781005.

BIHAR

Arrah Mook Badhir Vidyalaya, Mahadeva Rd., Arrah 802301; **Bihar Deaf & Dumb Assoc.,** 92, A. Kumar Rd., Rajendra Nagar, Patna 800016; **Bihar Deaf & Dumb School,** Bari Rd., Patna 800001; **Shree Kameshwari Priya Poor Home's Deaf & Dumb School,** Darbhanga 846004; **Kshitish Deaf & Dumb School,** Niwaranpur, P. O. Hinoo, Ranchi Dist.; **Patna Deaf & Dumb School,** Mahendru Rd., Patna 800001; **Singhbhum Dist. Assoc. of the Deaf,** Town Office, Jamshedpur; **Society for the Deaf of Chotanagpur,** Niwaranpur, P.O. Hinoo, Ranchi Dist.; **Vijay Vihar (Home & School for Deaf Children),** Jamshedpur 831001.

DELHI

All India Federation of the Deaf, 18, North End Complex, R. K. Ashram Rd., New Delhi 110001; **All India Sports Council of the Deaf,** 8, Northend Complex, R. K. Ashram Marg, New Delhi 110001; **Badhir Co-op. Industrial (Prod.) Soc.,** 15, UA-Jawahar Nagar, Delhi 110007; **Balwantrai Mehta Vidya Higher Secondary School,** Lajpat Bhawan, Lajpat Nagar, New Delhi 110024; **Deaf & Dumb Co-op. Industrial Society,** 65, Kamla Market, Asaf Ali Rd., New Delhi 110002; **Deaf & Dumb Ladies Employment Centre,** 321, Vinay Marg, Chanakya Puri, New Delhi 110021; **Delhi Association of the Deaf,** 92, Kamla Market, New Delhi 110002; **Delhi Foundation of Deaf Women,** 28, Dr. Rajendra Prasad Rd., New Delhi 110001; **Govt. Lady Noyce School for the Deaf,** 2, Feroze Shah Kotla, New Delhi 110002; **Handloom Weaving Centre for Deaf,** 8073, Bara Hindu Rd., Delhi; **Multi-purpose Training Centre for Deaf,** 9, North End Complex, R. K. Ashram Rd., New Delhi 110001; **Photography Institute for the Deaf,** 9, North End Complex, R. K. Ashram Rd., New Delhi 110001; **Printing Press Institute for the Deaf,** Jhandewalan Extn., New Delhi 110055; **School for the Deaf,** D-137, Anand Niketan, New Delhi 110021; **Tailoring Centre for Deaf,** 85, Kamla Market, New Delhi 110002; **Tailoring Training Centre for Deaf Girls,** 92, Kamla Market, New Delhi 110002; **Vocational Rehabilitation Centre for Physically Handicapped,** I.T.T. Campus, Pusa, New Delhi 110012.

GUJARAT

Ahmedabad Behara-Munga Mitra Mandal, C/o Shri R. C. Shah, 7, Bharati Society, Ellis Bridge, Ahmedabad 380001; **Day School for Deaf & Dumb,** Surat; **Deaf & Dumb School,** P. O. Kachholi, Via Bulsar 396370; **Deaf & Dumb School,** Madan Zampa Rd., Vadodara 390001; **Govt. Deaf & Dumb School,** Opp. Hathikhana, M. Gandhi Rd., Junagadh 362001; **Govt. School for Deaf, Mutes & Blind,** Matiya Bhavan, Gondal Rd., Rajkot; **Gujarat Assoc. of the Deaf,** Amrit Shastri Bungalow, New Bank of India Soc. Scheme No. 2, Ahmedabad 380009; **Gyan Jyoti,** Janmiyapura, Gandhinagar; **Kalpana Balamandir and Shishu Griha for Deaf & Blind,** Ashram Rd., Navrangpura, Ahmedabad 380009; **Khimchand L. Deaf & Dumb School,** Nagar Pole, Vora Bazar, Bhavnagar 364001; **Muk-Badhir Mitra Mandal,** Desai Sheri, Ghadiali Pole, Vadodara 390001; **Muk Vidyalaya,** (School for Deaf & Dumb), Kumarshala, Shiya Baug, Vadodara 390001; **Municipal School for Deaf & Dumb,** Ambaji Rd., Hawadia Chakala Gopipura, Mughsura, Surat; **School for Blind, Deaf, Dumb & Crippled Children,** Mandvi-Kutch; **School for the Deaf,** Pilajiganj, Mehsana 384001; **School for Deaf Mutes,** Ashram Rd., Navarangpura, Ahmedabad 380009; **Smt. K. K. School for the Deaf,** Pilajiganj, Mehsana 384001; **Shri & Smt. Chh. Sha Virani School for the Deaf,** Dhebar Rd., Rajkot 360002; **Shri S. P. K. Kothari Multi-purpose School for the Deaf,** P. O. Vijalpur, via Navasari, Bulsar Dist.; **Training Centre for Adult Deaf,** Ashram Rd., Ahmedabad 380009.

HARYANA

Haryana Welfare Centre for the Deaf & Dumb, Mehrauli Rd., Gurgaon 122001.

JAMMU & KASHMIR

Abhedanand Home for Blind, Deaf, Dumb and Handicapped, Ram Bagh, Silk Factory Rd., Srinagar 190001.

KARNATAKA

Assoc. of the Deaf, Post Box No. 4630, Benson Town P. O., Bangalore 560001; **Deaf & Dumb School,** Notified Area, Dandeli, North Kanara Dist.; **Govt. School for Deaf Boys & Girls,** Jewargi Rd., Gulbarga 585102; **Mysore Deaf & Dumb Assoc.,** 'B' Hostel, Room No. 22, West Coast Paper Mills Ltd., Bangur Nagar, Dandeli; **School for the Deaf & Blind Boys,** Tilak Rd., Mysore 570001; **Shella Kothavala Instt. for the Deaf,** Rustam Bagh, H.A.L. Rd., Bangalore 560017.

KERALA

All-Kerala Assoc. of the Deaf, Kunnamkulam, Trichur 680503; **Deaf & Dumb School,** Trivandrum 695001; **Dept. of Physical Medicine and Rehabilitation,** Medical College, Trivandrum 695011; **Govt. School for the Blind, Deaf & Dumb,** Bhaktivilas, Trivandrum 695001; **Govt. School for the Blind, Deaf & Dumb,** Trichur Rd., Kannamkulam, Trichur Dist.; **Govt. School for the Deaf Mutes,** Kanniyampuram, P.O. Ottapalam 679101; **Rahmania School for the Handicapped,** Calicut 673001; **School for Deaf Children,** Tiruvalla 689101; **School for Deaf & Mutes,** Chunangad 679511; **School for the Deaf and Blind,** Asisi Mount, Vadakara, Kottayam 686001; **School for the Blind & Deaf,** Thothumukham, Alwaye 863105; **Vikalanga Sevaka Co-op. Society,** Pattom, Trivandrum; **Vocational Training Centre for the Physically Handicapped,** Kunnukuzhi, Trivandrum 695001; **Vocational Training Centre for the Physically Handicapped,** R. C. Rd., Calicut 673001.

MADHYA PRADESH

Blind, Deaf Mute Children's Home, Bheda Ghat Rd., Kogwa, P.O. Tewar, Jabalpur 482001; **Deaf & Dumb, Blind School,** Bada Rawala, Juni, Indore; **Deaf & Dumb Institute,** Krishnapura, Indore 452001;**Deaf & Dumb School,** Bilaspur 495001; **Govt. Deaf and Blind School,** Quesher Bungalow, Parsi Bazar, Bhopal; **Govt. Blind, Deaf & Mute School,** Hars Bhavan, Juvenile Ward, Bilaspur 495001; **Home for the Orthopaedically Handicapped Children,** 3/4, Raja Talab, Raipur; **M. P. Deaf & Dumb Welfare Society,** Jiwajiganj, Laskar, Gwalior 474001; **Saurashtra Deaf & Dumb School,** Bhopal 462001; **School for Deaf Mute Children,** Shadol 484001; **School for Blind & Deaf Mutes,** 23, Martand Chowk, Indore 452001; **School for the Deaf & Blind,** 102, Cherital, Jabalpur 482001; **School for Deaf Mute Children,** Chandrabadnika Naka, Near Raja Gajra Medical College, Gwalior 474001; **Shree Madhav Ashram,** Rani Jhansi Rd., Gwalior; **State Home for Adult Mute Deaf Persons,** Morai Mohalla, H. No. 10, Purdeshipura, Indore 452003; **State Home for Adult Deaf & Dumb,** Chhawani, House No. 16, Indore 452001; **Welfare Assoc. for the Deaf,** 166, Subhas Marg, Indore 452001; **Yewa Mook Badhir Sanskritik Sangathan,** Bada Rowla (Instt.), Indore 452004.

MAHARASHTRA

Bharat Muk Vidyalaya, Gandhi Bagh, Nagpur 440002; **Bhagini Seva Mandir Kumarika Stree Mandal,** Sarojini Rd., Vile Parle

(West), Bombay 400056; **Bombay Deaf Centre,** C/o. St. Stanislaus High School, Bandra, Bombay 400050; **Bombay Deaf & Dumb Institute,** Kakadwadi, Girgaon, Bombay 400004; **Bombay Deaf & Dumb Society,** Govind Bldg., Shamaldas Gandhi Marg, Bombay 400001; **Bombay Institute for the Deaf Mutes,** 33, Nesbit Rd., Mazgaon, Bombay 400010; **Central Society for the Education of the Deaf,** 94, Nepean Sea Rd., Bombay 400006; **Cheshire Homes India,** Bethlehem House, Mahakali Rd., Andheri (East), Bombay 400093; **Deaf & Dumb School,** Station Rd., Thane 400601; **Deaf, Dumb & Blind Industrial Instt.,** North Ambazari Rd., Shankarnagar, Near Saraswati Vidyalaya, Nagpur; **Dumb-Deaf School,** Navi Peth, Solapur 413001; **Education Audiology & Research Society for the Deaf Children,** 67, Nepean Sea Rd., Bombay 400006; **Govt. School for the Deaf,** Gondhalpada, Post Veshvi, Alibag 402201; **Govt. School for the Deaf,** Jathar Peth, Akola 444001; **Govt. School for the Deaf,** Nagsem Housing Society, Jinsi, Aurangabad 431001; **Govt. Training Centre for Adult Deaf,** Shanti Bhavan, Ulhasnagar Camp, Thane; **Happy House Play Way Learning Centre,** St. Peter's Rd., Bandra, Bombay 400050; **Indian Deaf Society,** C/o Bharda New High School, Waudby Rd., Bombay 400001; **Indian National Society for the Deaf,** 15, Dadyseth Rd., Chowpatty, Bombay 400007; **Institute for Handicapped in Hearing,** Pandharpur Rd., Miraj 416410; **Maharashtra Deaf & Dumb Welfare Assoc.,** 425, Narain Peth, Pune 411002; **Muk Badhir Vidyalaya,** C/o Lions Club, Malegaon, Nasik Dist.; **N.V. Parasarak Mandala,** Dumb/Deaf School, 1520, Shivaji Peth (A Ward), Kolhapur; **Prof. Date's School for Deaf Mutes,** Thakurdwar, Bombay 400002; **Radha Kisan Furma Deaf-Dumb School** (Rotary North), Damani Nagar, Solapur 413002; **School for Deaf & Dumb,** Vijay Shikshan Sanstha, 172, Naigaum Cross Rd., Dadar, Bombay 400014; **School for the Deaf,** 18, Motlibai St., Agripada, Bombay 400011; **Stephen's High School for the Deaf,** 15, Dadyseth Rd., Bombay 400007; **Surhid Mandal for Deaf,** 492, Narayan Peth, Nagarkar Wada, Pune 411030; **Vacha Prasikshan Vidyalaya for Deaf Children,** New Educ. Society, New Mahadwar Rd., Kolhapur 416001; **Vikas Vidyalaya for Deaf Children,** A.S. Mehta Apartments, Bhawani Shankar Rd., Dadar, Bombay 400028; **Vjnay Kumar Ramniwas Ruia Muk Badhir Vidyalaya,** C/o Tilak College of Education, Tilak Rd., Pune 411030; **Vocational Rehabilitation Centre for Physically Handicapped.** C.T.I. Campus, Sion-Trombay Rd., Kurla, Bombay 400070.

MEGHALAYA

North East India Association of the Deaf, Shillong 793001.

ORISSA

All India Deaf & Dumb School, Bhubaneswar 751001; **Crafts Training Centre for the Deaf,** Plot No. 118, Shaheed Nagar, Bhubaneswar 751007; **Muk Badhir Vidya Bhavan,** Bhubaneswar 751001; **Red Cross School for Blind, Deaf & Dumb,** Bhubaneswar; **School for the Blind, Deaf & Dumb,** Bhubaneswar 751007.

PONDICHERRY

Govt. School for the Blind, Deaf & Dumb, Pillaichavady via Kottakuppam, Pondicherry 605104.

PUNJAB

Deaf & Dumb School, Amritsar 143001; **Deaf & Dumb Organisation,** E/R 127, Pucca Bagh Jullundur 144001; **Deaf & Dumb School,** Burton Park, G.T. Rd., Jullundur 144001; **School for the Deaf Children,** 20A, Shastri Nagar, Ludhiana 144002; **School for the Deaf & Dumb,** S. Kishan Singh Kamboj Hostel, Lower Mall, Patiala 147003.

RAJASTHAN

Badhir Vidyalaya, Anasagar, Circular Rd., Ajmer 305004; **Rajasthan Badhir Sabha,** 352, Raja Park, Jaipur 302001; **Rajasthan Deaf & Dumb School,** Ratangarh 331022; **Rehabilitation Cent[illegible] Handicapped Children,** J-14, Deepak Marg, Moti Doongri Rd., Adarsh Nagar, Jaipur 302004; **Seth Anandilal Podar Govt. Institute for Deaf & Dumb,** J. Nehru Rd., Jaipur 302004

TAMIL NADU

Anbu Nilayam (Cheshire Home), Covelong, Chingleput 603103; **Assoc. of Parents of Deaf Children,** Kamakoti, 35-A, Sixth Main Rd., R.A. Puram, Madras 600028; **C.S.I. School for the Deaf and Rehabilitation Centre for the Deaf,** C.S.I. Compound, Manamadamai, Ramnad Dist.; **C.S.I. School for the Deaf,** 148, Santhome High Rd., Madras 600004; **C.S.I. School for the Deaf,** Kottaram, Kanya Kumari Dist.; **Clarks School for the Deaf,** Kamakoti, 35/A, Sixth Main Rd., Raja Annamalaipuram, Madras 600028; **Coimbatore Deaf & Dumb Assoc.,** 153, Okkiliar St., Coimbatore 641001; **Deaf & Dumb School,** Ambasamudram 627401; **Deaf School,** Manamadurai, Ramanathapuram Dist.; **Florence Swainson School for the Deaf,** Palayamkottai 627002; **Govt. School for the Deaf,** 1, Shivaji Nagar, Thanjavur 613001; **Hearing & Speech Centre,** Christian Medical College Hospital, Vellore 632004; **I.E.L.C. School for the Deaf,** Ambur, North Arcot 635802; **Little Woodford** (School for Deaf Children), 114, Mowbray's Rd., Madras 600018; **Madras Assoc. of the Deaf,** 37, Santhome High Rd., Madras 600028; **Minakshi School for the Deaf,** Madurai 625001; **Municipal Deaf & Dumb School,** Karaikudi, Ramnad 623001; **Municipal Deaf & Dumb School,** Coimbatore 641002; **Municipal School for the Deaf,** Teynampet, Madras 600045; **School for the Deaf,** Cathedral P.O., Madras 600006; **Shanti Samarasa Deaf & Dumb School,** Kalyanipuram Silvasilam, Tirunelveli 627428; **St. Louis Institute for the Deaf & Blind,** Gandhinagar, Adyar, Madras 600020; **Tirunelveli After Care & Welfare Asscn. for the Deaf & Dumb,** Mildred Cottage, 17, Main Rd., Kulavanigarpuram, Palayamkottai 627002; **Training Centre for the Adult Deaf,** 37 Santhome High Rd., Madras 600028; **Y.M.C.A. School for the Deaf,** Y.M.C.A. Main Guard Square, Madurai 625001.

UTTAR PRADESH

Badhir Vidyalaya (Deaf & Dumb Instt.), Mohalla Kechcha Katra, Shahjahanpur 242001; **Bareilly Mook Badhir Sangh,** 256, Beharipur, Daryaiya Gali, Bareilly 243001; **Deaf & Dumb Assoc.,** C/o Shri Satya Prakash Jaindl, Oil Mills Owners, Chhota Bazar, Lalkurti, Meerut Cantt. 250001; **Deaf & Dumb School,** 221, West End Rd., Meerut Cantt. 281002; **Deaf & Dumb School,** Faizabad 224001; **Deaf & Dumb School** (Mukh Badhir Vidyalaya), Humayunpur, Gorakhpur 273001; **Deaf & Dumb School,** Laxmi Gate, Jhansi 280041; **Deaf & Dumb School,** Sadar, Meerut 250001; **Deaf & Dumb School,** Pilibhit 262001; **Deaf & Dumb School,** D 47/196-97, Rampura, Varanasi 221001; **Doon Assoc. of the Deaf,** 16C, Kalidas Rd., Dehra Dun 248001; **Gorakhpur Badhir Sabha,** Gorakhpur 273001; **Govt. School for the Deaf & Dumb,** 27, Vijaynagar Colony, Agra 282004; **Govt. Deaf & Dumb School,** Civil Lines, Bareilly 243001; **Govt. Deaf & Dumb School,** Fategarh 209601; **Gunge Beheron Ka Vidyalaya,** 104-A/226, Ram Bagh, Kanpur 208001; **Kanpur Deaf & Dumb Assoc.,** C/o S.N. Puri, 49, Cantt., Kanpur 208005; **Mukh Badhir Vidyalaya,** Rai Bareli 229001; **Nanhi Dunya School for the Deaf,** 18, Kalidas Rd., Dehra Dun 248001; **School for the Deaf,** Sarni Gate, Aligarh 202001; **School for the Deaf,** Deaf & Dumb School Rd., Aish Bagh, Lucknow 226001; **Speech & Hearing Clinic,** Dept. of Paediatrics, S.M. Medical College, Agra; **U.P. Deaf & Dumb Institute,** No. 4, Malaviya Rd., George Town, Allahabad 211001; **U.P. Welfare Soc. of the Deaf,** 45-B, Free India Estate, Civil Lines, Kanpur 208001; **Varanasi Society for the Deaf,** 39, Sigra, Gandhi Nagar, Varanasi 221001; **Voluntary School for the Deaf & Dumb,** Puranimandi, Saharanpur 247001.

WEST BENGAL

All India Deaf Children Society, 'Belasree Bhawan', P-231, Nandan Nagar, Calcutta 700056; **All India Deaf Women's Assoc.,** P-355, Keyatala Rd., Calcutta 700029; **Bengal Deaf & Dumb Assoc.,** 41, B. Sadananda Rd., Calcutta 700026; **Bijaygarh Deaf & Dumb School,** P.O. Jadavpur University, Calcutta 700032; **Calcutta Deaf & Dumb School,** 293, A.P. Chandra Rd., Calcutta 700009; **Deaf & Dumb Institute,** Rajashi; **District Assoc. for the Deaf,** 26/2, Nepal Shah Lane, Howrah 711101; **Helen Keller Memorial Library, Society for the Deaf,** 125, A.J. Chandra Bose Rd., Calcutta 700014; **Hooghly School for the Deaf,** Abinash Mukhopadhya Rd., Keola, Hooghly

712103; **Ideal School for the Deaf,** 103, A.P. Chandra Rd., Calcutta 700014; **Jatiya Badhir Sammelan,** 18, W.C. Banerjee St., Calcutta 700006; **Jatiya Muk-Vedhir School,** Grey St., Calcutta 700006; **Maharani Nilima Prabha Institute for the Deaf & Dumb,** P.O. Khagra, Beharampur 742101; **Manbhum Muk-Badhir Bidyapith,** P.O. Munsif Danga, Purulia Dist.; **Mukavadhir Vidyamandir,** 269/19, Lal Tagore Rd., Calcutta 700036; **Nabajatak School for the Deaf,** Block P, Block No. 816, New Alipore 700053; **National Organisation for Training, Employment and Labour of the Deaf,** 60A, W.C. Banerjee St., Calcutta 700006; **Oral School for the Deaf Children,** 4B, Short St., Calcutta 700016; **Polytechnic for the Deaf Women in India,** 1, Jawaharlal Nehru Rd., Calcutta 700013; **Rehabilitation Centre,** Bon-Hooghly, B.T. Rd., Calcutta 700035; **Rehabilitation India,** 47/1A, Palm Avenue, Calcutta 700019; **Salvation Army School for the Deaf,** 9th Mile, Kalimpong 734301; **Society for the Deaf,** 125A, J.C. Bose Rd., Calcutta 700014; **School for Gifted Deaf Children,** Govt. Quarters, Block No. 28/6, 9, B.T. Rd., Calcutta 700056; **Speech Centre,** 67/M/7, Haran Banerjee Lane, Calcutta; **Sri Ramendra Nath Basak Vejoygarh Deaf & Dumb School,** Vejoygarh Byamagar, Calcutta 700032; **Suri Deaf & Dumb School,** Suri, Birbhum 731001; **West Bengal Deaf Women's Assoc.,** 1A, Jawaharlal Nehru Rd. (First Fl.), Calcutta 700013.

INSTITUTIONS FOR MENTALLY RETARDED

ANDHRA PRADESH

Home for the Disabled, Basilalpet, Secunderabad 500003; **Radha Institute for Mentally Retarded Children,** Jainnivas, Himayatnagar, Street No. 11, Hyderabad 500029; **Rehabilitation Centre for Mentally Handicapped Children,** 'Sisu Gruham', G-3-1247, Somajiguda, Raj Bhavan Rd., Hyderabad 500004; **School for Mentally Retarded Children,** Dept. of Child Psychiatry, Niloafer Hospital, Hyderabad; **Hyderabad Special School for Children in Need of Special Care,** 1-3-20/9, Mahakali St., Secunderabad 500003.

BIHAR

The Central Nursing Home for Mental Invalids, Lower Burdwan Camp, Lalpur, Ranchi 834001; **Rustomji P. Patel Cheshire Home,** Sundernagar, Tatanagar 831002.

DELHI

Banarsidas Chandiwalla Swasthya Sadan, Kalkaji C-7, South Extn. 11, New Delhi 110016; **Child Guidance Clinic for Mentally Retarded Children,** R.A.K. College of Nursing, Andrew Ganj, New Delhi 110049; **Delhi Society for Welfare of Mentally Retarded Children,** C/o College of Nursing, 12, Jaswant Singh Rd., New Delhi; **Dr. Steiner Educ. Society,** 9A, Theatre Communication Bldg., Connaught Circus, New Delhi; **Fedn. for the Welfare of the Mentally Retarded,** 3, Red Cross Rd., New Delhi 110001; **Home for Mentally Retarded Girls,** 14/78, Punjabi Bagh, New Delhi 110001; **Jawaharlal Nehru Instt. of Physical Medicine & Rehabilitation,** 4, Vishnu Digambar Marg, New Delhi 110001; **Mental Health Instt.,** F-62, East Kailash, New Delhi; **Model School for Mentally Deficient Children,** Kasturba Niketan, Lajpat Nagar, New Delhi 110024; **Occupational Therapy Home for Children,** 29C, Ranjit Singh Rd., New Delhi 110001; **Okhla Centre** (Amrit Kaur Bal Vihar), Okhla Rd., New Delhi 110025; **Society for the Rehabilitation of Physically Handicapped and Mentally Backward,** 29C, Ranjit Singh Rd., New Delhi 110002.

GUJARAT

Clinic for Mentally Retarded, Dept. of Psychiatry, Edward New Hospital, Ahmedabad 380016; **Education & Training Institute for the Mentally Retarded Children,** A-12, Chandralok Society, New Navyug College, Surat 395001; **Education and Training Institution for the Mentally Retarded Children,** 29/24, Nandanvan Society, Race Course Rd., Surat 395001; **Female Beggars Home,** Dabhoda 382355; **Govt. Mental Hygiene & Psychiatric Child Guidance Clinic,** Vishwanath Bhuwan, Sanyash, Ahmedabad 380006; **Gyan Jyoti,** Janmiyapura, Gandhinagar; **Home for Mentally Deficient Children,** Pensionpara, Fatehganj, Vadodara 390002; **Home for Mentally Deficient Children,** Bhaktinagar Stn. Rd., Udyognagar, Rajkot 360002; **Jivan Vikas Trust,** A-12, Chandralok Society, Near Navyug College, Rander Rd., Surat 395001; **Jyoti Sangh,** Relief Rd., Ahmedabad 380001; **Occupational Therapy & Rehabilitation Centre,** B.M. Instt. of Mental Health, Ashram Rd., Naorangpura, Ahmedabad 380009; **School for Mentally Retarded Children,** Samaj Kalyan Kendra, Himavan Paldi, Ahmedabad 380007; **Sharada School for Mentally Retarded Children,** Jamsi Villa, Ashram Rd., Opp. Nehru Bridge, Ahmedabad 380009; **Shishu Kunj,** Near Vithal Wadi, Navrangpura, Ahmedabad 380009.

HARYANA

Govt. Girls High School (Special Class for Mentally Retarded Children), Model Town, Ambala 134003.

KARNATAKA

Asha Niketan, 83/7, Bannerghatta Rd., Bangalore 560029; **Association for the Mentally Handicapped,** Byrasandra, Bangalore 560027; **Bala Mano Vikasa Kendra** (School for Mentally Retarded), Gandhi Sishya Sangha, Malleswaram, Bangalore 560003; **Bangalore Child Guidance Centre and Mental Retardation Instt.,** 13, Rest House Rd , Bangalore 560001; **Bhagawan Shri Satya Sai Baba Occupational Centre for Mentally Handicapped,** Swaraj Bhawan, 11th Cross V.V. Puram, Mysore 570002; **B.S.S. Dr. Steiner's Curative Education Instt.,** Vidyagiri, Dharwar 580001; **"Facility" Vocational Unit,** 120/IVT Block, Jayanagar, Bangalore 560011; **Mahatma Gandhi Mentally Retarded Children's School,** X-Ray Instt., Wealock Hospital, Mangalore 575001; **Ratnaniketan,** Satellite Town, No. 559, Kengeri, Bangalore 562118; **School for Children in Need of Special Care,** St. Agnes College, Bendore, Mysore 575002; **Special School** (Sophia High School), 47, Palace Rd., Bangalore 560001; **Sri Satya Sai Institute for Mentally Retarded and Rehabilitation Centre,** Satyam Shivam Sundaram, 11th Cross V.V. Mohalla, Mysore 570002; **Stella Maria** (Mentally Handicapped Section), 23, Gayatri Devi Park Extn., Bangalore 560003; **'Utility' Navjyoti Trust,** 28, Lalbagh Rd., Bangalore 560027; **Vocational Rehabilitation Project,** Fr. Muller's Hospital, Mangalore 575002.

KERALA

Anuradha Vocational Rehabilitation Institute, VI-306, Kakkathuruthi Rd., Irinjalakuda 680121; **Asha Bhawan** (Home for the Mentally Retarded Children), Ittitam, Changanachery 686101; **Corporation Centre for Handicapped Children,** Karaparambu, Calicut 673001; **Custodial Care Home for Disabled Children,** Malappuram, Manjeri 676121; **Home for the Mentally Deficient Children,** Kuravan Konam, Trivandrum 695001; **Rotary Institute for the Children in Need of Special Care,** Hassan Marikkar Hall, Vazhuthacaud, Trivandrum 695014.

MADHYA PRADESH

Asha Niketan (Institute for the Rehabilitation of the Physically Handicapped), E/6, Bhopal 462006; **Hawabagh Opportunity School,** C/o Hawabagh Women's College, Jabalpur 482001; **Home for Mentally Retarded Children,** 10, Murai Mohalla Bal Surakshan Ashram Compound, Indore 452001; **Home for Mentally Retarded Children,** 8/5, Old Palasia, 2B, Indore 452001; **Karyalay Adhikshika Mandir Drashthi,** 3E, Avikasit Bachho ka Grih, Indore 452001; **M.Y. Hospital Child Guidance Clinic,** Indore 452001; **Paul Harris School for the Mentally Retarded Children,** 1/3, Old Palasia, Indore 452001; **School for Mentally Handicapped Children,** Ravindra Nagar, Indore 452001; **Vasudhaiv-Kudumbham,** Near Park Hotel, Rewa Rd., Satna 485001.

MAHARASHTRA

Assoc. for the Welfare of Mentally Handicapped, 15A, Insurance Bldg., Horniman Circle, Bombay 400001; **Bhagini Seva Mandir**

Kumarika Stree Mandal, Sarojini Rd., Vile Parle, Bombay 400056; **Canosa School Special Class,** M. Chotani Rd., Mahim, Bombay 400016; **Department of Spl. Education for Retarded,** Children's Orthopaedic Hospital, Clerk Rd., Haji Ali, Bombay 400034; **Dilkush Spl. School** (Convent), Church Rd., Opp. Theosophical College, Juhu, Santa Cruz, Bombay West 400054; **Govt. Certified School for Mentally Deficient Girls,** Sirur, Pune; **Gujarat Research Society's Mentally Handicapped School,** Samshodan Sadan, South Avenue, Khar, Bombay 400052; **"The Haven" Residential School for Mentally Handicapped Children,** Mahakali Rd., M.I.D.C., Chakala, Bombay 400093; **Home for Mentally Deficient Children,** Mankhurd, Bombay 400088; **Jankiram Vidyalaya,** Ram Nivas, Sir Bhalchandra Rd., Matunga, Bombay 400019; **Karunalaya,** St. Xavier's High School, Church Rd., Vile Parle (West), Bombay 400056; **Indian Society for Mentally Retarded,** Malad West, Bombay 400064; **Mrs. Chandrika Kapadia,** Municipal School, 5/Meera, 18, Nepean Sea Rd., Bombay 400006; **'Nandanvan' School & Sheltered Workshop for the Mentally Retarded Children,** Matru Seva Sangh, North Ambazari Rd., Sitabuldi, Nagpur 440012; **S.P.J. Sadhana School,** Sophia College Campus, Bhulabhai Desai Rd., Bombay 400026; **School for Children in Need of Special Care,** Sewri Hill, Sewri Rd., Bombay 400015; **'Kamayani',** 1187/64, J. Maharaj Rd., Pune 411005; **Shashi Mangalyam,** Opp. Theosophical Colony, 10-11, Juhu Rd., Santa Cruz (West), Bombay 400058; **Society for Vocational Rehabilitation of the Retarded,** Udyogalaya Swami Vivekananda, Kilchand Mansion, 298, Shammaldas Gandhi Marg, Bombay 400002; **Spl. Class,** St. Teresa Convent, Santa Cruz (West), Bombay 400054; **Spl. Class for Mentally Retarded Children,** Municipal School Bldg., Bajaj Rd., Kandivli (West), Bombay 400066; **Spl. Class for Mentally Retarded Children,** Bhanji Devshi Municipal School Bldg., Hingwala Lane, Ghatkopar (East), Bombay 400075; **Spl. Class for Mentally Retarded Children,** Manilal Sundarji Municipal Gujarati School Bldg., Bombay; **Spl. Class for Mentally Retarded Children,** Municipal School Bldg., Near Nare Park Maidan, Parel, Bombay 400012; **Spl. School for Subnormal Children,** 123, Arun Chambers (First Fl.), Tardeo, Bombay 400034; **Spl. School,** Convent of Jesus & Mary, Clare Rd., Byculla, Bombay 400008; **Spl. School for Mentally Retarded Children,** Mumbadevi Municipal School Bldg., Kalbadevi Rd., Bombay 400002; **Spl. Therapeutic Class,** Child Welfare Committee, Maharashtra State Women's Council, Reveline St., Bombay 400001; **St. Andrew's High School,** Mangaldwar, St. Dominic Rd., Bandra, Bombay 400050.

PUNJAB & CHANDIGARH

Association for the Mentally Retarded Children, Kothi No. 1567, Sector 18/D, Chandigarh 160017; **Bharat Sevak Samaj School for Mentally Handicapped Children,** 4, Lake View, Nangal Township 140124; **Govt. Institute for E.S.N. Children,** Dept. for Mentally Handicapped Children, Govt. Post Graduate Basic Training College, Chandigarh 160017; **Govt. Institution of Special Education,** 1576, Sector 18-D, Chandigarh 160017; **Institute of Special Education (Society for Vocational Rehabilitation of Children and Adults),** 523/L, Model Town, Ludhiana 141001; **Modern Basic School,** Kucha No. 5, Field Ganj, Ludhiana 141001; **Special Class for Mentally Retarded Children,** Govt. Higher Secondary School, Jullunder 144005; **State College of Education,** Patiala 147001.

RAJASTHAN

Mentally Retarded Home for Women, Social Welfare Dept., Janata Colony, Jaipur 302001.

TAMIL NADU

Abagam Sathamangolan, Shivganj Rd., Madras 600001; **Ambagam** (Institution for the Mentally Handicapped Children), Race Course, Madurai 625002; **Anita School,** Balar Kalvi Nilayam, 2, Ritherdon Rd., Madras 600007; **Association for the Welfare of the Mentally Retarded,** Bala Vihar, Halls Rd., Kilpauk, Madras 600010; **Dr. G.D. Boaz Memorial Hospital School,** 29, Second Main Rd., Gandhinagar, Adyar, Madras 600020; **Institute of Pediatrics,** Govt. Gen. Hospital, Madras 600013; **Kamakoti** (School for the Mentally Retarded), 35/A, Sixth Main Rd., Raja Annamalaipuram, Madras 600028; **Mahabodhi Institute for Mentally Handicapped Children,** 10, Kennet Lane, Madras 600008; **Rehabilitation Department,** Govt. Mental Hospital, Madras 600010; **Sathamangalam,** Ambagam, Madurai 625013.

UTTAR PRADESH

Allahabad Y.M.C.A. Opportunity School for Sub-normal Children, 18, Strachey Rd., Allahabad 211001; **Association of the Parents of the Mentally Retarded,** Kashi Vidyapith, Varanasi 221002; **Chetna** (School for Mentally Handicapped Children), B-8, Nirala Nagar, Lucknow 226007; **G.C.M. School for Mentally Retarded Children,** Kashi Vidyapith, Varanasi 221001; **Govt. School for Mentally Retarded Children,** 195/196, Crown Gate, Jagat Narayan Rd., Lucknow 226003; **Steiner Bhawan,** Dehra Dun 248001; **Y.M.C.A. Opportunity School for Mentally Retarded Children,** 13, Strachey Rd., Allahabad 211001.

WEST BENGAL

Alakendu Bodh Niketan, 11/7A, Ramakrishna Das Lane, Calcutta 700009; **Asha Niketan,** 308, Acharya Profulla Chandra Rd., Calcutta 700009; **Ashahay Bandhab Gita Ashram Trust,** Press Town, Jagachha, P.O. Jagachha, Howrah Dist.; **Ashutosh Institution,** 14, Rahim Ostagar Rd., West of Jadavpur Park, Calcutta 700095; **Bodhi Peet,** 20, Hari Nath Dey Rd., Calcutta 700009; **Calcutta Association for Mental Health,** 20, Hari Nath Dey Rd., Calcutta 700019; **Cheshire Home,** Burnpur 713325; **Cheshire Homes India,** 543, Raja Basanta Roy Rd., Calcutta 700029; **Day Care Centre,** C/o Bharat Scouts & Guides Headquarters, 2, Kyd St., Calcutta 700001; **Institute for the Mentally Deficient,** Calcutta 700034; **Psycho Lab.,** 15A, Sadananda Rd., Kalighat, Calcutta 700026; **Rehabilitation Centre,** Bon-Hooghly, B.T. Rd., Calcutta 700035; **Rehabilitation India,** 47/1A, Palm Avenue, Calcutta 700019; **Rudolf Steiner Society,** 204/5, Russa Rd., South 2nd Lane, Tully Gunj, Calcutta 700033; **Society for Child Health & Community Welfare and Alakendu Bodh Niketan,** 11/7A, Ramkrishna Das Lane, Calcutta 700009.

INSTITUTIONS FOR THE ORTHOPAEDICALLY HANDICAPPED

ANDHRA PRADESH

Aram Ghar, Indian Conference of Social Work, Red Hills, Hyderabad 500001; **Assoc. of Orthopaedically Handicapped,** Suryarjung Devdi, Yakutpura, Hyderabad 500023; **Crippled Children School and Hostel,** Amravati Rd., Guntur 522001; **Home for the Disabled,** Karwan Mangalhat, Hyderabad 500001; **Rani Chandramani Devi Children's Hospital,** Rehabilitation Centre for Handicapped Children, Laxmi Mahal, Vishakhapatnam 530003; **Shanti Ashram** (Hostel for Crippled Children), Shri Shanti Ashram Vishakhapatnam 530003; **St. Mary's Polio Rehabilitation Centre,** Church of South India, B. No. 4, Khammam 507001; **Vocational Rehabilitation Centre for Physically Handicapped,** C.T.I. Campus, Vidyanagar, Hyderabad 500007

BIHAR

Benilal Memorial Children's Hospital, P.O. Bairaganie, Muzaffarpur 842001; **Cheshire Home,** Meath Marg, P.O. Box 67, Ranchi 834001; **Crippled Children Institute,** Panchbati Hostel, Patna 800003; **Disabled Assen. of Blind, Deaf and Dumb and Orthopaedically Handicapped,** Kankarbagh, Patna 800020; **Gurunanak Home for the Handicapped Children and Artificial Limb Centre,** Bariatu Rd., Ranchi 834001; **Rustomji P. Patel Cheshire Home,** Sunder Nagar, Tatanagar 832107, Singhbhum Dist.; **Shree Kameshwari Priya Poor Home,** Dharbhanga 846004; **Birlang Bhavan** (Home for Handicapped Children), Kankarbagh, Patna 800020.

DELHI

Child Guidance Society, 32, Rajendra Park, Shankar Rd., New

Delhi 110005; **Department of Rehabilitation and Artificial Limbs,** All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016; **Handicapped Welfare Federation,** 4, Talkatora Rd., New Delhi 110001; **Jawaharlal Nehru Instt. of Physical Medicine & Rehabilitation,** 4, Vishnu Digambar Marg, New Delhi 110001; **Kalawati Saran Children's Hospital,** New Delhi; **Kiran Spl. School,** All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016; **Occupational Therapy Home for Children,** 29-C, Ranjit Singh Rd., New Delhi 110001; **Rehabilitation Centre,** Central Instt. of Orthopaedics, Safdarjang Hospital, New Delhi 110016; **School & Home for Mentally Retarded,** Shahdara, Near Mental Hospital, New Delhi 110032.

GOA

Goa Medical College, Panaji, Goa 403001.

GUJARAT

Apang Manav Mandal, Behind ATIRA, Ahmedabad 380015; **Baroda Cheshire Home,** Opp. Budhadev Colony, Kareli Baug, Vadodara; **Civil Hospital,** Ahmedabad 380016; **Home for the Crippled Children,** Bhaktinagar Stn. Rd., Udyognagar, Rajkot 360002; **Home for the Crippled Children,** Hira Villa, Lakkuwa Rly. Crossing, Vadodara 390001; **Methodist Boys' Home,** Godhra 389001; **Physio Occupational Centre,** Nandanvan, Near Town Hall, Ahmedabad 380006; **Shree Harilal Bhagwati Apang Sahay Ashram, Near Wadaj Bus Stand, Ahmedabad; T. K. Polio Clinic & Physiotherapy Institute,** Pritinagar, Ahmedabad 380006.

HARYANA

Medical College, Rohtak 124001; **Saket Hospital,** Chandimandir 134107.

HIMACHAL PRADESH

Centre for Orthopaedically Handicapped, Snowdown Hospital, H.P. Medical College, Simla 171001.

KARNATAKA

Association of the Physically Handicapped, 11, Hennur Rd., Lingarajapuram, Bangalore 560005; **Cheshire Homes of India** (Bangalore Unit), H.A.L. Rd., Bangalore 560017; **C.H.I.** (Mangalore Unit), Toers's Lane, Kankandy, Mangalore 575002; **Janapada Seva Trust,** Melkote, Mandya 571401; **Lions Centre for Physically Handicapped,** Mangalore 575001; **Red Cross Home, 2-3, Kensington Rd., Bangalore 560001; St. Martha's Hospital,** Rehabilitation Centre, Bangalore 560009; **Tarabai Polio Ashram,** Dr. Mudaliar Bldg., Jed Galli, Shahapur, Belgaum 590001; **Vocational Rehabilitation Project.** Fr. Muller's Hospital, Mangalore 575002.

KERALA

CARE Home for Disabled Children, Pallithottom, Quilon 691001; **CARE Home for Disabled Children,** Punkunnam, Trichur 680001; **Cheshire Home,** Choolakkaparambil Road, Ernakulam, Cochin 682001; **Damien Institute,** Kozhukkully 680781; **Department of Physical Medicine & Rehabilitation,** Medical College, Trivandrum 695011; **Home for the Physically Handicapped,** Alleppey 688001: **Home for the Physically Handicapped,** 7/136, Tharakad, Palghat 678001; **Karthika Nair Smaraka Rehabilitation Centre,** Vellamkulam, Tiruvalla 689101; **Kerala State Industrial Co-op. Society for the Physically Handicapped,** Trivandrum 695011; **Rahamania School for Handicapped,** Calicut 673008; **Snehabhavan, Christ Craft Training Centre for the Handicapped Poor,** Irinjalakuda 680121; **Snehaniketan Social Centre,** Deena Sevana Sabha, Pattuvam, Taliparamba 670141; **Vikalaka Sevaka Co-op. Society,** Pattom, Trivandrum 695001; **Vocational Training Centre for Physically Handicapped,** Kunnukuzhi, Trivandrum 695001; **Vocational Training Centre for the Physically Handicapped,** Near Beach Hospital, R.C. Rd., Calicut 673001; **Vocational Training Centre for Physically Handicapped Women,** Salvation Army, Trivandrum 695003.

MADHYA PRADESH

Asha Niketan (Institute for the Rehabilitation of the Physically Handicapped), Private Sector E-6, Bhopal 462006; **Home for the Orthopaedically Handicapped Children,** 3/4, Raja Talab, Dave Bldg., Raipur 492001; **Home for Orthopaedically Handicapped Children,** Snehlata Gunj, Indore 452002; **Main Hospital, Bhilai Steel Plant, Bhilai West; Orthopaedic Children's Home,** Pandarinaka, Raipur 492001; **Orthopaedically Handicapped Children's Home,** Bungalow No. 6, St. No. 5. Manorama Gunj, Indore 452001; **Paul Harris School for the Mentally Retarded Children,** C/o Physically Handicapped Children's Home, 1/3, Old Palasia, Indore 452001; **Vasudhaiv-Kudumbham,** Near Park Hotel, Rewa Rd., Satna 485001; **Vocational Rehabilitation Centre. Corporation New Market, Napier Town, Jabalpur 482001.**

MAHARASHTRA

All India Instt. of Physical Medicine & Rehabilitation, Haji Ali Park, Mahalaxmi, Bombay 400034; **Apang Shayyakari Sanstha,** 976, Sadashiv Peth, Pune 411030; **Apang Kalyan Kendra,** Junnar, Pune Dist.; **Armed Forces Medical Rehabilitation Unit,** Range Hills, Pune 411020; **Beggars Home for Males,** Chimbhan Taji, Shirgonda, Ahmadnagar; **Centre for Spl. Education,** Opp. Afghan Church, Upper Colaba Rd., Bombay 400005; **Cheshire Homes India,** Bethlehem House, Mahakali Rd., Andheri, Bombay 400093; **Fellowship of the Physically Handicapped,** Haji Ali Park, Mahalaxmi, Bombay 400034; **Govt. Home for the Crippled Children,** Kathole Sadan, Ramdaspeth, Nagpur 440001; **Govt. Home for the Crippled Children,** Near Water Works, P.O. Harsool, Aurangabad 431001; **Govt. Home-cum-School for the Crippled Children,** P.O. Miraj Killa, Miraj, Sangli; **Govt. Sheltered Workshop for Crippled,** New Colony, Nagpur 440001; **Govt. Sheltered Workshop for Adult Physically Handicapped,** Sikchi Bhavan, Bhadakal Gate, Aurangabad 431001; **Happy Hours Play Way Centre,** C/o St. Sebastian School, St. Peter's Rd., Bandra, Bombay 400050; **Home for the Aged and Handicapped,** Untkhana, Medical College Rd., Nagpur 440009; **Jyoti Kendra,** 2, Usha Kiran, Carmichael Rd., Bombay 400026; **King George V Memorial After Care Centre,** Dr. E. Moses Rd., Bombay 400011; **Medical Appliances & Rehabilitation Clinic,** 17, Shahunagar, Jalgaon 425001; **Nagpur Association for Rehabilitation of Children and Adults with Orthopaedic Disabilities,** Ramdaspeth, Nagpur 440001; **National Socy. for Equal Opportunities for the Handicapped,** C/o Tata Dept. of Plastic Surgery, Balaram Bldg., Sir J.J. Group of Hospitals, Bombay 400008; **Paraplegic Foundation, L.T.M.G. Hospital, Sion, Bombay 400022; Queen Mary's Tech. School for Disabled Indian Soldiers,** Park Rd., Kirkee, Pune 411020; **Rehabilitation Centre for the Cancer Society,** Dr. E. Borges Marg, Parel, Bombay 400012; **S.E.C. School** (Society for the Education of Crippled Children), Municipal School, Agripada, Bombay 400011; **Sangli Industrial School,** Post Box No. 71, Sangli 416416; **School for the Bed-ridden Children in the Bai Jerbai Wadia Hospital,** C/o Tata Institute of Social Sciences, Sion-Trombay Rd., Deonar, Bombay 400088; **Society for the Crippled Children,** Children's Orthopaedic Hospital, Haji Ali Park, Mahalaxmi, Bombay 400034; **Society for the Welfare of Physically Handicapped,** Wanori, Pune 411001; **Society for Rehabilitation of Paraplegics,** 'Dev Ashish', G. Deshmukh Rd., Bombay 400026; **St. Crispin's Home,** Yerandavna, Karve Rd., Pune 411004; **Vocational Rehabilitation Centre for Physically Handicapped,** C.T.I. Campus, Sion-Trombay Rd., Kurla 400070; **Wanless Hospital** (Orthopaedic Appliance & Rehabilitation Centre), Mission Hospital, Miraj.

ORISSA

Occupational Therapy and Rehabilitation Dept., Medical College, Berhampur 760001.

PONDICHERRY

General Hospital, Pondicherry 605101; **Jawaharlal Instt. of Post-Graduate Medical Education & Research,** Jipmer, Pondicherry 605006.

PUNJAB

All-India Pingalwara Society, Amrisar 143001; **Apahaj Ashram,** Gandhi Park, G.T. Rd., Jullunder 144001; **'Pingla Ghar',** (Home for Destitutes, Crippled and Invalids), Anath Seva Society, Near Gulab Devi, T.B. Hospital, Jullunder 144001; **Rehabilitation Dept.**

of Christian Medical College and Hospital, Ludhiana 141001; **Sheltered Workshop for the Handicapped Persons**, Kalsia Ashram, Gill Rd., Ludhiana 141001.

RAJASTHAN

Centre for Rehabilitation for Physically Handicapped, General Hospital, Udaipur 313001; **Institute of Vocational Training for Adult Handicapped** (Indian Council of Social Welfare), Motidungri Rd., Adarsh Nagar, Jaipur 302004; **Occupational Therapy Department**, Sawai Mansingh Medical College, Jaipur 302001; **Rehabilitation Centre** (Orthopaedics), Department of Social Welfare, J. Nehru Hospital, Ajmer 305001; **Shangrila Workshop for the Handicapped**, Prabhu Marg, Tilak Nagar, Jaipur 302001.

TAMIL NADU

Anbu Nilayam (Cheshire Home), P.O. Covelong, Chingleput 603103; **Cheshire Home**, 10, Vallabhbhai Rd., Madurai 625002; **Coimbatore Cheshire Home**, Dowripalayam Rd., Pulumedu 641004; **Coimbatore Orthopaedic and Rehabilitation Centre**, Methupalayam Rd., Coimbatore 641011; **Disabled Association**, Deenabandhu, 15/2, K.K. St., Madras 600021; **Gabriel Rehabilitation Centre**, Mount Poonamallee Rd., Madras 600089; **Govt. Industrial Training Institute**, Madurai 625007; **Handicapped Rehabilitation Workshop**, 106A, Lloyds Rd., Madras 600086; **Iswari Prasad Dattatreya Orthopaedic Centre**, C/o Andhra Mahila Sabha, No. 3, Adyar Bridge Rd., Kumbakonam 600028; **Mercy Home**, 14, Halls Rd., Kilpauk, Madras 600010; **Red Cross Vocational Rehabilitation Centre for Adult Amputees**, Egmore, Madras 600008; **Rehabilitation Institute** (Occupational Therapist), Christian Medical College & Hospital, Bagayam, Vellore 632002; **Rotary Club of Kumbakonam**, Kumbakonam 612001; **Salvation Army Catherine Booth Hospital Vocational Training Centre for the Physically Handicapped**, Aramboly, Kanyakumari 629301; **Society for Aiding the Handicapped** (Kamakoti), 37, VI Main Rd., Araparam, Madras 600028; **TELC Industrial Aid of Handicapped Children**, Krishnaswami Mudaliar Rd., Coimbatore 641002; **Society for the Welfare of the Handicapped**, 24, Hills Rd., Egmore, Madras 600008; **TELC Industrial School and Rehabilitation Centre**, P.O. Nagalnagar, Dindigul 624003; **Tamil Nadu Association for the Rehabilitation of the Handicapped**, 120, Thaiyappa Mudali St., Madras 600001; **Vellore Association for the Rehabilitation of the Handicapped (VARH)**, B/5, Industrial Colony, Katpadi.

UTTAR PRADESH

Clara Swain Hospital, Bareilly 243001; **Crippled Children's Centre**, Medical College Enclave, Park Rd., Allahabad 211001; **Handicapped Children's Relief Society**, Sponsored Rotary Club, Rampur, P.O. Jwalanagar 244901; **K.G. Medical College Artificial Limb and Prosthetic Workshop and Rehabilitation**, Lucknow University, Lucknow 226001; **National Institute for the Visually Handicapped**, Dept. of Social Welfare, Govt. of India, Rajpur Rd., Dehra Dun; **Shivlal Handicapped Rehabilitation Assocn.**, 75/4, Chakanata Rd., Debra, Dun 248110; **Varanasi Assocn. for Rehabilitation of the Disabled**, B15/54, Faridpura, Varanasi 221001.

WEST BENGAL

B.C. Roy Polio Clinic & Hospital for Crippled Children, 39, Badan Roy Lane, Bilighaba, Calcutta 700010; **Cheshire Home (Children)**, Tolly Gunge, Calcutta; **Cheshire Home**, P.O. Burnpur; **Cheshire Homes India**, 13, Upper Strand Rd., Serampore 712201; **Cheshire Homes India**, 543, Raja Basanta Roy Rd., Calcutta 700029; **National Instt. for the Orthopaedically Handicapped**, (Govt. of India, Ministry of Social Welfare), B.T. Rd., Bon. Hooghly. Cacutta 700050; **Rehabilitation India**, 47/1A, Palm Avenue, Calcutta 700019; **Rotary Crippled Children's Clinic**, (attached to B.C. Roy Memorial & Children's Hospital), III, Narkeldanga Main Rd., Calcutta 700054; **Welfare Association for the Physically Handicapped**, 47/1A, Palm Avenue, Calcutta 700019.

Artificial Limb Centres

Artificial Limb Centre, Nilratan Sarkar Medical College, 138, Acharya J.C. Bose Rd., Calcutta 700014.

Artificial Limb Centre, Military Hospital, Pune Camp, Pune 411001

Artificial Limbs Mfg. Corpn. of India, G.T.Rd., Kanpur 208016.

Sri Shankara Artificial Limbs & Aids Services, 14, Cambridge Rd., Someswarapuram, Ulsoor, Bangalore 560008.

INSTITUTIONS SERVING LEPROSY PATIENTS

ANDHRA PRADESH

Betheadal Leprosy Hospital, Narsapur 534225; **Evangeline Booth Leprosy Hospital**, P.O. Box 10, Bapatla 522101; **Gandhi Memorial Leprosy Foundation Unit**, Chilakalapalli, via Bobbili, Srikakulam Dist.; **Health Education Unit**, Cuddapah 516001; **Govt. Leprosy Hospital** (Training & Research Centre), Akkerampally, Tirupati 517501; **Leprosy Mission Hospital**, Vizianagaram 531202; **Health Education Unit**, Rajahmundry 533101; **Hospital Branch** (Mission), Akividu, W. Godavari Dist.; **Krupapalle Leprosy Home**, Kodur, Cuddapah Dist.; **Leprosy Church**, Tanaku, W. Godavari Dist.; **Leprosy Control Unit**, Chilakalapalli, via Bobbili, Srikakulam Dist.; **Leprosy Home**, Salur Post, Srikakulam Dist.; **Leprosy Home**, Vijayanagaram 531201; **Leprosy Investigation and Treatment Centre**, Zahirabad, Bidar Dist.; **Leprosy Mission Home & Hospital**, Ramachandrapuram, E. Godavari Dist.; **State Leprosy Control Officer**, C/o Directorate of Medical Services, Sultan Bazar, Hyderabad 500001; **Tikka Varan Sundarsanamma Memorial Govt. Leprosy Hospital**, Nellore 525014; **Victoria Leprosy Hospital**, Dichapalli, Nizamabad Dist.

ASSAM

Mary Kirby Berry Memorial Clinic, Borbheta, Jorhat 785001; **Santipara Leprosy Home & Hospital**, Santipara, Bongaigaon 783380; **Shrimant Shankar Mission**, Nowgong 782001; **Special Leprosy Officer**, C/o A.D.'P.H.'s Office, Gauhati 781001.

BIHAR

Bhagalpur Leprosy Asylum, Old Bhagalpur 812002; **Brambi Leprosy Institution**, Brambi, Ranchi 834001; **Gaya Leper Asylum**, Gaya 823001; **Kawakole Block S.E.T. Unit**, Nawada Sub Division, Gaya; **Kushta Seva Samiti**, Kapasia, Kawakole, Gaya; **Laman Leprosy Hospital**, Monghyr 811201; **Leprosy Relief Association**, Dhanbad 826001; **Leprosy Mission Hospital**, Post Box 24, Muzaffarpur 842001; **Rajendra Seva Ashram**, Mairwa, Saran Dist.; **Rajkumari Kushta Dham**, Deoghar 814112; **Saldaha Leprosy Home and Hospital**, Saldaha, Majul Pahadi, Santal Parganas.

DELHI

Catholic Hospital Association, CBCI Centre, Ashok Place, New Delhi 110001; **Hind Kusht Nivaran Sangh**, Red Cross Rd., New Delhi 110001; **Kushtarogi Seva Samiti**, 15, Hardinge Avenue, New Delhi 110001; **Leprosy Home**, Taharpur 110032.

GUJARAT

Ansuya Leprosy Hospital, Sinor Taluka, Vadodara Dist.; **Anti-Leprosy Association**, Bharuch 392001; **Anti-Leprosy Association**, Vadodara 390001; **Ashram Leprosy Hospital**, Opp. Sardesais, Bilimora 396321; **Gandevi Sahakari Samaj Seva Mandal**, Gandevi 396360; **Kushta Nivaran Dham**, Bhavnagar 364001; **Kushta Nivaran Mandal**, Navsari 396445; **Leprosy Hospital**, Datar Rd., Junagadh 362001; **Leprosy Control Units**, Valsad 396001; **Parvatibai Leprosy Infirmary and Lady Wilson Leprosy Clinic**, Ashwini Kumar Rd., Surat 395003; **Rev. Sister Agnes Kagrapeth Leprosy Hospital**, Outside Astodia Gate, Ahmedabad 380002; **Shri Menji Pathraj Kushta Nivaran Dham**, Bhavnagar 364001.

HARYANA

Leprosy Home, Ambala 133001.

HIMACHAL PRADESH

Palampur Leprosy Home & Hospital, Palampur 176061; **Subathu Leprosy Home & Hospital**, Subathu 173206, Simla Hills.

KARNATAKA

Central Leprosarium, Magadi Rd., Bangalore 560002; **Hind Kusht Nivaran Sangh**, Mangalore 575001; **Holdsworth Memorial Hospital**, P. Box 38, Karnataka 570001; **Khangaon Kusht Nivaran Sangh**, Gokak, Belgaum Dist.; **Krupalaya Dispensary**, Guledgudd, Bijapur Dist.; **Leprosy Dispensary**, Kasthur, Mangala, Chamarajnagar; **Leprosy Hospital**, Belgaum 590001; **Mrs. Esther Muirhead Leprosy Orgn.**, 10A, Mugrath Rd., Bangalore 560001; **Navajeevan Nilayam**, Vavathur Rd., Bangalore 560001; **Rehabilitation Workshop**, St. Joseph's Hospital, Mangalore 575002; **Silver Jubilee Leprosy Hospital**, Sankeshvar, Belgaum Dist.

KERALA[*]

Damien Leprosy Institute, Kozhukully, Trichur 680781; **Govt. Leprosy Hospital**, Koratty 680308; **Holy Cross Convent**, Kottayam; **Noornad Leprosy Sanatorium**, Noornad 690604; **Leprosy Mission Chevayur Leprosy Sanatorium**, Chevayur, Calicut 673016; **Mappadi Rehabilitation Centre**, Good Shepherd Hospital, Vythri, Via Calicut; **Poor Leprosy Hospital**, Green Garden, Shertally 688524, Quilon Dist.; **Salvation Army Evangeline Booth Leprosy Hospital**, Puthencruz 682308, Ernakulam.

MADHYA PRADESH

Bethesda Leprosy Home and Hospital, Champa 495671; **Chakdipavri Leprosy Hospital and Homes**, P.O. Baitalpur, 495001; **Govt. Leprosy Home and Hospital**, Raipur 492001; **Henderson Memorial Leper Hospital**, Dhar 494001; **Kusht Seva Sanstha** (behind E.S.I.S. General Hospital) Nanda Nagar, Indore 462001; **Leprosy Home and Hospital**, Rajnandgaon 491441; **Leprosy Home and Hospital**, Shantipur 492001; **Visarjan Ashram**, Anda 491221.

MAHARASHTRA[**]

Acworth Leprosy Home, Wadala, Bombay 400031; **Anandwan Maharogi Seva Samiti**, Warora 442907, Chanda Dist.; **Dattapur Leprosy Colony**, Amravati Post, Wardha Dist.; **Gandhi Memorial Leprosy Foundation**, Hindinagar, Wardha; **Hind Kushta Nivaran Sangh**, Red Cross Bldg., 141, Mint Rd., Bombay 400001; **Kothara Leprosy Hospital & Home**, Achalpur, Amravati Dist.; **Kusht Pidit Navjeevan Seva Sangh**, Thane 400601; **Leprosy Hospital**, Poladpur 402303; **Leprosy Hospital**, Nasik 422003; **Leprosy Clinic**, Alipur 442304; **Leprosy Committee, 18, Wellesley Rd., Pune 411001**; **Leprosy Health Education Unit**, C/o Director of Public Health, Pune 411001; **Leprosy Section**, Skin Dept., K.E.M. Hospital, Parel, Bombay 400012; **Maharogi Seva Samiti**, Warora 442907; **People's Medical Hall**, Jaya Mandir, Wardha 442001; **Plastic Surgery Unit**, J.J. Group of Hospitals, Byculla, Bombay 400008; **Pune Dist. Leprosy Cttee.**, Red Cross Blood Bank Bldg., 593/2, Rasta Peth, Pune 411011; **Richardson Leprosy Hospital**, Miraj 416410; **Skin Dept.**, Sassoon Hospital, Pune 411001; **St. Andrews' Leprosy Clinic**, Kagal 416216, Kolhapur Dist.; **Vadala Leprosy Control and Gorapur Rehabilitation Project**, P.O. Vadala Mission, 414602, Ahmednagar Dist.; **Vidarbha Maharogi Seva Mandal**, Tapovan, Amravati 444603.

MANIPUR

Leprosy Centre, Bishenpur; **Leprosy Centre**, Imphal 795001; **Leprosy Centre**, Tamenglong 795141; **Leprosy Centre**, Thoubal 795138; **Leprosy Hospital**, Kongpokpi 795129.

MIZORAM

Baptist Mission Dispensary, Lumgleh 796106.

ORISSA

Hatibany Leprosy Colony, Sambalpur 768001; **Leprosy Asylum**, Baripada 757001; **Leprosy Clinic**, Hatigarh, Balasore Dist.; **Mayurbhanj Leprosy Home**, Barapada, Mayurbhanj 756113.

PUNJAB

Leprosy Home and Hospital, Tan Taran 143401.

RAJASTHAN

All Saints' Health Centre, Kherwara 313803.

TAMIL NADU

Central Leprosy Teaching and Research Institute, Tirumani, N. Arcot Dist.; **C.S.I. Leprosy Centre**, Wandiwash, N. Arcot Dist.; **Charles Peasse Memorial Leprosy Hospital**, Kanyakumari; **Cheshire Home**, "Vishranthi Illam", Kotpadi Township, North Arcot Dist.; **Dayapuram Hospital**, Manamadurai, Madurai; **G.D.M. Dispensary**, Kollegal, Coimbatore; **Gabriel Rehabilitation Centre**, Mt. Poonamallee Rd., Manapakkam, Madras 600089; **German Leprosy Centre**, Chetpat via Polur, N. Arcot Dist.; **German Leprosy Relief Assoc. & Leprosy Relief Work Emmaus, Switzerland**, 29/C, Gajapathy Naidu St., Shenoynagar, Madras 600030; **Govt. Leprosy Centre**, Polambakam, Madurantakam 603306; **Hand Research Unit**, Christian Medical College & Hospital, Vellore 632001; **Health Education Unit for Leprosy**[†], Thiruchirapalli Dist.; **Hind Kusht Nivaran Sangh**, 7, Veera Gardens, CIT Colony, Madras 600004; **Leprosy Control Unit**, Arkonam 631001; **Leprosy Control Unit**, Rasipuram, 637408; **Leprosy Home and Hospital**, Vadathorasajur, Tyagadurg, Chingleput Dist.; **Leprosy Relief, Control and Eradication**, Deenabandhupuram, N. Arcot Dist.; **Leprosy Relief and Control Scheme**, Walajah Taluq, Ranipet, 623401; **Leprosy Office**, Tirukoilur, S. Arcot Dist.; **Memorial Leprosy Hospital**, Neyyoor Colachel, Kanyakumari Dist.; **Mission Hospital**, Kolan-Junai, via Saligramam, Ramanathapuram Dist.; **Mobile Dispensary**, Tambaram 600045; **Sacred Heart's Hospital**, Sakkottai, Kumbhakonam 612001; **Salvation Army Catherine Booth Hospital**, Aramboly, Kanyakumari Dist. 629301; **Schiefflien Leprosy Research Sanatorium**, Karigeri, N. Arcot; **St. Joseph's Leprosy Home**, Tuticorin 628002; **St. Luke's Leprosarium & Rehabilitation Centre**, Peikulam, P.O. Asirvathapuram, Tirunelveli Dist.; **Swedish Red Cross Rehabilitation Centre**, Industrial Colony, Katpady Extn., North Arcot Dist.

UTTAR PRADESH

Almora Leprosy Home and Hospital, Chandag Heights, Pithoragarh 262501; **Faizabad Leprosy Home & Wellesley Balley Children's Sanatorium**, P.O. Motinagar; **Leprosy Kusht Nivaran Sangh**, Dir. of Medical & Health Services, Lucknow 226001; **Leprosy Hospital**, Faizabad, Motinagar; **Leprosy Hospital**, Naini, Allahabad Dist.; **Leprosy Hospital and Home**, Almora 263601; **Raphael Rydercheshire International Centre**, P.O. Box 157, Dehra Dun 248001; **State Leprosy Office**, Lucknow 226001.

WEST BENGAL

Bankura Leprosy Home & Hospital, P. Box 27, Bankura; **Gandhi Memorial Leprosy Foundation**, Sriniketan, Bolpur 731204; **Hind Kusht Nivaran Sangh**, 94, Chittaranjan Avenue, Calcutta 700012; **Leprologist**, 32/1, Radhakanta Jew Street, Shyambazar, Calcutta 700004; **Leprosy Control Work**, 5, Kyd. St., Calcutta 700016; **Leprosy Home and Hospital**, Purulia 723101; **Leprosy Hospital**, Kalimpong 734301; **Leprosy Office**, Health Staff Quarters, Asansol Mines Board, Asansol 713301; **Premanand Leprosy Dispensary**, Calcutta; **S.E.T. Units**, Sriniketan, Bolpur (Clinics under the unit are at (a) Sriniketan, (b) Bandhalodanga and (c) Sarbawandpur)

---

[*] In Kerala State 140 Survey Eradication Treatment Centres are functioning under Leprosy Control Units

[**] There exist Survey Education and Treatment (S.E.T.) Units at Sevagram, Wardha Dist.; Jamner, Jalgaon Dist. and three clinics each to the above units

[†] This unit carries out educational work on leprosy at Srirangam, Walgudi, Kulitalai, Pudukottai and Ariyalur

THE INDIAN CHILD

INDIA is one of the few less developed countries of the world, which has a National Policy, devised in 1974, for its millions of children. Between then and now, children's boards have been set up in various States and their activities are co-ordinated by a National Children's Board with the Prime Minister of India as its President.

Since 1979 was designated the International Year of the Child (IYC) a Plan of Action for National and State Boards was drawn up for further enlargement of the scope of their programmes, already under implementation, for improving the lot of the children of India. India had agreed to contribute Rs. 900,000 to the UNICEF in connection with the IYC. In fact India was one of the first countries of the world to respond to the United Nations announcement of celebrating a "Year of the Child". India has also contributed $ 100,000 for a secretariat to programme the IYC work for the year.

The year 1979 was the 20th anniversary of the declaration of the Rights of the Child. So that each country accelerated its efforts to recognise and fulfil the needs of the children, the United Nations had declared 1979, the International Year of the Child.

The "International Year of the Child" was concerned with improving the quality of childhood, so that children could live in an atmosphere where basic services like education, health, nutrition, safe water and shelter are available to all children, especially to young and disadvantaged children, and to those in remote areas.

The present UNICEF commitments in India amount to $107.9 million. The commitments for India cover three years and present the largest single country commitment in UNICEF's 34-year history. UNICEF assistance to India was first begun in 1949.

The present Indian programme envisages the expansion of UNICEF support to reduce infant mortality and concentrate on the welfare of the young child, improve the life of mothers and reduce effects of poverty on children's well-being.

UNICEF's programmes will be coordinated with the Government of India's Five-Year Plan.

UNICEF considers the following basic services essential:

(a) Health care; (b) Clean water supply; (c) Nutrition; (d) Education (elementary); (e) Training to provide health workers, teachers, social workers and nutritionists; (f) Welfare services (creches, youth and women's groups) and self-help projects to improve family and community life.

UNICEF stresses that special attention should be devoted to disadvantaged children, e.g. slum children, children of migrant workers, abused children, orphaned children, refugee children in poor rural areas, children exposed to drug and crime, and handicapped and malnutritioned children.

The care of destitute children is a more difficult task than looking after the health and other needs of children who live with their parents. It was in 1974-75, that special scheme for looking after the neglected abandoned or orphaned children was set in motion with an initial allocation of Rs. 50 million, later raised to Rs. 90 million.

The essence of the scheme is finding a home for a group of children (about 25) in a children's village to be set up under a house-mother. The *mother* with the assistance of voluntary and government agencies helps to provide non-formal education and pre-vocational and post-vocational training of the children under her charge. Only about 24,284 children have been attended to under this scheme. There are about 2.5 million destitute children in India.

There are also 33 Integrated Child Development Service Projects functioning at present with 3,098 *anganwadis* under them

Anganwadi delivers a package comprising nutrition upkeep, reduction of infant mortality and of the incidence of infectious diseases, in addition to the extension of non-formal education facilities to take care of the rural drop-outs. The entire project relies heavily on voluntary agencies and the participation of the rural community in the implementation of the programme charted out for each ICDS rural unit.

ICDS has extended the benefit of better nutrition to 227,000 children and women and non-formal education to 103,000 children. Since children account for 42 per cent of the country's population the impact of ICDS will be of real significance, only if more *anganwadis* were organised and made to function in the far-flung areas of the country.

In the First Plan, child welfare found no place. In the Second Plan, child welfare was bracketed with family welfare and a token allotment of funds was made for child welfare programmes. In the Third Plan, separate provision was made for child welfare programmes. In the Fourth Plan the amount was marginally increased, but was still inadequate to meet the demands of child population of the country.

A National Children's Fund has been launched by the Centre and similar funds are to be started by the State Governments.

Since 1927, there is also a Children's Aid Society to provide residential care to destitute children and in 1952 Indian Council of Child Welfare was set up. But the impact of all these in view of the magnitude of the problem is negligible.

A Committee under the Chairmanship of Shri M. S. Gurupadaswamy of Karnataka has been set up by the Central Government to go into the Child Labour Problems. The Committee will examine present laws relating to child labour and will suggest ways of improving the laws. The Committee will also suggest new areas, where laws abolishing or regulating the employment of children can be introduced and recommend welfare measures, training or other facilities that should be introduced for the welfare of the children.

Some Facts and Figures

DEMOGRAPHIC:

1. Our Child population falls between 150-250 million depending on whether the ceiling is 12 years, 14 years, or 15 years.
2. It goes up by a rate of 1 million a month.
3. Ratio of child population (0-14 years) is 42 per cent.
4. Infant mortality is 81 per thousand live births in urban areas and 131 per thousand live births in rural areas.
5. One third of our child population lives below the poverty line.
6. One fifth of the Indian children live in slums and villages which do not have basic amenities (for education, health etc.)
7. The children in 0-6 years age group number about 150 million. Of these 85.1 million live in rural areas, 6.9 million in tribal areas and 23 million in urban areas.
8. Half the deaths in developing countries, occur amongst children under 5 years of age.
9. In developing countries child mortality is 8 times that of industrialised countries.
10. Life expectancy in developing countries is 1–3 shorter compared to developed countries.
11. Maternal mortality—one out of 25 women who die during the reproductive period, die as a direct or indirect cause of child birth.
12. Though 0-5 years age group form 17 per cent of the country's population, they account for 40 per cent of the total annual deaths.
13. There are about 2.5 million destitute children in India.

LABOUR:

1. **About 11 million children below 14 years (one out of every 23) who form 1/16 of our work force and contribute 14**

per cent to the income of families earning about Rs. 300 per month.
2. 10.7 million worked for their living in 1971. By 1975, the figure rose to 12 million. 5.8 million of agriculture labour consists of children. Out of these 4.47 live in villages.
3. Children between 7-14 years are employed in factories, shops and other establishments in conditions bordering on serfdom. The children work 10-15 hours a day for wages that may average Re. 1 a day. The money earned is invariably taken away by parents or agents.

EDUCATION:

1. Despite efforts towards universal education 73 per cent boys and 80 per cent girls do not reach high school.
2. Out of 100 children who start school, 40 complete 5th Standard and 25 per cent complete 8th Standard.
3. Out of 3 million handicapped children only 20,000 have access to educational opportunities.
4. In 1975, 120 million children of the world (of 6-11 years) were out of school, of these, 80 million were from the Asian region.
5. 24 per cent of boys and 46 per cent of the girls do not even enter school.

CRIME:

1. In one year 2,229 boys and 229 girls below the age of 12 were apprehended for crimes which included 156 gambling, 1,335 prohibition cases and 13 murders and 9 rapes.
2. Juveniles were responsible for 700 murders, 300 kidnappings, 320 dacoities, 500 robberies, 63,000 burglaries, 25,000 thefts registered in a year in the country and the graph is still rising.

HEALTH AND NUTRITION:

1. There are 50-60 million children in India who suffer from malnutrition and almost 500,000 die every year from diseases caused by malnutrition.
2. About 20 per cent of premature births and 15 per cent of maternal fatalities are due to pre-natal malnutrition.
3. At least 70 per cent of children from poor families suffer from growth retardation due to mild or moderate form of malnutrition.
4. Almost 60 million children go through life with impaired physical and mental faculties.
5. The number of seriously handicapped children is about 3 million.
6. Fifty per cent of children in the pre-school going group suffer from anaemia and other vitamin deficiencies.
7. Blindness afflicts about 12,000 children every year because of Vitamin 'A' deficiency.
8. In 1970, a vitamin drive was launched in Southern and Eastern States, and about 4 million children had been covered by it by 1977.
9. Of every 1,000 children born in India, 125 do not survive the 1st year. Out of those that survive, one in fifty is handicapped.
10. Infant mortality according to a recent announcement was 134 per thousand.
11. Though 80 per cent of the population in developing countries live in rural areas, 90 per cent of medical education remains rooted in the cities. 116,000 villages lack the most elementary source of drinking water.

(For the universities which teach Child Health and Child Welfare as a subject, refer to the chapter 'Education').

CHILD GUIDANCE CENTRES

Seva Niketan, Sir J.J. Road, Byculla, Bombay 400 008.

Admission regulations: a. Age—School age 3½ to 18 years, S.S.C. or ISC; b. Sex—Male/Female; c. Fees—Free.

Capacity: 20—25 cases per month, follow up cases once a fortnight, 3 months or 6 months

Contact: Father-in-charge.

Facilities: a. Run a dispensary (minimal charges); b. Has a child guidance clinic;, c. Provide therapy for adults with emotional problems and suicide prevention through "samaritans"; d. Alcoholics Rehabilitation Centre (Counselling and residential rehabilitation); e. Employment Bureau, job placement, speed classes in typing; f. Community development; g. Legal Bureau; h. Hostel (short-term for men only).

Mini Workshop, Apostolic Carmel School, 94, Hill Road, Bandra, Bombay 400 050.

Admission regulations: a. Age—3—15 years; b. Sex—Male/Female.

Contact: Executive Secretary, Indian Council for Mental Health, Eros Bldg., 3rd floor, Or Rev. Sister, Apostolic Carmel Convent.

Facilities: a. Individual therapy; b. Play-therapy; c. Parental guidance.

Institute of Child Health, Child Guidance Clinic, J.J. Hospital, Byculla, Bombay 400 008.

Admission regulations: a. Age—0—12 years; b. Sex—Male/Female; c. Fees—Free.

Capacity: Flexible.
Contact: Social Worker.

Facilities: Diagnostic and therapeutic services for children with emotional and behavioural problems.

Educational & Vocational Guidance, Gujarat Research Society, Samshodhan Sadan, South Avenue, Khar, 16th Road, Bombay 400 052.

Admission regulations: a. Age—6 to 18 years; b. Sex—Male Female; c. Fees—Rs. 10/- or per case depending upon income; For vocational testing in schools it is Rs.10/- per student.

Capacity: Flexible.

Contact: Person-in-charge.

Facilities: a. Psychological testing for personality problems; b. Intelligence testing; c. Vocational Tests & Counselling.

Juvenile Service Bureau, C/o Children's Aid Society, 83, Takandas H. Kataria Marg, Mahim, Bombay 400 016.

Admission Regulations: a. Age—Upto 17 years; b. Sex—Male/Female; c. Fees—Free.

Capacity: Flexible.

Contact: Superintendent.

Facilities: a. Casework services, viz. Guidance to children with behavioural problems and counselling their parents; b. Recreational and cultural activities in disorganised and semi-slum localities, annual sports events; c. Visual education and library service at 13 other juvenile centres in Bombay; d. Financial assistance scheme to economically backward children; e. Sponsorship scheme; f. Coaching classes; g. Self-employment projects; h. Nutrition and medical aid.

Ma Niketan (Home for Homeless Children), Opp. Devidayal Cables, 2nd Pokhran Rd., Thane 400 601.

MSWC Child Guidance Clinic, 10, Raveline Street, Opp. Excelsior Cinema, Bombay 400 001.
Admission regulations: a. Age—Children & Adolescents; b. Sex—Male/Female; c. Fees—Nominal.
Capacity: Flexible.
Contact: Social Worker.
Facilities: To help emotionally disturbed children and juvenile delinquents.

Indian Council for Mental Health, 3rd floor, Eros Building, 42, M. Karve Marg, Bombay 400 020.
Admission regulations: a. Age—Children 3 to 13 years; b. Sex—Male/Female; c. Fees: Therapy—Depending on the case Rs. 25/- nominal fees; Films: Rs. 100/- for 4 films programme and transport and projector charges.
Capacity: Flexible.
Contact: Supervisor.
Facilities: a. Psychological counselling and guidance; b. Educative film services.
Child Guidance Clinic, Umerkhadi, Old Jail Road, Bombay 400 009.

Admission regulations: a. Age—Upto 18 years; b. Sex—Male

Female; c. Fees—Free (For Remand Home Children only).
Capacity: 125 children at a time.
Contact: Social Worker.
Facilities: a. Diagnosis of problem children. b. I.Q. assessment. c. Preparation of detailed report; d. Therapeutic treatment.

Balvihar—The Bombay City Council for Child Welfare, B.D.D. Chawl No. 50, Worli, Bombay 400 017. (Affiliated to the Maharashtra State Council for Child Welfare.)

Admission regulations: a. Age—3-6 years; b. Sex—Male/Female; c. Fees—Nursery School, Fee—Rs. 2/- monthly. Mess Fee—Rs. 3/- monthly.

Capacity: 64 children admitted to Primary School.

Contact: Honorary General Secretary.

Facilities: Bal Vihar has following services: a. Creche—to accommodate 25 infants and toddlers; b. Nursery School—to accommodate 60 children from the age of 3-6 years; c. Nutrition—all the nursery school children and creche toddlers are given a full mid-day meal on all working days. Creche infants are given milk and other nutritious diet daily; d. Health care—doctor examines the children regularly every month. Tonics and drugs are given to children in need of these. Immunisations are arranged; e. Family consultation provided; f. Provides facilities for family and children's reading room and library; g. It also provides for sewing class for women; h. Chalana class is run for children going to primary and upper primary schools; i. It also runs hobby classes for children in which crafts such as clay work, paper and cardboard work, plastic cane work, sewing, embroidery and making of soft toys are taught; j. Provides uniforms, umbrella, text books etc. to school going girls.

Gujarat Research Society, Child Guidance & Lalita Balmandir Research Centre, Samshodhan Sadan, South Avenue, Khar, Bombay 400 052.

Admission regulations a. Age—children & adolescents; b. Sex—Male/Female; c. Fees—Very nominal on monthly basis.

Capacity: Flexible.

Contact: Doctor-in-charge.

Facilities: a. Diagnostic investigations and treatment of children; b. Psychological research and classification.

Child Guidance Clinic, Sophia College, Bhulabhai Desai Road, Bombay 400 026.

Admission regulations a. Age—under 12; b. Sex—Male/Female; c. Fees—Rs. 10/- per session, may be reduced or free in special cases.

Capacity: Flexible.

Contact: Principal, Sadhana School.

Facilities: a. Diagnostic and remedial education; b. Child counselling; c. Parent counselling; d. Psychologist, Psychiatrist & Social Worker.

CENTRES FOR THE MENTALLY HANDICAPPED

Sashi Mangalyam School, Opp. Theosophical Colony, Satchit, Juhu, Santacruz (West), Bombay 400 054.

Admission regulations: a. Age—4½ to 14 years; b. Sex—Male and Female; c. Fees—Rs. 70/- per month and Rs. 40/- for lunch. Also half freeship and full freeship.

Capacity: 90 students approximately.

Contact: Principal.

Facilities: a. Normal school curriculum for educable children; b. Girl's polytechnic for older group; c. Sheltered training workshops to prepare students for jobs; d. Counselling. Medium of instruction: Marathi, Hindi, Gujarati and English.

St. Teresa's Convent School, Classes for Mentally Retarded, S.V. Road, Santacruz (West), Bombay 400 054.
Admission regulations: a. Age—No bar; b. Sex—Female (Educable group) IQ 60 and above; c. Fees—Rs. 20/- per month
Capacity: 10 children
Contact: Sister-in-charge
Facilities: a. To provide educational training for the upliftment of Mentally Retarded children; b. Education in academic skills.

MSWC Special Therapeutic Class, 10, Raveline Street, Opp. Excelsior Cinema, Fort, Bombay 400 001.

Admission regulations: a. Age—6 to 14 years; b. Sex—Male/Female (should be stable in nature); c. Fees—Rs. 5/- to 30/-.

Capacity: 40 students.
Contact: Supervisor.

Facilities: a. Teach academic skills; b. Pre-vocational skills such as handicrafts, music, speech therapy and cooking; c. Psychological testing.

Karuna Vidyalaya, C/o St. Xaviers, Church Road, Vile Parle (W), Bombay 400 056.
Admission regulations: a. Age—5 to 16 years; b. Sex—Boys/Girls; c. Fees—Free.
Capacity: 30
Contact: Principal.
Facilities: a. Provide pre-vocational training; b. Aim at development of social usefulness.

School for Children In Need of Special Care, Sewri Hill, Sewri Road, Bombay 400 033.
Admission regulations: a. Age—6 years and above; b. Sex—Male/Female; c. Fees—Rs. 65/- per month.
Capacity: 500.
Contact: Principal.
Facilities: a. Tests to detect early mental retardation; b. Academic teaching; c. Vocational training; d. Residential accommodation; e. Research section.

Society for the Care, Treatment and Training of Children in Need of Special Care, Sewri Hill, Sewri Road, Bombay 400 033.
Admission regulations: a. Age—6 years and above; b. Sex—Male/Female; c. Fees—Rs. 65/- per month.
Capacity: 400.
Contact: Director.
Facilities: a. Day school and residential facilities; b. Education, training and rehabilitation; c. Teacher training programme is also provided; d. Research section.

Bhagini Seva Mandir, Kumarika Stree Mandal, Sarojini Road, Vile Parle (W), Bombay 400 056.
Admission regulations: a. Age—5-16 years; b. Sex—Boys/Girls; c. Fees—Rs. 17/- per month; d. Should have a doctor's certificate saying he or she is mentally retarded; e. Should be given IQ test at Gujarat Research Society, Khar.
Contact: Principal.
Capacity: 130.
Facilities: Education and pre-vocational training

The Haven Residential School for the Mentally Retarded, Mahakali Road, M.I.D.C., Chakala, Bombay 400 093.
Admission regulations a. Age—5 years and above, should have a certificate of a psychiatrist saying the child is mentally handicapped; b. Sex—Males; c. Fees Rs. 225/- monthly; Deposit Rs. 225/-.
Contact: Principal.
Capacity: 40 children.
Facilities: Teach Handloom, weaving, basketmaking.

Special Class for Mentally Retarded, Convent of Jesus and Mary, Clare Road, Byculla, Bombay 400 008.
Admission regulations: a. Age—minimum 5 years. If toilet trained under 5 years are admitted. Upper age limit 12 years. b. Sex—Boys/Girls. c. Fees—Rs. 65/- monthly.
Capacity: 60 children.
Contact: Principal of Special school.
Facilities: a. Private school bus; b. Boys sent for apprenticeship; c. Girls trained for house work, needle work, craft weaving, cane work and typing, P.T., field trips outstation, medical facilities.

Special Class for Mentally Retarded Children, Municipal School Building, Near Nare Park Maidan, Parel, Bombay 400 012. It has branches at Ghatkopar, Mumbadevi, Kandivili, Vile Parle and Khar.

Admission regulations: a. Age—6-14 years; b. Sex—Male/Female; c. Fees—Free, Admission taken with 50 IQ onwards.
Capacity: 40-60 children.
Contact: Principal.
Facilities: Education and preparation for further studies to other schools.

Seva Dham, Association of the Friends of the Mentally Ill, Opp. B.D.D. Chawl No. 5. Next to Police Station, N.M. Joshi Marg, Delisle Road, Bombay 400 013.
Admission regulations: a. Age—above 20 years; b. Sex—Male and Female; c. Fees—Free.
Capacity: 25 patients.
Contact: Social worker or doctor.
Facilities: a. Workshop for making of envelopes, agarbattis: b. Executing sub-contract work.

Dilkhush Special School, Church Road, Juhu, Bombay 400 049.
Admission regulations: a. Age—5 to 9 years; b. Sex—Male and Female; c. Fees—For some free, otherwise according to the income of parents.
Capacity: 100.
Contact: Principal.
Facilities: a. Education in academic skills; b. Day-school training in selfcare and self expression; c. Speech Therapy and psychotherapy for children; d. Counselling for parents.

Indian Society for Mentally Retarded, Kedia Shopping Centre, 1st floor, Opp. Rly Station, Anand Road, Malad (West), Bombay 400 064.
Admission regulations: a. Age—5 to 20 years; b. Sex—Male and Female; c. Fees—Rs. 65/- entrance fee and Rs. 25/- per month. For poor children concession given.
Capacity: 70 students approximately.
Contact: Social Worker or Doctor.
Facilities: a. Education in academic skills; b. Vocational Training for rehabilitation; c. Assist in employment opportunities; d. Counselling; e. Research in field of education and rehabilitation.

Special Class for Mentally Retarded, Municipal School Bldg., Bajaj Road, Kandivli (West), Bombay.
Admission regulations: a. Age—7-16 years. IQ 50 and above; b. Sex—Male/Female; c. Fees—Free.
Capacity: 75 to 80 children.
Contact: Principal.
Facilities: a. Marathi, Gujarati and Hindi medium classes; b. Children given formal education upto 3rd and 4th std.; c. Also teach drawing, sewing and cutting etc.

Canosa Convent High School, Special Education Department, Pitamber Lane, Mia Mohamed Chhotani Road, Mahim, Bombay 400 016.
Admission regulations: a. Age—from 4 years, males upto 17 years and females upto 20 years; b. Sex—Male/Female; c. Fees—Rs. 50/- per month, concession for poor children.
Capacity: 95 students approximately.
Contact: Sister-in-charge.
Facilities: a. Training in sewing, typing, embroidery, cooking; b. Diagnostic team service run by Lions Club, Mahim.

Special School for Sub-normal Children, Arun Chambers, 1st floor, Room No. 123, Tardeo, Bombay 400 034.
Admission regulations: a. Age—4 to 21 years; b. SexMale/Female; c. Fees—Rs. 100/- per month.
Capacity: 30 children.
Contact: Principal.
Facilities: a. Education in academic skills; b. Entertainment and recreational activities; c. Training of teachers in remedial education.

Lion's Juhu Centre for Children in Need of Special Care, Sanshodhan Sadan, South Avenue, Khar, 16th Road, Bombay 400 052.
Admission regulations: a. Age—Children below 16 years of age and IQ of 60 and above; b. Sex—Male/Female; c. Fees—Free.
Capacity: 100 children approximately.
Contact: Principal
Facilities: a. Education and training for rehabilitation in English, Marathi, Hindi and Gujarati; b. Medical and guidance clinic; c. School bus services between Mahim and Andheri.

Home for Mentally Retarded Children, Sion-Trombay Road, Mankhurd, Bombay 400 088.
Admission regulations: a. Age—Under 18 years; b. Sex—Male/Female; c. Fees—Free for court committed children; Rs. 125/- to Rs. 200/- for private admission.
Capacity: 300 to 400.
Contact: Superintendent.
Facilities: a. Residential Home, day school, private cases kept in a private residential home.

S.P.J. Sadhana School for the Developmentally Handicapped (Unit of Special Education), Sophia College, Bhulabhai Desai Road, Bombay 400 026.
Admission regulations: a. Age—4 years; b. Sex—Male and Female; c. Fees—Educational training fees Rs. 100/-, Term Fees Rs. 25/-, Workshop fees Rs. 50/-, Snack Fees Rs. 10/-, Guidance fees Rs. 5/- per session. Observation fees Rs. 25/- if necessary.
Capacity: 50.
Contact: Principal.
Facilities: Training in workshop activities and special education.

Special Class for Mentally Handicapped Children, Manilal Sunderji School Building, Dashrathlal Joshi Road, Vile-Parle (West), Bombay 400 056.
Admission regulations: a. Age—5 years onwards; b. Sex—Male/Female; c. Fees—Free.
Capacity: 48.
Contact: Person-in-charge.
Facilities: a. Provide education according to IQ (in Gujarati, Marathi, English and Hindi Medium); b. Teach handicrafts; c. Provide medical facilities.

CENTRES FOR THE BLIND

Blind Working Men's Hostel, Near Salvation Army Head Quarters, Maulana Azad Road, Byculla, Bombay 400 008.
Admission regulations: a. Sex: Male; b. Age: 18 to 60 years; c. Fees: Rs. 20/- onwards.
Capacity: 78.
Contact: Superintendent.
Facilities: a. Provide food & accommodation for blind, single, working men.

M.N. Banajee Industrial Home for the Blind (N.A.B.), 280, Swami Vivekanand Road, Jogeshwari (West), Bombay 400 060.
Admission regulations: a. Sex: Male; b. Age: 18 to 45 years; c. Fees: Free.
Capacity: More than 120 people.
Contact: Superintendent.
Facilities: a. Intensive industrial training in handloom weaving, tailoring, cane work, assembly work, woodworking and light engineering; b. Music; c. Payment by piece work.

The Victoria Memorial High School for the Blind, Tardeo Road, Bombay 400 034.
Admission regulations: a. Age—admission given only between 3-6 years; b. Sex: Male/Female: c. Fees: Rs. 5/- admission fee, Rs. 25/-; Entrance test and medical check-up compulsory.
Capacity: 100 to 150.
Contact: Principal.

Facilities: a. Education to visually handicapped children from Pre-Primary to Middle School level; b. Integrated at High School level; c. Training Centre for Teachers of Visually Handicapped (1 year course).

Industrial Home for Blind Women, Plot No. 35, Near Lallubhai Park, Andheri, Bombay 400 058.
Admission regulations: a. Age: 16-40 years; b. Sex: Female; c. Fees—Free.
Capacity: 40 women.
Contact: Superintendent.
Facilities: a. Vocational skills in weavingcane work, tailoring, broom making and coaching in music and Hindi; b. Residential home.

Happy Home & School for the Blind, Dr. Annie Besant Road, Worli, Bombay 400 018.
Admission regulations: a. Age—Upto 12 years; b. Sex—Males only; c. Fees—Free.
Capacity: 150 approximately.
Contact: Principal.
Facilities: a. Boarding school for blind boys; b. Home for orphaned boys including court committed; c. Training in Marathi medium to S.S.C. level. The curriculum includes music, physical level and handicraft training, and training in pottery and ceramics.

N.S.D. Industrial Home for the Blind, Opposite Jambori Maidan, Near Shree Ram Mills, Worli Road, Bombay 400 018.
Admission regulations: Admission given only to men who are blind with no communicable disease. Medical check-up is done. a. Age: 18 to 40 years; b. Sex: Males; c. Fees: Free.
Capacity: 90 to 100 for residential. 10 days—scholars.
Contact: Superintendent.
Facilities: a. Provide training in industrial subjects, such as handloom, weaving, carpentry, tailoring, cane work, assembling of component parts; b. Payment by piece-work; c. Provide Orchestra on hire during festivals.

Workshop for the Blind, Dr. Annie Besant Road, Worli, Bombay 400 018.
Admission regulations: a. Age: 18 to 40 years; b. Sex: Males only; c. Fees—Free. Stipend of Rs. 70/- is given.
Capacity: 100 to 125.
Contact: Caseworker.
Facilities: a. Training in light engineering, brush manufacturing, simple tailoring, assembling articles, plastic and fileboard, carpentry and cane work; b. For educated blind, training in dictaphone, typewriting & telephone operating; c. Mobility training.

Dadar School for the Blind, 160, Dadasaheb Phalke Road, Bombay 400 014.
Admission regulations: a. Age: 4 to 10 years; b. Sex: Female; c. Fees: Free.
Capacity: 150 students.
Contact: Principal.
Facilities: School from 1st to 7th Std. in the institute and from 8th to 10th Std. outside.

REHABILITATION CENTRES

CHILDREN'S Observation Home, Children's Aid Society, Old Jail Road, Umerkhadi, Bombay 400 009.
Admission regulations: a. Age: Upto 16 years for boys and upto 18 years for girls; b. Sex: Male & Female; c. Fees: Free.
Capacity: Upto 550.
Contact: Superintendent.
Facilities: a. Temporary residential home; b. Literacy classes; c. Medical aid; d. Recreation; e. Vocational training.

David Sassoon Industrial School, 83, Takandas H. Kataria Marg, Mahim, Bombay 400 016.
Admission regulations: a. Age: 8 to 17 years; b. Sex: Male—referred by juvenile courts; c. Fees: Free.
Capacity: 400 boys.
Contact: Superintendent.
Facilities: a. Residential Home and School upto Std. IV in Hindi & Marathi medium; b. Rehabilitation through education, health services, physical training & psychological & psychiatric advisory services; c. vocational training in blacksmithy, cane work, carpentry, lacquering, tailoring, welding, power-loom, weaving, agarbatti and chalk making classes.

New Observation Home Mankhurd, Bal Kalyan Nagri, Sion-Trombay Road, Mankhurd, Bombay 400 088.
Admission regulations: a. Age: 6 to 12 years; b. Sex: Male; c. Fees: Free.
Capacity: Upto 200.
Contact: Superintendent.
Facilities: a. Temporary residential home for destitute children; b. Literacy and craft classes.

3R's Society, Rehabilitation Centre, Receiving Centre Compound, Off Jain Mandir, R.C. Marg, Chembur, Bombay 400 071.
Admission regulations: a. Age: Adult; b. Sex: Male and Female; c. Fees: Free.
Capacity: Flexible.
Contact: Works Manager.
Facilities: Provides training and employment for handicapped who can work to make them self-supporting.

Govt. Reception Centre, Sion-Trombay Road, Near Telecom Quarters, Deonar, Bombay 400 088.
Admission regulations: a. Age: 18 years and above; b. Sex: Female; c. Fees: Free.
Capacity: 40.
Contact: Superintendent.
Facilities: a. Free residential accommodation; b. Rehabilitation.

Bal Kalyan Nagri, Children's Aid Society, Sion-Trombay Road, Mankhurd, Bombay 400 088.
Admission regulations: a. Age: 6 to 12 years; b. Sex: Male & Female; c. Fees (Juvenile court cases only).
Capacity: 900.
Contact: Administrator.
Facilities: a. Provide lodging & boarding; b. Schooling; c. Vocational training.

Snehasadan, Chakala, Andheri East, Bombay 400 093.
Admission regulations: for homeless abandoned boys and girls.
Capacity: Flexible.
Contact: Director.
Facilities: Home for the care, protection & rehabilitation of the homeless & socially handicapped children.

Guild of Service Family Home, 16A, B.D.D. Chawl (Naigaum), Dadar, Bombay 400 014.
Admission regulations: a. Age: 7 to 18 years; b. Sex: Male; c. Fees: Free, only Court Committed boys are eligible.
Capacity: 20 boys.
Contact: Superintendent.
Facilities: a. Provide schooling; b. Teach handicrafts & housework.

Additional Observation Home, Bal Kalyan Nagri, Sion-Trombay Road, Mankhurd, Bombay 400 088.

Admission regulations: a. Age: 3 to 6 years for males, 3 to 12 years for females; b. Sex: Male and Female; c. Fees: Free.

Capacity: Upto 150.

Contact: Superintendent.

Facilities: a. Provide residential home; b. Provide Montessori class.

Our Lady's Home, Home for boys, St. Paul's Compound, 205, Dr. Ambedkar Road, Dadar, Bombay 400 014.

Admission regulations: a. Age: 5½ to 6 years; b. Sex: Male; c. Fees: Free.

Capacity: 200.

Contact: Director.

Facilities: a. Provide schooling; b. Provide vocational training and help to rehabilitate children and families.

St. Anthony's Home and High School, Byculla, Bombay 400 008.

Admission regulations: a. Age: Orphans below one year and girls upto 16 years; b. Sex: Girls; c. Fees: Free.

Capacity: 110-120 children.

Contact: Superintendent.

Facilities: a. Provide schooling for children; b. Provide recreation—T.V., outdoor games, picnics.

Byramjee Jeejeebhoy Home, Shradhanand Road, Matunga, Bombay 400 019.

Admission regulations: a. Age: between 5 and 10 years; b. Sex: Boys/Girls; c. Fees: Free.

Capacity: Flexible.

Contact: Superintendent.

Facilities: a. Provide academic education; b. Provide vocational guidance; c. Training in weaving, tailoring etc.

Anand Kendra, Annie Besant Road, Worli, Bombay 400 018.

Admission regulations: a. Age: 8 to 18 years; b. Sex: Males only; c. Fees: Free. Stipend.

Capacity: 50.

Contact: Committee Members.

Facilities: a. Provide boarding and lodging; b. Provide education; c. Provide vocational training in weaving; d. Provide medical care.

Young Men's Christian Association, Boys' Home (YMCA), Near Dhake Colony, Versova Road, Andheri West, Bombay 400058.

Admission regulations: a. Age: 9 years; b. Sex: Boys; c. Fees: Free.

Capacity: 70.

Contact: Social Worker.

Facilities: a. Provide shelter and care for children from broken homes till employed; b. Vocational training.

Andh & Anath Institute, Haji Allarakhai Sonawalla, Andh & Anath Stree Ashram, Dadabhoy Road, Opp. Rationing Office, Andheri West, Bombay 400 058.

Admission regulations: a. Age: Above 18 years; b. Sex: Girls only; c. Fees: Free.

Capacity: 35 to 50.

Contact: Superintendent.

Facilities: a. Teach occupational therapy including housework, gardening, poultry and farming; b. Provide residential facilities.

St. Joseph's Home & Nursery, Dr. Leela Melville Marg, 8, Reynolds Road, Byculla, Bombay 400 008.

Admission regulations: a. Abandoned and orphans; b. Sex: Girls; c. Fees: Free.

Contact: Sister Superior.

Facilities: a. Provide shelter care and education for abandoned children.

Receiving Centre for Beggars, Ram Krishna Chemburkar Marg, Opp. Jain Temple, Chembur, Bombay 400 071.

Admission regulations: a. Age: 18 years and above; b. Sex: Male; c. Fees: Free (court committed).

Capacity: 650.

Contact: Superintendent.

Facilities: a. Provide shelter and food for beggars; b. Medical check-up; c. Sent outside Bombay for rehabilitation.

Female Beggars Home, Ram Krishna Chemburkar Marg, Opp. Jain Mandir, Chembur, Bombay 400 071.

Admission regulations: a. Age: Above 18 years; b. Sex: Female; c. Fees: Free (court committed).

Capacity: 450-600.

Contact: Superintendent or Social Worker.

Facilities: a. Provide training in tailoring, farming, broom making, basket making; b. Children accompanying woman allowed, if below 5 years.

Male Beggars Home, Ram Krishna Chemburkar Marg, Opp. Jain Mandir, Chembur, Bombay 400 071.

Admission regulations: a. Age: Above 18 years; b. Sex: Male; c. Fees: Free.

Capacity: 450-600.

Contact: Superintendent.

Facilities: a. To teach tailoring, farming, broom making, basket making, and weaving for employment; b. children sent to children's section.

CENTRES FOR THE DEAF

LIMG School for the Deaf, Opp. Andhra Education Society Scheme, No. 57, Road 7th A, Sewri, Wadala, Bombay 400 033.

Admission regulations: a. Age: 4-16 years; b. Sex: Male/Female; c. Fees: No fees (except a nominal charge for hearing aid).

Capacity: 87 children.

Contact: Medical Social Worker.

Facilities: Education and Vocational Training for the Deaf.

Bombay Institution for Deaf Mutes, 33, Nesbit Road, Mazagaon, Bombay 400 010.

Admission regulations: a. Age: 4 to 18 years; b. Sex: Male/Female; c. Fees: Admission Rs. 10; Monthly Rs. 10, Term Fee Rs. 10.

Capacity: 180 students.

Contact: Principal.

Facilities: Education in Marathi, English and Gujarati to teach deaf to hear and speak so they can be integrated in normal schools.

Stephen School for the Deaf & Aphasics, 15, Dadyseth Road, Chowpatty, Bombay 400 007.

Admission regulations: a. Age: 3½ - 21 years; b. Sex: Male/Female; c. Fees: Nominal.

Capacity: 90 - 100 students.

Contact: Principal.

Facilities: a. Pre-school and secondary education; b. Medical check-up; c. Assistance in job placement.

Bombay Centre for the Deaf, St. Stanislaus High School, Bandra Hill Road, Bombay 400 050.

Admission regulations: a. Age: Mainly for adults; b. Sex: Male and Female; c. Fees: Free/nominal.

Capacity: Flexible.

Contact: Father-in-charge.

Facilities: a. Adult education classes for beginners; b. Advanced classes for adults in English; c. Counselling services mainly regarding vocational training, employment and personal problems; d. Sunday prayer service and recreation which is partially educational.

Vijay Shikshansanstha, Bombay Marathi Grantha Sangralaya, 3rd Floor, Grantha Sangralaya Rd., Dadar, Bombay 400 014.

Admission regulations: a. Age: 3 to 16 years; b. Sex: Male and Female; c. Fees: Rs. 10 monthly.

Capacity: 60.

Contact: Secretary.

Facilities: a. Balwadi for deaf children; b. Primary education for deaf children; c. Speech training for deaf children; d. Training in sewing, drawing and handicrafts and physical education for children; e. educational and cultural trips; f. Freeship to poor students.

Central School for the Deaf, 18, Motibai Street, Agripada, Bombay 400 011.

Admission regulations: a. Age: 2-6 years; b. Sex: Male/Female; c. Fees: Rs. 10.

Capacity: 45.

Contact: Principal.

Facilities: a. Formal education given to children; b. Guidance to parents; c. Training courses in Marathi and English for male and female graduates.

Vikas Vidyalaya for Deaf Children, A-3, Mehta Apartments, Prof. V.S. Agashe Road, Off Bhavani Shankar Road, Dadar, Bombay 400 028.

Admission regulations: a. Age: 2½-5 years; b. Sex: Male and Female; c. Fees: Rs. 10 per month; Rs. 5 per term; Rs. 10 entrance fee.

Capacity: 75.

Contact: Principal.

Facilities: a. Pre-school and primary education upto 16 years of age; b. Home science classes for deaf girls; c. Parent guidance clinic; d. Secondary education in Marathi medium; e. Infant service training for deaf children.

Education, Audiology and Research Society for Deaf Children, Punam, 67, Nepean Sea Road, Bombay 400 026.

Admission regulations: a. Age: 0 to 15 years; b. Sex: Male/Female; c. Fees: Free; Nominal fee for hearing aid.

Capacity: 60.

Contact: Principal.

Facilities: 1. INFANT CENTRE: a. Early detection and diagnosis; b. Auditory training; c. Parent counselling. 2. SCHOOL: a. Full-time education in English and other regional languages; b. Extra curricular activities like music, art, and craft; c. Pre-vocational training and integration into normal schools; d. Provide guidance to parents on how to help their children at home. 3. CLINIC: a. Provide auditory tests for children referred from hospitals elsewhere; b. Provide pre-school training in regional languages; c. Teach mothers to train children at home.

Bombay Dumb & Deaf Institution, Kakadwadi, Opposite Arya Samaj, Girgaum, Bombay 400 004.

Admission regulations: a. Age: 6-10 years; b. Sex: Male/Female; c. Fees: Free.

Capacity: 40 (20 in each shift); Timing: 7.30 a.m.-11.30 a.m.; 12 noon-4.30 p.m.

Contact: Superintendent/Head Master.

Facilities: a. Education Std. I-IV (Gujarati & Marathi Medium); b. Handwork, crafts, art; c. Outdoor sports/indoor games.

Prof. Date's Charitable Deaf & Dumb Institute, Opposite Kala Mandir, Thakurdwar Road, Bombay 400 002.

Admission regulations: a. Age: 6-15 years; b. Sex; Male/Female; c. Fees: Free or Nominal Rs. 5 p.m.

Capacity: 25

Contact: Principal.

Facilities: a. Std. I - IV (Marathi & Hindi Medium); b. Handicraft, tailoring; c. Outdoor sports (Cricket) and indoor games.

Bombay Deaf and Dumb Society, Govind Building, 140, Princess Street, Bombay 400 002.

Admission regulations: a. Age: Birth to old age; b. Sex: Male/Female; c. Fees: Rs. 10 per year (membership fee).

Capacity: Flexible.

Contact: Hon. Secretary.

Facilities: a. Parent Guidance; b. Training for industrial placement; c. Employment assistance; d. Marriage arrangements.

Nursery Unit for the Partially Deaf, St. Columba School, Dr. Kashibai Nawrange Road, Gamdevi, Bombay 400 007.

Admission regulations: a. Age: Infancy - 5 years (pre-primary age); b. Sex: Girls; c. Fees: Rs. 10 p.m.

Capacity: 6.

Contact: Principal.

Facilities: a. Early detection of deafness; b. Nursery School education (preparation for integration of partially deaf children into the existing school); c. Parent Counselling Centre; d. Library.

Jhaveri Thanawala School for Deaf & Dumb, Kesar Wadi, Thane, Bombay.

Admission regulations: a. Age: 3 - 16 years; b. Sex: Male/Female; c. Fees: Nil.

Capacity: 50.

Contact: Headmaster.

Facilities: a. To provide formal education; b. Teach handicraft; c. Teach tailoring.

Bhagini Samaj Bhadraben Desai Arogya Kendra and Khetwadi Lions Deaf and Mute School, Vijayrai Hazrat Sadan, Islampura Street, Nanubhai Desai Road, Bombay 400 004.

Admission regulations: a. Age: 3-6 years; b. Sex: Male/Female.

Capacity: 20.

Contact: Teacher-in-charge.

Facilities: Pre-primary and primary education in Gujarati medium with modern equipment.

INSTITUTIONS FOR THE AGED

Lady Dhunbai Jehangir Home for the Destitute, Dr. E. Moses Road, Bombay 400 011.

Admission regulations: a. Age: Aged, infirm beggars and young physically handicapped men; b. Sex: Male/Female; c. Fees: Free.

Capacity: 102.

Contact: Superintendent.

Facilities: Medical facilities.

King George V. Memorial, Jagtap Marg, Bombay 400 011.

Admission regulations: a. Age: Young men; b. Sex: Male; c. Fees: Free.

Capacity: 40.

Contact: Superintendent.

Facilities: a. Sleeping on verandah only; b. Work: Printing, tailoring, pin bunching, etc.

Cheshire Home, Bethlehem Home, Mahakali Road, Andheri East, Bombay 400 094.

Admission regulations: a. Age: Above 18 years; b. Sex: Male; c. Fees: Free.

Capacity: 50 members.

Contact: Sister-in-charge.

Facilities: a. Toy making; b. Provide nursing and medical care for the inmates; c. Spinning on the Ambar Charkha and cane work, painting and craft work.

District Benevolent Society of Bombay, Sir Jamshetjee Jijeebhoy Dharamshala, Jahangir Boman Behram Road, Nagpada Junction, Byculla, Bombay 400 008.

Admission regulations: a. Age: above 60 years; b. Sex: Male and female; c. Fees: Free.

Capacity: 300 people.

Contact: Superintendent.

Facilities: Medical care for aged destitutes.

Home for the Aged, Little Sisters of the Poor, Mahakali Road, Chakala, M.I.D.C.P.O.; Bombay 400 093.

Admission regulations: a. Age: Over 60 years; b. Sex: Male/Female; c. Fees: Free.

Contact: Sister-in-charge.

Capacity: 300.

Facilities: Provide shelter and care.

Shepherd Widows' House, Shepherd Road, Off Clare Road, Byculla, Bombay 400 008.

Admission regulations: a. Age: 60 years; b. Sex: Only female destitutes: c. Fees: Free.

Capacity: 30-32.

Contact: Secretary.

Facilities: a. General health care (nurse & matron); b. Recreational (T.V., Outings).

Jeevan Asha, Veera Desai Road, Andheri (West), Bombay 400 058.

Admission regulations: a. Age: no age bar; b. Sex: Male/Female; c. Fees: Free.

Capacity: 30-40 people.

Contact: Sister-in-charge.

Facilities: a. Weekly medical check-up; b. Hospital situated on premises; c. First preference to destitutes; d. Shelter and care provided.

All Saints Home, Old Dockyard Road, Mazagaon, Bombay 400 010.

Admission regulations: a. Age: Adults (60-85 years); b. Sex: Female; c. Fees: Nominal (according to means. Fixed fees for hostel).

Capacity: 36.

Contact: Superintendent.

Facilities: Shelter for the aged.

The Stranger's Home, 115, Shah Motishah Road, Mazagaon, Bombay 400 010.

Admission regulations: a. Age: Over 50 years; b. Sex: Male; c. Fees: Nominal/Free.

Capacity: Approx. 70.

Contact: Superintendent.

Facilities: Provide boarding and lodging.

Cardinal Gracias Home, Missionaries of Charity, 17, Chapel Lane, Santacruz (West), Bombay 400 054.

Admission regulations: a. Age: Adults; b. Sex: Female; c. Fees: Free.

Capacity: 50 women approximately.

Contact: Sister Superior.

Facilities: Total care for the destitute and dying women.

CENTRES FOR DESTITUTES

St. Francis High School Orphanage, Mount Poinsur, Near L.I.C. Colony, Borivli (W), Bombay 400 092.

Admission regulations: a. Age: 9-20 years; b. Sex: Male; c. Fees: Free (Court committed boys also).

Capacity: 300 boys.

Contact: Brother-in-charge.

Facilities: a. Provide free board, lodging and clothes to poor and destitute children; b. Provide formal education; c. Provide recreational facilities; d. Provide medical care.

St. Catherine Home, Ambivilli, Veera Desai Rd., Andheri (W), Bombay 400 058.

Admission regulations: a. Age: Below 16; b. Sex: Female; c. Fees: Free.

Contact: Superintendent.

Facilities: a. Provide free board, lodging, clothes to unwed mothers and orphaned girls; b. Educate such girls to minimum Std. VII. If capable girls given college education; c. Help inmates to get employment.

Protective Home, Chembur, Sion-Trombay Road, Near Diamond Garden, Bombay 400 071.

Admission regulations: a. Age: 17 years and above; b. Sex: Female; c. Fees: Free (Court committed only).

Capacity: Flexible.

Contact: Superintendent.

Facilities: a. Protect young women and their children under Suppression of Immoral Traffic in Women and Girls Act. 1956; b. Training in home science and various trades and crafts.

Shradhanand Mahilashram, Shradhanand Road, Maheswari Udyan. Matunga. Bombay 400 019.

Admission regulations: a. Age: no bar; b. Sex: Male/Female; c. Fees: Free.

Capacity: 400.

Contact: Honorary Secretary.

Facilities: Teach tailoring, embroidery and other household work.

Shree Manav Seva Sangh, 255-57. Sion East. Bombay 400 022.

Admission regulations: a. Age: below six years for boys and girls; b. Sex: Male & Female: c. Fees: Free.

Capacity: 200.

Contact: Superintendent.

Facilities: a. Teach handicrafts. sewing. singing. domestic duties. nursing; b. College education arranged for those with merit; c. Marriages arranged for public; d. Medical Centre; e. Child Guidance Clinic; f. Family Service Centre; g. Creche for working women.

The Salvation Army, Women & Children's Home. Sion Road. Sion. Bombay 400 022.

Admission regulations: a. Age: upto 18 years; b. Sex: Female; c. Fees: Free.

Capacity: 127.

Contact: Officer-in-charge.

Facilities: a. Provide shelter & protection to the homeless; b. Teach household work; c. Provide schooling outside the institute.

Bal Kalyan Nagri, Children's Aid Society. Sion-Trombay Road. Mankhurd. Bombay 400 088.

Admission regulations: a. Age: 6 years and above; b. Sex: Male and Female; c. Fees: Free (Juvenile court cases only).

Contact: Superintendent.

Facilities: a. Provide board and lodging; b. Schooling; c. Technical training.

Byramjee Jeejeebhoy Home. Shradhanand Road. Matunga. Bombay 400019.

Admission regulations: a. Age: between 5 and 10 years; b. Sex: Boys and Girls; c. Fees: Free.

Capacity: Flexible.

Contact: Superintendent.

Facilities: a. Provide academic education; b. Provide vocational guidance; c. Teach weaving, tailoring, printing etc.

Fr. Agnel's Ashram, Bandstand. Bandra. Bombay 400 050.

Admission regulations: a. Age: 7 to 12 years; b. Sex: Male; c. Fees: Free for some.

Capacity: 200.

Contact: Superior.

Facilities: a. Provide shelter. maintain and educate poor orphans and children with one parent; b. Have a technical school and Junior College and offer a wide variety of courses

St. Catherine of Slenna School, Welfare Society for Destitute Children, 17C, Mount Mary Road, Bandra, Bombay 400 050.

Admission regulations: a. Age: 5 to 12 years; b. Sex: Male and Female; c. Fees: Some free, others according to income.

Capacity: 160 boys and girls.

Contact: Superintendent.

Facilities: a. Provide board and lodging for vagrant, destitute and orphaned. Separate homes for boys and girls; b. Provide education from K.G. to Std. IV in English medium.

Our Lady's Home, St. Paul's Church Compound, Dr. Ambedkar Road, Dadar, Bombay 400 014.

Admission regulations: a. Age: 5 to 12 years; b. Sex: Male; c. Fees: Free.

Capacity: 200.

Contact: Superintendent.

Facilities: a. Provide schooling; b. Provide vocational training; c. Placement for job and accommodation.

League of Mercy, 'The Shelter', 61, Clare Road, Byculla, Bombay 400 008.

Admission regulations: a. Age: 3-17 years; b. Sex: Female; c. Fees: Free.

Capacity: 35.

Contact: Superintendent.

Facilities: a. Provide education to the children till S.S.C. level; b. Provide training in craft and cooking; c. Provide medical care; d. Sponsor children of 14 years and above through the Christian Children Fund from America; e. Provide recreation; f. Assist in getting employment.

St. Anthony's Home & High School, T. Boman Behram Marg, Byculla, Bombay 400 008.

Admission regulations: a. Age: Orphans below one year; b. Sex: Female; c. Fees: Free.

Capacity: 120.

Contact: Superintendent.

Ranchhoddas Chaturbhuj Cutchi Lohana Balashram, 63, Parel Road, Bombay 400 012.

Admission regulations: a. Age: 3-17 years; b. Sex: Male; c. Fees: Rs. 30/- per month; for admission 3 months fee to be paid in advance.

Capacity: 100.

Contact: Superintendent.

Facilities: a. Residential school from Std. I to high school; b. Provide higher education classes at 169, Sewri Wadala Road, Opp. V.J.T.I. College.

National Sponsorship Council, Mathurdas Estate Building No. 1, 43/45, Colaba Causeway, Bombay 400 005.

Admission regulations: a. Age: 10-14 years; b. Sex: Male/Female; c. Fees: Free.

Capacity: 1,500 children.

Contact: Social Worker.

Facilities: a. Sponsoring of needy children for medical expenses, education etc

Northecote Hindu Orphanage, 7, Kulapati K.M. Munshi Marg, Bombay 400 007.

Admission regulations: a. Age: 8-12 years; b. Sex: Male; c. Fees: Free (Admission between June & Mid-August).

Contact: Superintendent

Facilities: a. Provide Free board and lodging to destitute and orphaned (Hindu) children; b. Provide games and sports; c Provide medical care; d. Education

Asha Sadan, M.S.W.C. Asha Sadan Marg, Umarkhadi, Bombay 400 009

Admission regulations: a. Age: Girls—14-20 years; Children—0-6 years; b. Sex: Children—both Sexes; c. Fees: Free.

Capacity: Girls—100; Children—60.

Contact: Superintendent.

Facilities: a. Provide board & lodging to destitute rescued, court committed girls and unwanted children; b. Conduct adult education classes in Hindi & Marathi; c. Conduct classes in home science, music, craft, painting, sewing, embroidery, gardening & moral science; d. Provide recreation (cultural & entertainment programmes) competition; e. Child guidance clinic; f. Provide medical care; g. Assist in adoption or foster care of children by families in India and abroad.

Anjuman-E-Mufidul Yatama Orphanage, Mohammed Umer Rajjab Road, 11, Siddik Lane, Madanpura, Bombay 400 008.

Admission regulations: a. Age: 5-10 years; b. Sex: Male; c. Fees: Free.

Capacity: 200.

Contact: Superintendent.

Facilities: a. Residential school offering primary education and some sent to high school; b. Provide technical and craft training.

Bethel Children's Home, Ibrahim Manzil, Opp. Dharti Cinema, Parel, Bombay 400 012.

Admission regulations: a. Age: 7-12 years; b. Sex: Male; c. Fees: Free.

Contact: Warden in charge.

Facilities: a. Provide home for orphaned boys; b. Provide education in municipal school.

St. Joseph's Home & Nursery, Dr. Mrs. Leela Melville Marg, Byculla, Bombay 400 011.

Admission regulations: a. Age: Upto 18 years—girls; Below 5 years—boys; b. Sex: Male/Female; c. Fees: Free.

Capacity: 20.

Contact: Sister Superior.

Facilities: a. Home for abandoned and orphans; b. Education.

Religious of Mary Immaculate, Seth Motishah Lane, Opp. Byculla Police Station, Byculla, Bombay 400 027.

Facilities: a. Club & Employment Bureau for houseworkers; b. Hostel for working girls and students; c. Home for destitute children; d. Day and night school till SSC for girls of the 'Home' and others too.

Foster Care Group, C/o Bapnu Ghar, 12, Dr. Annie Besant Road, Worli, Bombay 400 018.

Admission regulations: a. Age: Below 6 years; b. Sex: Male Female; c. Fees: Free.

Capacity: 50.

Contact: Social Worker.

Facilities: a. Assistance to deserted children.

Shraddhanand Mahila Ashram, Shraddhanand Road, King Circle, Matunga, Bombay 400 019.

Admission regulations: a. Age: New born infants to any age; b. Sex: Infants (both sexes), others—Females only; c. Fees: Free.

Capacity: 400.

Contact: Honorary Secretary.

Facilities: a. Foundling Home; b. Orphanage; c. Rescue Home; d. Detention & Rehabilitation of Female Convicts; e. After-Care-Services (Rehabilitation); f. Residential Care of Aged & Infirm

CENTRES FOR THE PHYSICALLY HANDICAPPED

Society for the Education of the Crippled (Child and Adult), Agripada, Motlibai Street, Bombay 400 011.

Admission regulations: a. Age: 4-16 years; b. Sex: Male/Female; c.

Fees: Rs. 10/- per month.

Capacity: 150 children.

Contact: Principal.

Facilities: a. To provide educational facilities for orthopaedically handicapped children with a view to their integration into the normal educational system and adjustment into Society; b. To emphasize the need for extra-curricular activities such as swimming, outings, holiday camps, etc.; c. To provide guidance, opportunities for continuing education and recreational activities for ex-students; d. To create public awareness of the needs of the orthopaedically handicapped.

Orthopaedic Hospital for Children, Haji Ali Park, Clerk Road, Mahalaxmi, Bombay 400 034.

Admission regulations: a. Age: Upto 17 years; b. Sex: Male/Female; c. Fees: according to hospital; charges based on patient's income. Transport charges according to the distance.

Capacity: 50 indoor wards. Outdoor patients any number.

Contact: Honorary General Secretary.

Facilities: a. Provide treatment and rehabilitation; b. It has a school for children undergoing treatment; c. For physically handicapped children bus facility is provided.

All India Institute of Physical Medicine & Rehabilitation, Haji Ali Park, Bombay 400 034.

Admission regulations: a. Age: Adults and few children; b. Sex: Male/Female; c. Fees: Free.

Capacity: Flexible.

Contact: Medical Director.

Facilities: a. Training of technical personnel in the field of rehabilitation of the disabled; b. Treatment and rehabilitation available for various disabilities resulting from poliomyelitis, accidental injuries, neurological conditions, arthritic deformities; c. Research programme pertaining to the physically handicapped.

The Fellowship of the Physically Handicapped, Hornby Vellard, Haji Ali, Bombay 400 034.

Admission regulations: a. Age: Adults; b. Sex: Male/Female; c. Fees: Free.

Capacity: 140.

Contact: Superintendent.

Facilities: a. To rehabilitate the orthopaedically handicapped; b. To train and employ handicapped adults; c. To give them social opportunities; d. Academic facilities.

Vocational Rehabilitation Centre for Physically Handicapped, Sion Trombay Rd., Sion, Bombay 400 022.

Admission regulations: a. Age: 18-45 years; b. Sex: Male and Female; c. Fees: Free.

Capacity: Flexible.

Contact: Superintendent.

Facilities: a. Vocational evaluation for the provision of rehabilitation and employment assistance; b. Training in metal trade, carpentry, caning, tailoring etc. c. Counselling and follow-up; d. Assistance and guidance in setting up self-employment projects; e. Assistance in getting admission, stipend, etc. for pursuing technical education.

The Spastics Society of India, Opp. Afghan Church, Upper Colaba Road, Colaba, Bombay 400 005.

Admission regulations: a. Age: 3 to 15 years with confirmed cerebral palsy.

Capacity: 50.

Facilities: Special school providing expert educational and therapeutic services.

FAMILY WELFARE CENTRES

Urban Community Development Centre, 14th Road, T.P.S. III, Bandra, Bombay 400 050.

Admission Regulations: a. Age: Children and Adults; b. Sex: Male/Female; c. Fees: moderate rate for Typing, Shorthand, Tailoring. Other services are free.

Capacity: Flexible.

Contact: Director/Social Worker.

Facilities: a. Training programme like typing, shorthand, tailoring and screen printing; b. Employment bureau; c. Adult literacy classes in English, Hindi, Marathi and tuition classes for children from poor homes; d. Slum improvement programmes.

Family Service Centre, Eucharistic Congress Building III, 5. Convent Street, Bombay 400 039.

Admission regulations: a. Age: Sponsorship after the child has passed the 4th std., Adoption—Infants; b. Sex: Male and Female; c. Fees: Service Charges.

Capacity: Sponsorship—250 children; Adoption since 1962—257.

Contact: Social Worker.

Facilities: a. Adoption and Foster care; b. Sponsorship; c. Family Counselling; d. Financial Aid; e. Employment Bureau.

Nagpada Neighbourhood House, Sophia Zuber Road, Byculla, Bombay 400 008.

Admission regulations: a. Age: Children and Adults; b. Sex: Male and Female; c. Fees: Free/Nominal.

Capacity: Flexible.

Contact: Director.

Facilities: a. Child guidance clinic; b. Employment bureau; c. Full day creche and half-day nursery; d. Student centre for study and recreation.

Bapnu Ghar, 12, Annie Besant Road, Lotus Cinema, Worli, Bombay 400 018.

Admission regulations: a. Age: Married women with marital problems, with their children under 6 years of age, unmarried girls in moral danger and/or with parental problems; b. Fees: Free.

Capacity: 125.

Contact: Superintendent.

Indian Association for Promotion of Adoption, C/o M.G. Corporation, Indian Mercantile Ins. Bldg., Dr. V.B. Gandhi Marg, Bombay 400 001.

Admission regulations: a. Age: Infants; b. Sex: Male and Female; c. Fees: Rs. 200/- for Indians in India; Rs. 500/- for Indians residing abroad.

Capacity: Flexible.

Contact: Social Worker.

Facilities: a. To arrange adoption of children after home-study; b. To improve legal and social climate for adoption.

Family Welfare Agency, Near 10 B.D.D. Chawl, Delisle Road, Bombay 400 013.

Admission Regulations: a. Age: Flexible; b. Sex: Male/Female; c. Fees: Free.

Capacity: Flexible.

Contact: Honorary Secretary or President or Social worker.

Facilities: a. Education Aid; b. Medical Aid; c. Nutrition Aid; d. Family counselling; e. Marital counselling; f. Programme for the aged; g. Community based programmes in the B.D.D. Chawls.

The Bombay Mother's and Children Welfare Society, B.D.D. Chawl No. 10, N.M. Joshi Marg, Bombay 400 013.

Facilities: Serving the poor and needy people through hospitals and creche/nursery schools.

Hospitals: a. Dr. Mhaskar Hospital, No. 31 B.D.D. Chawl, N.M. Joshi Marg, Bombay 400013; b. Dr. Tilak Hospital, No. 50 B.D.D. Chawl, G.M. Bhosale Marg, Opp. Jambori Maidan, Worli, Bombay 400018; Creche/Nursery Schools—a. Bal-Mandir, No. 31 B.D.D. Chawl, N.M. Joshi Marg, Bombay 400013; b. Usgaokar Memorial Bal-Vihar, Dahisar-Gaurav, Joshi Road, Dahisar East, Bombay 400068; c. Vile-Parle Day Care Centre, Hanuman Road, Vile Parle East, Bombay 400057.

International Women's Association, 10, Raveline Street, Fort, Bombay 400 001.

Admission regulations: a. Age: Birth to 8 years; Family Planning facilities to all (Men and Women); b. Sex: Male/Female; c. Fees: Free for low income families.

Capacity: Flexible.

Contact: Doctor-in-charge.

Facilities: a. To provide free medical examination and treatment for children of low income families; b. To provide family planning facilities; c. Distribution of milk, biscuits and grains when donated.

Maharashtra State Women's Council, Head Office: Town Hall, S. Bhagatsingh Marg, Bombay 400 023.

Admission regulations: a. Age: All ages; b. Sex: Female; c. Fees: Free/Nominal.

Contact: Executive Secretary.

Functions: Maintenance of Rescue Home (Umerkhadi), Management of Bapnu Ghar (Worli), Child Welfare, Recreation, Libraries, Work Centre (Worli), Special Class, Vocational Training Centre (Santa Cruz) and Child Guidance Clinic (Fort) for Mentally Handicapped and Foster Care Programme, Balwadi (Labour Camp, Matunga) and Balwadi (Shahbaj, New Bombay).

Catholic Relief Services, U.S.C.C. India Programme, Bombay Zone, Eucharistic Congress Bldg. III, 1st fl., 5, Convent Street, Bombay 400 039.

Organised in 1943 by the Catholic Bishops of the United States as a compassionate response to victims of the World War II. It started operations in India in the year 1951 with the signing of the Indo-U.S. Agreement which provides for the duty free import of American agricultural commodities, medicines and other relief items for distribution to the poor and needy in India, without distinction to race, caste or creed.

The programmes supported are (a) Mother & Child Health; (b) School Feeding; (c) Orphanages/Hostels; (d) Individual Health Cases and (e) Food for Work. Bombay Zone conducts food programmes for 323,000 people per month through 45 consignees and 707 distributors. Cash grants are also considered for community development projects.

Maharashtra State Branch of Indian Council of Social Welfare, 43/45, Mathurdas Estate Building, Colaba Causeway, Above Apollo Florist, Bombay 400 039.

Admission regulations: a. Age: No age limit; b. Sex: Male and Female; c. Fees: Nominal fees.

Capacity: Flexible.

Contact: Honorary General Secretary or Executive Secretary.

Facilities: a. Community development programmes in slum areas; b. Pre-school education to slum child and study class for high school children; c. Adult literacy and social education; d. Sewing class for women; e. Youth clubs for slum youths.

A.K. Munshi Child Welfare Centre, Adarsh Niwas, 2nd floor, 214, Rajaram Mohan Roy Marg, Bombay 400 004.

Admission regulations: a. Age: Children under 15 years; b. Sex: Male/Female; c. Fees: Nominal for certain facilities; Free for certain facilities.

Capacity: Flexible.

Contact: Social Worker.

Facilities: a. Free advice and guidance for parents of mentally retarded children; b. Organise talks, film-shows, panel discussion, group therapy sessions for parents of mentally retarded and problem children; c. Shishu Graha for children between 1 to 5 years providing pre-school education and health check-up; d. Child clinic; e. Composite health scheme for children.

Snehalaya, Family Service Centre, Victoria Church Compound, L.J. Road, Mahim, Bombay 400 016.

Admission regulations: a. Age: Flexible; b. Sex: Male/Female; c. Fees: According to income.

Capacity: Flexible.

Contact: Social Worker.

Facilities: a. Marriage counselling; b. Psychotherapy; c. Psychological testing; d. Vocational guidance; e. Counselling children; f. Marriage preparation courses; g. Parent enrichment programmes; h. Responsible parenthood training.

FAMILY WELFARE PROGRAMME

INDIA was the first country to adopt an official policy favouring family planning in 1952. During the period of the first two Plans (1951-61), the emphasis was mainly on research in the field of motivation, communication, demography, physiology of reproduction and on the extension of Central and State organisations for providing clinical services. In 1962-63 the programme was reorganised and a new "Extension Approach" was adopted. The programme was, however, still treated as an isolated birth control scheme. This point of view was given a more concrete shape during 1974, the World Population Year. In March 1977, the Ministry of Health and Family Planning has been redesignated as Ministry of Health and Family Welfare, the Department of Family Planning as the Department of Family Welfare and the Family Planning Programme as Family Welfare Programme. The objective of the Family Welfare in India in 1978 was to reduce the birth rate to 30 per thousand population by the end of 1982-83 from the present rate of 33 per thousand population.

In 1978, the Planning Commission, appointed a Working Group on Population Policy to suggest a long-term demographic objective for the country. They felt that under the present conditions it is hardly possible to separate the issues of fertility control from the broad spectrum of socio-economic and developmental factors. The Group suggested that the future fertility goals should be linked to some developmental variables, like mortality level, particularly infant mortality. The Working Group, in its final report has recommended that the long term demographic goal of the country should be that on the average woman will be replaced by one daughter and two-child family will be the normative pattern in the society, and all the States should reach this goal by the year 2001 A.D.

Fixation of Levels of Performance: The operational programme fixed for the five-year period 1978-83, to bring down the birth rate to 30 by the end of 1982-83, envisages 28 million voluntary sterilisations, 5 million IUD insertions, an annual average of 5 million users of conventional contraceptives and oral pills. For the year 1978-79, it was aimed to perform about 3.96 million sterilisations, 0.6 million IUD insertions and to increase the number of users of other methods to 4 million.

Position in 1978-79: The method-wise performance of the programme as compared to that in the year 1977-78 is tabulated in the following page.

Overall Performance of Family Planning in 1978-79

(figures in million)

Method	Target (1978-79)	Achievement		Performance in 1977-78	Change in performance in 1978-79 over 1977-78 (percentage)
		Number	Percentage		
1. Sterilisation	3.96	1.48	37.4	0.95	(+) 56.3
a) Vasectomy		0.39		0.19	(+) 109.0
b) Tubectomy		1.09		0.76	(+) 43.6
2. I.U.C.D.	0.60	0.55	92.0	0.33	(+) 69.4
3. Other Methods	4.00	3.60	90.1	3.25	(+) 10.8
a) C.C. Users		3.52		3.17	(+) 10.9
b) Oral Pill Users		0.08		0.07	(+) 4.7
Total users		5.63		4.53	(+) 24.5

Administration: A full-fledged Department of Family Planning created in April 1966, in the Ministry of Health and Family Planning, now known as the Department of Family Welfare, is headed by the Secretary of the Ministry and an Additional Secretary who is also Commissioner of Family Welfare. There is a Family Welfare Cabinet Committee presided over by the Finance Minister and the State Family Welfare Cabinet Committees headed by the Chief Ministers to ensure expeditious policy clearance and better co-ordination among different administrative wings. The Central Family Welfare Council is the supreme policy making body. The Union Minister of Health presides over the Council, while all State Health Ministers and Secretaries are its members. The Council also includes representatives of voluntary and labour organisations, some members of Parliament and eminent personalities and experts in the field of family welfare. Family Welfare Councils also function at the State level.

Allocation of Funds and Actual Expenditure during the Plan Periods.

Period	Allocation of Funds (in million Rs)	Actual Expenditure (in million Rs.)
First Plan		
1951-56	6.5	1.45
Second Plan		
1956-61	49.7	21.56
Third Plan		
1961-66	270.0	248.60
Annual Plans (Inter Plan Period)		
1966-67	149.3	134.26
1967-68	310.0	265.23
1968-69	370.0	305.15
Fourth Plan	3,150.0	
1969-70	420.0	361.84
1970-71	520.0	489.04
1971-72	606.1	617.56
1972-73	763.1	797.48
1973-74	548.5	578.46
Fifth Plan (Plan Outlay 4,973.6)		
1974-75	541.4	620.48
1975-76	632.0 (a)	806.14
1976-77	1,491.0 †	1,729.82*
1977-78	981.8 †	933.37*
Sixth Plan		
1978-79	1,109.3 (b)	1,075.45*
1979-80	1,162.0	not available

*Provisional. † Including Rs. 791.4 million obtained through supplementary grants and excluding Rs. 1.5 million provided in the Ministry of Works and Housing. (a) In addition supplementary grant was also sought, including Rs. 59.5 million for payment of arrears. (b) Excluding Rs. 8.8 million provided in the demands of Ministry of Works and Housing.

Organisation in States and Union Territories: To implement Family Welfare and Maternal Health Programme, 26 State Family Welfare Bureaux are functioning in various States and Union Territories. At the district level 358 District Family Welfare Bureaux are functioning in 385 districts of India. Six more have been sanctioned during 1978-79. Upto September 1978, Urban Family Welfare Centres (including 350 attached to Post-Partum Family Welfare institutions) numbered 1,986. Upto September 30, 1978, as against 5,397 Primary Health Centres functioning in the country 5,304 Rural Family Welfare Centres had been established. In addition State Governments have been allowed to establish 158 Rural Family Welfare Centres at such Primary Health Centres, which do not have one at present. These rural centres are supported by sub-centres. Against the requirement of 43,910 sub-centres necessary to achieve the target of one sub-centre per 10,000 rural population (1971 census), 39,012 sub-centres are functioning in the country. It is also proposed to provide one female multi-purpose worker (ANM) for every 5,000 rural population by 1984-85 to improve the maternity services in the rural areas and massive training schemes have been taken up towards that end.

Integrated Approach: During the inter-plan period of 1968-69, the family planning programme was integrated with the public health programme in the country, especially with the maternal and child health programme. In 1973-74, it was integrated with other health programmes, like health, family planning, maternity and child health (MCH) and multi-purpose workers are being trained to perform all the integrated tasks. Since 1978, the programme has been integrated with other development programmes, such as adult education programmes, population education programmes in the schools and special programmes for employment of women in rural areas. However, during the year 1974-75, the policy of mini-camps were adopted. These camps are held at primary health centres, urban welfare centres and at district and *tehsil* hospitals. An extra expenditure of Rs. 5 per case is allowed.

Some Associations: Voluntary organisations have been recognised for playing an important role in the field of family welfare. Some of these are: the Family Planning Association of India, Indian Medical Association, Central Bharat Sevak Samaj, Indian Red Cross Society, Trained Nurses Asssociation of India, Bharatiya Gramin Mahila Sangh, Indian Council of Social Welfare, the Christian Medical Association, the Rotary Clubs, the Lions Clubs and the Junior Chambers of Commerce etc. Many of these voluntary organisations are represented on the Central as well as on the State family welfare councils. In addition, the Ministries of Railways, Defence, Labour and Employment, and the Posts and Telegraphs Department have been participating in the National

Family Welfare Programme. For commercial distribution of *Nirodh*, 12 consumer goods marketing companies are engaged in the work and it is estimated that 0.38 million retail shops are selling *Nirodh*.

Research: Research in demography, bio-medicine and communication is supported by the Government through suitable grants.

A high powered committee called the Committee on Socio-economic Studies on Family Welfare has been constituted to go into different aspects of the family welfare programme. This Committee advises and co-ordinates research on economic, sociological, educational, psychological, communicational and demographic aspects of population growth and family welfare. The Committee also reviews the progress of research work done and makes recommendations for development of research in these fields. It also reviews the working of the research centres dealing with population studies.

The International Institute for Population Studies (IIPS), Deonar, Bombay 400 088: Formerly known as Demographic Training and Research Centre, the Institute was established as a registered body in July 1956 and is a regional centre for the training of demographers from India and other ESCAP countries. It is supported by the United Nations and Government of India. The Institute conducts a Certificate course in Population Studies, and Diploma course in Population Studies. It also has a Ph.D. Programme leading to Ph.D. in Demography of the Bombay University. Apart from teaching the Institute undertakes researches in the field of population studies, including family welfare. It was renamed as International Institute for Population Studies in 1970.

Population Research Centres: The National Institute of Health and Family Welfare, New Delhi, is responsible for undertaking family welfare researches. In addition, there are at present twelve demographic research centres like: Institute of Economic Research, Dharwar; Bureau of Economics and Statistics, Government of Kerala, Trivandrum; Gokhale Institute of Politics and Economics, Pune; Department of Statistics, M.S. University, Vadodara; Indian Statistical Institute, Calcutta; Institute of Economic Growth, Delhi; Department of Statistics, University of Patna, Patna; Institute of Social and Economic Change, Bangalore; Department of Economics, University of Lucknow, Department of Statistics, Andhra University, Waltair; Department of Sociology, University of Udaipur; and Department of Anthropology, University of Utkal, Bhubaneshwar. In addition, there is Demographic Research Centre functioning in the Department of Statistics, Benaras Hindu University, Varanasi.

India Population Project: Since 1973, two experimental projects on family welfare have been initiated. The first project covers six districts of Uttar Pradesh and the second, five districts of Karnataka. These projects were run with assistance from the International Development Association to the extent of 21.2 million dollars in the form of a loan, and 10.6 million dollar grant from the Swedish International Development Authority. The emphasis in these projects is on the implementation of a maternity based family welfare programme both in urban and rural areas. An attempt has also been made to assess the effect of supplementary nutrition on the acceptance of family welfare in one district each in the two States and to Develop a better system of management information and evaluation. The implementation of the field programme has been divided into three broad categories namely, an urban programme in the cities of Lucknow and Bangalore; an optimal programme on the existing pattern in four districts of Uttar Pradesh and three districts of Karnataka; and an intensive rural programme in two districts of each of the States. A population centre is attached to each of these projects. The main function of the Centre is to carry out experimental and innovative studies in the field of family welfare and to experiment with new management techniques.

Research in Reproductive Biology and Fertility Control: Research in Reproductive Biology and Fertility Control is carried out at the Central Drug Research Institute, Lucknow; All-India Institute of Medical Sciences, New Delhi; Rajasthan University; National Institute of Health & Family Welfare, New Delhi; Indian Institute of Science, Bangalore; Institute of Research in Reproduction, Bombay. The Indian Council of Medical Research provides technical advice and co-ordinates research work in the field of medical and bio-medical research.

Training: The training of family welfare instructors and key staff is undertaken by five training institutes, the National Institute of Health and Family Welfare, New Delhi; the Institute of Rural Health and Family Welfare, Gandhigram; the All-India Institute of Hygiene and Public Health, Calcutta; the Family Welfare Training and Research Centre, Bombay; and the Central Health Education Bureau, New Delhi. There are 59 Family Welfare Training Centres at the State level functioning. Each State has a Central Family Welfare Field Unit which undertakes *ad hoc* training programmes. In order to overcome the acute shortage of Auxiliary Nurse Midwives in some States, the Family Welfare Department opened 25 new ANM training schools in 1970-71, ten in Bihar, ten in Uttar Pradesh and five in Orissa.

Oral Contraceptives: The Technical Committee on Family Planning recommended in June, 1971, that oral contraceptives may be tried both in urban and rural areas under some restricted conditions as an adjunct to the IUD programme. Till March 1979, 6,070 centres comprising of 3,684 rural centres, and 2,361 urban centres (excluding 25 centres of Tripura for which rural/urban break up is not available) were distributing pills throughout the country. During 1978-79, a total of 1,057,833 cycles of oral pills were distributed throughout the country. The oral pills are being distributed free of cost.

Copper 'T': The Government has agreed to include Copper T as a new loop in its programme. The Indian Medical Research Institute has found it effective. Out of a total of 551,808 IUD insertions in 1978-79, 176,339 were Copper T. Compared to the performance of Copper T insertion in 1977-78, the performance during 1978-79 has increased by more than three fold. It is likely the demand of Copper T will increase in future.

Medical Termination of Pregnancy Programme: Through this programme, abortions are conducted on persons requiring the same voluntarily by trained doctors in government hospitals and approved institutions. As per reports received upto March 1979, there were, 2,765 institutions approved for M.T.P. Since inception a total of 1,219,784 abortions have been terminated under this programme, out of which 312,754 were performed during 1978-79.

Conventional Contraceptives: Among the conventional contraceptives, Nirodh is widely used. It claims about 99 per cent of the total conventional contraceptive users. During the year 1978-79, about 252 million pieces were distributed out of which around 120 million pieces were distributed through commercial distribution and the rest free of cost. Presently 12 consumer goods marketing companies are engaged in this work and about 0.38 million retail shops are selling Nirodh.

Progress: The country's **birth rate** for 1978-79 was slightly higher than that for the previous year. Calculated on the basis of births averted through the family welfare programme, the rate was 33 per 1,000 during 1978-79 as compared to 32.9 for 1977-78.

The number of births averted in 1978-79 was 4.93 million, while the corresponding achievement in the preceding year was 5.05 million.

The total number of births averted up to the end of March 1979 since the inception of the family planning programme was 34.52 million.

However, the progress of the family welfare programme during 1978-79 was better than in the previous year. The number of voluntary sterilisations performed in 1978-79 was 1.48 million as compared to 0.95 million in 1977-78, representing a 52.6 per cent increase

The percentage of tubectomy operations performed during 1978-79 was, howevecr, lower at 73.8 as against 80.2 in 1977-78.

Since the launching of the family planning programme in the country, 29.6 million sterilisation operations have been performed up to the end of March 1979, giving a cumulative rate of 45.7 per 1,000 population.

The number of IUD insertions done in 1978-79 was 551,808 as against 325,680 in 1977-78, representing an increase of 64.7 per cent. The total of such insertions done from the beginning of the programme until March 31, 1979 was 7.5 million giving a cumulative rate of 11.6 per 1,000 population.

But in 1978-79, the actual performance, against the official "expectation" was less in all aspects of the programme. In the case of voluntary sterilisation while the expectation was 3.96 million the achievement was not more than 1.48 million.

There was a significant improvement in the community's acceptance of family welfare programme during the financial year 1978-79. The number of "acceptors" of any of the family planning techniques propagated under the official programme in 1978-79 was higher at 5.63 million as compared to 4.53 million in 1977-78. representing a percentage increase in the number of acceptors was highest in the case of voluntary vasectomy operations.

In percentage terms, this was 108.0. The improvement recorded by other family planning technicians in 1978-79 over the previous year was 69.4 per cent (IUD), 43.6 per cent (tubectomy) and 10.8 per cent (for conventional contraceptives including oral pills).

Up to the end of March, 1979, the number of eligible couples effectively protected by the programme was 25.06 million, out of the total 110 million such couples in the country. Thus, the percentage of protected couples was 22.8.

State-wise achievement of Family Planning by Methods, 1978-79

State/Union Territory/Agency	Sterilisation		IUD		Other methods	
	Achievement	Per cent of target	Achievement	Per cent of target	Achievement	Per cent of target
Andhra Pradesh	192,199	63.6	17,575	38.6	27,468	17.9
Assam	25,269	28.7	6,638	49.9	23,345	52.3
Bihar	88,078	21.3	19,332	31.1	47,536	22.7
Gujarat	197,367	102.5	35,301	121.7	205,429	210.5
Haryana	13,914	27.5	27,858	366.6	125,162	487.0
Himachal Pradesh	6,994	32.2	5,161	156.4	11,243	102.2
Jammu & Kashmir	9,256	24.7	3,944	70.4	6,218	32.7
Karnataka	96,000	41.5	33,901	97.4	74,769	63.9
Kerala	90,090	55.7	12,095	49.6	23,053	28.1
Madhya Pradesh	80,281	28.6	20.126	47.6	63,857	44.8
Maharashtra	177,898	51.5	20,721	39.8	139,710	79.8
Manipur	2,130	27.7	1,167	97.3	1,488	38.2
Meghalaya	230	5.4	365	28.1	664	15.4
Nagaland	126	-	50	-	53	-
Orissa	105,058	77.4	13,945	68.4	54,155	78.8
Punjab	20,530	22.6	34,308	250.4	130,821	283.8
Rajasthan	20,884	10.4	18,179	60.0	94,112	92.4
Sikkim	328	-	725	-	941	-
Tamil Nadu	216,428	78.2	36,589	87.7	73,380	52.3
Tripura	769	6.6	165	9.2	3,056	51.8
Uttar Pradesh	29,255	4.3	195,224	188.8	349,348	100.4
West Bengal	67,511	20.6	10,687	21.7	59,105	35.6
A. & N. Islands	498	71.1	234	234.0	476	119.0
Arunachal Pradesh	92	5.4	281	56.2	510	28.3
Chandigarh	1,214	67.4	3,413	682.6	6,190	343.9
D. & N. Haveli	266	44.3	5	5.0	450	150.0
Delhi	7,901	31.0	24,190	314.2	149,090	575.6
Goa, Daman & Diu	2,282	30.3	524	47.6	1,301	34.2
Lakshadweep	29	9.7	8	8.0	288	144.0
Mizoram	1,423	88.9	355	71.0	720	45.0
Pondicherry	3,495	105.9	959	191.8	1,236	72.7
M/O Defence	17,676	88.4	5,500	220.0	62,893	138.5
M/O Railways	7,609	21.7	2,283	69.2	180,080	116.0
Commercial Distribution			-	-	1,670,000	92.8
Family Planning Asociation of India			-	-	6,504	
C.M.A.I. (F.P. Project)			-	-	8,012	
ALL INDIA	1,483,080	37.4	551,808	92.0	3,602,663	90.1

Religion and Family Welfare: The religion-wise distribution of sterilisation and IUD insertions based on 1977-78 revised estimates of the Department of Family Welfare are given in the table in next column.

New Legislation: The Medical Termination of Pregnancy was passed in 1972 and is designed to substantially liberalise legal provisions to resort to abortion in cases where contraceptives fail to prevent conception.

According to the National Population Policy announced by the Government of India on April 16, 1976, it was proposed to raise the legal minimum age of females at marriage from 16 to 18 years. The Child Marriage Restraint (Amendment) Act, 1978, which came into effect from 1-10-1978, provides for raising the minimum age of marriage in respect of girls to 18 years and in respect of boys to 21 years. The government has also taken preliminary steps to introduce population education in schools and colleges.

According to the revised statement of policy released on 29-6-1977, family planning will be pursued vigorously as a wholly voluntary programme and an integral part of comprehensive policy covering education, health, maternity and child care, family welfare, women's rights and nutrition.

Religion-wise Percentage Distribution of Sterilisation and IUD 1977-78

Religion	Sterilised persons	IUD acceptors	Distribution in 1971 census
Hindus	89.8	82.0	83.9
Muslims	5.6	6.2	10.9
Christians	2.3	2.4	1.6
Sikhs	1.4	8.3	2.0
Others	0.9	1.1	1.6
Total	100.0	100.0	100.0

Percentage of Couples Effectively Protected by Various Methods upto March, 1979

State/Union Territory Agency	Estimated no. of reproductive couples in the age group 15-44 in March, 1979 (million)	Percentage of Couples Effectively Protected			
		Sterilisation	IUD	Other methods	All methods
Andhra Pradesh	9.0	25.9	0.4	0.2	26.5
Assam	2.8	19.2	0.6	0.4	20.2
Bihar	12.3	12.0	0.3	0.2	12.5
Gujarat	5.2	27.7	1.2	2.2	31.1
Haryana	1.9	24.3	4.2	3.3	31.7
Himachal Pradesh	0.7	21.8	1.4	0.8	23.9
Jammu & Kashmir	1.0	8.9	0.9	0.4	10.1
Karnataka	5.6	20.3	1.0	0.7	22.0
Kerala	3.5	27.5	1.0	0.3	28.8
Madhya Pradesh	9.1	20.5	0.5	0.4	21.4
Maharashtra	10.1	33.8	0.4	0.7	34.9
Manipur	0.2	6.8	1.4	0.4	8.6
Meghalaya	0.2	6.1	0.6	0.2	6.8
Nagaland	0.08	0.8	0.1	0.1	1.0
Orissa	4.6	23.4	0.8	0.6	24.8
Punjab	2.2	19.8	3.1	3.0	25.8
Rajasthan	5.7	11.7	0.6	0.9	13.1
Sikkim	0.03	2.2	2.6	2.9	7.7
Tamil Nadu	7.8	27.4	0.8	0.5	28.7
Tripura	0.3	9.7	0.1	0.6	10.2
Uttar Pradesh	18.1	9.2	1.7	1.0	11.9
West Bengal	8.2	20.7	0.3	0.4	21.4
A. & N. Islands	0.03	12.3	1.5	1.0	14.8
Arunachal Pradesh	0.1	0.6	0.3	0.4	1.3
Chandigarh	0.08	12.7	7.6	4.2	24.5
D. & N. Haveli	0.02	12.6	0.1	1.6	14.2
Delhi	0.9	24.6	3.9	8.4	36.8
Goa, Daman & Diu	0.2	15.0	0.7	0.4	16.2
Lakshadweep	0.01	5.6	0.2	2.5	8.3
Mizoram	0.06	6.8	0.8	0.6	8.2
Pondicherry	0.1	32.0	2.4	0.7	35.1
Ministry of Defence	-	-	-	-	-
Ministry of Railways	-	-	-	-	-
Commercial Distribution					
All India	110.0	20.2	0.9	1.7	22.8

PUBLIC HEALTH

(For the addresses of the Research Institutes mentioned in the chapter please refer to 'Research' chapter)

HEALTH programmes are primarily the responsibility of the State Governments. The Centre is, however, directly responsible even for the State subjects in the Union Territories.

Outlay on Public Health and Medical Programme

(Rs. million)

Period	Central	Centrally Sponsored	States	Union Territories	Total
Third Plan	148.3	54.6	1,932.4	123.3	2,258.6
1966-69	167.6	111.4	1,052.4	69.7	1,401.1
Fourth Plan 1969-74	535.0	1,765.0	1,842.4	192.9	4,335.3
Fifth Plan 1974-78	445.1	1,740.6	2,436.6	269.8	4,892.1
1978-79	219.8	1,245.0	1,223.5	127.0	2,815.3

For the year 1979-80 the Planning Commission has provided in the Annual Plan an outlay of Rs. 2.681.8 million. Budget estimates (1979-80) under State and Central Sectors respectively were Rs. 1,112.1 million and Rs. 1,569.7 million.

The Sixth Plan outlay on Health and Family Welfare Scheme is Rs. 28,300 million out of which Rs. 18,200 million is for health and Rs. 10,100 million for family welfare schemes.

Rural Health: The Central Health and Family Welfare Ministry drafted a plan for the development and extension of health care services in the rural areas at an expenditure of Rs. 4,860 million over the next four years. It proposes to provide health services at the villager's doorstep through 580,000 community health workers and another 580,000 midwives after a short term training in the preventive and promotional aspects of health care. It envisages one man and one woman multipurpose worker for every 5,000 people by 1984-85. Manpower will be drawn from among those below 30 years with minimum formal education up to the sixth standard. The workers, covering every village with a population of 1,000 will be selected by the community itself and trained in groups of 20 for three months. The target of training is 580,000 community health workers at the country's 5,372 community health centres. Since the inception of the Community Health Volunteers' Scheme 14,213 persons have been trained upto 30th Sept., 1979, and all these workers have been supplied with manuals, kits and drugs.

Expectation of Life at Birth and Death Rates

Year	Expectation of life at birth		Death rate per 1,000 population
	Males	Females	
1941-50	32.5 years	31.7 years	27.4
1951-60	41.9 years	40.6 years	22.8
1961-70	46.4 years	44.7 years	15.7* (for 1970)
1971-75	50.7 years	49.3 years	15.5* (for 1973)
1976-80	53.8 years	52.6 years	15.9* (for 1975)

* Based on sample registration school data.

Sources: (i) The figures for 1941-50, 1951-60 and 1961-70 are based on Census estimates.

(ii) The figures for 1971-75 and 1976-80 are estimates based on the revised projections made by the Expert Committee appointed by the Government of India.

Hospitals & Dispensaries: The number of hospitals and dispensaries (as on Dec. 31, 1977) was 16,432 out of which 6,353 were in the urban areas and the rest rural. The number of beds available in the urban areas was 322,552 and in the rural 104,182. At the end of March, 1978 the total number of hospitals in the country was 5,100 and dispensaries was 12,500.

Doctor-Population Ratio: At the end of 1977-78 was 1:3,730 and that of nurse was 1:5,870. The number of economically active doctors in India in 1977-78 was 170,000.

Population Ratio per Doctor in States/Territories (1981): Uttar Pradesh 16,677; Haryana 15,444; Assam 11,879; Andhra 11,568; Madhya Pradesh 11,546; Karnataka 9,779; Rajasthan 9,656; Orissa 9,377; Himachal 7,514; Jammu & Kashmir 6,996; Tripura 6,851; Meghalaya 6,422; Bihar 4,746; Manipur 4,131; Nagaland 3,425; Sikkim 3,115; Gujarat 2,603; Kerala 2,491; Punjab 1,826; West Bengal 1,760; Tamil Nadu 1,653; Maharashtra 1,557; Others 12,172; Dadra and Nagar Haveli 4,300; Arunachal 3,231; Andaman & Nicobar Islands 3,000; Pondicherry 2,806; Lakshadweep 2,692; Goa 1,243.

Air Pollution: The atmospheric pollution in cities like Delhi, Calcutta, Bombay and Kanpur has increased between 50 and 100 per cent since 1957. This affects the health of the people. The National Environmental Engineering Research Institute, Nagpur is studying the effects of air pollution in Bombay. A national network of sampling for air quality has been set up in nine cities (viz. Delhi, Calcutta, Madras, Kanpur, Bombay, Ahmedabad, Hyderabad, Jaipur and Nagpur).

The Union Government has set up an expert committee to study the general problem of air pollution and to suggest ways and means including a draft legislation to control them. Government of India has decided to set up many stations to measure air pollution in all major cities. A beginning would be made with 10 of them being located in schools or colleges of Delhi with the help of teachers. A provision of Rs. 15 million was made in the Fifth Plan for water and air pollution control to meet the cost of establishment of a Central Water Board and for extending financial assistance to State Governments and Union Territories for necessary studies in this subject.

Cancer: About 425,000 people die every year from cancer in India. There are 84 centres where facilities for cancer treatment are available in the form of surgery, radium etc. The State-wise break-up is: Andhra Pradesh 7, Assam 4, Bihar 2, Delhi 6, Gujarat 5, Karnataka 6, Kerala 3, Maharashtra 15, Orissa 2, Punjab (including Haryana) 5, Rajasthan 6, Tamil Nadu 13, Uttar Pradesh 5, and West Bengal 5. During the Fifth Plan it was proposed to strengthen the treatment facilities by providing radio-therapy units at medical college hospitals and important district hospitals with Cobalt beam. A sum of Rs. 30 million has been provided for this purpose. The Cancer Foundation had offered a donation of Rs. 4 million for setting up of a Rotary Cancer Hospital at the All India Institute of Medical Sciences, New Delhi.

Research is conducted at the Cancer Research Institute, Parel, Bombay; the Cancer Institute, 110 Mount Road, Madras 600018; the Chittaranjan National Cancer Research Centre, Calcutta; Radium Institute and Cancer Hospital, Hyderabad; J.K. Institute of Radiology and Cancer Research, Kanpur; International Cancer Centre, Neyoor, Tamil Nadu and S.N. Medical College, Agra. Field Research stations for official facilities have also been established at Chandernagore, Hooghly, West Bengal and Madras. The Indian Council of Medical Research has started a study of cancer of the cervix at the Lady Hardinge Medical College and Safdarjang Hospital in New Delhi.

Cholera: The endemic areas are Andhra Pradesh, Bihar, Maharashtra, Karnataka, Orissa, Tamil Nadu and West Bengal. Considerable decline had been noticed in the incidence and deaths due to Cholera during the year 1979. From 1st January to 31st October 1979, 8,909 cases and 253 deaths were reported as against

10.834 cases and 269 deaths during the whole of 1978. From 1st January to 31st October, 1979 4,021 cases and 253 deaths were reported as against 10.834 cases and 269 deaths during the whole of 1978.

The introduction of Oral Rehydration Therapy has proved very effective in the control of cholera and other diarrhoral diseases. 46 cholera combat teams are functioning in different parts of the country.

Diabetes: The urban population in the country is more prone to diabetes than its counterparts in rural areas. On a rough estimate at the end of 1972 about 5.5 million people were suffering from diabetes in India. Of them, urban area's share was 3.3 million.

Filaria: The National Filaria Control Programme has been in operation since 1955-56. About 236 million persons are endemic for filaria. 18 million persons have been detected as micro-filaria carriers and 14 million are chronic filaria patients. At present 157 Filaria control units, 46 filaria clinics, and 22 survey units are functioning in 15 States/Union Territories endemic for filariasis. These units protect 23 million urban population.

The headquarters of the programme is located at the National Institute of Communicable Diseases, Delhi. Training in filariology is being imparted at the Regional Filaria Training and Research Centres located each at Calicut (Kerala), Rajamundry (Andhra Pradesh) and Varanasi (Uttar Pradesh). These centres are also responsible for the field evaluation of the programme, and research in various aspects of filariasis.

Pilot programmes for the control of filariasis in rural areas were introduced in three districts, viz. Srikakulam (Andhra), Valsad (Gujarat) and Jaunpur (Uttar Pradesh) since 1978, which cover about 5 million of the population.

Goitre: Endemic goitre is a nutritional deficiency disease and is prevalent in the southern slopes of the Himalayas covering a distance of 2,414 kms. About 40 million people live on this goitre belt which consists of northern parts of Jammu and Kashmir, Punjab, Haryana, Himachal Pradesh, Bihar, West Bengal, Nagaland, Arunachal Pradesh and Manipur. The persons affected with goitre are estimated to be about 8 to 10 million. The Central Goitre Survey Teams have completed initial goitre surveys.

The National Goitre Control Programme includes the manufacture of iodised salt at Sambhar Salt Ltd. (Sambhar Lake) in Rajasthan, Hindustan Salt Ltd. (Kharaghoda) in Gujarat and Govt. Salt Golah (Howrah, Calcutta). The production in these establishments was 48,000, 68,000 and 68,000 tonnes respectively in 1978-79. Two plants, with UNICEF assistance, were proposed to be set up at Gauhati, Assam to cater to the needs of Mizoram and districts of Goalpara and Kamrup of Assam State were expected to produce 48,000 tonnes of iodised salt per year.

Influenza: An Influenza Centre was opened in 1950 at the Pasteur Institute, Coonoor, Tamil Nadu, to undertake study of and research in problems relating to influenza. The centre co-operates with the World Influenza Centre, London and other influenza centres organised by the WHO in different parts of the world.

Leprosy: It has been estimated that 3.2 million people in India are suffering from leprosy out of which about 25 per cent are of the infectious type and 25 per cent suffer from deformities.

The National Leprosy Control Programme was launched in the year 1955 to control the spread of the disease and to provide modern treatment facilities to the leprosy patients. The following components have been established under the above programme: Leprosy control units: 381; Survey, eradication and treatment centres: 6,590; Urban leprosy centres: 430; Temporary hospitalisation wards: 190; Voluntary leprosy control units: 42, No. of beds provided 31,800.

The Central Leprosy Training and Research Institute, Chingleput (Tamil Nadu), **Regional Leprosy Training Institute,** Aska (Orissa) and **Regional Leprosy Training & Research Institute,** Raipur (Madhya Pradesh) are the Regional Training and Research Institutions under the Central Govt

Assistance to certain research programmes is received from the WHO in the form of equipment and drugs.

Private organisations also take active part in controlling leprosy. These include the Leprosy Mission, Hind Kushta Nivaran Sangh (the Indian Leprosy Association), Gandhi Memorial Leprosy Foundation (for addresses refer to the chapter on 'Institutions for the Handicapped') and 3 R' Society, C/o Tata Dept. of Plastic Surgery, Balaram Bldg., J.J. Group of Hospitals, Bombay 400008. In addition four centres helped by international agencies are also functioning. They include the French Centre in Andhra Pradesh, ELEP Centre and Swedish Mission Hospital in Tamil Nadu, and JALMA in Uttar Pradesh.

The Reconstruction Surgery Programme is receiving increasing attention of the Government of India and leprosy patients with deformities of hands, feet and face get facilities of corrective surgery now in about 30 hospitals in India.

Malaria: The incidence of the disease which used to be 75 million cases per year in 1952 has been reduced to about 0.1 million total cases in 1965. But due to world-wide shortage of DDT and BHC, and increase in their prices, spraying was limited causing an increase in the incidence of malaria. In 1975 there were 5.1 million cases which again were brought down to 1.7 million in 1979. Mortality due to malaria which in 1952 was estimated at 0.75 million deaths, is now a rarity. Deaths due to Malaria during 1979 were 62. Incidence of Malaria during 1976 was the highest in recent years, viz. 6,467,215. In order to tackle the growing incidence of Malaria a modified plan of operation at an estimated cost of Rs. 658.7 million per annum was implemented since April 1, 1977. There are at present 393,250 NMEP units functioning in the country covering a population of 535 million. The remaining population reside in areas which were never malaria endemic.

The National Institute for Communicable Diseases is responsible for research and field investigations and for the training of unit medical officers and district health officers in methods of malaria eradication. Other categories of health personnel are trained by the regional co-ordinating organisations established at Bangalore, Vadodara, Bhubaneswar, Hyderabad, Lucknow and Shillong.

Smallpox: As a result of intensive campaign carried out in 1974-75 with the help of the World Health Organisation, smallpox has been eradicated from the country. No smallpox case has been reported since May 1975. 9,597,687 primary vaccinations and 10,573,439 revaccinations against smallpox have been given during 1979 (upto Sept.).

Trachoma: Trachoma infection is highly endemic in the States of Punjab including Haryana (79.1 per cent), Rajasthan (74.3 per cent), Uttar Pradesh (68.1 per cent), and Gujarat (56.0 per cent). The States of Madhya Pradesh (41.3 per cent), Bihar (35.0 per cent), Assam (25.2 per cent), and Karnataka (22.6 per cent), are considered to be moderately endemic areas where the prevalence is more than 20 per cent but less than 50 per cent. The low endemic areas are the States of Jammu and Kashmir (16.8 per cent), Maharashtra (11.2 per cent), Kerala (8.7 per cent), Andhra Pradesh (5.3 per cent), Tamil Nadu (4.6 per cent), Orissa (2.7 per cent) and West Bengal (0.5 per cent).

About 45 million people are suffering from visual impairment and over 9 million are blind including 6 million who can be cured by surgery. Due to nutrition deficiency about 2 million people lost their eye-sight.

A National Plan for prevention of Visual Impairment and Control Blindness including Trachoma Control was drawn up with the main objective of providing eye-health care services to the community with emphasis on prevention and treatment. The control strategy of the programme includes (1) health education to the community; (2) temporary measures to provide immediate and comprehensive eye health care by establishing mobile units in different parts of the community and (3) creation of permanent infrastructure for eye care in general health services. International co-operation is being extended by WHO/UNICEF, UNDP etc. for the programme. Besides Danish International Development Agency has provided an assistance of Rs. 85 million for mobile units, and to strengthen PHCs and District hospitals. Financial assistance is being provided to voluntary organisations for organising eye-camps in rural areas.

Tuberculosis: There are at present 600 T.B. clinics in the country including 318 upgraded District T.B. centres. Approximately, 42,700 T.B. beds have been established. There are 17 T.B. demonstration and training centres.

It is estimated that the number of active cases is nearly 9 million of which 2.25 million are infectious. Almost all of the 3,119 towns and urban areas and 575,936 villages are affected by tuberculosis. The Government of India proposes to have one BCG team in every district. The 300 BCG teams currently functioning in various States and Union Territories.

The National Tuberculosis Institute of India, Bangalore 560003, established by the Government of India in 1959 is responsible for formulating and continuous evaluation of India's National Tuberculosis Programme. It carries out applied research in tuberculosis, epidemiology, bacteriology and BCG vaccination, sociological studies as well as operations research. This institute also arranges for the training of tuberculosis programme workers. There are two more research institutions at Madanapalle, Andhra Pradesh and Tamil Nadu. Training is also imparted at other institutions, such as Vallabhbhai Patel Chest Institute, Delhi.

The B.C.G. Vaccine Laboratory, Guindy, Madras is one of the largest B.C.G. producing laboratories in the world, manufacturing freeze dried vaccine. India is self-sufficient in B.C.G. vaccine.

Venereal Diseases: India has an estimated 20 million people suffering from V.D. which comes to nearly 20 per cent of the reproductive age group. About 5 per cent of the total population suffers from syphilis and an equal percentage from gonorrhoea. Yaws is prevalent in a few districts of Andhra Pradesh, Orissa, Madhya Pradesh and Maharashtra.

V.D. control schemes are sponsored by the Union Government, which gives all the money needed to the States and Union Territories. In India, 187 V.D. clinics function, whilst some hospitals have special wards for V.D. patients. A mobile V.D. unit at Safdarjang Hospital, New Delhi, has started functioning since July 1973. Sufficient quantity of VDRL antigen is produced in the country. During 1978 (upto Oct.) 303,120 V.D. cases were examined in the V.D. clinics. During 1979-80 about 452,640 patients were suffering from S.T.D. (Venereal Diseases) in various States & Territories.

Training: Facilities are available in the V.D. Training Centre, Safdarjang Hospital, New Delhi, and the Institute of Venereology, Government General Hospital, Madras. Apart from these institutions, a few colleges have a venereological department.

National Water Supply and Sanitation Programme: This programme was launched in 1954. During the three Plan periods and three Annual Plans, about 418,700 new wells were constructed and 304,000 new hand-operated tubewells were bored. In addition about 554,000 old wells were renovated.

Nearly 36,000 villages with a population of 21.6 million have been provided with water supply. For the water supply and sanitation sector the Fifth Plan had allocated Rs. 10,206 million against Rs. 4,105.3 million in the Fourth Plan. The proposed priorities were (i) to cover remaining 116,000 villages; (ii) to intensify efforts for provision of water supply in urban areas; (iii) to increase the efforts for the conversion of dry latrines into sanitary latrines and (iv) to increase efforts to provide and demonstrate modern methods of garbage collection and disposal.

The programme also provides for the training of public health engineering personnel. The training programme is being implemented at the Victoria Jubilee Technical Institute, Matunga, Bombay 400019, the All India Institute of Hygiene and Public Health, Calcutta, the Engineering College, Guindy, Tamil Nadu and the Engineering College, Roorkee, Uttar Pradesh. The Central Public Health Engineering Organisation (C/o Min. of Health and Fly. Welfare) has been set up for helping State Governments in the preparation and execution of their schemes and for giving technical advice and guidance. Similar organisations have also been established in most of the States.

HEALTH EDUCATION: The Central Health Education Bureau at Temple Lane, Kotla Road, New Delhi 110002, established in November 1956, co-ordinates and promotes health education in the country through Health Education Bureaux established in the States and Union Territories.

The Bureau conducts a one-year Diploma in Health Education under the auspices of the University of Delhi and conducts in-service training programmes for health and family planning personnel such as, medical officers, mass education and information officers, media personnel etc. It conducts research on behavioural aspects of health and develops health education curricula for different age groups of students and teacher training courses. The Bureau organises exhibitions, maintains a film library and produces educational and publicity materials for National Health Programmes and programmes for promoting MCH nutrition and immunisation and against the menace of food and drug adulteration.

Publications: The Central Health Education Bureau publishes monthly journals *Swasth Hind* (English) and *Arogya Sandesh* (Hindi) for general readers and *Directorate General of Health Services Chronicle* for medical personnel.

It also produces health education material — folders, pamphlets, posters, filmstrips, etc. for use by health personnel and the general public.

FOOD AND NUTRITION: Several measures are being taken to meet the nutritional deficiency of certain vulnerable groups such as industrial workers, expectant and nursing mothers and school children. Skim milk powder supplied by UNICEF and other organisations is distributed to children and expectant and nursing mothers. Midday meals are provided to about 13.1 million primary school children. Other schemes being implemented are protein supplement to the diet of the vulnerable groups, opening of canteens in industrial concerns and offices and manufacture and popularisation of cheap and nutritious food.

Malnutrition is one of the major factors responsible for high mortality and morbidity in India. Nutrition divisions have been established in Health Dept. of 18 States and two Union Territories to tackle the problem of malnutrition. Those divisions assess the incidence of nutritional deficiencies among various groups, conduct nutrition education campaigns and supervise supplementary feeding programmes.

Quality control over food articles is exercised under the Prevention of Food Adulteration Act, 1954 (amended in Feb. 1976). Excepting Maharashtra, Assam and Kerala where the States have taken the responsibility, in all other States the work is left to the local bodies. The Director-General of Health has established a Food Squad under the Act to check adulteration of food at inter-state level.

Central Food Laboratories: The Prevention of Food Adulteration Act (amended in 1976) provides for the establishment of (four) Central Food Laboratories, viz. Public Health Laboratory, Pune (West Zone); Central Food Technological Research Institute, Mysore (Southern Zone); Food Research and Standardisation Laboratory, Ghaziabad (Northern Zone) and Central Food Laboratory, Calcutta (Eastern Zone).

The Govt. of India proposes to have regular refresher training course at Central Food Technological Research Institute, Mysore, for analysts working in the country.

A two weeks' refresher course for senior Health Officers and administrators in the implementation of the Prevention of Food Adulteration Act is imparted in collaboration with the Indian Institute of Public Administration at New Delhi.

MEDICAL EDUCATION: There are 106 medical colleges with over 13,000 annual admissions in the country.

Dental Education: There are now 17 dental institutions, all affiliated to universities, training students for the degree of Bachelor of Dental Surgery (B.D.S.), having facilities for about 615 admissions. Eleven of these institutions have post-graduate degree courses leading to M.D.S.

(Refer to the chapter on "Education" for the list of dental institutions.)

Pharmacy:.(See chapter on "Education". for institutes and/or universities teaching pharmacy.)

STATUTORY COUNCILS

Medical Council of India: Established under the Indian Medical Council Act of 1933 and reconstituted under the Indian Medical Council Act, 1956, this Council is responsible for the maintenance of the Indian Medical Register, uniform standards of medical education and for recognition of medical qualifications in the country. The **total number of doctors** on the Medical Register upto 31st December 1978 was 238,304.

Dental Council of India: This council was established under the Dentists Act of 1948 for the regulation of the profession of dentistry. It maintains uniform standards of dental education in the country. It also maintains the registers of qualified dentists, dental hygienists and dental mechanics, respectively. The number of dentists on the State Dentists Registers of the various State Dental Councils as on 1st April 1979 was 7,518.

Pharmacy Council of India: Was constituted under the Pharmacy Act, 1948 to prescribe the minimum educational standards for qualification as a pharmacist, to ensure that these standards are uniformly enforced throughout the country and to recognise qualifications in pharmacy granted outside the said Act which offered sufficient guarantee of the requisite skill and knowledge.

By 1980 the diploma courses in pharmacy were being conducted at 72 centres having annual admissions of 3,760 and degree course in pharmacy at 29 centres having annual admission of 1,039 per annum. The list of pharmacy institutions is given under the chapter on 'Education'.

The registration of pharmacists is the responsibility of the State Government's State Pharmacy Councils.

Indian Nursing Council: The Council established under the Indian Nursing Act, 1947, is responsible for laying down uniform standards of nursing education.

The number of training institutions for nursing personnel and of students under training at the end of 1978 respectively were as follows:-

The figures within brackets indicate the number of students: Nurses 277 (21,219); Midwives 263 (4,549); Auxiliary Nurse Midwives 329 (9,178); Health visitors 21 (1,144); B.Sc. (Nursing) 8 (1,210).

In 1977-78 there were 127,420 registered nurses in India.

Address: The Medical Council Building, Temple Lane, Kotla Road, New Delhi 110002.

(See chapter on **State Associations** for State-wise list of medical associations)

Availability of Health Services in India: 1960-61 to 1977-78*

Items & Units	1960-61	1970-71	1973-74	1975-76	1976-77	1977-78	Targets for Fifth Plan
Hospital beds ('000)	186	266.2	281.6	293.5	299.8	496.0	321.6
Primary health centres (number)	2,800	5,112	5,250	N.A.	N.A.	5,400	5,351
Family welfare centres (number)	1,649	36,800	33,000	N.A.	N.A.	42,875†	44,036
Medical colleges (number)	57	95	99	105	106	106	105
Doctors ('000)	70	115.7	138	154	162.2	170	176
Nurses ('000)	27	77.8	88	98	103	108	123
Auxiliary nurses, midwives ('000)	19.9	57	60.3	N.A.	N.A.	NA	70
Public health expenditure (Rs. million)	890	3,481	4,335.3	951.5	1,261.5	2,867†	7,960

*Sources: 1. Draft of Fifth Five-Year Plan. 2. Ministry of Health and Family Welfare, Directorate General of Health Services, New Delhi.
†Figures relate to 1978-79.

Availability of Health Services in India: 1960-61 to 1978-79 per 100,000 Population*

Items	1960-61	1970-71	1973-74	1974-75	1978-79**
Doctors	15.9	21.5	23.7	25.0	27.1
Beds	42.4	49.4	49.6	49.0	49.6
Auxiliary nurses/ midwives	1.4	10.6	10.4	10.5	40.8
Nurses	6.2	12.7	15.1	15.9	19.0

*Sources: 1. Draft of Fifth Five-Year Plan. 2. Ministry of Health and Family Welfare, Directorate General of Health Services, New Delhi.
**Estimated figures.

POPULATION

CURRENT Position: India's total population touched 648 million on 1st March, 1981. This represents an increase of 24·75 per cent since 1971 when the population was 548 million.

Census: Most of the population data in India is available from the census. The first synchronous census in India was taken in 1881, and since then a census has been taken every tenth year. The last of the series is the Census of 1981 which gives the population count as of the sunrise of 1st March 1981. Generally the census count in India refers to the sunrise of 1st March, but because of the mid-term General Election the census date of the 1971 Census was shifted by one month and it refers to the sunrise of 1st April, 1971.

The 1981 Census: The enumeration of the 1981 Census began on 9th February, 1981 and ended on 28th February 1981. A revisional round was conducted during 1st to 5 March, 1981 to up-to-date the figures for the sunrise of 1st March, 1981. The houseless persons were enumerated on the night of 28th February 1981.

The 1981 Census was conducted synchronously in all the States and Union Territories except for Assam and Jammu and Kashmir. In Jammu and Kashmir the enumeration was done from 20th April to 5th May, 1981 with the reference date being the sunrise of 6th May, 1981. The revisional round was conducted during 6th to 10th May 1981. In Assam, census could not be conducted synchronously because of the disturbed conditions. In order to determine the total population of the country as on 1st March 1981, the population of Assam has been borrowed from the estimates of the Expert Committee on Population Projections set up by the Planning Commission.

The Census Organisation on the basis of the 1981 Census has published provisional population totals and few other informations. In the present section the figures have been updated wherever available and the remaining are based on the previous census.

Size: The size of India's population in 1981 was 683,782,461 persons comprising of 353,419,467 males and 330,362,894 females.

Growth: India's population which was 238 million in 1901 increased to 361 million in 1951 and to 684 million in 1981. Thus, in the first half of the present century, that is, during 1901–51, India's population increased by about 51·5 per cent whereas in the next thirty years during 1951–81 it increased by nearly 89·4 per cent.

The rate of growth of India's population till the 1971 Census was slow and since then it has tended to increase at a faster rate. During the period 1921–51, India's population increased at a moderate rate but after the 1951 census it increased at an accelerated rate because of decline in death rate caused by health programme initiated by the government to control eradication of epidemic and communicable diseases. It may be mentioned that during the decade 1911–21, India's population experienced a negative growth, excess of deaths over births, due to natural calamities and epidemics. During the inter-censal period 1961–71 the population increased by 24·80 per cent. Again, during 1971 81 the population experienced a growth of 24·75 per cent. This signifies that the growth of India's population has somewhat stabilised and may start declining with decline in fertility levels.

Growth of Population from 1901-1981

Year	Persons	Per cent Decade Variation
1901	238,396,327	
1911	252,093,390	5·75
1921	251,321,213	(—) 0·31
1931	278,977,238	11·00
1941	318,660,580	14·22
1951	361,088,090	13·31
1961	439,234,771	21·51
1971	548,159,652	24·80
1981	683,782,461	24·74

Future Growth: The recent increase in India's growth rate is due to a fall in death rate and not due to any increase in birth rate. Death rate has declined by nearly fifty per cent during the past 70 years. Reliable figures of birth and death rates are not available in India because of the deficiency of the registration data. Efforts are being made by the Registrar-General of India to improve the quality of the registration data and a scheme called the Sample Registration System has been launched in different parts of India. The object of the scheme is to have sample areas, both urban and rural, in different States and Union Territories and to obtain reliable birth and death data in these areas. Most reliable estimates, however, point out that the **Birth rate** in India in 1961 was around 43 and **Death rate** around 21 per 1,000 population. The sample registration system has estimated that birth rate in 1978 was 33·3 and the death rate 14·2. The birth rate in the rural areas was 34·7 and in the urban areas, 27·8, whereas, the death rate was 15·3 and 9·4 respectively. It is estimated that the death rate might decline still further and reach the low level of 10 per 1,000 population by 1990 or so. Birth rate would, therefore, be the crucial factor in determining the future growth of India's population.

Expectation of Life and Death Rate: The expectation of life at birth for males and females in the country was 53·87 years and 52·93 years, respectively, as on October 1, 1981. (See chapter on Public Health.)

State-wise Growth Rate: The decennial growth rate of 1971–81 shows that the highest rate was observed in the Union Territory of Chandigarh followed by Andaman and Nicobar Islands and Delhi. In case of States, the highest rate was observed in Sikkim followed by Nagaland, Assam, Manipur and Tripura. The differential growth rate is due to differences in birth and death rates and in internal migration.

Age Structure: One of the consequences of high birth rate is that India has a very 'young' population. Nearly 42·0 per cent of India's population in the 1971 Census was below the age of 15 years and only 6·0 per cent of the population was aged 60 years and over.

Income Structure: The average per capita income in the country has shown marginal increase in 1978–79 compared with the previous year.

The average **per capita income** in 1978–79 was Rs. 1,249 at current prices and Rs. 712 at the 1970-71 prices.

In 1977-78, the average per capita income in India was Rs. 1,189 at current prices and Rs. 697 at 1970-71 prices.

Infant Mortality: (See chapter on Public Health).

Rural-Urban: A very large proportion of India's population live in rural areas. However, urban population has grown from about 9 per cent in 1881 to about 20 per cent in 1971. Leaving aside the Union Territories, the most urbanised State in India is Maharashtra, in which about 31 per cent of the population were found living in urban areas at the time of the 1971 Census. Assam, Himachal Pradesh, Nagaland and Orissa States have less than 10 per cent urban population.

Sex-wise Rural-Urban Break-up of Population

	Persons	Males	Females
Total	548,159,652	284,049,276	264,110,376
Rural	439,045,675	225,319,943	213,725,732
Urban	109,113,977	58,729,333	50,384,644

In the 1971 Census it was observed that about 48·9 per cent of the urban population of India lives in towns having a population of 100,000 and more. The corresponding figure for 1961 was 44·5 per cent. The growth of population in towns of large size is generally greater than in

Population Growth in Metropolitan Cities during 1901-81

	Population (in '000)					Percentage growth over 1901
	1901	1951	1961	1971	1981	
Calcutta U.A.	1,488	4,589	5,737	7,031	9,166	372·4
Greater Bombay	813	2,967	4,152	5,971	8,203	634·5
Delhi U.A.	214	1,437	2,359	3,647	5,228	1,603·3
Madras U.A.	594	1,542	1,945	3,170	4,277	433·3
Hyderabad U.A.	448	1,128	1,249	1,796	2,566	300·6
Ahmedabad U.A.	186	877	1,206	1,742	2,515	836·9
Bangalore	159	779	1,200	1,654	2,914	939·8
Kanpur U.A.	203	705	971	1,275	1,685	528·8
Pune U.A.	164	606	791	1,135	1,685	591·6
Nagpur	128	449	644	930	1,298	—

U.A. = Urban Agglomeration.

I. Some Demographic Characteristics of India's Population, States and Union Territories, 1981

State/Union Territory	Population (in '000)		Decennial growth rate (percentage)	Sex ratio (females per 1,000 males)	Density (persons per sq. km.)	Literacy rate			Percentage of urban population (1971)
	1971	1981				1971	1981	Percentage increase	
INDIA	548,160	683,782	24·74	935	221	29·45	36·08	22·51	19·91
Andhra Pradesh ..	43,503	53,404	22·76	975	194	24·57	29·94	21·86	19·31
Assam	14,625	19,903	36·09	900	254	28·15	—	—	8·82
Bihar	56,353	69,823	23·90	947	402	19·94	26·01	30·44	10·00
Gujarat	26,698	33,961	27·21	942	173	35·79	43·75	22·24	28·08
Haryana	10,037	12,851	28·04	877	291	26·89	35·84	33·28	17·66
Himachal Pradesh	3,460	4,238	22·46	988	76	31·96	41·94	31·23	6·99
Jammu & Kashmir	4,617	5,954	28·97	899	N.A.	18·58	26·17	40·85	18·59
Karnataka	29,299	37,043	26·43	963	193	31·52	38·41	21·86	24·31
Kerala	21,347	25,403	19·00	1,034	654	60·42	69·17	14·48	16·24
Madhya Pradesh ..	41,654	52,132	25·15	941	118	22·14	27·82	25·65	16·29
Maharashtra ..	50,412	62,694	24·36	939	204	39·18	47·37	20·90	31·17
Manipur	1,073	1,434	33·65	972	64	32·91	41·99	27·59	13·19
Meghalaya	1,012	1,328	31·25	956	59	29·49	33·22	12·65	14·55
Nagaland	516	773	49·73	867	47	27·40	41·99	53·25	9·95
Orissa	21,945	26,272	19·72	982	167	26·18	34·12	30·33	8·41
Punjab	13,551	16,670	23·01	886	331	33·67	40·74	21·00	23·73
Rajasthan	25,766	34,103	32·36	921	100	19·07	24·05	26·11	17·63
Sikkim	210	316	50·44	836	44	17·74	33·83	90·70	9·37
Tamil Nadu ..	41,199	48,297	17·23	978	371	39·46	45·78	16·02	30·26
Tripura	1,556	2,060	32·37	948	196	30·98	41·58	34·22	10·43
Uttar Pradesh ..	88,341	110,858	25·49	886	377	21·70	27·38	26·18	14·02
West Bengal ..	44,312	54,485	22·96	911	614	33·20	40·88	23·13	24·75
Andaman & Nicobar Islands	115	188	63·51	761	23	43·59	51·27	17·62	22·77
Arunachal Pradesh	468	628	34·34	870	7	11·29	20·09	77·95	3·70
Chandigarh.. ..	257	450	74·95	770	3,948	61·56	64·68	5·07	90·55
Dadra & Nagar Haveli	74	104	39·78	974	211	14·97	26·60	77·69	—
Delhi	4,066	6,196	52·41	810	4,178	55·61	61·06	9·80	89·70
Goa, Daman and Diu	858	1,082	26·15	981	284	44·75	55·86	24·83	26·44
Lakshadweep ..	32	40	26·49	976	1,257	43·66	54·72	25·33	—
Mizoram	332	488	46·75	936	23	53·79	59·50	10·90	11·36
Pondicherry ..	872	604	28·07	985	1,228	46·02	54·23	17·84	42·03

II. Some Demographic Characteristics of India, States and Union Territories, 1971

State/Union Territories	Proportion of workers in 1971			Proportion of workers by industrial categories in 1971			Mean age at marriage in years in 1971	
	Male	Female	Total	Cultivator	Agri. labourer	Others	Male	Female
INDIA	52·50	11·85	32·92	43·34	26·33	33·33	22·24	17·23
Andhra Pradesh	58·22	24·16	41·39	32·18	37·93	29·90	22·56	16·39
Assam	48·83	4·66	27·96	55·86	9·92	34·22	25·10	18·38
Bihar	52·16	8·88	31·03	43·33	38·92	17·75	19·85	15·51
Gujarat	51·24	10·26	31·45	43·12	22·48	34·40	22·08	18·34
Haryana	47·27	2·41	26·44	49·08	16·21	34·71	—	—
Himachal Pradesh	52·43	21·69	36·95	70·64	4·17	28·19	22·51	17·51
Jammu & Kashmir	52·50	3·86	29·76	64·78	3·05	32·17	23·37	17·80
Karnataka	54·40	14·20	44·17	40·01	26·70	33·29	24·78	17·91
Kerala	45·00	13·49	29·12	17·80	30·70	51·50	26·31	20·88
Madhya Pradesh	53·74	18·65	36·72	52·86	26·56	20·58	19·24	15·20
Maharashtra	52·09	19·70	36·48	35·55	29·33	35·12	23·34	17·53
Manipur	45·31	23·62	34·57	67·00	3·65	29·35	24·82	21·07
Meghalaya	53·20	34·57	34·74	69·15	9·88	20·97	—	—
Nagaland	55·55	45·24	50·75	77·58	1·45	20·97	—	—
Orissa	55·32	6·81	31·22	49·16	28·28	22·56	22·64	17·20
Punjab	52·82	1·18	28·87	42·56	20·11	37·33	22·37*	18·80*
Rajasthan	52·09	8·34	31·24	64·92	9·31	25·77	19·48	15·37
Tamil Nadu	56·02	15·09	35·78	31·26	30·46	38·28	25·52	19·61
Tripura	49·43	4·83	27·79	54·41	19·97	25·62	24·92	18·44
Uttar Pradesh	52·24	6·71	30·94	57·80	19·95	22·25	19·41	15·59
West Bengal	48·83	4·43	27·91	31·97	26·46	41·57	24·32	17·76
Andaman & Nicobar Islands	62·10	4·53	39·55	13·77	4·69	81·54	—	—
Arunachal Pradesh	63·14	51·28	57·65	78·34	1·96	19·70	—	—
Chandigarh	53·96	5·70	33·29	29·26	14·78	55·96	—	—
Dadra & Nagar Haveli	55·43	38·96	47·17	72·45	16·96	10·59	—	—
Delhi	50·61	4·75	30·21	2·62	1·24	96·14	23·52	19·86
Goa, Daman & Diu	47·76	15·40	31·67	23·97	15·01	61·02	26·13	21·46
Lakshadweep	38·43	13·60	26·15	—	—	—	—	—
Mizoram	51·43	39·46	45·61	83·53	0·37	16·10	—	—
Pondicherry	48·65	10·94	29·90	11·85	32·81	55·34	—	—

* Former Punjab State.

III. Some Demographic Characteristics of India's Population, 1901-1981

Year	Population (in million)	Density per square km.	Sex ratio (females per 1,000 males)	Percentage		Percentage of population by religion				Percentage of literate and illiterate population		Number of persons per house hold
				Rural	Urban	Hindu	Muslim	Christian	Sikh	Literate	Illiterate	
1901	238·4	77	972	89·2	10·8	70·4	21·2	1·0	0·8	5·4	94·7	5·27
1911	252·1	82	964	89·7	10·3	69·4	21·3	1·2	1·0	5·6	94·1	4·95
1921	251·3	81	955	88·8	11·2	68·6	21·7	1·5	1·0	7·2	92·8	4·89
1931	279·0	90	950	88·0	12·0	68·2	22·2	1·8	1·2	9·5	90·5	4·97
1941	318·7	109	945	86·1	13·9	65·9	23·8	1·6	1·5	N.A.	N.A.	5·12
1951	361·1	117	946	82·7	17·3	85·0	9·9	2·3	1·7	16·7	83·3	4·90
1961	439·2	142	941	82·0	18·0	83·5	10·7	2·4	1·8	24·0	76·0	5·16
1971	548·2	177	930	80·1	19·9	82·7	11·2	2·6	1·9	29·5	70·5	5·46
1981	683·8	221	935	—	—	—	—	—	—	36·1	63·9	—

medium and small towns. In case of Class V towns (population size between 5,000 to 9,999), however, the population decreased during the decade 1961-71. As per 1971 Census, there are only 9 cities which have population of one million and above and these are Calcutta, Greater Bombay, Delhi, Madras, Hyderabad, Ahmedabad, Bangalore, Kanpur and Pune.

The following are nine metropolitan cities in India :—

1.	Calcutta Urban Agglomeration	7,031,382
2.	Greater Bombay	5,970,575
3.	Delhi Urban Agglomeration	3,647,023
4.	Madras Urban Agglomeration	3,169,930
5.	Hyderabad Urban Agglomeration	1,796,339
6.	Ahmedabad Urban Agglomeration	1,741,522
7.	Bangalore Urban Agglomeration	1,653,779
8.	Kanpur City Urban Agglomeration	1,275,242
9.	Pune Urban Agglomeration	1,135,034

A city is regarded as metropolitan when its population exceeds one million.

Sex Ratio: There are more males than females in India. In 1961 the sex ratio was 941 females per 1,000 males and in 1971 it decreased to 932 females per 1,000 males. Differential mortality by sex may be responsible for this disparity in sex ratio. However, in the 1981 Census the situation improved and the sex ratio works out to 935 females per 1,000 males. Probably during the decade 1971-81 the females gained comparatively more from the health programmes than the males. Only in Kerala the sex ratio is favourable to females and in other places it is favourable to males. In Haryana, Nagaland, Punjab, Sikkim, Uttar Pradesh, West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Chandigarh and Delhi the sex ratio is highly favourable to males where it is estimated to be less than 900 females per 1,000 males.

Literacy: Literacy which is defined as capacity to read and write with understanding in any language was as low as 5·8 per cent in 1891 and only 9·5 per cent in 1931. In 1981 it had increased to 36·2 per cent. Male literacy was found to be nearly 47 per cent and female literacy was found to be about 25 per cent. Rural areas have lower literacy rate than urban areas.

Religious break-up: According to the 1971 Census 82·7 per cent of India's population belonged to the Hindu religion and about 11·2 per cent to the Muslim religion. The percentage of the Christians and the Sikhs was 2·6 and 1·9 respectively.

Religions	Number	Percentage to total population	Percentage increase in 1961–71
Hindus	453,436,630	82·72	23·69
Muslims	61,418,269	11·20	30·84
Christians	14,225,045	2·59	32·58
Sikhs	10,378,891	1·89	32·28
Buddhists	3,874,942	0·71	17·33
Jains	2,604,837	0·48	28·49
Scheduled Castes	80,005,398	14·60	24·14
,, Tribes	38,015,162	6·94	26·00

Age at Marriage: In India, age at marriage is very low because of the prevalence of child marriages. From time to time suitable legislations have been passed specifying the minimum age at marriage for boys and girls. Nevertheless, a sizeable number of boys and girls seem to be married below the specified minimum age. However, the age at marriage shows an increasing trend over the decades which is an indicator of social change.

Decade	Age at marriage	
	Males	Females
1921–31	18·4	12·5
1931–41	20·3	14·4
1941–51	19·9	15·4
1951–61	21·8	15·4
1961–71	22·2	17·2

Age at Widowhood: It was found in the 1911 Census that 17·3 per cent of the females were widows. This percentage declined to 15·5 in 1931 and to 8·9 in 1971. The mean age at widowhood of those who are widowed by age 45 was found to be 34 years in the 1951–61 decade and 34·8 years in the 1961–71 decade.

Fertility: The fertility of Indian women is high and about 5·5 children are born to a couple who remain married throughout the reproductive period. This average number is, however, reduced to 5 when all ever-married women, that is, those who are widowed, divorced or separated are considered.

The pattern of age-specific fertility among females between the ages 15-44 shows that highest fertility exists among females in the ages between 25 to 29 years. The fertility curve shows a low but significant rate in the ages 15-19 years, a sharp rise in the age group 20-24 and 25-29 and a sharp decline after the age of 35.

Of the children born in a year roughly 62 per cent in rural India and 67 per cent in urban India are of first-three order births and 38 per cent and 33 per cent are of the fourth and higher order birth. About 23·5 per cent and 25·3 per cent are first order births, 20·9 and 23·5 per cent second order births, 17·2 and 17·8 per cent are third order births, 13·7 and 12·4 per cent fourth order births, 9·7 and 7·7 per cent fifth order births, and about 15·2 and 13·7 per cent sixth and higher order births in rural and urban India respectively.

There is some evidence to indicate that fertility of those women who are educated above Matriculation and also of those who marry after the age of 19 is lower than of those who are less educated or marry earlier.

Working Force: According to the 1971 Census, roughly 33 per cent of the population of India was in the working force. About 53 per cent of the males and 12 per cent of the females were workers. Slightly larger proportion of the rural population was in working force. The work participation rate by residence shows that 33·8 per cent of the rural population (53·5 per cent male and 13·1 per cent female) was in working force whereas 29·3 per cent of the urban population (48·8 per cent male and 6·6 per cent female) was in working force. The maximum participation rate was in age groups 25 to 59, it was around 95 per cent among males and around 20 per cent among females.

The work participation rate of 1971 cannot be compared with that of any of the earlier censuses because of change in definition. In the 1961 Census 43 per cent of the total population was recorded as workers. According to the Registrar-General of India, the concept of worker at the 1961 Census tended to inflate workers as persons who were basically non-workers like housewives, students, etc., were included in the category of workers even though their participation was very marginal.

Among the workers as given in the 1971 Census, nearly 43 per cent were cultivators, 26 per cent agricultural labourers and nearly 31 per cent were engaged in other occupations. In the rural areas nearly 52 per cent of the workers were cultivators, 31 per cent were agricultural labourers and 17 per cent were engaged in other occupations. In urban areas nearly 5 per cent of the workers were cultivators, 6 per cent agricultural labourers and 89 per cent are engaged in other occupations.

Poverty Line: At least 294 million people in the rural and urban areas were living below the poverty line during 1977-78 under the norms adopted by the Planning Commission.

First Six States Area-wise: Madhya Pradesh (442,841 sq. kms.); Rajasthan (342,214 sq. kms.); Maharashtra (307,762 sq. kms.); Uttar Pradesh (294,413 sq. kms.); Andhra Pradesh (276,814 sq. kms.); and Gujarat (195,984 sq. kms.).

First Six States Population-wise: Uttar Pradesh (110,858,019); Bihar (69,823,154); Maharashtra (62,693,898); West Bengal (54,485,560); Andhra Pradesh (53,403,619); and Madhya Pradesh (52,131,717).

Language-wise Break-up: According to 1971 Census, about 25 million people or 4·5 per cent of the total population speak their mother tongue other than the 15 languages listed in the Constitution.

The break-down of the population in terms of the 15 Constitutional languages is as follows (figures in million): Assamese — 8·96; Bengali — 44·79; Gujarati — 25·87; Hindi — 208·51; Kannada — 21·71; Kashmiri — 2·50; Malayalam — 21·94; Marathi — 41·77; Oriya — 19·86; Punjabi — 14·11; Sindhi — 1·68; Sanskrit — 2,212 (persons); Tamil — 37·69; Telugu — 44·76; Urdu — 28·62.

Six Most Thickly Populated States: (figures per sq. km.): The six most thickly populated States, excluding the Union Territories, according to the 1981 Census are Kerala (654); West Bengal (564); Bihar (402); Uttar Pradesh (377); Tamil Nadu (371); and Punjab (331).

National Average Density: 221 per sq. km.

Density in Union Territories: (per sq. km.) (First three). Delhi (4,178); Chandigarh (3,948); Lakshadweep (1,257).

Population Projections upto 1991

(in Million)

Year	Males	Females	Total
1971	283·5	263·6	547·1
1976	315·4	293·7	609·1
1981	347·6	324·4	672·0
1986	379·8	355·3	735·1
1991	412·4	386·5	798·9

The project figures given above are of Projection III prepared by the Expert Committee on Population Projections set up by the Planning Commission and has been recommended for official use. Projection III is based on the assumption that birth rate in India will reach a level of thirty point by 1982-83 and thereafter it will reduce by one point every year. As a result of the decline in the birth rate, the percentage of population in the age group 0–14, which at the time of the 1971 Census was around 41·5 will come down to 34·3 in 1991. The working age population in the age group 15–59 will however, increase. Its percentage which in 1971 was 53·3 will increase to 59·3 in 1991. However, on 1st March 1981, about 683·8 million persons were enumerated in the country. Thus, the projected population fell short of the enumerated population by about 12 million.

Per Capita Net Domestic Product for Different States

State/Union Territory	Year	Per capita (Rs.) (At current prices)	Per capita (Rs.) (At constant prices)
Andhra Pradesh	1977–78	1,002	322
Assam	1977–78	866	552
Bihar	1976–77	700	422
Delhi	1976–77	2,213	785
Goa, Daman & Diu	1976–77	1,686	1,240
Gujarat	1976–77	1,341	400
Haryana	1976–77	1,472	482
Himachal Pradesh	1977–78	1,154	359
Jammu & Kashmir	1977–78	986	355
Karnataka	1976–77	1,002	366
Kerala	1976–77	968	291
Madhya Pradesh	1977–78	896	494*
Maharashtra	1977–78	1,628	527
Manipur	1977–78	799	500*
Meghalaya	1973–74	598	N.A.
Orissa	1975–76	785	523*
Pondicherry	1976–77	1,341	N.A.
Punjab	1977–78	1,991	625
Rajasthan	1977–78	925	308
Tamil Nadu	1977–78	1,031	657*
Tripura	1975–76	813	374
Uttar Pradesh	1977–78	892	503*
West Bengal	1976–77	1,047	387

Source: Family Welfare Programme, *Year Book*, 1978-79 (Ministry of Health & Family Welfare, New Delhi), Table C. 2, p. 59.

* Base: 1970–71.

Literacy Rate by Sex, 1981

State/Union Territory	Persons	Males	Females
INDIA	36·08*	46·64*	24·80*
Andhra Pradesh	29·94	39·13	20·52
Bihar	26·01	37·78	13·58
Gujarat	43·75	54·53	32·31
Haryana	35·84	47·78	22·23
Himachal Pradesh	41·94	52·36	31·39
Jammu & Kashmir	26·17	35·49	15·82
Karnataka	38·41	48·61	27·83
Kerala	69·17	74·03	64·48
Madhya Pradesh	27·82	39·38	15·54
Maharashtra	47·37	58·89	35·08
Manipur	41·99	52·97	30·69
Meghalaya	33·22	36·98	29·28
Nagaland	41·99	49·16	33·77
Orissa	34·12	46·90	21·11
Punjab	40·74	46·59	34·14
Rajasthan	25·05	35·78	11·22
Sikkim	33·83	43·65	22·07
Tamil Nadu	45·78	57·19	34·12
Tripura	41·58	51·05	31·60
Uttar Pradesh	27·38	38·87	14·42
West Bengal	40·88	50·49	30·33
Andaman and Nicobar	51·27	58·44	41·85
Arunachal Pradesh	20·09	27·98	11·02
Chandigarh	64·68	68·82	58·30
Dadra and Nagar Haveli	26·60	36·19	16·75
Delhi	61·06	67·95	52·56
Goa, Daman and Diu	55·86	64·77	46·78
Lakshadweep	54·72	64·97	44·21
Pondicherry	54·23	64·00	44·30
Mizoram	59·50	65·99	52·57

* Excludes Assam.

IMPORTANT LEGISLATIONS (1980)

January 24 : Lok Sabha passes the 45th Constitution Amendment Bill extending reservation of seats in State Assemblies and the Lok Sabha for Scheduled Castes, Scheduled Tribes and Anglo-Indians for a period of ten years; **25.** Rajya Sabha okays 45th Constitution Amendment Bill; **28.** Maharashtra Assembly passes Maharashtra Recognition of Trade Unions and Prevention of Unfair Labour Practices (Amendment) Bill, 1978.

February 4 : Rajya Sabha passes Prevention of Blackmarketing and Maintenance of Supplies Bill; **5.** Parliament approves Representation of the People (Amendment) Bill, 1980 which provides readjustment of Assembly constituencies in Sikkim.

March 6 : Governor of Maharashtra promulgates Maharashtra Vacant Lands Ordinance, 1980 which provides interim protection to occupiers of vacant lands from eviction and recovery of arrears of rent or compensation; **19.** Lok Sabha passes Requisition and Acquisition of Immovable Property Amendment Bill; **27.** Rajya Sabha endorses dissolution of nine State Assemblies.

April 2 : Kerala Legislative Assembly passes bill derecognising tenancies created after April 1964; **14.** President gives assent to 45th Constitution (Amendment) Bill; **22.** West Bengal Legislative Assembly passes Great Eastern Hotel (Acquisition of Undertaking) Bill.

May 15 : President promulgates ordinance empowering the Govt. of Maharashtra to prohibit strikes in essential services in the State and another to give overriding effect to the provisions of a similar measure which exists in Gujarat; **17.** Andhra Pradesh Govt. issues ordinance empowering collectors or officers to evict people encroaching on Govt. lands without notice.

June 7: Governor of Meghalaya promulgates Meghalaya Essential Service Maintenance ordinance, 1980; **16.** Lok Sabha endorses decision to nationalise six banks; Lok Sabha passes bill to make provision for the regulation and development of the profession of company secretaries; Rajya Sabha okays Assam Appropriation Bill, 1980.

July 31: Maharashtra Legislative Assembly passes Maharashtra Vacant Lands Bill, 1980.

August 6 : Tamil Nadu Assembly passes bill to abolish 194-year-old revenue board; **11.** Lok Sabha approves Dock Workers (Regulation of Employment) Amendment Bill; Parliament approves bill to regulate Chit Funds; Tamil Nadu Assembly passes Tamil Nadu Land Reforms (Fixation of Ceiling on Land) Amendment Bill; **16.** Uttar Pradesh Governor promulgates ordinance empowering Government to detain a person in the interest of peace and public order for six months; **18.** President gives assent to Maharashtra Vacant Lands Bill, 1980; **21.** President promulgates ordinance on minimum bonus; President gives assent to Maharashtra Raw Cotton (Procurement, Processing and Marketing Extension of Duration) Bill, 1980; **28.** Maharashtra Governor promulgates ordinance for prevention of communal, anti-social and other dangerous activities in the State.

September 20 : Madhya Pradesh Assembly passes State Security and Public Order Maintenance Bill empowering Government to curb the activities of anti-social elements and para-military organisations and providing for preventive detention of any person whose activities might endanger peace and security in the State; **22.** President promulgates ordinance to enable Central Govt. to order detention of a person if it is satisfied that it is necessary to prevent him from acting in any manner prejudicial to the defence or security of the country; **23.** President issues ordinance amending the code of conduct procedure to enable the law enforcement agency to deal effectively with habitual criminals and those creating enmity between different groups and communities.

October 11: Maharashtra Governor issues ordinance to reconstitute the Shri Siddhi Vinayak Ganapati Temple Trust at Prabhadevi, Bombay; **13.** Union Cabinet issues ordinance to take over liabilities and assets of Maruti Ltd.; **28.** President promulgates ordinance for forest conservation and for controlling diversion of forest land for non-forestry purposes.

November 10 : Tamil Nadu Governor promulgates an ordinance declaring as punishable any act of incitement to refuse to pay taxes and dues to the Govt.; President promulgates Auroville (Emergency Provisions) Ordinance, 1980; **17.** Lok Sabha passes bill declaring Sree Chitra Tirunal Medical Centre Society for Advanced Studies, Trivandrum as an institution of national importance; **18.** Parliament passes Advocates (Amendment) Bill 1980 which seeks to protect seniority of attorneys; **24.** Maharashtra Governor issues ordinance to vest an officer of the rank of Divisional Commissioner with the powers to supervise and review the implementation of the Employment Guarantee Scheme (E.G.S.) and the National Rural Employment Programme (N.R.E.P.); Rajya Sabha okays bill declaring Sree Chitra Tirunal Medical Centre Society for Advanced Studies, Trivandrum as an institution of national importance; **25.** Maharashtra Governor promulgates an ordinance to amend the Maharashtra Legislature Members (Removal of Disqualification) Act thereby enabling the members of the legislature to continue their membership even after their services are utilised by some of the corporations on account of their special knowledge; **26.** Lok Sabha passes bill to improve service conditions of Supreme Court and High Court judges.

December 1: Lok Sabha passes Monopolies and Restrictive Practices Act, 1969 Amendment Bill; Lok Sabha passes Auroville (Emergency Provision) Bill; **4.** Rajya Sabha okays bill empowering Central Govt. to appoint Chief justices of High Courts from outside the states; Lok Sabha passes Public Premises (Eviction of Unauthorised Occupants) Amendment Bill; **9.** Lok Sabha passes Criminal Procedure Code (Amendment) Bill which makes it difficult for habitual criminals to obtain bail; **10.** Parliament okays Jute Companies (Nationalisation) Bill; **11.** Rajya Sabha okays Sales Promotion Employees (Conditions of Service) Amendment Bill, 1979; **16.** Bihar Assembly adopts Official Language (Amendment) Bill which provides Urdu the status of second official language; Lok Sabha passes National Security Bill; **18.** Lok Sabha passes the Maruti Limited (Acquisition and Transfer of Undertaking) Bill; **19.** Lok Sabha passes the Forest (Conservation) Bill; **22.** Maharashtra Legislative Assembly passes the State Prevention of Communal, Anti-social and other Dangerous Activities Bill; Rajya Sabha passes National Security Bill; **23.** Lok Sabha passes Air (Prevention and Control of Pollution) Bill; **24.** Parliament approves Payment of Bonus (Second Amendment) Bill, 1980 to make 8·33 per cent minimum bonus a permanent feature; **27.** Lok Sabha passes Hotel Receipt Tax Bill which seeks to impose a special tax of 15 per cent on gross receipts of certain hotels.

FOREIGN AID TO INDIA

FOREIGN Exchange Reserves: 1960-61: Rs. 3,040 million; 1970-71: Rs. 7,320 million; 1971-72: Rs. 8,490 million; 1972-73: Rs. 8,470 million; 1975-76: Rs. 10,237.3 million.

AID GIVING COUNTRIES

United States: The total amount of U.S. economic assistance to India up to September 30, 1980 was 11,677.3 million dollars or, at the current rate of exchange 90,499.0 million rupees.

The break-up of this figure is as follows:

Grants (not repayable) 3,281.9 million dollars; Loans repayable in dollars 4,022.0 million dollars; Loans repayable in dollars or rupees convertible into U.S. dollars and/or third country currencies at the option of U.S. Government 423.8 million dollars; Loans repayable in rupees 3,371.0 million dollars (including PL 480 Title I rupee loans to Government of India 2,494.5 million dollars, and Cooley Fund loans to private enterprises 220.3 million dollars); and amounts reserved from all rupee sale proceeds under PL 480 Title I sales agreement for U.S. Government uses 578.6 million dollars.

The various U.S. Government programmes under which the aid funds are disbursed and the amounts sanctioned for each programme up to September ,30, 1980 are as follows:

	Programme (up to 30.9.80)	Million Dollars	Equiv. Rupees at Current Rate★ (Million)
1.	USAID Tech. Assistance Programme:		
	(a) Development Grants (not repayable)	488.3	3,784.3
	(b) Loans (repayable in rupees)...	148.1	1,147.8
2.	USAID Development Loans		
	(a) Repayable in Dollars	2,919.2	22,623.8
	(b) Repayable in Rupees	502.3	3,892.8
3.	Wheat Loan of 1951 (repayable in dollars)	243.7	1,888.7
4.	P.L. 480, Title I Rupee Payable Sales (grants, and loans repayable in rupees)	4,076.8	31,595.2★★
5.	P.L. 480, Title I Credit Sales (repayable in dollars, or rupees convertible to U.S. dollars and/or third country currencies)	423.8	3,284.4
6.	P.L. 480 Title I Credit Sales (repayable in dollars)	244.9	1,898.0
7.	P.L. 480 Title II Food Aid Grants (Donations through voluntary Agencies and U.N. World Food Programme) (not repayable)	1,997.1	15,477.5
8.	Emergency Flood & Famine Relief Grants (not repayable)	5.5	42.6
9.	Disaster Relief Grants (not repayable)	7.6	58.9
10.	Triangular Trade (repayable in rupees)	5.8	45.0
11.	U.S. Export-Import Bank Loans (repayable in dollars)	614.2	4,760.0
	Total	11,677.3	90,499.0

*Rate of Conversion: $1.00=Rs.7.75

**Actual amount of P.L. 480 sale proceeds deposited by the Government of India under all rupee payable sales agreements totalled Rs 22,430 8 million Of this, actual amount utilized for Cooley Loans to private enterprises totalled Rs. 1,244.0 million; for loans and grants to Government of India Rs. 18,118 2 million, and for U.S. Government uses Rs. 3,068 million. While rupee loans to Government of India have been fully repaid (pursuant to the Indo-US. Rupee Agreement), some of the loans to private borrowers (Cooley Loans) are still outstanding.

Note: The Indo-U.S. Rupee Agreement signed on February 18, 1974 between the Government of India and the U.S. Government provided for the disposition of U.S.-owned P.L. 480 Title 1 rupees held in deposit with banks and those prepaid by the Government of India under all outstanding loans repayable in rupees. Under the terms of the Agreement, the U.S. Government additionally granted Rs. 16,804 million to the Government of India—roughly two-thirds of India's rupees debt to the US —which have been used for financing various economic development projects during the first three years (1974 to 1977) of India's Fifth Five Year Plan (Roughly Rs. 8,000 million, mostly of non-P.L. 480 funds were retained for U.S. Government uses.)

FY 1980 Programme: During Fiscal Year 1980 (October 1, 1979 to September 30, 1980), the U.S. Government aid funds were committed for the following projects and activities under various programmes.

COMMITMENTS IN U.S. FISCAL YEAR 1980
(October 1, 1979 to September 30, 1980)

	Project-Activity	Amount Obligated (In Million U.S. Dollars)
1.	**Development Loans (a)**	
	Rajasthan Medium Irrigation (b)	15.0
	Agriculture Development (c)	20.0
	Fertilizer Promotion (d)	44.0
2.	**Development Grants**	
	Rajasthan Medium Irrigation (e)	0.5
	Integrated Rural Health & Population (f)	23.7
3.	**Total Development Assistance**	103.2
4.	**PL 480 Food AID**	
	Title II Gift Commodities—through U.S. Voluntary Agencies (g)	149.7 (i)
	Title II Gift Commodities—through World Food Programme (g)	12.6 (i)
	Title II Gift Commodities—through Cooperative League of U.S.A. (h)	31.9 (i)
5.	U.S. Export-Import Bank Loans (Net)	9.5 (j)
	Total	306.9

a) Loans are repayable in 40 years with 2% interest during the first 10 years grace period and 3% thereafter.

b) Finances the construction of new and modernization of existing medium irrigation projects, which will help to increase food production and to reduce the risks of drought in the State of Rajasthan. The project is expected to contribute to raising the levels of small farmers income, expanding rural employment opportunities, and increasing availability of food to the rural and urban poor.

C) Provides additional resources to the Agricultural Refinance and Development Corporation to support its programme of refinancing loans by credit institutions such as cooperatives, land development banks and commercial banks, for minor irrigation activities including dugwells, tubewells, pumpsets, lift irrigation and land development. The project is expected to expand and increase access to credit, primarily for small farmers, and contribute to increased agricultural production, income and employment for small and marginal farmers and landless labourers.

d) Finances the imports of fertilizers to ensure availability of sufficient supplies in remote areas for use by the weaker sections. The project is expected to contribute to increased income and welfare of the small and marginal farmers by increasing their agricultural production through expanded use of fertilizer and associated practices.

e) As a complement to the loan project described above, this grant will finance U.S. and in-service training for Rajasthan State officials and engineers responsible for design, construction, operation, analyses and evaluation; and special studies such as base-line socio-economic surveys, water management studies, etc.

f) This grant finances the construction of additional subcentres, primary health centres, rural centres, rural centres and quarters for female workers; training of additional village level workers, *dais*, and subcentre level workers; and expanded services and support systems including base-line survey and needs assessment, communications, management information, etc. The project is expected to contribute to the Government of India's Model Plan for improved access to health and family planning services that promote fertility and mortality reduction in 13 districts of Maharashtra, Gujarat, Punjab, Haryana and Himachal Pradesh.

g) Gifts of U.S. blended food commodities of greater nutritional value have been imported for free distribution through U.S. Voluntary Agencies working in India and the U.N. World Food Programme. These agencies assist government and private institutions in their programmes of maternal/child health, school feeding, mid-day meals, food-for-work, and to support humanitarian/relief activities.

h) Gift imports of U.S. vegetable oil have been provided to the Cooperative League of U.S.A. in support of its programme of assistance in developing India's cooperative vegetable oil sector. Under this programme, U.S. donated oil is sold to generate funds for development of oilseed production and marketing system owned and controlled by farmers cooperatives. The project which is being implemented by the National Dairy Development Board, is expected to contribute to ease the supply of edible oils in India.

i) Includes estimated ocean freight.

j) Represents net total during July 79-June 80. However, Eximbank authorised a loan of $35.0 million during FY 1980 for Boeing aircraft 737's.

U.S.S.R.: The total value of Soviet long-term economic credits to India exceeds 1,475 million roubles. This amount is being utilised for the construction of more than 75 industrial and other projects in India. Among these projects there are steel plants in Bhilai and Bokaro with the capacity of 4 million tonnes of steel per annum each, oil refinery in Mathura with the capacity of 6 million tonnes of crude oil per year, two oil refineries at Koyali and Barauni with a capacity of 3 million tonnes each, Heavy Machine Building Plant in Ranchi, Heavy Electrical Equipment Project in Hardwar, power stations etc.

On April 27, 1977, the USSR sanctioned new 250 million roubles credit to India. This credit is repayable over a period of 20 years, including 3 years grace period, and will be utilised for a wide range of new projects in steel, coal and other industries.

On March 14, 1979 the USSR and India signed Long-term Programme of Economic, Trade, Scientific and Technical co-operation between the two countries. The Programme is intended for the period of 10-15 years and envisages both: further development of co-operation in such traditional areas as ferrous and non-ferrous metallurgy, oil and coal industry, machine building, etc., and establishing co-operation in new areas, such as light, food, pulp & paper, building materials, industries, irrigation etc. The Programme also provides for setting up of production cooperation and specialisation, cooperation in designing and construction of projects in third countries, development of trade, scientific and technical ties.

In conformity with the long-term programme an intergovernmental agreement on co-operation in the construction of metallurgical plant at Visakhapatnam was signed on June 12, 1979, a feasibility report for the construction of alumina plant in Andhra Pradesh was prepared, a working programme of co-operation in oil industry for 1980-85 was signed, new projects of cooperation in coal industry were chalked out, some measures for the improvement of production capacity utilisation of machine-building plants set up in India with Soviet assistance were worked out. etc. Working Programmes of cooperation in a number of new areas and a Protocol on co-operation in Science and Technology were signed. New Trade Agreement has been prepared.

Switzerland: (i) *Multilateral Development Aid:* Over 30 per cent of the Swiss technical assistance and 50 per cent of the soft loans are channelled through the U. N. specialised agencies like UNDP, FAO, WHO, UNICEF, etc., and through Asian Development Bank. The major part of the relief and humanitarian assistance is channelled through the World Food Programme.

(ii) Bilateral Development Aid to India: *Loans*: Until Dec. 31, 1978, the Swiss Government had provided transfer credits to the extent of 270 million Swiss francs and a development loan of 35 million francs was converted into a grant in 1978.

(III) Grants: (a) *Technical Assistance*: From 1961 until 31 December, 1979 the Swiss Government had sanctioned a total of 80.2 million Swiss Francs for development grants to India. For 1979, the amount was 5 (1978:6.9) million. The main fields of cooperation with India are cattle breeding and fodder development (Kerala, Punjab, Andhra Pradesh), minor irrigation (Maharashtra, Karnataka), scientific applied research (biochemistry IIT Delhi, electronics IISc Bangalore), tool-makers training (CSIO and NTTF), flour milling technology (CFTRI) and assistance to a number of technical schools, agricultural extension schemes, colleges and hospitals.

(b) *Capital Assistance:* In 1979, a contribution of 20 million Swiss francs was made to the Agricultural Refinance and Development Corpn. for its 3rd Rural Credit Programme in favour of small farmers. (c) *Relief and Humanitarian Assistance:* For 1979, the Swiss Government had allocated an amount of 3.3 million Swiss francs for various activities in India against 5.0 million Swiss francs in 1978.

United Kingdom: British aid to India has been granted through the Aid India Consortium since its formation in 1958. From June 1975, all British aid to India is in the form of grants. Upto 1977-78 an amount of £ 1,249.3 million has been paid to India as loan. *Major British Aided Projects in India are:* 1. Durgapur Steel Plant; 2. Bharat Heavy Electricals Ltd., Bhopal; 3. Security Paper Mill, Hoshangabad; 4. Oil India Ltd., Duliajan (Upper Assam); 5. Fertiliser Plants: (a) Hindustan Fertiliser Corpn., Namrup; (b) IFFCO, Kandla/Kalol; (c) Southern Petro-chemicals Corpn.; (d) Mangalore Chemicals and Fertilisers, Mangalore; 6. Sulphuric Acid Plant, Sindri, Bihar; 7. Indian Petrochemicals Corporation, Vadodara; 8. Cochin Shipyard Ltd., Cochin; 9. Indian Oil Corporation—Pipe line Project; 10. Bharat Coking Coal Ltd.—Longwell Mining Project; 11. Neomer Ltd., Vadodara—Polypropylene Film Project; 12. Shardlow India Ltd.—Automobile Crankshaft Project; 13. Newsprint Projects: (a) Hindustan Paper Corporation Ltd., (b) Mysore Paper Mills Ltd.; 14. Industrial Phosphates Project—Hindustan Lever Ltd.; 15. Automobile Tyre Project—Webster Ltd.; 16. Rubber Chemicals—Alkali & Chemicals Corporation of India; 17. Agreements to provide funds for construction of ships for Shipping Corporation of India, Scindia Steamship Company and Great Eastern Shipping Co.; 18. Calcutta Electric Supply Corporation/Titaghur power project; 19. Foot-mouth Disease Vaccine plant at Hyderabad.

Canada: The Canadian development assistance programme in India began in 1951 with grants of $ 10 million for food aid, $ 5 million for projects and equipment, and a small amount of technical equipment. Until the mid-60s the programme averaged around $25 million per year. Then, with the onset of the famine years, it grew rapidly to the $ 100 million level. From 1974-75 onwards, Canadian Aid is focussing specially on food grains, edible oils, fertilisers and small agricultural projects etc., keeping in view the Indian Govt.'s priority areas of development. In 1979-80 Canada provided a total of $ 47 million in development aid.

Commitments by Canada through the development assistance programme in India totalled $ 1,461.3 million as at the end (March 31) of fiscal year 1979-80. To this may be added export credits of $ 120 million, bringing the total programme of assistance to $1,581.3 million. Of the development assistance programme, which is administered by the Canadian International Development Agency, 65 per cent of commitments have been in the form of grants, and 35 per cent development loans (50-year maturity, 10-year grace period, with no interest or service charges). The export credits, administered by Canada's Export Development Corporation, have been on concessional terms varying with conditions at the time the credits were given.

Since India has become self-suficient in food grains as is evident in the last 3 years, Canadian aid will be diversified into other industrial sectors such as energy, transport, telecommunication, dairying etc. in the coming years in addition to the provision of grants for edible oil and loans for agricultural refinancing institutions and for the import of fertiliser material.

Technical assistance activities have included the provision of advisers in many fields and the training of around 1,300 Indians in Canada.

In addition to the above there is an active and growing programme of activities by Canadian non-governmental organisations (NGOs) in India.

Canada has been the fifth largest bilateral donor to India. in 1977-78 in terms of net aid transfers to India during that year.

Projects which receive Canadian aid are: Idukki Hydro-electric Project (Kerala); Kundah Hydro-electric Project (Tamil Nadu); Synthetic Rubber Plant (Koyali, near Vadodara); bulk fertiliser

Canadian Assistance to India during 1978-79 and 1979-80 in Canadian $ Millions

	1978-79	1979-80	Cumulative Total upto March '80
Grants			
Food	5.4	20.0	664.2
Fertilizers	-	-	20.2
Industrial commodities	-	-	100.4
Projects & equipment	-	0.2	130.1
Debt relief	-	-	6.2
Technical assistance	1.3	1.3	29.3
Total Grants	6.7	21.5	950.4
Loans			
Food	-	-	32.8
Fertilizers	-	-	185.1
Industrial commodities	-	-	146.9
Projects & equipment	27.8	25.5	146.1
Total Loans	27.8	25.5	510.9
Total Development Assistance Programme	34.5	47.0	1,461.3
Export Credits	-	-	120.0
Total Assistance	-	-	1,581.3

handling equipment for the ports of Kandla and Calcutta; Earth Satellite Communications Station at Dehra Dun; Mining Exploration equipment for Geological Survey of India; Airport Navigation and Lighting Equipment for Delhi, Madras, Bombay and Calcutta.

Current Canadian financed projects are: $15 million Oil and Natural Gas sector loan—a line of credit for the procurement of equipment and services by the Oil and Natural Gas Commission and Oil India Ltd.; $25 million loan to the Agricultural Refinance Development Corporation for the provision of agricultural credit to the rural farmers in India; $3.2 million grant for the All India Coordinated Research Project for Dryland Farming in Hyderabad.

New Projects are in the planning stages in hydro-electric power, mining, agriculture, telecommunications and provision of rapeseed oil.

Australia: Australian Development Assistance to India started in 1951. In the early stages of this programme assistance was given in the form of commodities (wheat, fertilisers, copper, milk powder, wool) and capital equipment (rail cars, railway wagons, trucks and radio equipment). Since the late sixties, Australia has concentrated its aid in the agricultural field.

Projects completed are: (i) Bakeries Project (1966-76)—Australia has donated modern automatic machinery for the production of protein enriched bread and bread products to the Modern Bakeries in their units at Delhi, Bombay, Calcutta, Madras, Ahmedabad, Chandigarh, Ranchi and Cochin. Australian contribution through provision of equipment and expertise was $ A 2,741,500. (ii) Supply of high quality dairy cattle (1968-73) — Australia has supplied 1,415 head of dairy cattle at a total cost of $A 882,000 during the period 1968-73. The cattle were distributed among various States of India for use in their cattle development programmes.

The major projects currently receiving Australian assistance are:

(a) Sheep Breeding Projects in Hissar (Haryana), Mamidipally (Andhra Pradesh) and Challakere (Karnataka);

(b) Cattle Breeding Projects at Hissar (Haryana) and Barapetta (Assam) with associated Deep Frozen Semen Centres for collection, processing and distribution of frozen bull semen;

(c) Supply of 606 dairy cattle and provision of an Australian Adviser to selected Centrally Sponsored Exotic Cattle Breeding Farms. (The Project was recently completed).

(d) Establishment of a model Packhouse Cool Store in Sopore (near Srinagar) for grading, packing, storage and marketing of Jammu & Kashmir apples;

(e) Development of a Fodder Seed Farm in Hessaraghatta (Karnataka) for the production of improved pasture and fodder seeds.

Projects under consideration for Australian assistance are:

Development of the State Farm Corporation's Seed Farm at Kokilabari (Assam) for the production of edible seeds; Establishment of a modern abattoir at Andul-Mourigram (West Bengal); Assistance in Forestry Development through establishment of pilot plantations; Provision of Plant Quarantine facilities—establishment of two post-entry quarantine stations.

Australia has agreed to supply 2 DTH drilling rigs to be located in drought affected areas.

During the 1979 calendar year, Australian assistance to India amounted to $A 4.3 million. Total assistance from 1951 to June 1980 amounted to $A 122 million (approx). During this period approximately 1,730 fellowships were provided for Indian nationals to undertake training in Australia in the various fields ranging from Agriculture & Animal Husbandry to Public Administration and Trade Promotion.

About 188 Australian experts have worked in India on short and long term assignments.

West Germany: Aid to India for the financial year 1980-81 is envisaged to the tune of Rs. 1,450.8 million (DM 360 million). The break-up of the aid is as follows: Project assistance (DM 178 million), loan to Indian Development Banks (DM 40 million), capital goods assistance (DM 44 million), commodity aid for financing import requirements of industrial equipment (DM 60 million), grant for Agricultural Re-finance and Development Corporation (ARDC) (DM 38 million), Project assistance is used to extend aid to Super Thermal Power Plant, Singrauli, (DM 90 million), Neyveli Lignite Corp. II (DM 50 million). Oceanographic Research Vessel (DM 15 million). Rural Water Supply in Madhya Pradesh (DM 23 million).

Technical assistance was envisaged inter alia for an afforestation project, a project for quality improvement of electronic products, the Indian Institute of Technology, a tool-room in Lucknow and a watershed management programme.

Netherlands: In 1980 an amount of Dfl 234 million (Rs. 936 million) has been made available to India. Of this amount, Dfl 175 million, consisted of a loan on DAC conditions while Dfl 59 was given as a grant.

In November 1979 the Netherlands Govt. decided to grant debt-relief to India upto an amount of about Dfl 10.4 million. This brings the total debt relief given by the Netherlands to India to Dfl 110.1 million.

Belgium: Belgium joined the Aid India Consortium in 1962 and upto 1979-80, it has extended State to State loan amounting to BF 3,360 million (1BF-Rs. 0.27) to India. The loan last granted for the year 1979-80 was of BF 350 million inclusive of Debt Relief of BF 40 million. The same amount of loan, including Debt Relief of BF 46 million, has been committed for 1980-81. The terms and conditions of the loans have been liberalised progressively; at present the loan is available to India free of interest, with a repayment period of 30 years including an initial grace period of 30 years. Belgium has also extended to India suppliers' credit of more than BF 4,000 million to cover big purchases like ships.

Denmark: India has signed a loan agreement with Denmark for a loan of Rs. 110 million (Danish Kroner 80 million). This amount will be utilised for the import of many items needed for the fisheries, fertiliser, petro-chemical, rubber, electronics, etc. industries.

Besides technical co-operation is also rendered in various fields, such as animal husbandry, rural development, family welfare, preventive health and small-scale industrial development. For the period 1978-83, a total of Rs. 830 million (Danish Kroner) has been appropriated by the Danish Government for technical assistance to India.

Japan: During the fiscal year 1979-80, Japan has agreed to pay an amount of 27,600 million Yen as project loan at an interest rate of 2.75 per cent, and 30 years repayment period including 10 years grace period. 50 million Yen grant assistance for the supply of science laboratory equipment to the Archaeological Survey of India. 1000 million Yen grant assistance for increase in Food Production. (For the purchase of machinery for construction of irrigation facilities under the irrigation project in the States of Uttar Pradesh, Madhya Pradesh and Punjab.) 1,500 million Yen grant assistance for social environment improvement (for purchase of small-size steel bars for construction of group houses in New Delhi and Bombay and hospitals in New Delhi). 2,690 million Yen in grant assistance for the purchase of commodity as a debt relief measure.

Norway: Norway has stablished up its bilateral technical assistance, by way of grants, to India for the four-year period beginning 1980 at a level of N.Krs. 106 million (Rs. 170.9 million) each year—totalling N.Krs. 424 million (Rs. 683.8 million).

Norwegian assistance will be utilised for the development of fisheries, family planning, forestry, science and technology and import of commodities like fertilisers and paper.

Sweden: A development cooperation agreement providing Swedish aid of Rs. 558 million (Skr. 310 million) to India was signed in July 1980.

Out of this assistance Rs. 171 million (Skr. 95 million) will be available for general imports and Rs. 198 million (Skr. 110 million) will be available for imports into India of goods and services from Sweden. An additional Rs. 189 million (Skr. 105 million) will be provided for technical assistance programmes and projects.

The entire assistance committed for 1980-81 is in the form of an outright grant.

France: France has granted India aid amounting to French francs 4.605 million (Rs. 8,500 million). French assistance has been permitted for the establishment of the following projects, viz. the Haldia refinery, Nasik thermal station, Khetri copper mines, caprolactum and polyethylene factories at Vadodara, fertilizer factory at Haldia, Kalpakkam reactor and two heavy water factories.

In 1980 an agreement was signed by which India was given PF 760 million (Rs. 1400 million) as project credits (including FF 400 million—Rs. 740 million for the aluminium project in Orissa) and FF 240 million as non project credits. (Rs. 440 million).

These credits include:- a) a loan of FF 500 million (Rs. 930 million) from the French treasury repayable within a period of 28 years with 10½ years grace and the rate of interest payable is 3 per cent and b) a loan of FF 500 million (Rs. 930 million) from private credits guaranteed by the French government which shall be amortized in 10 years with the usual rate of interest applied to export credits.

IMPORT AND EXPORT TRADE

DURING 1979-80, India's exports recorded a rise of 12 per cent to Rs. 64,268 million from Rs. 57,263 million in 1978-79. Imports increased by 27 per cent to Rs. 86,875 million in 1979–80 from Rs. 68,143 million in 1978–79. Consequently, India's trade deficit doubled to Rs. 22,607 million during 1979–80 from Rs. 10,880 million during 1978–79.

Trend of Exports :

India's exports have been maintaining a buoyant trend since 1972–73. The yearly rise in exports was 22·5 per cent in 1972–73, 28 per cent in 1973–74, 31·9 per cent in 1974–75, 21·4 per cent in 1975–76, 27·3 per cent in 1976–77, 5·3 per cent in 1977–78, 5·9 per cent in 1978–79 and 12·2 per cent in 1979–80. The composition of exports is presented in Table I.

Trend in Imports :

Table II gives the composition of imports for selected years.

Regional pattern of India's Foreign Trade :

Table III shows the regional pattern of our external trade. U.S.A., Japan, U.S.S.R., U.K. and West Germany were our top five exporters in 1979–80. U.S.A., Iraq, U.S.S.R., U.K. and West Germany were the top five importers.

Table I : India's Principal Exports

(Rs. in million)

	1969–70	1977–78	1978–79	1979–80*
Jute manufactures	2,067	2,440	1,656	3,412
Tea	1,245	5,697	3,405	3,553
Cotton fabrics	697	2,248	2,239	2,847
Iron ore	946	2,408	2,329	2,893
Coir yarn & manufactures	134	239	263	342
Oil cakes	415	1,333	1,158	1,151
Leather & leather manufactures (except footwear)	815	2,480	3,263	5,249
Cashew kernels	574	1,495	802	1,106
Tobacco	334	1,172	1,163	1,134
Engineering goods	1,025	6,174	6,044	6,298
Coffee	196	1,944	1,451	1,633
Sugar	86	195	1,361	1,458
Manganese ore	111	109	154	132
Raw cotton	147	7	160	749
Iron and steel	642	1,854	2,215	1,006
Chemicals & allied products	222	1,167	1,463	1,998
Fish & fish preparations	308	1,743	2,238	2,491
Art silk fabrics	36	269	389	322
Footwear	90	240	269	312
Vegetable oils	93	261	189	479
Cotton apparel	58	2,351	4,212	4,537
Handicrafts	710	7,518	9,523	7,431
Mica	152	173	189	176
TOTAL (including others)	14,133	54,079	57,263	64,268

* Provisional.

Table II : India's Principal Imports

(Rs. in million)

Commodity	1969–70	1977–78	1978–79	1979–80*
Cereals and cereal preparations	2,610	1,224	869	1,067
Cashew-nuts (unprocessed)	276	180	92	116
Fibres	1,111	4,308	2,707	N.A.
Petroleum oil and lubricants	1,376	15,518	16,768	30,235
Animal and vegetable oils & fats	296	7,379	5,524	N.A.
Fertiliser and fertiliser materials	1,173	3,380	4,490	5,461
Chemical elements and compounds	466	1,966	2,308	3,124
Dyeing, tanning and colouring materials	71	174	233	251
Medicinal & pharmaceutical products	183	636	792	730
Plastic materials, regenerated cellulose and artificial resins	84	662	700	936
Paper, paper board and manufactures	237	817	1,047	1,547
Non-metallic mineral manufactures	322	3,626	5,579	N.A.
Iron & Steel	815	2,599	4,723	8,720
Non-ferrous metals	745	1,915	2,453	3,627
Manufactures of metals	73	380	461	632
Non-electrical machinery, apparatus and appliances	2,804	7,129	7,811	7,751
Electrical machinery apparatus and appliances	643	1,722	1,774	2,082
Transport Equipment	512	2,252	2,960	3,119
TOTAL (including others)	15,821	60,202	68,143	86,875

*** Provisional. N.A. = Not available.**

Table III : Regional Pattern of India's Foreign Trade

(Rs. in million)

Countries	1970–71		1978–79		1979–80*	
	Exports	Imports	Exports	Imports	Exports	Imports
1. U.S.A.	2,073·4	4,529·5	7,711·8	7,619·0	8,088·1	8,698·0
2. Canada	279·6	1,172·3	486·8	2,403·0	612·7	2,234·0
3. E.C.M.	**2,796.1**	**3,186.7**	**15,757.2**	**20,821.0**	**16,821.3**	**21,201.0**
of which						
(*i*) Belgium	203·3	115·1	2,327·2	3,565·0	1,597·2	2,662·0
(*ii*) France	179·8	213·3	1,776·0	2,261·0	1,792·8	1,879·0
(*iii*) F.R.G.	323·1	1,074·7	2,733·7	6,296·0	3,652·7	6,445·0
(*iv*) Netherlands	139·8	190·9	1,812·3	1,578·0	2,284·1	1,574·0
(*v*) U.K.	1,704·4	1,267·6	5,340·2	5,699·0	4,736·0	6,635·0
4. E.S.C.A.P.	**3,787.9**	**1,724.8**	**13,125.9**	**11,204.0**	**15,231.9**	**13,558.0**
of which						
(*i*) Australia	244·6	365·8	879·8	920·0	995·2	1,497·0
(*ii*) Japan	2,034·8	834·3	5,992·5	5,650·0	6,649·1	6,102·0
5. O.P.E.C	**1,030.0**	**1,258.5**	**7,258.3**	**13,821.1**	**8,587.9**	**23,575.0**
of which						
(*i*) Iran	266·5	916·4	924·8	3,485·0	1,002·5	6,201·0
(*ii*) Iraq	96·3	30·9	470·5	5,832·0	591·7	8,579·0
(*iii*) Kuwait	157·4	56·8	1,200·4	1,036·0	1,335·8	1,652·0
6. East European Countries	**3,624.3**	**2,276.5**	**6,120.0**	**6,484.0**	**5,831.9**	**10,000.0**
of which						
(*i*) Poland	221·4	280·3	648·4	436·0	405·2	580·0
(*ii*) Czechoslovakia	294·6	202·0	372·1	309·0	432·6	500·0
(*iii*) G.D.R.	245·6	186·3	354·9	309·0	480·3	336·0
(*iv*) Rumania	137·0	165·8	406·3	450·0	497·2	872·0
(*v*) U.S.S.R.	2,098·5	1,061·3	4,105·9	4,706·0	6,456·5	7,286·0
7. Others	1,760·3	2,193·7	6,742·6	5,790·9	9,093·7	7,608·8
GRAND TOTAL	15,351·6	16,342·0	57,262·6	68,143·0	64,267·5	86,874·8

* Provisional.

Santa Cruz Electronics Export Processing Zone, Andheri East, Bombay 400096. It is a free trade zone created by the Ministry of Commerce, Govt. of India on Sept. 1, 1974 to encourage establishment of electronics industry for 100 per cent export, and to earn foreign exchange.

The Zone covers an area of 40·47 hectares and it can accommodate about 100 units. As on 31st March, 1980 the number of approved applications amounted to 46 of which 34 are in operation. The total exports made from Zone since its inception in September, 1974, till 31st March, 1980 were of the order of Rs. 250·83 million. The exports for the year 1979–80 were of the order of Rs. 111·41 million.

SEEPZ Administration renders all assistance to entrepreneurs for setting up facilities in the Zone, after they are approved for setting up a project in the Zone by the SEEPZ Board. The clearances are made at single point. Since the operations in SEEPZ are all for 100% export purposes there are certain relaxations in the application of local laws such as MRTP and FERA.

Export Inspection Council of India, World Trade Centre 14/1B, Ezra St., Calcutta 700001.

Estd. by Govt. of India to advise the Govt. regarding the measures for enforcement of quality control and inspection in relation to commodities intended for export and to draw up programmes with the object of improving the quality of export products and projecting a better image of India abroad. *Regnl. Offices :* Bombay, Cochin, New Delhi.

EXPORT PROMOTION COUNCILS

Apparels Export Promotion Council : Textile Centre, Poona St., 34, P. D'Mello Road, Bombay 400009.

Basic Chemicals, Pharmaceuticals and Cosmetics Export Promotion Council, Jhansi Castle, 4th Floor, 7, Cooperage Road, Bombay 400039. Gram : "Chemexcil". *Regional Offices :* No. 22, III Main Road, Gandhinagar, Bangalore 560009 ; Kankaria Estate, 9th Floor, 6, Little Russell St., Calcutta 700071.

Cashew Export Promotion Council : Chittoor Road, Ernakulam, Cochin 682016.

Chemicals and Allied Products Export Promotion Council : 14/1B, Ezra St., Calcutta 700001. Gram : "Capexil". *Branch Offices : (i)* Commerce Centre, Block D-17, Tardeo Rd., Bombay 400034 ; *(ii) Regional Office of Capexil :* 123, Anna Road, Madras 600006 ; *(iii)* Laxmi Niwas, 8, S. Bhagat Singh Marg, New Delhi 110001.

Overseas Correspondents : (i) C. P. Gonnetilleke, 115, Davidson Road, Colombo 4, Sri Lanka ; *(ii)* M. K. Unnithan, 31, Unakan Road, Post Box 975, Bangkok, Thailand ; *(iv)* Dolly Enterprises, Post Box No. 16061, 3-C, Hyde Centre 221-226, Gloucester Road, Hong Kong.

Cotton Textile Export Promotion Council : Engineering Centre, Mathew Road, Bombay 400 004 ; Gram : "Texprocil" ; Telex : 011/2166. *Branch Offices : (i)* Cecil Court, Mahakavi Bhushan Marg, Bombay 400 039. *(ii)* Jaldarshan Housing Society, Opp. Nataraj Cinema, Ashram Road, Ahmedabad 380009 : *(iii)* 14-1B, Ezra St., Calcutta 700001 ; *(iv)* 64-B, Dr. Alagesan Road, Sai Baba Mission, Coimbatore 641011 ; *(v)* 101, Ashoka Estate, 24, Barakhamba Road, New Delhi 110001 ; *(vi)* C/o Madhya Pradesh Textile Mills Association, No. 8, South Tukoganj, St. No. 1, Indore 452004.

Overseas Office : T. J. Jacob, C/o Consulate General of India, Wilhelm Leuschner Str. 93, 6, Frankfurt/Main, West Germany.

Engineering Export Promotion Council : World Trade Centre (3rd Floor), 14/1B, Ezra Street, Calcutta 700001. Telex : 021-7837 ; Gram : "Oceanborne". *Territorial Division :* Vandhna (4th Floor), 11, Tolstoy Marg, New Delhi 110001. *Regional Offices : (i)* Commerce Centre, 2nd Floor, Tardeo Rd., Bombay 400034 ; *(ii)* World Trade Centre, 1st Floor, 14/1B, Ezra St., Calcutta 700001 ; *(iii)* Kannammai Building, 1st Floor, 612, Mount Rd., Madras 600006 ; *(iv)* Surya Kiran, 4th Floor, 19, Kasturba Gandhi Marg, New Delhi 110001.

Foreign Offices : (i) 333 North Michigan Ave., Chicago, Illinois 60601 (U.S.A.) ; *(ii)* P.O. Box No. 6591, Dubai (U.A.E.) ; *(iii)* Indische Technische Handelsberatung, 4 Duesseldorf, Immermannstr-59, West Germany ; *(iv)* Skyline Building, 4th Floor, No. 9, JL. M. H. Thamrin, Jakarta (Indonesia) ; *(v)* 28/30, Cork Street, London W1 ; *(vi)* World Trade Center, 350 South Figueroa Street, Suite 475, Los Angeles, California 90071 ; *(vii)* Rm. 502, Sarmiento Bldg., Ayala Ave., Makati, Metro Manila, Philippines ; *(viii)* Room No. 104, St. George House, Parliament Road, P.O. Box No. 42030, Nairobi (Kenya) ; *(ix)* Faber House (6th Floor), 232F-1, Orchard Road, Singapore 0923 ; *(x)* Indische Technische Handelsberatung, Promenade Gasse 22/3/14, 1170 Vienna, Austria.

Export Promotion Council for Finished Leather and Leather Manufactures: 15/46, Civil Lines, P.B. No. 198, Kanpur 208001. Telex : KP 286 ; Gram : "LEXPORT". *Regional Offices : (i)* 202, "Niranjan", 2nd Floor, 99, Subhash Rd., Bombay 400002 ; Gram : "Reolexport" ; (2) 27, Mirza Ghalib St., 5th Floor, Calcutta 700016 ; Gram : "Reolexport" ; (3) 31, Rundals Rd., Madras 600007 ; Gram : "Filexport" ; (4) Research and Development Cell, B-19, Sarvoday Nagar, Kanpur 208005.

Gem & Jewellery Export Promotion Council : D-15, Commerce Centre, Tardeo Rd., Bombay 400034. Telex : GJEPC 011–4360 ; Cable : "Gejexcon".

Handloom Export Promotion Council : Rasheed Mansion, 622, Anna Salai, Post Bag 461, Madras 600006. Telex : MS-7158 ; Gram : "Gossamer".

Leather Export Promotion Council : Marble Hall, 118, Vepery High Rd., Madras 600003 ; Tel. : "Lexprocil" ; Telex : 41-7354 — LEPC-IN.

Marine Products Export Development Authority : (Ministry of Commerce, Govt. of India) M. Gandhi Rd., P. B. 1708, Cochin 682016 ; Tel. : "Marine" ; Telex : (0885) 288.

Plastics and Linoleums Export Promotion Council : Nyloc House, 254-D2, Dr. A. Besant Rd., Bombay 400025. Tel. : "Plexconcil" ; Telex : 011/3940. *Regional Offices : (i)* 123, Mount Rd., Madras 600006 ; *(ii)* 14/1B, Ezra St., Calcutta 700001.

Processed Foods Export Promotion Council : 105, New Delhi House, 27, Barakhamba Rd., New Delhi 110001. Tel. : "Profoodcil".

Shellac Export Promotion Council : 14/1B, Ezra St., Calcutta 700001 ; *Deals in :* Seedlac, Shellac and Lac manufactures.

Silk and Rayon Textiles Export Promotion Council : Resham Bhavan, 78, Veer Nariman Rd., Bombay 400020 ; Cable : "Silkrayon" ; Telex : 011/3703 ; *Branch Offices : (i)* Resham Bhavan, Plot No. 3D/E, Lal Darwaza, Surat 395001 ; *(ii)* 3A, Diwan C. Mehra Rd., Amritsar 143001.

Spices Export Promotion Council : M. G. Road, Ernakulam, Cochin 682016. Telex : CN 0885-534.

Sports Goods Export Promotion Council : 1E/6, Jhandewalan Extension, New Delhi 110055.

Textiles Committee (Min. of Commerce, Government of India), Textile Centre, 34, P. D'Mellow Rd., Bombay 400009. *Regional Offices :* Ahmedabad, Amritsar, Andheri,-(Bombay), Bangalore, Calcutta, Coimbatore, Indore, Kanpur, Ludhiana, Madurai, Madras, New Delhi (Karol Bagh), Naraina (Delhi), South Delhi, Nagpur, Surat, Sholapur, Sangli and Cannanore. *Other Offices :* Inspection and Laboratory : 79, Dr. Annie Besant Road, Worli, Bombay 400018 ; Market Research : 103, Kakad Chambers, Bombay 400018.

Wool and Woollens Export Promotion Council : 714, Ashoka Estate, Barakhamba Rd., New Delhi 110001. Tel. : 40015 ; Gram : " Warmth " ; Telex : 031-4500. *Regional Offices :* Churchgate Chambèrs, 5, New Marine Lines, Bombay 400020. Tel. : 296640/294181 ; Gram : " Woollens " ; Telex : 011/3922 ; " Sekhon Niwas ", 704/3, Gurdev Nagar, Pakhowal Road, Ludhiana. Tel. : 22170 ; Gram : " Exprocil " ; Telex : 0386-257.

BANKING

As many as 2,224 (1,735 in unbanked centres) new branches were opened between July, 1979 and June, 1980 against 2,191 during the previous year. Of these, 948 branches were opened by 20 nationalised banks, 354 by the State Bank of India and its subordinates, 209 by private sector banks, 713 by regional rural banks and two by foreign banks. The total number of bank offices stood at 32,419 on 30th June, 1980.

With the upsurge in **rural banking** there has been a significant diversification of bank credit to previously neglected sectors such as agriculture, small industries, transport, professionals and self employed persons, retail trade, export and food procurement. Bank credit to these sectors had gone up from Rs. 9,050 million in June, 1969 to Rs. 212,340 million in March, 1980.

During the year gross bank credit increased by Rs. 18,910 million as compared with an increase of Rs. 21,870 million during the corresponding period in 1978-79. There was a decline of Rs. 8,960 million in public food procurement credit as against Rs. 3,150 million during the previous year. Non-food gross credit, however, increased by Rs. 27,870 million as against Rs. 25,020 million in the earlier year.

The total deposits of all scheduled commercial banks increased from Rs. 46,460 million in June, 1969 to Rs. 229,319 million in June, 1978, Rs. 286,710 million in June, 1979 and Rs. 332,830 million in June, 1980.

Average population served by commercial banks improved from 19,000 at the end of December, 1978 to 17,000 at the end of December, 1979. It is 4,000 in Britain, 2,600 in France, 5,000 in the U.S., 5,500 in Japan and 1,300 in West Germany.

Working Results of Scheduled Commercial Banks: The working results of all 66 scheduled commercial banks indicate that their profits during 1979 increased by Rs. 80 million as compared with the rise of Rs. 40 million in 1978. The rising trend noticed in 1975 and 1976 was, however, not noticed in 1977 when their profits declined.

Selected data for Scheduled Commercial Banks

Item	June 1978	June 1979	June 1980
No. of offices	28,016	30,202	32,419
Aggregate deposits (Rs. million)	229.319	286.710	332.830
Total bank credit (Rs. million)	161.066	196,870	220,530
Credit deposit ratio (%)	68.9	68.7	66.3
Investment in government and other approved securities (Rs. million)	75.520	93.890	118.250
Investment deposit ratio (%)	32.4	32.8	35.5
Cash in hand and balances with R.B. (Rs million)	27.550	35.820	40.510

Progress of Banking

Item	June 1969	June 1980
BANK OFFICES (No.)	8,262	32,419
(a) Rural	1,832	15,101
(b) Semi-urban	3,322	8,078
(c) Urban	1,447	4,856
(d) Metropolitan centres	1,661	4,384

Earnings of these banks during the year increased by Rs. 6,350 million to Rs. 32,380 million. Total expenses of these banks also increased by Rs. 6,270 million to Rs. 31,960 million or by 24.4 per cent during 1979 (Rs. 3,480 million or 15.7 per cent in 1978).

Indian Banks' business abroad: The gross deposits of the Indian bank offices abroad also increased from Rs. 13,960 million in June, 1978 to Rs. 14,760 million in December, 1978. Credit extended by these offices increased from Rs. 9,770 million to Rs. 11,440 million during the same period.

Foreign Banks: Total income of 12 foreign banks increased from Rs. 1,381 million in 1978 to Rs. 1,589 million in 1979, showing a rise of over Rs. 200 million. The profit of the foreign banks thus showed an increase of Rs. 78 million over the previous year.

Nationalisation of Banks: 14 banks were nationalised by an ordinance on 20th July, 1969.

Nationalised Banks: Names of 14 banks and the names of chairmen and managing directors are given below:

Central Bank of India: *B.V. Sonalkar;* Bank of India: *N. Vaghul;* Punjab National Bank: *S.L. Chopra;* United Commercial Bank:

The table below shows selected data of the six banks nationalised on April 15, 1980 (Dec. end 1980):

(Rs. Million)

Name	No. of Branches	Total Deposits	Total Advances	Total Investment
Andhra Bank	631	5.450	3.760	1.890
Corporation Bank	325	2.450	1.450	810
New Bank of India	424	4.490	2.500	1.540
Oriental Bank of Commerce	326	2.770	1.660	940
Punjab and Sind Bank	536	5.310	3.670	1.590
Vijaya Bank	578	4.050	2.260	1.410

B.K. Chatterji; Canara Bank: *C. E. Kamath;* United Bank of India: *R. K. Datta;* Dena Bank: *M. N. Goiporia;* Syndicate Bank: *R. Raghupath;* Union Bank of India; *R. R. Kumar;* Bank of Baroda: *R. C. Shah;* Allahabad Bank: *Amitabh Ghosh;* Indian Bank: *M. V. Subha Rao;* Bank of Maharashtra: *M. V. Patwardhan;* Indian Overseas Bank: *K. V. Yerkadithaya.*

Besides, six more banks in the private sector were nationalised on April 15, 1980. The six banks are: Andhra Bank *(Custodian:* O. Swaminathan Reddy); New Bank of India *(Chairman & Mg. Director:* R. Srinivasan); Oriental Bank of Commerce *(Chairman & Mg. Director:* M. K. Vig); Punjab and Sind Bank *(Chairman & Mg. Director:* Sardar Inderjit Singh); Corporation Bank *(Custodian:* J. B. Kamath); Vijaya Bank *(Chairman & Mg. Director:* R. Vijayaraghavan).

Regional Rural Banks: There were 73 regional rural banks covering 130 districts in 17 states. As on June 30, 1980, these banks had set up 2,678 branches and had mobilised deposits worth Rs. 1,230 million towards the end of 1979.

Meanwhile, commercial banks continued the policy of expansion in unbanked and underbanked areas. In all 2,224 rural offices were opened between July, 1979 and June, 1980 against 2,119 offices in the corresponding period of 1978-79.

State-wise distribution of bank offices at the end of June 1978, June 1979 & June 1980

States & Union Territories	Opened during 1978-79 (July-June)		Opened during 1979-80 (July-June)		Population per bank office (in thousands) as at the end of		No. of offices at the end of		
	Total centres	Of which unbanked centres	Total centres	Of which unbanked centres	June 1979	June 1980	June 1978	June 1979	June 1980
Andhra Pradesh	232	162	112	91	18	18	2,134	2,366	2,477
Assam	32	24	20	12	33	31	144	448	466
Bihar	198	151	313	282	35	30	1,397	1,594	1,907
Gujarat	85	43	82	67	12	12	2,077	2,162	2,243
Haryana	46	32	27	21	14	13	674	720	746
Himachal Pradesh	21	14	12	9	11	11	292	313	324
Jammu & Kashmir	34	30	23	19	12	12	337	371	394
Karnataka	193	132	106	74	12	11	2,339	2,531	2,636
Kerala	87	59	93	74	10	10	2,011	2,098	2,191
Madhya Pradesh	162	122	216	176	26	23	1,465	1,626	1,842
Maharashtra	200	98	207	135	16	15	2,913	3,113	3.320
Manipur	3	1	—	—	31	31	32	35	35
Meghalaya	4	4	2	1	19	18	49	53	55
Nagaland	4	3	2	2	16	15	29	33	35
Orissa	59	46	97	85	31	27	660	718	815
Punjab	44	22	75	59	9	9	1,425	1,469	1,544
Rajasthan	167	136	154	108	20	18	1,150	1,317	1,471
Tamil Nadu	123	87	141	104	15	15	2,552	2,675	2,814
Tripura	2	2	8	5	23	20	67	69	77
Uttar Pradesh	313	239	370	312	26	24	3,055	3,369	3,740
West Bengal	106	52	131	84	23	22	1,804	1,910	2.040
Union Territories									
Andaman & Nicobar Islands	—	—	—	—	10	10	12	12	12
Arunachal Pradesh	4	3	2	2	28	25	13	17	19
Chandigarh	2	1	1	1	3	3	74	76	78
Dadra & Nagar Haveli	—	—	—	—	19	19	4	4	4
Delhi	54	2	18	3	5	5	768	820	837
Goa, Daman & Diu	9	7	7	5	4	4	216	225	232
Lakshadweep	—	—	—	—	6	6	5	5	5
Mizoram	6	6	—	—	28	28	6	12	12
Pondicherry	1	—	5	4	11	10	42	43	48
Total	2,191	1,478	2,224	1,735	18	17	28.016	30,202	32.419

BULLION

GOLD: Quest for gold is centuries old, but, it has been available in any real quantity only for the last hundred and thirty years. The gold mined between 1492 and 1975, is estimated to be 80,000 tonnes. But more gold had been mined from 1800 to 1975 than in the preceding 5,000 years, due to more discoveries in Brazil, Russia, South Africa, California (U.S.A.), Australia and South America. More than three quarters of the total gold had been mined in the 20th century and little more than two-thirds of it since 1931. Since 1976 it is estimated that the gold production outside the communist world was 5,000 tonnes.

International Price of Gold: The price of gold in free markets fluctuated between $124 an ounce in January 1976 to $132 in January 1977 and later went up to $243.65 in October 31, 1978. The year 1979 ended with a record price of $524 an ounce in London and $534.5 in Comex (New York). The year 1980 began with $600.00 and ended with $606.50.

In January, 1975, the 126 countries of the International Monetary Fund (IMF) agreed to abolish the official price of gold, thus putting an end to the privileged role gold had been enjoying in the international monetary system since the end of World War II. The decision opened the way to the elimination of any reference to gold in the IMF statutes and amounted to a new step towards the release of gold stocks held by central banks.

The decision of the IMF to sell one-sixth of its gold to the market over a period of four years had a psychological impact on the Gold Market during 1976 and 1977; but in fact these sales represented less than eight per cent of total supplies.

Official Gold Holdings: The following table shows the value of gold holdings of central banks all over the world (except China, U.S.S.R. and associated countries) and of the I.M.F. in millions of Special Drawing Rights at 35 S.D. Rs per fine ounce.

	End 1976	End 1977	30th Sept. 1978
Central Banks	35,330	35,396	35,419
I.M. Fund	5,233	4,605	4,395
Total	40,563	40,001	39,814

Based on the market price of U.S. $217.10 ruling to September 1978, the world official gold holdings were valued at $246,958 million.

World Gold Holdings: (In millions of Special Drawing Rights at 35 S.D.Rs per fine ounce)

	1974	1975	1976 Sept. 30
Countries' holdings	35,751	35,714	35,365
Official holdings	5,173	5,159	5,288

Source: International Financial Statistics

Gold Production and Consumption: Gold production in the free market in 1979 was 977 tonnes. Supplies of gold to the world market however fell by 18 per cent in 1980. There was less demand for gold to make jewellery during the year. Sales of the Soviet Union, the world's second largest producer after South Africa, fell to 80 tonnes in 1980 from 230 tonnes in 1979. The production cut was, however, met by individuals and governments, mostly from the Middle East and Iran which sold some 80 tonnes of gold to U.S.S.R. In 1979, India produced about 2.6 tonnes of gold.

The demand for gold touched 1,381 tonnes in 1970 while in 1973 it came down to 1,350 tonnes. Absorption of this in Europe was 780 tonnes and in the rest of the world 570 tonnes.

India absorbed about 63 tonnes in 1973 compared to 110 tonnes in 1972, 179 tonnes in 1971 and 217 tonnes in 1970. The demand in 1974 was only 14 tonnes while in 1975 and 1976 it went to 25 and 33 tonnes respectively. In 1977 and 1978 India absorbed a total of about 65 tonnes. In 1979 the gold demand was estimated at 120 tonnes and in 1980 at 80 tonnes due to consumer resistance against high prices. Most of the gold that came to India in the past was through unauthorised imports.

Gold Standard: The true gold standard existed only in the 50 years preceding World War I. Till the 19th century most countries were on silver or bimetallic (silver 15 or 16 part, gold one part) standard. Britain went into a formal gold standard in 1816. Europe followed in 1870s and U.S.A. started after 1900 — same as India. However, gold standard was only a phase and was over by 1914.

International gold exchange standard prevailed since the last war till 1973. It meant a country's monetary authority responsible for determining and managing the supply of gold to supplement their resources with key currencies, notably dollars and sterling, which could be redeemed for gold.

This pattern, however, changed when in February, 1973 the U.S.A. devalued its dollar for the second time in 14 months by 10 per cent.

An ounce of gold that for 37 years cost only $35 and which went, officially, to $38 in 1972, was worth $42.22 towards the end of 1973. In reality, no gold was traded at that price. In the wake of U.S. devaluation, the price of gold in London market shot up beyond expectations and the free price of gold at one time touched $198 per ounce in 1974.

In 1974, the U.S. withdrew the free convertibility of dollars with gold. Except in France, there had been no restoration of an international gold standard thereafter.

In the outside world, 1978 and 1979 were the years of much uncertainty and great fluctuations in the fortunes of gold.

In 1978 the price of gold in the international market fluctuated between $172.50 and $226.60 per ounce and in 1979 between $219.34 and $426.37.

Gold Production: The following table shows the revised production of gold in various countries in fine kilos:

Countries	1979	1978	1977	1976
South Africa	703,300	706,400	700,000	713,000
Ghana	11,500	14,200	16,900	16,900
Other Africa	18,000	20,000	26,300	25,300
Canada	49,000	54,000	53,100	52,400
U.S.A.	28,300	30,200	34,200	32,600
Latin America	67,700	62,700	47,000	45,100
Philippines	19,100	20,200	17,400	15,600
Papua/New Guinea	19,700	23,400	22,800	19,800
Australia	18,500	20,100	19,400	15,500
Other Asia/Oceana	31,800	32,100	14,100	13,900
Europe	10,000	12,500	19,000	19,000
	977,000	995,800	970,000	969,000
South Africa (per cent)	71.9	70.9	72.0	74.0

Gold & Silver Prices

Year	GOLD PER TOLA			SILVER PER 100 TOLAS		
	Highest Rs. a. p.	Lowest Rs. a. p.	Average Rs. a. p.	Highest Rs. a. p.	Lowest Rs. a. p.	Average Rs. a. p.
1928-29	21 11 6	21 4 6	21 6 10	66 6 0	58 2 0	60 9 2
1929-30	21 0 0	21 5 3	21 7 5	59 7 0	46 14 0	53 9 11
1930-31	21 13 3	21 3 6	21 12 6	57 4 0	39 0 0	46 15 1
1931-32	31 2 0	21 3 6	24 4 3	66 8 0	41 12 0	50 3 11
1932-33	32 1 6	26 10 0	29 5 2	60 0 0	48 14 0	52 11 11
1933-34	34 12 0	28 11 0	32 4 5	59 14 0	52 15 0	56 0 10
1934-35	36 13 3	33 3 0	35 15 8	67 0 0	50 7 6	60 13 5
1935-36	36 12 0	31 3 6	35 4 11	87 0 0	46 12 0	65 1 1
1936-37	35 8 0	35 15 3	34 12 6	56 2 0	47 0 0	50 5 8
1937-38	32 2 0	34 3 6	34 7 10	55 15 6	46 1 6	51 4 1
1938-39	37 10 7	34 12 3	35 10 3	53 1 6	48 2 0	51 11 3
1939-40	43 8 0	36 9 0	39 13 11	66 4 0	44 7 6	55 4 9
1940-41	48 8 0	40 2 6	42 6 0	64 13 0	54 10 0	62 8 0
1941-42	57 12 0	41 9 6	44 7 11	97 6 0	61 12 6	66 11 4
1942-43	72 0 0	44 12 0	57 10 10	116 8 0	75 4 0	94 2 6
1943-44	96 4 0	65 4 0	76 11 6	141 8 0	101 8 0	120 7 11
1944-45	76 12 0	61 2 0	71 7 4	143 4 0	113 10 0	128 10 9
1945-46	97 12 0	63 6 0	80 3 0	159 6 0	118 0 0	135 1 11
1946-47	111 0 0	84 4 0	101 1 2	195 0 0	127 0 0	162 4 10
1947-48	117 12 0	95 14 0	108 0 4	183 8 0	142 8 0	166 12 6
1948-49	121 0 0	103 0 0	114 9 10	190 8 0	166 8 0	177 9 0
1949-50	119 10 0	107 2 0	114 14 11	192 12 0	158 14 0	174 11 10
1950-51	120 2 0	104 12 0	113 7 4	198 12 0	173 14 0	185 14 3
1951-52	118 10 0	79 0 0	98 8 0	207 4 0	139 0 0	173 2 0
1952-53	95 14 0	77 5 0	88 0 1	174 12 0	141 12 0	159 8 4
1953-54	93 6 0	79 8 0	86 1 6	167 14 0	148 14 0	157 4 10
1954-55	95 6 0	83 0 0	89 2 4	173 14 9	147 15 0	159 3 9
	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.	Rs. P.
1955-56	91.79	76.66	82.12	157.59	132.68	144.65
1956-57	93.98	84.83	89.61	160.64	144.63	150.58
1957-58	98.06	89.59	92.99	168.09	151.91	158.32
1958-59	103.31	89.33	96.09	173.19	152.99	162.95
1959-60	107.98	99.98	103.71	187.12	164.50	176.08
1960-61	124.40	107.12	114.01	209.30	181.00	193.64
1961-62	126.00	115.85	121.25	219.65	196.95	206.49
1962-63	129.90	86.00	117.71	242.00	187.80	218.69
1963-64	118.00/ 69.75	97.00/ 58.00	111.98/ 61.85	269.00	222.50	240.32
1964-65	72.75	63.25	68.84	281.50	224.00	261.17
1965-66	85.00	70.50	77.78	406.50	281.00	314.62
1966-67	92.75	76.00	83.85	385.00	336.00	358.88
1967-68	168.00	146.00	156.97	565.00	346.00	430.09
1968-69	181.00	150.00	160.45	633.00	508.00	556.67
1969-70	192.00	163.50	179.62	521.00	446.00	489.13
1970-71	198.00	177.50	184.96	588.50	483.50	536.08
1971-72	214.50	188.00	200.16	610.50	512.25	561.35
1972-73	288.00	202.00	242.14	655.00	495.00	554.20
1973-74	525.00	279.00	369.23	1,420.00	612.00	796.14
1974-75	565.00	470.00	518.00	1,340.00	981.00	1,161.00
1975-76	574.00	511.00	542.00	1,427.00	1,001.00	1,214.00
1976-77	566.00	504.00	535.00	1,410.00	1,083.00	1,246.50
1977-78	701.00	561.00	631.00	1,383.00	1,093.00	1,238.00
1978-79	960.00	645.00	802.50	1,958.00	1,334.00	1,646.00
1979-80	1,300.00	862.00	1,081.00	3,134.00	1,535.00	2,334.50
1980-81	1,800.00	1,350.00	1,575.00	3,678.00	2,180.00	2,929.00

(a) Spot prices relate to gold bullion upto 1963, 14 carat gold upto 1966 and to standard gold from 1967 onwards.

(b) Average relating to closing quotations for working days.

(c) The quotations from 1955-56 onwards are in Rupees and Naye Paise.

(d) The quotations from 1960 onwards are per 10 gms. of gold and per kg. of silver instead of tola and 100 tolas respectively

(e) Spot prices of silver relate to 0.996 fineness.

India and Gold: Indian gold market is quite different from the international market. India has the world's largest stock of privately hoarded gold estimated unofficially at 5,000 tonnes against aggregate world stocks of 58,000 tonnes. The mobilisation of this gold could affect the international market also, besides improving the economic conditions in the country. But this is unlikely to happen unless a social revolution takes place. As a protective measure, India's hoarded gold should be coaxed into the market and also her output of 2.6 tonnes per year should be stepped up. The demand for jewellery is about 100 tonnes per year in India. About 60 per cent of this is supplied through recycling of fabrication.

Stocks of Gold in India: It was estimated that the total stocks of gold in the country in 1951 was 85.4 million ozs. Since 1951 to December, 1972, the smuggled gold was estimated at 58.1 million ozs. bringing the total stock to 143.5 million ozs. (4,600 tonnes or 4,600,000 kg.) as on December 31, 1972. The present stock of gold in India is estimated at 5,000 tonnes.

Gold Auction by Government: Before the auction took place in the first week of May, 1978 there was a tendency towards fall in price of gold. However, after initial fall the unofficial price of gold went up to as much as Rs. 720 per ten grammes. Slight fluctuations were recorded during May but the price never reached a level anticipated by the Government.

Unfortunately, by reason of the unprecedented world-wide speculation in gold that gathered momentum after August, 1978, the price of gold in the country went up by leaps and bounds and the Government was forced to suspend the gold auctions at the end of October after 14 auctions of which two were infructuous. The amount of gold sold by the auctions was 12.89 tonnes estimated at Rs. 365.5 million at the then prevailing price.

Since then the price of gold had gone up to as much as Rs. 1,800 per ten grammes in 1980 and at present ruling between Rs. 1,600 and Rs. 1,700.

Silver: The year 1979 witnessed the most astounding rise in the price of silver in living memory. Not only the price of silver in New York — the world's premier spot and future market for the white metal — escalated from 596.10 cents at the commencement of 1979 to 2,800.00 cents by the end of the year the yearly average which was 435.35 cents in 1976, 462.30 in 1977 and 540.09 cents in 1978, was lifted to 1,109.40 cents for 1979. This was truly fantastic rise brought about by competitive market forces. And in January, 1980, silver prices continued to scale new peaks, briefly touching $50.00 an ounce.

Among the principal reasons for this spectacular rise in the price of silver, is the persisting imbalance between demand for industrial uses and primary supply (i.e. newly mined production). It is estimated that in 1979, new production was only 271 million ounces against aggregate demand for 410 million ounces for industrial uses — out of this latter, India's share is estimated at about 19.00 million ounces.

The second important factor was the diminished supply from secondary sources i.e. dehoarding from previously accumulated stocks, as well as from salvage and recycling operations. In this context, the imposition of the ban on export of silver by the Government of India in February, 1979 played a big part. According to Handy & Harman's estimates, the quantity of Indian silver reaching world markets declined from 25.5 million ounces in 1978 to 14.5 million ounces in 1979. Of this about 10.0 million ounces must have left our shores through other channels.

The third reason for the rise in the price of silver which occurred after August, 1979 was the demand for silver on the part of speculators and private investors, as a safe channel for investment next to gold in a world troubled by economic and political uncertainties. The energy crisis, the double-digit inflation, the depreciating dollar etc contributed to fuel investment and speculative purchase of silver, pushing up the price to higher records. In February, 1980 in the Bombay market the silver was quoted at Rs. 5,000 per kg. Thereafter, of course the prices began to decline and ruled between Rs. 2,200 and Rs. 2,900 for the rest of the year.

NATIONAL INCOME

THE white paper on National Accounts Statistics published by the Central Statistical Organisation gives data relating to national product, per capita income and consumption, both at current and constant prices, rates of saving and capital formation, data on other related aggregates such as net national product at market prices, net domestic product from public sector by industry of origin, economic and purpose classification of expenditure of administrative departments and factor incomes, etc. The latest white paper on national income gives exhaustive information upto 1978-79. The Central Statistical Organisation has, however, released the " quick " estimates of national income and related aggregates for 1979-80.

According to these estimates, India's national income at constant prices, declined by 5·0 per cent to Rs. 443,280 million during 1979-80. The per capita income, also at constant prices, registered a fall of 6·8 per cent to Rs. 678 in 1979-80.

At current prices, the national income during 1979-80 rose by 11·0 per cent to Rs. 901,730 million and per capita by 8·8 per cent to Rs. 1,379.

The big drop in net national product in real terms in 1979-80 stemmed from the poor performance in agricultural sector whose net product was lower by 12·7 per cent as compared to 1978-79.

Consumption and Saving : Private final consumption, at current prices, was of the order of Rs. 736,910 million in 1979-80 and accounted for 68 per cent of the gross national product at market prices. The per capita private final consumption expenditure stood at Rs. 1,127 in that year as compared to Rs. 1,059 in 1978-79. However, at constant prices, there has been little improvement in private final consumption expenditure. This is evident from the fact that the per capita final consumption expenditure in real terms, was only Rs. 560 in 1979-80, as against Rs. 600 in 1978-79 and Rs. 583 in 1977-78.

Savings and Capital Formation : The rate of net domestic saving in 1979-80 declined to 16·1 per cent from 19·2 per cent in 1978-79 and that of net domestic capital formation to 16·6 per cent from 19·0 per cent.

Domestic saving during 1979-80 stood at Rs. 163,780 million — a decline of Rs. 12,990 million as compared to the preceding year. Likewise, net capital formation was lower by Rs. 5,010 million at Rs. 169·410 million in 1979-80.

Public Sector : One of the major developments in the Indian economy is the increasingly important role played by the public sector. This is brought out by the significant spurt in the gross product of the public sector which in 1979-80 is estimated at Rs. 200,320 million as compared to only Rs. 54,560 million in 1970-71. During this period, the share of the public sector in gross domestic product has increased from 14·9 per cent to 20·6 per cent.

Selected national income data are presented in the following tables.

TABLE I : Trends in National and Per Capita Income

Year	At current prices		At constant (1970-71)	
	Total (Rs. million)	Per capita (Rs.)	Total (Rs. million)	Per capita (Rs.)
1970–71 ..	342,350	632·8	342,350	632·8
1971–72 ..	365,700 (6·8)	660·2 (4·3)	347,150 (1·4)	626·6 (—1·0)
1972–73 ..	402,700 (10·1)	711·5 (7·8)	341,910 (–1·5)	604·1 (—3·6)
1973–74 ..	504,240 (25·2)	870·9 (22·4)	359,670 (5·2)	621·2 (2·8)
1974–75 ..	594,460 (17·9)	1,005·9 (15·5)	365,020 (1·5)	617·6 (—0·6)
1975–76 ..	621,390 (4·5)	1,028·8 (2·3)	400,790 (9·8)	663·6 (7·4)
1976–77 ..	673,620 (8·4)	1,093·5 (6·3)	406,060 (1·3)	659·2 (—0·7)
1977–78 ..	761,090 (13·0)	1,210·0 (10·7)	440,900 (8·6)	701·0 (6·3)
1978–79 ..	812,280 (6·7)	1,267·2 (4·7)	466,360 (5·8)	727·6 (3·8)
1979–80 ..	901,730 (11·0)	1,378·8 (8·8)	443,280 (—5·0)	677·8 (—6·8)

Note: Figures within brackets indicate the percentage change over the previous year.

TABLE II : Net Domestic Product by Industry by Origin

(Rs. million)

INDUSTRY	At current prices			At 1970–71 prices	
	1970–71	1978–79	1979–80	1978–79	1979–80
1. Agriculture	163,540 (47·4)	305,350 (37·5)	306,980 (33·9)	192,440 (41·2)	167,930 (37·0)
2. Forestry and logging ..	3,970 (1·1)	9,900 (1·2)	12,530 (1·4)	5,020 (1·1)	5,040 (1·2)
3. Fishing	2,290 (0·7)	7,420 (0·9)	7,520 (0·8)	3,080 (0·7)	2,750 (0·6)
4. Mining and quarrying ..	3,270 (0·9)	10,200 (1·3)	12,310 (1·4)	4,420 (0·9)	4,460 (1·8)
PRIMARY (1 to 4)	173,070 (50·1)	332,870 (40·9)	339,340 (37·5)	204,960 (43·9)	180,180 (40·6)
5. Manufacturing	46,190 (13·4)	137,030 (16·8)	157,740 (17·5)	73,290 (15·7)	71,890 (16·2)
6. Construction	18,530 (5·4)	46,460 (5·7)	46,700 (5·2)	24,120 (5·1)	22,530 (5·1)
7. Electricity, gas and water supply.	3,180 (0·9)	12,480 (1·5)	13,840 (1·5)	6,120 (1·3)	6,260 (1·4)
SECONDARY (5 to 7) ..	67,900 (19·7)	195,970 (24·0)	218,280 (24·2)	103,530 (22·1)	100,680 (22·7)
8. Transport, storage and communication.	15,740 (4·6)	42,980 (5·3)	49,020 (5·4)	25,270 (5·4)	26,290 (5·9)
9. Trade, hotels and restaurants	38,800 (11·2)	113,730 (14·0)	154,450 (17·1)	59,560 (12·8)	59,550 (13·4)
10. Banking and insurance ..	6,440 (1·9)	25,220 (3·1)	27,810 (3·1)	12,900 (2·8)	12,890 (2·9)
11. Real estate, ownership of dwellings and business services	10,390 (3·0)	21,390 (2·6)	22,730 (2·5)	13,310 (2·8)	13,790 (3·1)
12. Public administration and defence.	16,350 (4·7)	40,660 (5·0)	46,110 (5·1)	27,530 (5·9)	29,900 (6·7)
13. Other services	16,500 (4·8)	41,470 (5·1)	46,000 (5·1)	20,070 (4·3)	20,640 (4·7)
TERTIARY (8 to 13)	104,220 (30·2)	285,450 (35·1)	346,120 (38·3)	158,640 (34·0)	163,060 (36·7)
NET DOMESTIC PRODUCT	345,190 (100·0)	814,290 (100·0)	903,740 (100·0)	467,130 (100·0)	443,920 (100·0)

Note : Figures within brackets show the percentage shares to net domestic product.

TABLE III : Distribution of Factor Incomes

(Per cent)

Year	Compensation of employees	Interest	Rent	Profits & Dividends	Mixed income of self-employed
(1)	(2)	(3)	(4)	(5)	(6)
1. Organised Sector					
1970–71	72·1	10·6	1·5	15·8	—
1976–77	68·2	12·2	1·5	18·1	—
1977–78	69·2	12·7	1·6	16·5	—
1978–79	69·3	13·3	1·6	15·8	—
2. Unorganised Sector					
1970–71	26·0	3·2	6·4	—	64·4
1976–77	25·1	4·5	5·7	—	64·7
1977–78	24·3	4·3	5·5	—	65·9
1978–79	24·5	4·7	5·8	—	65·0
3. Total					
1970–71	38·7	5·2	5·1	4·3	46·7
1976–77	39·2	7·0	4·4	5·9	43·5
1977–78	38·5	7·0	4·2	5·2	45·1
1978–79	39·7	7·6	4·4	5·3	43·0

TABLE IV

Year	Net domestic savings	Net domestic capital formation
	As per cent of net domestic product at market prices	
1960–61	9·3	12·7
1961–62	8·4	10·7
1962–63	9·6	12·3
1963–64	9·8	12·1
1964–65	9·2	12·0
1965–66	11·2	13·8
1966–67	11·8	15·4
1967–68	9·6	12·3
1968–69	9·5	10·8
1969–70	11·8	12·5
1970–71	12·0	13·0
1971–72	12·3	13·5
1972–73	11·3	11·9
1973–74	15·0	15·7
1974–75	13·8	14·8
1975–76	15·4	15·2
1976–77	17·4	15·7
1977–78	17·0	15·3
1978–79	19·2	19·0
1979–80	16·1	16·6

TABLE V : Gross Domestic Product of the Public Sector

(at current prices—Rs. million)

Year	Gross domestic product of public sector	Percentage share of public sector in gross domestic product
1970–71	54,560	14·9
1972–73	68,070	15·7
1973–74	79,540	14·8
1974–75	102,310	16·2
1975–76	122,180	18·4
1976–77	142,810	19·8
1977–78	156,340	19·2
1978–79	172,810	19·8
1979–80	200,320	20·6

ECONOMIC SITUATION

OVERALL POSITION

THE trends that have emerged in recent months paint a far from reassuring picture of the Indian economy during 1980-81. Although agricultural production is expected to increase sharply by about 19 per cent in contrast to a decline of 15.5 per cent in 1979-80, the industrial output continues to be more or less stagnant. A relentless upward spiral in prices, the unconscionable large doses of deficit financing and the massive trade deficit are some of the factors due to which the economic situation continues to be under constraint.

Growth Rate: The growth of Gross National Product **(GNP)** during 1980-81 is expected to be about 6.5 per cent in contrast to a decline of 4.5 per cent during 1979-80. This is mainly because of the good agricultural output of both foodgrains as well as commercial crops. Available data indicate that the rate of investment continues to be sluggish as a proportion of the gross domestic product. It had already fallen to 21.8 per cent in 1979-80 from 23.7 per cent in the previous year.

Agriculture: With the south-west monsoon fairly widespread and the winter rains quite satisfactory the agricultural production is likely to be higher by about 19 per cent in 1980-81 over the depressed level of 1979-80. Production of foodgrains is estimated to touch the record of about 132 million tonnes, i.e. about 23 million tonnes higher than the output of 109 million tonnes during 1979-80. The recovery has been substantially in rice production which has expected to reach a level of 56 million tonnes thus exceeding the peak level of 53.6 million tonnes in 1978-79. The production of current *kharif* cereals is estimated at 23.2 million tonnes while *kharif* pulses are estimated at 4.1 million tonnes.

As regards commercial crops production, sugarcane is estimated to be 152 million tonnes in 1980-81 which will be 18.8 per cent higher than 128 million tonnes in 1979-80. Production of cotton is expected to increase to about 8 million bales, jute and mesta may touch the record level of 8.1 million bales. Groundnut production has been affected by inadequate rains during September-October 1980 in several parts of Gujarat, Karnataka and Andhra Pradesh. The prospects of other oilseeds is somewhat encouraging.

Industry and Infrastructure: Industrial output which showed a decline by 1.4 per cent in 1979-80 is estimated to rise by about 4 per cent in 1980-81. Data available for April-December show some increases in production of steel, cement, aluminium, lead, newsprint, tractors, diesel engines, transport equipments, sugar and vanaspati. However, infrastructure constraints continued to affect the overall industrial output in the current year.

The generation of electricity has been improved in the recent months and also output of coal and lignite has improved.

Price Trends: By far the most disquieting development in the economy has been the relentless upward spiral in prices. The upsurge in prices which began in early 1979 continued. The annual average increase during April-December 1980 showed an increase of 18.9 per cent as compared with 15.4 per cent during the corresponding period of 1979. Even taking the average in the calendar year of 1980 the increase in wholesale prices was 19.2 per cent during 1980 as compared with 11.5 per cent in 1979.

Cost push and international factors were mainly responsible in pushing up prices of food and non-food items. The increase was particularly marked in the case of pulses, oilseeds, petroleum crude, fuel, power, light and lubricants, mineral oils, sugar, *khandsari, gur,* edible oil and fertilisers.

Monetary Situation: In view of the inflationary pressures in the economy, expansion of monetary reserves and bank credit were controlled during 1980-81. The expansion of monetary reserves (M3), was lower at 12.6 per cent during the current year up to January 19, 1981 as against 13.4 per cent in the same period last year. However, both food and non-food credit had risen faster to meet busy season demand as well as higher cost procurement during the ramaining months of 1980-81.

Even bank credit of government increased by 21.4 per cent during March 31, 1980 to January 9, 1981 as against an increase of 17 per cent last year. This reflects the continued increase in government's budgetary deficit.

Balance of Payments: The sharp increase in oil prices since 1979 has substantially added to the total import bill which is likely to increase to Rs. 113,000 million during 1980-81. The full impact of rise in oil price has been felt during the current year when the total import bill of crude oil and petroleum products is likely to be about Rs. 56,000 million.

In contrast, exports have remained sluggish both due to infrastructural constraints and unfavourable international environment. During the year as a whole, the growth in the value of exports is likely to be about 10 per cent while the increase in volume of exports will be very insignificant. As a result the trade deficit during 1980-81 is likely to exceed Rs. 40,000 million as against Rs. 23,680 million in 1979-80 and the much lower figure of Rs. 10,880 million during 1978-79. Invisible receipts on account of tourism, transport, investment income and remittances from abroad have stagnated. The growth of remittances from abroad has

SELECTED ECONOMIC INDICATORS

	1974-75	1975-76	1976-77	1977-78	1978-79	1979-80	1980-81
	(Percentage change over previous year)						
1. Gross National Product at 1970-71 prices	1.2	9.6	1.5	8.4	5.9	−4.5	6.5
2. Agricultural production	−3.2	15.2	−7.0	14.5	3.4	−15.5	19.0
3. Foodgrains production	−4.6	21.2	−8.1	13.7	4.3	−17.5	21.0
4. Industrial production	3.2	7.2	9.6	3.3	7.6	−1.4	1.2
5. Electricity generated	5.2	12.8	11.5	4.4	11.2	2.1	3.8
6. Wholesale prices (on point to point basis)	10.1	−6.5	12.0	0.3	4.6	21.4	13.2
7. Monetary resources	10.9	15.0	23.6	18.4	21.9	17.8	12.6
8. Imports (in current prices)	52.9	16.5	−3.6	18.7	13.2	29.1	50.5
9. Exports (in current prices)	31.9	21.4	27.2	5.2	5.9	12.2	3.0
10. Foreign exchange reserves (excluding gold and SDRs)	5.1	144.2	91.9	57.2	16.0	−1.1	−10.4

decelerated and there are limits to the growth in income from transport and tourism. In view of these factors the current deficit may go up to Rs. 20.000 million.

The deterioration in country's balance of payment is reflected in draw down of the foreign exchange reserves which amounted to Rs. 3.130 million at the end of January, 1981. The draw down would have been more substantial if it was cushioned by the borrowings of Rs. 8.150 million from the IMF. On this basis the total withdrawal of foreign exchange reserves by the end of 1980-81 may be about Rs. 6,000 million. At the end of January, 1981, the foreign exchange reserves stood at only Rs. 48,510 million as against Rs. 51,640 million at the end of 1979-80.

The balance of payments situation facing the country according to the economic survey for 1980-81 will remain under pressure in the coming years. The deterioration in the trade balance poses severe problems over the medium term. Imports are heavily dominated by crude oil, petroleum products and fertilisers and prices of these items are likely to rise more rapidly than international prices. On the other hand, export prices at best will rise at the same rate as the international prices. The resulting deterioration in the terms of trade would mean a larger trade deficit at the current prices. All these factors point to continued difficulties on the external payment front for some years to come.

Outlook for 1981-82: The economic survey estimates a modest increase in agricultural output in the coming years. This is so because the increase will be from a high base in 1980-81. However, the lagged effect of good agricultural production during 1980-81 will spill over into the next year and together with the improved performance of the infrastructure, the rate of growth of industrial production is estimated to be significantly higher than that of 1980-81. According to the survey, if the Sixth Plan target of 5.2 per cent growth in GDP is to be fulfilled, it would require the harnessing of available unutilised capacity and the continued improvement in the performance of the infrastructure. This should be possible in view of the considerable under-utilisation of capacity in many key sectors of the economy at present and the likely improvement in the performance of the infrastructure. The survey also predicts that price pressures (specially on account of international factors) are likely to continue in the coming year.

CENTRAL BUDGET (1981-82)

FISCAL policy for 1981-82 has been formulated in an economic situation which continues to be difficult but shows some improvement as compared with 1980-81. (The details of the economic situation in 1980-81 and the outlook for 1981-82 are given in the chapter Economic Situation).

1980-81 Revised

According to the revised estimates for 1980-81 budgetary deficit of the Central Government increased sharply to Rs. 19,750 million as against the budgeted estimate of Rs. 14.450 million. The total expenditure of the Central Government is now (revised) placed at Rs. 228.080 million compared to Rs. 214.670 million in the budget (vide table B). Expenditure on revenue account showed an increase of Rs. 3.720 million while that on capital account increased by Rs. 9.690 million.

The increase in expenditure of the Central Government in 1980-81 as compared with the budgeted estimates is attributed to (i) Rs. 2.280 million for defence; (ii) Rs. 1,040 million non-plan assistance to Central Public Undertakings; (iii) Rs. 1.260 million to Agricultural Refinance Development Corporation and another Rs. 500 million to Industrial Development Bank of India; and (iv) Rs. 2.960 million under economic services and Rs. 7.290 million under loans and advances.

Aggregate receipts of the Centre at Rs. 208,330 million were Rs. 8,110 million higher than the budget estimates of Rs. 200,220 million. The increase under this head were mainly because of (a) higher receipts from corporation tax by Rs. 350 million as compared with the budget estimates; (b) receipts from Union excise were higher by nearly Rs. 1,000 million compared with budget estimates while that from customs exceeded the budget estimates by Rs. 3,610 million. Market borrowings also were higher by Rs. 1,040 million and an account of Rs. 2,000 million was taken from the sale of their advance in 1980-81.

1981-82 BUDGET

The Central Budget of 1981-82 provides for an overall deficit of the order of Rs. 18,100 million which after taking into account additional tax measures to the tune of Rs. 2,710 million is likely to be reduced to Rs. 15,390 million.

Gross tax revenue at the existing rates of taxation are estimated at Rs. 144.720 million compared with Rs. 131.330 million in the current year showing an increase of Rs. 13.390 million over the revised estimates. The States' share of taxes in 1981-82 is estimated at Rs. 42,060 million compared with Rs. 37,920 million in current year. Consequently, Centre's net tax revenue will be Rs. 102,660 million as against Rs. 93,410 million in 1980-81.

The receipts from market borrowings (net) are estimated at Rs 28.000 million compared with Rs. 26.040 million in the current year. Small savings are estimated to yield Rs. 12,500 million next year compared with Rs. 11.000 million in 1980-81. External assistance (net and loan payments) is estimated at Rs. 13.790 million compared with Rs. 12.580 million in the current year. Credit has also been taken of Rs. 8.000 million for receipt from sale of Special Bearer Bonds in 1981-82.

PLAN OUTLAY

The Plan Outlays for the Centre, States and Union territories in 1981-82 are estimated at Rs. 174,790 million compared with Rs. 145,930 million in budget estimates for 1980-81. This represents an increase of nearly 20 per cent over the 1980-81 level. The Plan Outlay of the Centre for 1981-82 is being stepped up to Rs. 86,190 million from Rs. 73.400 million in budget estimates for 1980-81 showing an increase of 17.4 per cent. The Plan Outlay is estimated to be financed by budgetary support of Rs. 63.090 million and internal-external budgetary resources of public sector undertakings of Rs. 23,100 million. The total of the approved plan outlays of States and Union Territories will be Rs. 88,600 million as against Rs. 72,530 million in budget estimates of 1980-81 showing an increase of 22 per cent. A provision of Rs. 34,620 million has also been made for Central assistance, for the State Plans as well as Union Territories.

The aggregate expenditure of the Central Government is estimated at Rs. 248,710 million. The increase of Rs. 20,630 million in the coming year is likely to be on account of (i) Rs. 7,130 million under general services; (ii) Rs. 2,930 million for defence; (iii) an increase of Rs. 1,710 million under services—social and community services and Rs. 5,650 million under economic services. In the capital account, the outlay on various developmental heads will increase by Rs. 6.410 million.

The budget leaves an overall deficit of Rs. 18,100 million which after taking into account the additional tax measures (of Rs. 2,710 million) is likely to amount to Rs. 15.390 million.

BUDGET AT A GLANCE

TABLE 1

(in rupees million)

	1980-81 Budget	1980-81 Revised	1981-82 Budget		1980-81 Budget	1980-81 Revised	1981-82 Budget
REVENUE RECEIPTS				**REVENUE DISBURSEMENTS**			
Tax Revenue	125,800	131,330	144,720 +1,960*	General Services	38,460	38,780	45,910
Less: States' Share of Tax Revenue	36,580	37,920	42,060 –750*	Defence Services	32,730	35,010	37,940
				Social and Community Services	8,900	9,020	10,730
Net: Centre's Tax Revenue	89,220	93,410	102,660 +271*	Economic Services	24,490	23,960	92,610
Non-Tax Revenue	34,060	35,530	37,900	Grants-in-aid to States etc.	28,520	30,050	28,800
Total Centre's Revenue	123,280	128,940	140,560 +2,710*	Total Revenue Disbursements	133,100	136,820	152,990
				Revenue Surplus (+) or Deficit (-)	–98,200	–7,880	–12,430 2,710*
CAPITAL RECEIPTS				**CAPITAL DISBURSEMENTS**			
Loan Recoveries	18,320	16,880	19,500	General Services	490	490	740
Market Loans	25,000	26,040	28,000	Defence Services	3,270	2,990	4,060
Special Bearer Bonds	...	2,000	8,000	Social and Community Services	1,650	1,370	2,030
External Loans (Net)	8,000	8,180	10,000	Economic Services	24,660	27,620	34,030
Loan from I.M.F. Trust Fund	5,400	5,340	...	Loans and Advances	51,500	58,790	54,860
Other Receipts	20,220	20,950	24,550				
Total Capital Receipts	76,940	79,390	90,050	Total Capital Disbursements	81,570	91,260	95,720
Total Receipts	200,220	208,330	230,610 +2,710*	Total Disbursements	214,670	228,080	248,710
Overall Deficit	14,450	19,750	18,100 –2,710*				
			15,390				

* **Effect of budget proposals**

SIXTH FIVE-YEAR PLAN (1980-85)

THE Sixth Five-Year Plan has been formulated taking into account the achievements and shortcomings of the past three decades of planning, recent economic developments which have a bearing on the growth prospects of the economy in the medium term as well as the vision of the future as reflected in the long term perspective. The removal of poverty is the foremost objective of the Sixth Plan even though it is recognised that, given the magnitude of the task, it cannot be accomplished in a short period of five years. Inevitably, the pace of movement towards the long-term objectives of removal of poverty and the achievement of self-reliance and the nature of priorities in the immediate period ahead, are influenced by the current economic situation and the constraints operating in the economic system. It should be recognised that the Sixth Plan is being launched under difficult conditions. These include the acute inflationary pressures which have prevailed since March, 1979, a set-back in the functioning of such critical sectors as power, coal, railways and steel in the years immediately preceding the launching of the Sixth Plan and the steep rise in the price of petroleum products resulting in an increasing deterioration in the nation's terms of trade and the balance of payments. Effective solution for the existing difficulties are a pre-condition of successful implementation of the Sixth Plan. **Any effective solution for these problems must be consistent with** long term social and economic objectives so that the economy emerges out of these difficulties with improved growth prospects Thus the economy is faced with many challenges.

Growth prospects of the economy have been adversely affected by all these three factors: inflationary situation, constraints imposed by a poor performance in the basic infrastructure and the deteriorating balance of payments position. Since, however, the long-term prospects of the economy depend significantly on the development of domestic resources of oil, coal, power, and renewable source of energy, on the investment, in the modernisation and expansion of transport and on a rapid growth in agriculture and rural development, it will be necessary to make the requisite effort to mobilise resources in the face of all these difficulties so as to put the economy back on the path of sustained and self-generating growth.

The objectives of the Sixth Plan are given below. Along with the objectives are also listed major areas of effort which will be required to fulfil these objectives:

(i) a significant step up in the rate of growth of the economy, the promotion of efficiency in the use of resources and improved productivity;

(ii) strengthening the impulses of modernisation for the achievement of economic and technological self-reliance;

(iii) a progressive reduction in the incidence of poverty and unemployment;

(iv) a speedy development of indigenous sources of energy, with proper emphasis on conservation and efficiency in energy use;

(v) improving the quality of life of the people in general with special reference to the economically and socially handicapped population, through a minimum needs programme whose coverage is so designed as to ensure that all parts of the country attain within a prescribed period nationally accepted standards;

(vi) strengthening the redistributive bias of public policies and services in favour of the poor contributing to a reduction in inequalities of income and wealth;

(vii) a progressive reduction in regional inequalities in the pace of development and in the diffusion of technological benefits;

(viii) promoting policies for controlling the growth of population through voluntary acceptance of the small family norm;

(ix) bringing about harmony between the short and the long term goals of development by promoting the protection and improvement of ecological and environmental assets; and

(x) promoting the active involvement of all sections of the people in the process of development through appropriate education, communication and institutional strategies.

The strategy adopted for the Sixth Plan consists essentially in moving simultaneously to strengthen the infrastructure for both agriculture and industry for an accelerated growth in investments, output and exports, and to provide increased opportunities for employment especially in the rural areas and the unorganised sector and meet the minimum basic needs of the people. Stress is laid on dealing with inter-related problems, through a systems approach rather than in separate compartments; on greater managerial efficiency and intensive monitoring in all sectors and active involvement of the people in formulating specific schemes of development at the local level and in securing their speedy and effective implementation. The attack on the problem of poverty is most effective only in the conditions of an expanding economy. Since growth by itself may now, however, suffice, other programmes and policies will need to be adopted with the specific aim of improving the living conditions of the masses and to bring about a reduction in inequalities of income and wealth. The scheme of the Sixth Plan outlays thus provides for specific allocations for such programmes.

The Sixth Plan envisages a total investment (gross capital formation) of Rs. 1,587,100 million over the plan period 1980-85 at 1979-80 prices. This is to be financed by domestic saving of Rs. 1,496,470 million estimated at 1979-80 prices during the Sixth Plan and the net inflow of funds from abroad to the extent of Rs. 90,630 million. Thus, nearly 94.3 per cent of the total investment is to be financed from domestic resources.

The total investment has been projected to grow from Rs. 236,180 million in 1970-80 to Rs. 367,970 million in 1984-85. At the same time the GDP at market prices has been projected to increase from Rs. 1,085,460 million to Rs. 1,465,400 million during the same period. Thus, the investment (as per cent of GDP at market prices) is expected to rise from 21.8 per cent in 1979-80 to 24.5 per cent in 1984-85, implying a marginal rate of saving of the order of 33.7 per cent over the plan period 1980-85.

The total plan investment for the period 1980-85 is estimated at Rs. 1,587,100 million. Of this, Rs. 840,000 million (53 per cent) is estimated to be in the public sector and the balance of Rs. 747,100 million (47 per cent) in the private sector.

The Sixth Plan has been formulated against the background of a perspective covering a period of 15 years from 1980-81 to 1994-95. This development perspective visualises accelerated progress towards the removal of poverty, generation of gainful employment and technological and economic self-reliance. The strategy to attain these goals has been chosen after considering a variety of feasible alternative development profiles with their attendant costs and benefits. Consistent with our overall social and economic objectives, public policies will have to acquire a sharper redistributior focus in raising the share of the poorer sections in national income. consumption and in the utilisation of public services. Specific action programmes like the national rural employment programme and other anti-poverty schemes meant for selected target groups of population are essential components of a strategy to assist in the removal of unemployment and poverty.

In selecting the growth path we have to consider the trade off between a faster growth in the medium term with the consequence that the growth might slow down later on and conversely, somewhat slower growth now, to permit faster growth later. Although at any given time, meaningful investment choices are limited by the fact ongoing projects absorb a substantial proportion of available investible funds, there is always some choice at the margin in the sense that the mix of new projects can be altered in favour of quick maturing and directly productive projects. However, in so far as such a choice leads to less investment in long gestation infrastructure projects, the long term growth rate may be adversely affected even though the short term prospect may improve.

A large number of social and economic indicators have been used in selecting the development strategy for the Sixth Plan and the decade thereafter. Some of these indicators belong to conventional national income aggregates like gross domestic products (GDP) consumption, saving and investment, employment, per capita income and consumption. Others fall in the category of specific social welfare indicators like the number of people below the poverty line, life expectancy etc. Effective implementation of the development strategy outlined in the perspective will make a material contribution to removal of poverty and achievement of full employment over a period of about fifteen years. The principal indicators for the preferred alternative are shown in Table 1.

The Sixth Plan aims at a growth in gross domestic product of 5.2 per cent a year and per capita income by 3.3 per cent per annum. Thus by 1984-85 **per capita income** is expected to reach Rs. 1,744 at 1979-80 prices as compared with Rs. 1,488 in the base year.

TABLE I. Development Perspective 1979-80 to 1994-95
Selected Economic and Social Indicators

Item	1979-80	1984-85	1994-95
1	2	3	4
Gross Domestic Product (Rs. million at 1979-80 prices)	970,510	1,250,500	2,136,000
	—	(5.2)	(5.5)
Saving as per cent of GDP at market prices	21.24	24.48	27.52
Investment as per cent of GDP at market prices	21.76	25.11	26.92
Population (Million)	654.1	717.2	843.0
	—	(1.86)	(1.63)
Per capita GDP (Rs.)	1,484	1,744	2,534
	—	(3.28)	(3.81)
Per capita monthly consumption (Rs.)	95.62	109.67	151.98
	—	(2.79)	(3.32)
Percentage of people below poverty line	48.44	30.00	8.75
Employment (Million standard person years)	151	185	248
Monthly per capita consumption of foodgrains (kg.)	12.95	14.32	15.50
	—	(2.03)	(0.80)
Monthly per capita consumption of sugar (kg)	0.68	0.79	1.15
	—	(3.00)	(3.82)
Monthly per capita consumption of clothing (metres)	0.85	0.92	1.41
	—	(1.60)	(4.36)
Monthly per capita consumption of electricity (KWH)	14.27	22.19	39.05
	—	(9.23)	(5.81)
Value added in education per capita (Rs.)	20.32	24.72	36.60
	—	(4.00)	(4.00)
Life expectancy (years)	M 52.6	55.1	60.1
	F 51.6	54.3	59.8

Note: Figures in brackets represent annual compound growth rates.

TABLE II: Commodity Output Projections (1984-85)

Item	Unit	1979-80	1984-85 (Projections)
1	2	3	4
Foodgrains	Million tonnes	109	149-154
Sugarcane	- do -	128	200-215
Jute & Mesta	Million bales	8.03	9.10
Cotton	- do -	77	92
Oilseeds (five major)	Million tonnes	8.1	11.0
Tea	Million kgs.	550	705
Coffee	- do -	105.00	159.45
Milk	Million tonnes	30.27	38
Eggs	Million Nos.	12,320	16,300
Coal	Million tonnes	103.96	165.00
Lignite	Million tonnes	3.12	8.00
Crude petroleum	Million tonnes	11.77	21.60
Iron ore, including concentrates	- do -	39	60
Sugar	- do -	3.9	7.6
Vanaspati	Thousand tonnes	626	900
Cloth (mill & decentralised sectors)	Million metres	10,435	13,030
Jute manufactures	Thousand tonnes	1,336	1,500-1,540
Paper & paper board	- do -	1,050	1,500
Newsprint	- do -	47.45	180
L.D. Polyethylene	- do -	71.3	100.0
H.D. Polyethylene	- do -	25.4	27.0
Polypropylene	- do -	13.4	27.0
P.V.C.	- do -	49.9	128.0
Natural Rubber	- do -	148.47	200.0
Synthetic Rubber (SBR & PBR)	- do -	30.3	45

TABLE II: Commodity Output Projections (1984-85) — *Contd.*

Item	Unit	1979-80	1984-85 (Projections)
1	2.	3	4
Petroleum products (including Lubricants)	Million tonnes	25.8	35.3
Sulphuric Acid	Thousand tonnes	2,131	3,600
Caustic Soda	- do -	549.6	850
Soda Ash	- do -	555.8	850
Caprolactum	- do -	13.5	18.0
DMT	- do -	27.9	56.0
Nitrogenous Fertilizer (N)	- do -	2,226	4,200
Phosphatic Fertilizer (P205)	- do -	757	1,400
Nylon Filament Yarn	- do -	17.7	28.0
Polyester Filament Yarn & Staple Fibre	- do -	32.6	73.0
Cement	Million tonnes	17.68	34-34.5
Pig iron for sale	- do -	1.09	1.52
Saleable steel (Plain carbon)	- do -	7.38	11.51
Aluminium	Thousand tonnes	192	300
Copper Refined	- do -	18.8	45.0
Zinc	- do -	52.65	85.00
Lead	- do -	11.4	25.0
Agricultural Tractors	Thousand Nos.	62.5	100.0
Machine Tools	Rs. Million	1,633	2,500
Hydro Turbines	Million Kws.	0.95	1.20
Thermal Turbines	- do -	2.28	3.50
Electric Transformers	Million Kva.	18.7	35.0
Commercial Vehicles	Thousand Nos.	57.4	105.0
Electricity Generation	Billion Kwh.	112	191
Originating Traffic in Railways	Million tonnes	217.8	309

DEFENCE SERVICES

SUPREME COMMANDER: President of India: **Chief of Army Staff :** Gen. K. V. Krishna Rao : **Chief of Naval Staff :** Admiral O. S. Dawson : **Chief of Air Staff :** Air Chief Marshal Dilbagh Singh.

(Further details see under " Ministry of Defence ".)

Army : The army is organised into 5 Commands under Army Headquarters. Each Command is further divided into Areas and independent Sub-Areas. A Command is commanded by a General Officer Commanding-in-Chief (called Army Commander) of the rank of Lt. General: Areas by General Officers Commanding (Maj. Generals) and Sub-Areas by Brigadiers.

Army Commands with headquarters in brackets: Eastern Command (Calcutta, West Bengal), Southern Command (Pune, Maharashtra), Western Command (Simla, Himachal Pradesh), Central Command (Lucknow, Uttar Pradesh), and Northern Command (Udhampur, Jammu & Kashmir).

(For sector Commanders see " Ministry of Defence " in Central Govt. list.)

Navy : The Chief of Naval Staff exercises command through the following authorities :

(*a*) The Flag Officer Commanding-In-Chief, Western Naval Command, Bombay : Covers : Bombay, Okha, Jamnagar and Lonavla.

(*b*) The Flag Officer Commanding-In-Chief, Eastern Naval Command, Visakhapatnam : Covers : Visakhapatnam, Calcutta, Andaman and Nicobar and Madras.

(*c*) The Flag Officer Commanding-In-Chief, Southern Naval Command, Cochin : Covers : Cochin, Coimbatore and Goa

(For Commanding Officers see " Ministry of Defence " in Central Govt. list.)

Air Force : There are six Commands: The Western Air Command (Palam, New Delhi), the Central Air Command (Allahabad, Uttar Pradesh), the Eastern Air Command (Shillong, Assam), the Training Command (Bangalore, Karnataka), the Maintenance Command (Nagpur, Maharashtra) and the South Western Air Command (Jodhpur, Rajasthan). Some units with distinct functions are controlled by Air Headquarters directly.

(For Commanding Officers see " Ministry of Defence " in Central Govt. list.)

India's Frontiers : The country has 15,168 kms. of land frontier — 2,966 kms. with Pakistan : 3,950 kms. with Bangladesh ; 3,862 kms. with China : and 4,390 kms. with Nepal. Besides it has a coastline of 5,689 kms.

Expenditure : The defence expenditure during 1979–80 was Rs. 32,730 million. During 1980–81 India is expected to spend Rs. 36,000 million on defence. Of this the lion's share goes to the army which accounts for Rs. 21,590 million followed by Rs. 8,665 million for the air force and Rs. 2,160 million for the navy. Pensions and retirement benefits will account for Rs. 2,280 million.

According to Military Balance, 1980–81, per capita expenditure on defence in U.S. dollars in 1979 was 6 in India, 13 in Pakistan, 520 in U.S.A., 314 in U.K., 10 in Indonesia, 54 in Egypt, 101 in Iran, and 1,291 in Israel. India spent 3·9 per cent of its G.N.P. on defence in 1979, according to the Military Balance.

Strength of Forces (Source: The Military Balance, 1980–81): India maintains 944,000 men in the Army. India has 2 armoured divisions, 5 independent armoured brigades, 17 infantry divisions, 10 mountain divisions, one independent infantry brigade, 14 independent artillery brigades, 2 para brigades, and one commando brigade.

The Air Force has 3 bomber squadrons, 17 fighter-ground attack squadrons, 14 interceptor squadrons (with MIG-21s), one reconnaissance squadron, 11 transport squadrons, one communication squadron, 12 helicopter squadrons and 20 surface-to-air missiles squadrons. Orders were placed to acquire 150 Jaguars, 100 Ajeet fighters, 5 MIG-25 reconnaissance planes, 10 HS-748 transport planes, 40 trainers and 45 chetak helicopters.

The number of combat aircraft is 630 and personnel 113,000.

The Navy consists of an aircraft carrier, 8 submarines, one cruiser, 29 frigates, 4 Corvettes with surface-to-surface and surface-to-air misslies, 16 fast attack crafts (missiles), one patrol craft, 5 coast guard patrol crafts, 11 mine-sweepers, one landing ship and 6 landing crafts. Orders were placed for 3 destroyers, 2 frigates, 2 Corvettes, 2 mine-sweepers and 6 landing crafts. The navy has 42,000 men.

The Naval Air Force consists of 50 combat aircrafts, one attack squadron, one anti-submarine warfare squadron, 2 maritime reconnaissance squadrons, 4 anti-submarine warfare helicopter squadrons, one search and rescue or liaison helicopter squadron, three training or communications squadrons. Orders have been placed for 8 ground attack fighters, 3 maritime reconnaissance aircrafts and also for 8 training aircrafts. Naval Air Force has 2000 men.

The Para-Military Forces consist of about 200,000 Border Security Force and 100,000 in other organisations.

Anti-tank Missiles : The SS-11 and ENTAC anti-tank wireguided missiles are manufactured by Bharat Dynamics Ltd., Hyderabad. It is reported that India has acquired from Britain the SEACAT surface-to-air missiles and the shorter range TIGERCAT surface-to-air missiles for anti-aircraft protection. India also has the STYX surface-to-surface liquid-fuelled naval missiles and the SA-2 surface-to-air missiles acquired from the Soviet Union. The Indian Air Force's Mig-21s are equipped with ATOLL air-to-air infra-red missiles, manufactured in India.

New Equipment: The Hindustan Aeronautics Ltd. is currently setting up assembly lines at its Bangalore Units, for the manufacture of "Jaguar" aircraft. Production is expected to start in 1980.

Work is in progress since 1974, for the indigenous production of submarines. Planning design is to be completed in 1980. Mazgaon Dock will launch a series of more sophisticated "Leander" for the Navy by the end of 1980.

RECRUITMENT AND TRAINING

Recruitment of Ranks : In peace time, the demands are related to normal wastage. Considering the limited number required and the large number of candidates offering themselves for enrolment the screening procedure has been streamlined and made more effective to ensure that only the best candidates from the available material are inducted into the Services.

Physical Standards : Physical standards prescribed for recruitment of ranks in the Army have been revised upwards. Generally the increase in the physical standards ranges between 1 to 2 cms. in the height and 2 to 3 kgs. in weight. This marginal upward revision of the physical standards has not affected recruitment in the Army. On the contrary, it has improved physical standards. Discretionary powers exercised at various levels to condone shortfalls to a limited extent have been withdrawn. Minimum standards prescribed for general population are :

(*a*)	Height	164 cms.
(*b*)	Chest	78 cms.
(*c*)	Weight	51 kgs.

Corresponding physical standards are higher in respect of specified racio-ethnic groups whose inherent anthropometric characteristics are better, and lower for some other classes, predominantly residing in the hill districts and backward tribal regions. The physical standards for Sailors and Airmen are different.

Instructions have been issued to recruiting officers to enrol one son of a serving soldier/ex-servicemen on a relaxed standard, such relaxations extending to 2 cms. in height, 1 cm. in chest expansion and 2 kgs. in weight. This step has been taken as a measure of welfare and also to ensure that the tradition of service in the Army to those already serving or who have retired is maintained. The new instructions have come into force with effect from February 1977.

Educational Standards : The educational standards vary from trade to trade. In the case of the Army, variations range from literate to Higher Secondary as opposed to Higher Secondary/Pre-University in the Air Force and Matriculation for all categories except cooks/stewards in the Navy.

Selection Procedure : All prospective recruits for enrolment are screened by the enrolling officers at a suitable place. The best candidates among those who fulfil the prescribed standards are selected. The practice of putting the candidates through an aptitude test at the pre-enrolment stage was discontinued with effect from 15th November 1977. These aptitude tests would now be administered at the training centres after ten weeks of training and trades would be allotted on the basis of these tests. This has been introduced with a view to eliminating a source of malpractice at the recruitment stage where the JCO Tester had the last say in the matter of recruitment of an individual who was otherwise found physically and medically fit.

Recruiting Organisation : There is a combined recruiting organisation for the Army and the Navy. There are 60 recruiting offices located in important towns, each one of which covers several districts for recruitment to the Navy as well as the Army. There is a separate recruiting organisation for the Air Force which has 13 recruiting offices. Recruiting Officers carry out recruitment at their own stations or while on tour in the interior areas in their territorial jurisdiction. Each Recruiting Officer is expected to hold one recruiting *mela* in a month and make open recruitment at these *melas*.

Recruitment of Officers : Recruitment to the officers cadres in the three Services is made on the basis of a competitive examination through the U.P.S.C. as also by the Services Selection Boards. Candidates in the age group of 16–18½ years and possessing Higher Secondary and equivalent qualifications are eligible for competing in the examination. It is worth noting in this context that although it is not obligatory for the students of the Military Schools located at Chail, Ajmer, Dholpur, Belgaum and Bangalore to sit for the U.P.S.C. examination, special care is taken to see that they develop an interest in a military career. Accordingly coaching is arranged for those students who are desirous of appearing in the U.P.S.C. examination.

The candidates selected are imparted training at the National Defence Academy, Khadakvasla on an Inter-service basis for a period of three years. On completion of the training at N.D.A., Army Cadets go to the Indian Military Academy, Dehra Dun for further training for one year before they are commissioned. The Naval Cadets, after passing from the N.D.A. undergo afloat training for 6 months in the training squadron followed by another 6 months as midshipmen before they are commissioned. The Air Cadets undergo further training for 18 months at the Elementary Flying School, Bidar and Air Force Academy, Hyderabad, before they are commissioned.

Apart from the entry through N.D.A., there is a scheme of direct entry for candidates with graduate/post graduate qualification for the three services for various general/technical branches like, E.M.E., Engineers, Signals, Army Medical Corps, Army Service Corps, Army Education Corps etc. in the Army; Logistics, Aeronautical Engineering, Education and Meteorological Branches of the Air Force; and Engineering and Education Branches in the Navy. The age prescribed to these branches varies from 20 to 27 years. The selection is made through U.P.S.C. as well as directly by the Services Selection Boards. There is also a scheme for entry through N.C.C. and through promotion from the ranks.

After commissioning the Army Officers are appointed as 2nd Lieutenant and Naval and Air Force Officers as Ag. Sub Lieutenant and Pilot Officers respectively. Ante date commission is given to qualified graduates in Engineering, M.B.B.S. etc.

Training : Training in the Services has been planned so as to keep the units and formations in a state of readiness so that they can take the field at short notice. Special emphasis has been laid on endurance, fortitude and mental robustness of all ranks so that they are conditioned to withstand the pressure and the intensity of fire of modern weaponry.

Intensive pre-commission training is provided to the officers in National Defence Academy, Indian Military Academy, Naval and Air Force Academies, before the officers are commissioned. After an officer has been commissioned in the Service, he undergoes a number of courses designed to fit him in his particular branch of service. In the case of Army, post-commission training in specialised branches is imparted at Infantry School, Armoured Corps and Artillery Schools, College of Military Engineering, College of Combat and High Altitude Warfare School etc. Training in Navy is provided in the training schools of various branches, *e.g.* INS "SHIVAJI" for the Engineering Branch, INS "VALSURA" for the Electrical Branch, INS "HAMLA" for the Supply Branch and INS "VENDURUTHY" for the Executive Branch. Air Force Officers undergo advanced training in the Air Force Academy, Air Force Technical College and Air Force Administrative College, etc. The Officers of the three Services are also deputed for training in the Defence Services Staff College, Institute of Defence Management and National Defence College.

Individual and collective training exercises are held periodically by the three Services so as to keep the units and formations in a state of operational readiness. The training imparted develops inter-arms and inter-service co-operation and inculcates initiative at all levels of command.

In order to keep the Armed Forces abreast of modern tactical concepts and technological advancements in foreign countries, officers are deputed to foreign countries for specialised training. Services of such officers are utilised for imparting training to other officers in respective fields.

TRAINING ESTABLISHMENTS

There are a number of training institutions where Officers are imparted pre-commission and post-commission training. There are also a few other institutions run under the auspices of the Ministry of Defence for preparation of boys for entry to the National Defence Academy, such as Rashtriya Indian Military College, Military Schools and Sainik Schools. A brief description of these important training establishments and feeder institutions is given below:

Armed Forces Medical College, Pune, Maharashtra: Admits 120 students of whom those who receive a stipend have to serve as short service commissioned officers after training. For the others preference for admission is given to those who volunteer for service.

Army Cadet College, Pune: Trains selected other ranks from the Army to acquire officer-like qualities and general academic education required for entry to the I.M.A. for grant of commission.

College of Air Warfare, Begumpet Air Force Station, Hyderabad, Andhra Pradesh: provides training to senior officers.

Defence Institute of Fire Research, New Delhi 110046: Trains personnel in the Defence organisation in modern methods of fire fighting and prevention.

Defence Institute of Stores Preservation and Packaging, Delhi: Presently a part of Defence Materials and Stores Research and Development Establishment, Kanpur, trains defence personnel in different aspects of preservation and packaging.

Defence Institute of Work Study, Mussoorie, Uttar Pradesh: Conducts work study courses, for defence personnel.

Defence Services Staff College, Wellington, Nilgiri Hills, Tamil Nadu: Conducts a 45-week course for senior officers of the three wings, some civilians and foreign officers in all aspects of staff work.

Indian Military Academy, Dehra Dun, Uttar Pradesh: Imparts pre-commission training to cadets from the N.D.A., cadets from the A.C.C. direct entry cadets and N.C.C. cadets selected for commission in the Army.

Institute of Armament Technology, Pune, Maharashtra: Trains service personnel and civilian scientific officers in the field of science and technology related to armaments.

Institute of Defence Management, Secunderabad, Andhra Pradesh: Trains service and civilian officers in modern defence management techniques.

Institute of Defence Studies and Analysis, Sapru House, Bara Khamba Rd., New Delhi 110001: Set up in 1965 it carries out studies, discussions and research on various aspects of national security.

nstitute of Nuclear Medicine and Allied Sciences, Probyn Rd., New Delhi 110007: It runs courses on nuclear medicine and technical studies in nuclear, biological and chemical warfare.

Military Schools: There are 5 run by the Defence Ministry, one each at Chail (Himachal Pradesh); Ajmer (Rajasthan); Belgaum (Karnataka); Bangalore (Karnataka); Dholpur (Rajasthan). The boys appear for the All India Higher Secondary Examination but are not obligated to appear for the National Defence Academy Examination.

National Cadet Corps, West Block, 4, Ramakrishnapuram, New Delhi 110022: Set up to stimulate among youth an interest in the defence of the country.

National Defence Academy, Khadakvasla, Maharashtra : Trains boys who wish to join the armed forces as commissioned officers. Age limit is 16-18½ years and qualifications higher secondary or equivalent. The standard of training reached is equivalent to that of a degree course of a University.

National Defence College, Tees January Marg, New Delhi 110011 : Set up in 1960. This college trains officers of the rank of Brigadiers, and its equivalent ranks.

Officers Training School, Madras : Officers granted short service commissions in the Army are trained at this school. Admission to the OTS is made on the basis of a competitive examination convened by the U.P.S.C. followed by suitability having been assessed by a Services Selection Board.

Rashtriya Indian Military College, Dehra Dun : The admission is made twice a year in January and August, for Class VII and boys between 11 to 12 years are eligible for it. It has adopted 10 + 2 pattern of secondary education. There are a limited number of seats which are allocated normally at the rate of one seat for each State. The State Governments have instituted scholarships schemes for boys studying in the College and such boys are under obligation to take the National Defence Academy examination.

Sainik Schools : Boys between 9-18 are prepared for the NDA entrance examinations in 17 schools run by the Sainik School Society headed by the Defence Minister. The Sainik Schools are affiliated to the Central Board of Secondary Education and follow the 10 + 2 pattern of secondary education.

These schools are located at : Nagrola on Tawi near Jammu (Jammu & Kashmir) ; Kapurthala (Punjab) ; Kunjura near Karnal (Haryana) ; Chittorgarh (Rajasthan) ; Balachadi (Gujarat) ; Satara (Maharashtra) ; Ghorakhal near Naini Tal (Uttar Pradesh) ; Rewa (Madhya Pradesh) ; Tilaiya (Bihar) ; Purulia (West Bengal) ; Bhubaneshwar (Orissa) ; Korukonda (Andhra Pradesh) ; Amaravathinagar (Tamil Nadu) ; Bijapur (Karnataka) ; Kazhakootam (Kerala) ; Goalpara (Assam) ; and Imphal (Manipur).

School of Directorate of Psychological Research, M-Block, New Delhi 110001 : Gives training in selection, techniques and methods.

School of Foreign Languages, West Block 4, Wing No. 56, R. K. Puram, Delhi 110022 ; Teaches Arabic, Burmese, Chinese, French, German, Japanese, Malay/Indonesian, Persian, Russian, Spanish and Tibetan to Service personnel, government employees and a few civilians. Courses begin in April and August each year.

Schools of Nursing : Army Hospital, Delhi Cantt. ; Central Command Hospital, Lucknow ; I.N.H.S. Ashvini, Bombay ; Air Force Hospital, Bangalore ; Military Hospital, Jullundur ; Military Hospital, Secunderabad ; Eastern Command Hospital, Calcutta ; Western Command Hospital, Chandigarh.

Other training establishments: A number of other specialised training establishments for each wing of the Armed Forces give instructions of special nature. It is not possible to list them all in this Chapter for reasons of space and, because they cater largely to the needs of the personnel already recruited.

DEFENCE PRODUCTION : The nine public sector units (see Chapter Central Govt. Undertakings) under the administrative control of the Defence Ministry produced goods worth Rs. 4,292·7 million during 1978–79 as against Rs. 4,259·0 million in 1977–78. During 1979–8 the production is estimated to be Rs. 4,776·8 million.

The total paid up share capital of the undertakings as on 31st March 1979 stood at Rs. 1,608·6 million and the Govt. of India loans amounted to Rs. 1,503·2 million.

The total strength of employees during 1978–79 was 0·1 million.

Export and Foreign Exchange Earnings: During 1978–79 Bharat Electronics Ltd. exported items worth Rs. 350 million and earned foreign exchange worth Rs. 143·1 million. Praga Tools Ltd.'s exports amounted to Rs. 34·8 million. Bharat Earth Movers Ltd. exported equipment worth Rs. 44·3 million and earned foreign exchange worth Rs. 34·63 million. Mazagon Dock Ltd., earned foreign exchange worth Rs. 126·55 million. Garden Reach Shipbuilders and Engineers Ltd., exported items worth Rs. 1·48 million in addition to traditional export revenue of foreign ship repairs worth Rs. 1·98 million. The export earnings of Hindustan Aeronautics Ltd., have increased threefold during the last three years from Rs. 1·52 million in 1977–78 to Rs. 4·52 million in 1979–80.

Ordnance Factories: There are 32 ordnance and equipment factories in India producing a wide range of arms, ammunitions, military bridges, explosives, instruments, clothing, electrical cables, vehicles and various other defence stores. About 140,000 people are employed. The gross value of production during 1978–79 was Rs. 3,900 million.

AGGRESSIONS AGAINST INDIA

1. First invasion on Kashmir — 23rd October, 1947.
2. Chinese infiltration into Tibet began in 1950.
3. By 1956, Chinese Army had moved along the entire boundary from Ladakh to NEFA.
4. In 1957, China had built roads in the Aksai Chin area.
5. India protested against it on October 18, 1958.
6. In March 1959 China over-ran Tibet and Dalai Lama came to India.
7. Chinese massive attack on the eastern border and Ladakh simultaneously — October 20, 1962.

   Unilateral cease fire by China on midnight November 21/22, 1962.
8. (*a*) Pakistan aggression commenced on April 9, 1965, on Kutch border.
   (*b*) Infiltrators started coming in Jammu and Kashmir on 5th August, 1965.
   (*c*) Pakistani troops entered Mendhar area in Jammu and Kashmir on 22nd August, 1965. Repulsed by India, Indian troops crossed cease fire line on 25th August, 1965.
   (*d*) Cease fire on 23rd September 1965.
9. Tashkent Agreement on 10th January, 1966.
10. Four Pakistani sabre jets intruded into Indian territory on 22nd November, 1971, near Calcutta. Three of these were shot down. On December 3, 1971. Pakistani aggression on India began with a 'pre-emptive' air strike on several airports from Srinagar to Agra. President Giri declared a state of emergency in the country, and Pakistan launched a full-scale war on India. Hostilities ceased when Pakistan surrendered in Bangla Desh on December 16, 1971 and Prime Minister Indira Gandhi announced a unilateral cease fire on the western front effective 8 p.m. on December 17, 1971.

LABOUR

WORKING POPULATION: The total working population was 139·5 million in 1951; 188·4 million in 1961; 212 million in 1971; and is expected to reach 280 million in 1980.

The working population formed 32·92 per cent of total population according to 1971 census.

Employment: According to the 1971 census 72 per cent of the working population was engaged in the primary sector, 11·1 per cent in the secondary sector and 16·7 per cent in the tertiary sector.

The occupational structure of the rural working population also revealed that 84·8 per cent were dependent on agriculture and allied activities, 6·6 per cent on mining, manufacturing and household industry and only 8·5 per cent in trade, commerce and other services.

In the urban sector 54·9 per cent were engaged in the tertiary sector and only 32·3 per cent found employment in the secondary sector.

Rural Workers: Nearly 80 per cent of the population of India and 83 per cent of the workforce live in the rural areas. The estimated workforce in the rural areas in 1978 was 216·16 million as against urban workforce of 44·76 million. Workforce in agriculture was 192·43 million. The remaining 23·73 million of the rural workforce was engaged in non-agricultural occupations.

Sex Break-up: The sex-wise break-up of the working population showed that 82·6 per cent of the total workers were male and 17·4 per cent female.

Age Break-up: 5·9 per cent of the total workers were children in the age group 0 to 14 whilst 7·8 per cent were over the age of 60. The social reality is that nearly 10·8 million children are labourers despite the law against child labour, whilst lack of old age security compels people to work beyond the retirement age.

Employment Exchanges: The number of employment exchanges at the end of March, 1980, was 627 which included 15 professional and executive employment offices and 69 University Employment Information and Guidance Bureau.

The number of vacancies notified by employers was 878·7 thousand during 1979 against 830·7 thousand in the previous year.

Employment of Handicapped: Special employment offices for the physically handicapped are functioning at Bombay, Delhi, Madras, Hyderabad, Calcutta, Kanpur, Bangalore, Ahmedabad, Chandigarh (Punjab & Haryana separately), Trivandrum, Patna, Jabalpur, Jaipur, Simla. Bhubaneshwar, Gauhati and Agartala. In addition Vocational Rehabilitation Centres are functioning, one each at Bombay, Hyderabad, Delhi, Kanpur, Jabalpur. Ludhiana, Calcutta, Madras, Trivandrum, Bangalore and Ahmedabad for vocational evaluation and imparting adjustment training to physically handicapped persons.

Apprentice Training Scheme: Under the Apprentice Act, 1961, it is obligatory on the part of employers in organised sectors to engage apprentices as per ratio fixed by Central Government. Persons possessing qualifications from 5th standard to 10th standard are engaged as apprentices in 131 different designated trades in 217 industries. 117,359 trade apprentices were undergoing training as on 31st March, 1980. Out of this roughly 46,021 belong to weaker section viz. Scheduled Castes, Scheduled Tribes. physically handicapped, minorities and women. Also 10,273 graduate and technician apprentices have been engaged.

Stipend: The present rate of stipend for various categories of apprentices is — Trade apprentices in the first year of their training get Rs. 130 per month, in the second year Rs. 140, in the third year Rs. 150 and, in the fourth year Rs. 200. Engineering graduate apprentices get Rs. 280 per month, while sandwich course students having a degree get Rs. 180 per month and diploma holders (for post institutional training) Rs. 180 per month.

Industrial Relations: The number of mandays lost in 1978 was 28·34 million as against the provisional figure of 37·10 million in 1979. Strikes accounted for time loss of 30·57 million mandays or about 82 per cent of the total time loss in 1979 against 15·42 million mandays or about 54 per cent of the total time loss in 1978. Lockouts accounted for time loss of 6·53 million mandays or 18 per cent of the total time loss in 1979 against 12·92 million mandays or about 46 per cent of the total time loss in 1978. Time lost due to strikes and lockouts, in the public sector was 6·66 million mandays or about 18 per cent of the total time loss in 1979 as against 4·35 million mandays or about 15 per cent of the total time loss in 1978. The time losses in the private sector during 1979 and 1978 were 30·44 and 23·99 million mandays respectively.

Employment Situation: Employment in the organised sector increased from 21·48 million at the end of March, 1978 to 22·19 million at the end of March, 1979, recording an increase of 3·3 per cent.

Public Sector: Employment in the public sector, increased from 14·44 million at the end of March, 1978 to 14·98 million at the end of March, 1979, contributing a growth rate of 3·8 per cent during 1978–79 as against an increase of 4 per cent achieved during the previous year. An analysis of the different branches of the public sector showed that all the branches of public sector recorded an increase in employment during 1978–79. The highest rate of growth was in the State Quasi-Government establishments (7·3 per cent), State Government establishments (4·6 per cent), Central Quasi-Government establishments (4·4 per cent), local bodies (12·4 per cent) and Central Government establishments (1·3 per cent).

Private Sector: In the private sector, the quantum of employment increased by 2·3 per cent during 1978–79 as against a negative growth rate of 2·5 per cent recorded in 1977–78. In absolute terms, the employment increased from 7·043 million in March, 1978 to 7·202 million in March, 1979.

UNEMPLOYMENT: Number of job-seekers on the live register of employment exchanges showed a rise of 13·1 per cent from 12·678 million in December 1978 to 14·334 million in December 1979 (14·69 million on the live register at the end of March 1980). The total number of placements effected during 1979 was 466,000 as against 461,000 during the previous year showing a rise of 1·2 per cent. The number of educated job seekers (Matriculates and above) was 6·937 million in June 1979 against 6·048 million in June 1978 showing a rise of 14·7 per cent. Out of the educated job seekers, 3·784 million were matriculates, 1·797 million under Graduates (including Intermediate and Higher Secondary) and 1·356 million were Graduates and above.

The number of job-seekers belonging to Scheduled Castes and Scheduled Tribes, on the live register of Employment Exchanges at the end of June 1979 was 1·578 million and 370,000 respectively as against 1·373 million and 302,000 respectively in 1978.

CLASSIFICATION OF WORKING POPULATION

(Numbers in million)

	Total No.	Total Per Cent	Rural No.	Rural Per Cent	Urban No.	Urban Per Cent
Total workers	180·37	100	148·37	100	32·00	100
Primary Sector :						
Cultivators	78·18	43·3	76·54	51·6	1·63	5·1
Agro Labour	47·49	26·3	45·57	30·7	1·92	6·0
Livestock, Forestry, Fishery etc.	4·30	2·4	3·76	2·5	0·54	1·7
Sub-Total	129·96	72·0	125·87	84·8	4·09	12·8
Secondary Sector :						
Mining & Quarrying	0·92	0·5	6·0	0·4	0·32	1·0
Household Industry	6·35	3·5	4·76	3·2	1·59	5·0
Other than Household Industry	10·72	5·9	3·40	2·2	7·31	22·8
Construction	2·21	1·2	1·10	0·8	1·12	3·5
Sub-Total	20·21	11·1	9·86	6·6	10·34	32·3
Tertiary Sector :						
Trade & Commerce	10·04	5·6	3·62	2·4	6·41	20·0
Transport, Storage & Communications	4·40	2·4	1·21	0·8	3·19	10·0
Other Services	15·76	8·7	7·80	5·3	7·96	24·9
Sub-Total	30·21	16·7	12·63	8·5	17·56	54·9

Source : Census of India 1971 Series 1.

Employment in Public and Private Sectors

(Numbers in million)

As at the end of March	PUBLIC SECTOR Central Govt.	State Govt.	Quasi Govt.	Local bodies	Total	Private Sector	Grand Total
1962	2·186	3·087	0·879	1·365	7·417	5·160	12·577
1974	2·939	4·706	2·912	1·928	12·485	6·794	19·279
1975	2·988	4·748	3·192	1·940	12·868	6·803	19·671
1976	3·047	4·939	3·392	1·985	13·363	6·844	20·207
1977	3·082	5·130	3·675	1·989	13·876	6·867	20·744
1978	3·09	5·40	3·91	—	14·40	7·05	21·45

Employment Industry-wise

(Numbers in million)

Year	Plantation, Forestry etc. (1) Public	Private	Mining and Quarrying Public	Private	Manufacturing Public	Private	Construction Public	Private
1962	0·174	0·740	0·145	0·480	0·421	3·050	0·641	0·180
1975	0·340	0·818	0·694	0·123	1·019	4·109	0·956	0·127
1976	0·401	0·827	0·719	0·132	1·113	4·158	0·992	0·09
1977	0·476	0·838	0·757	0·130	1·226	4·165	1·009	0·083
1978	0·628	0·852	0·758	0·127	1·323	4·322	0·99[illegible]	0·083
1979	0·777	0·841	0·841	0·124	1·416	4·433	1·032	0·083

Employment Industry-wise—*(Contd.)*

(Numbers in million)

Year		Electricity (2) Public	Electricity (2) Private	Trade & Commerce (3) Public	Trade & Commerce (3) Private	Transport & Communications (4) Public	Transport & Communications (4) Private	Service (5) Public	Service (5) Private	Finance, Real Estate Services	Insurance & Business	Total† Public	Total† Private
1962	..	0·234	0·040	0·109	0·190	1·797	0·120	3·896	0·360	—	—	7·417	5·160
1975	..	0·507	0·039	0·053	0·309	2·363	0·079	6·936	1·200	0·490	0·183	12·868	6·804
1976	..	0·536	0·035	0·056	0·287	2·418	0·074	6·639	1·055	0·490	0·183	13·363	6·844
1977	..	0·563	0·035	0·076	0·275	2·467	0·071	6·769	1·086	0·534	0·186	13·876	6·867
1978	..	0·559	0·035	—	—	2·512	0·061	7·507	1·298	—	—	14·402	7·054
1979	..	0·634	0·034	0·099	0·281	2·597	0·071	7·071	1·140	0·647	0·201	15·045	7·208

Note : Totals in rows and columns may not add-up due to rounding off. † Figures prior to March 1975 are based on Standard Industrial Classification, 1960 and that for the years March 1975 onwards are based on National Industrial Classification, 1970 and as such they are not comparable. (1) Includes agriculture, hunting & fishery, (2) includes gas & water, (3) means wholesale and retail trade and hotels and restaurants, (4) includes storage also, (5) Services include financing, insurance, estate and business services, community, social and personal services.

The number of ex-services personnel on the live register stood at 162,047 at the end of September 1979 as against 148,547 in September 1978. Placements effected numbered 10,086 during January-September 1979, as against 10,535 during the corresponding period in 1978.

Women job-seekers on the live register at the end of December 1979 was 1·904 million against 1·672 million in December 1978. During 1979, placements effected in respect of women job-seekers was 57,705, as against 54,925 in 1978.

WAGES: The average annual earnings of workers drawing less than Rs. 1,000 per month in the manufacturing industries increased from Rs. 3,011 in 1973 to Rs. 5,614 in 1977. The number of such workers in 1977 was 3,574,000.

The average emolument of a Central public sector worker during 1975–76 was Rs. 9,000. Total payment to employees in the Central public sector was Rs. 13,520 million during the same period.

Trade Unions (See chapter on Trade Unions).

Employees' State Insurance Corporation

The ESI Scheme covers 6·9 million persons for provision of social security benefits and extends medical care to 26·6 million people. An amount of Rs. 635·52 million was disbursed to insured persons towards cash benefits and Rs. 635·92 million were spent on provision of medical care during 1979–80. The Corporation has paid Rs. 767·6 million out of Rs. 917·5 million sanctioned on construction of ESI Hospitals, annexes and dispensaries upto 30–9–1980, and 68 hospitals and 35 annexes with 14,752 and 710 beds respectively have been commissioned.

Labour Education & Training (See chapter on Education).

Employees' Provident Funds & Miscellaneous Provisions Act, 1952.

Under this Act three Schemes have been framed:

(*i*) The Employees' Provident Funds Scheme, 1952 ;
(*ii*) The Employees' Family Pension Scheme, 1971 and
(*iii*) The Employees' Deposit-linked Insurance Scheme, 1976.

The salient features, in brief of these three schemes are as follows :—

(1) *The Employees' Provident Funds Scheme, 1952 :* The Act and the Scheme have been made applicable to 157 specified industries/classes of establishments upto 31-3-1980. All factories/establishments engaged in one or more of these industries/classes of establishments and employing 20 or more persons and having completed the infancy period (viz., 3 years for establishments employing 50 or more persons and 5 years for those employing more than 20 but less than 50 persons) are covered under the Scheme. The statutory rate of Provident Fund Contribution—employer's and employees' share each is 8 per cent of pay (*i.e.* basic wages, dearness allowance including cash value of food concession, if any, and retaining allowance, if any) in respect of factories/establishments engaged in 89 specified industries/classes of establishments and employing 50 or more persons and 6·25 per cent in respect of the other factories/establishments.

The qualifying period of service for membership of the Provident Fund is six months' continuous service or 120 days of actual work during a period of six months or less or on becoming permanent, whichever is earliest.

Membership : At the end of March, 1980 the number of subscribers was 10·46 million in respect of 93,094 covered establishments (both exempted and unexempted) and the total Provident Fund contributions collected was Rs. 64,337·2 million.

(2) *The Employees' Family Pension Scheme, 1971 :* The Scheme came into force w.e.f. 1st March, 1971 and covers the employees enrolled as members of the Employees' Provident Funds Scheme, 1952, thereafter, the existing subscribers of the E.P.F. Scheme, 1952 as on 28-2-1971, were given the option to join this Scheme. As on 31-3-1980, there were 5·44 million members of the Family Pension Scheme. The rate of contribution is 1·6 per cent of the pay of the employees, diverted out of both employer's and employees' shares of contributions to the Provident Fund with an equal share contributed by the Central Govt. who also bears the total administrative expenses of this Scheme. As on 31-3-1980 a total amount of Rs. 2,812·8 million was received as contributions (including Central Govt.'s share) in respect of this Scheme.

(3) *The Employees' Deposit-linked Insurance Scheme, 1976 :* This Scheme, which came into force w.e.f. 1-8-1976, is applicable to all employees who are members of the Provident Fund, both in exempted or unexempted establishments. The Scheme provides for the payment to the nominees/heirs of a member in the event of his death, of an additional amount equal to the average balance in the Provident Fund account of the deceased member during the preceding three years, but not exceeding Rs. 10,000, provided that the average balance (after 1-8-1979) in the account of the deceased member is not

less than Rs. 1,000 during the preceding three years or during the period of his membership, whichever is less. Employees covered under this Scheme are not required to make any contribution to get the benefit under this Scheme. The Scheme is financed by the employees of the covered establishments @ 0·5 per cent of the pay of the employees, who are members of the Provident Fund and the Central Govt. also contributes an amount representing one half of the employer's contribution. The cost of administration of this Scheme is borne both by the employers and the Central Govt. @ 0·1 per cent and 0·05 per cent (respectively) of the pay of the employees. The employers of the exempted establishments however pay inspection charges @ 0·02 per cent of the pay of the employees. As on 31-3-1980, a total amount of Rs. 821·8 million and Rs. 176·6 million was received as contributions and Administration Charges respectively in respect of this Scheme, which includes Central Govt.'s share also.

Bonded Labour : The powers for enforcement of the Bonded Labour System (Abolition) Act, 1976 rest with the State Governments. According to reports from State Governments the number of bonded labourers so far identified and released is more than 120,000. The 32nd round of the National Sample Survey (April, 1979) indicated the number around 340,000. According to the preliminary findings of a joint survey conducted by the National Labour Institute and Gandhi Peace Foundation (1978) the incidence of bonded labour is about 3 million.

Employment Publications: The Directorate of Advertising and Visual Publicity of the Government of India began in April, 1976, to bring out "Employment News" in English and "Rozgar Samachar" in Hindi every week.

Labour Situation in 1979 at a Glance

Sl. No.	State/Union Territory	No. of Industrial disputes referred to I.R.M.	No. of failure reports received	Adjudication, Arbitration & Awards				Strikes & Lockouts‡		
				No. of disputes referred for		No. of disputes of which awards are available		No. of strikes and lock-outs	No. of workers involved	No. of man-days lost
				Adjudication	Arbitration	In favour of workers	Against workers			
1	2	3	4	5	6	7	8	9	10	11
1.	Centre	5,860	1,127	273	19	11	7	902	1,185,435	2,974,423
2.	Andhra Pradesh	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	1	4,703	4,703
3.	Assam	400	183	183	—	19	23	12	13,863	25,798
4.	Bihar	1,039	202	83	4	61	16	132	72,118	501,371
5.	Gujarat ..	4,884	2,104	1,225	—	394	83	221	45,608	532,497
6.	Haryana‡ ..	2,561	1,126	722	3	68	110	83	21,230	645,604
7.	Himachal Pradesh	69	10	3	—	6	3	2	64	488
8.	Jammu & Kashmir	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	—	—
9.	Karnataka ..	1,285	428	57	1	50	38	45	31,865	312,654
10.	Kerala	5,231	78	290	4	131	99	108	153,394	3,370,336
11.	Madhya Pradesh	476	197	114	6	—	—	123	87,729	559,691
12.	Maharashtra ..	6,261	2,293	N.A.	N.A.	693	473	196	165,458	1,950,449
13.	Manipur ..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	2	469	2,477
14.	Meghalaya ..	28	—	—	—	2	1	—	—	—
15.	Nagaland ..	—	—	1	—	—	—	—	—	—
16.	Orissa	579	249	138	1	93	35	5	569	4,076
17.	Punjab‡ ..	6,739	4,141	3,555	2	1,325	1,072	104	18,211	68,078
18.	Rajasthan ..	1,182	638	176	7	N.A.	N.A.	74	5,084	54,443
19.	Sikkim ..	—	—	—	—	—	—	—	—	—
20.	Tamil Nadu ..	7,808	1,983	719	10	302	134	324	275,793	8,263,236
21.	Tripura ..	104	—	—	—	—	—	1	113	N.A.
22.	Uttar Pradesh	6,545	3,630	2,278	6	1,050	1,078	168	205,120	1,259,604
23.	West Bengal ..	10,626*	579†	420	—	4	—	232	385,552	15,728,336
24.	Andaman & Nicobar Islands	39	5	4	—	2	3	10	4,616	12,830
25.	Arunachal Pradesh	—	—	—	—	—	—	—	—	—
26.	Chandigarh ..	179	65	33	2	22	14	3	877	14,198
27.	Dadra & Nagar Haveli	—	—	—	—	—	—	—	—	—
28.	Delhi	5,032	1,533	1,396	1	173	418	39	32,125	264,095
29.	Goa, Daman & Diu	231	21	22§	—	1	4	23	3,828	107,594
30.	Lakshadweep ..	—	—	—	—	—	—	—	—	—
31.	Mizoram ..	—	—	—	—	—	—	—	—	—
32.	Pondicherry ..	298	15	15	—	—	—	19	25,492	443,570
	TOTAL	67,456	20,607	11,707	66	4,407	3,611	2,829	2,741,316	37,100,751

* This includes 4,189 cases brought forward from 1978. † This includes 57 cases 'Not recommended for adjudication'.

‡ Provisional. § This includes one f.o.c. report received in the previous year. N.A. = Not available. (—) = Nil.

TRADE UNIONS

All-India Port and Dock Workers' Federation, *Headquarters :* Port Shramik Bhawan, 26, Dr. Sudhir Basu Rd., Calcutta 700023.

Established : By P. D'Mello and Sibanlal Saxena in the year 1948.

President's Office : P. D'Mello Bhawan, P. D'Mello Rd., Carnac Bunder, Bombay 400038.

Regional Office : 18, Krishnan Koil St., George Town, Madras-600001.

Total Membership : 175,000.

Number of Affiliated Unions : 28.

Present Office-bearers :

President : S. R. Kulkarni ; *Vice-Presidents :* S. C. C. Anthony Pillai ; Dr. S. Maitra ; M. K. Raghavan and Nishamoni Khuntia ; *General Secretary :* Makhan Chatterjee.

All-India Trade Union Congress : 24, Canning Lane, New Delhi 110001.

Established : 31-10-1920.

Regional Offices : State committees in all the States and Union Territories.

Total Membership : 2,745,027.

Number of Affiliated Unions : 3,004.

Present Office-bearers :

President : A. P. Trivedi ; *Vice-Presidents :* M. S. Krishnan ; B. D. Joshi ; Mohd. Elias ; J. Chittaranjan, M.L.A. ; K. G. Sriwastava ; Homi F. Daji ; N. K. Krishnan; V. Subbiah, M.L.A. ; M. Kalyanasundaram, M.P.; *General Secretary :* Indrajit Gupta, M.P.

Centre of Indian Trade Unions : 6, Talkatora Road, New Delhi 110001. *Sub-Office :* 172, Lenin Sarani, Calcutta 700013.

Established : 30-5-1970.

Regional Offices at : Hyderabad (A.P.), Gauhati (Assam), Patna (Bihar), Ahmedabad (Gujarat), Rohtak (Haryana), Simla (H.P.), Bangalore (Karnataka), Trivandrum (Kerala), Bhilai (M.P.), Bombay (Maharashtra), Imphal (Manipur), Bhubaneshwar (Orissa), Jullundur (Punjab), Jaipur (Rajasthan), Madras (T.N.), Agartala (Tripura), Lucknow (U.P.), and Calcutta (W. Bengal) and in the Union Territories of Delhi and Goa.

Total Membership : 1,700,000 (1979 Approx.).

Number of Affiliated Unions : 3,631.

Present Office-bearers :

President : B. T. Ranadive ; *Vice-Presidents :* Jyoti Basu, Mohammed Ismail, S. Y. Kolhatkar, Sudhin Kumar. K. Ramani, Manoranjan Roy, C. Kannan, Susheela Gopalan (M.P.). ; *General Secretary :* P. Ramamurti, M.P. ; *Treasurer :* Samar Mukherjee. M.P.

Official Publications : 'The Working Class' (English). 'CITU Mazdoor' (Hindi), 'Sramik Andolan' (Bengali), 'Karmik Lokam' (Telugu), 'Shramik Ekta' (Oriya), 'CITU Sandesham' (Malayalam), 'Warga Yudha (Marathi), 'CITU Saithee' (Tamil) — all monthlies.

Hind Mazdoor Sabha : Nagindas Chambers, 167, P. D'Mello Rd., Bombay 400038.

Established : 1948.

Total Membership : 2,000,000 Approx.

Number of Affiliated Unions : 800.

Present Office-bearers :

President : S. Venkat Ram ; *General Secretary :* Dr. Shanti Patel, M.P.

Indian National Trade Union Congress : 1B, Maulana Azad Rd., New Delhi 110011.

Established : 3-5-1947.

Total Membership : 3,293,296.

Number of Affiliated Unions : 3,329.

Present Office-bearers :

President : A. P. Sharma, M.P. ; *General Secretary :* G. Ramanujam.

Official Publications : 'Indian Worker', Weekly 'Labour Information Service', Monthly.

Rashtriya Mill Mazdoor Sangh: Mazdoor Manzil, G. D. Ambekar Marg, Parel, Bombay 400012.

Established : By late G. D. Ambekar on 19-5-1940.

Total Membership : 130,000.

Present Office-bearers :

President : V. R. Hoshing ; *Vice-Presidents :* V. B. Arolkar, M. P. Thorat, S. M. Jadhav, Shivaji Anant Kadam, Laxman Ramu Nikam, Shrinath Bachanu Yadav, Parvatibai Dattaram Pawar ; *General Secretary :* A. T. Bhosale ; *Treasurer :* Miss E. D'Souza.

Trade Unions, International Confederation of Free (Asian Regional Organisation) : (ICFTU-ARO), P-20, Green Park Extn., New Delhi 110016. Affiliating twenty-nine trade union organisations from eighteen Asian countries with more than twenty-two million members.

United Trades Union Congress : 249. Bepin Behari Ganguly St., Calcutta 700012.

Established : By late Mrinal Kanti Bose, late K. T. Shah and Jatin Chakravorty in the year 1949.

Regional Offices : 780, Ballimaran, Delhi-110011 ; 11, McLean Street, Madras-600001 ; 119/75, Darshanpurwa, Kanpur-208012 ; Cantonment, Quilon ; Jakkanpur New Area, Patna-800001 ; 5th Rd., Santa Cruz East. Bombay-400055.

Total Membership : 417,461.

Number of Affiliated Unions : 540.

Present Office-bearers :

President : N. Srikantan Nair : *Vice-Presidents :* Tridib Chaudhury. Jayaram Shetty. S. V. R. Acharia and Thakur Mukund Singh Vaid ; *General Secretary :* Jatin Chakravorty.

TIME DIFFERENCE

THE following table gives the time in the various important cities of the world when it is 5·30 p.m. in India. The calculations are based on Greenwich time i.e. when it is 12 noon at Greenwich, England, it is 5·30 p.m. in India.

Accra, Ghana	12 Noon
Adelaide, Australia	9·30 p.m.
Algiers	1·00 p.m.
Amsterdam, Netherlands	1·00 p.m.
Ankara, Turkey	2·00 p.m.
Athens, Greece	2·00 p.m.
Baghdad, Iraq	3·00 p.m.
Baltimore, U.S.A.	7·00 a.m.
Bangkok, Thailand	7·00 p.m.
Belgrade, Yugoslavia	1·00 p.m.
Berlin, Germany	1·00 p.m.
Berne, Switzerland	1·00 p.m.
Boston, U.S.A.	7·00 a.m.
Brisbane, Australia	10·00 p.m.
Brussels, Belgium	1·00 p.m.
Budapest, Hungary	1·00 p.m.
Buenos Aires, Argentina	9·00 a.m.
Cairo, Egypt	2·00 p.m.
Calgary, Canada	5·00 a.m.
Canberra, Australia	10·00 p.m.
Cape Town, South Africa	2·00 p.m.
Chicago, U.S.A.	6·00 a.m.
Colombo, Ceylon	5·30 p.m.
Copenhagen, Denmark	1·00 p.m.
Darwin, Australia	9·30 p.m.
Detroit, U.S.A.	7·00 a.m.
Dublin, Ireland	12 Noon
Freetown, Sierra Leone	12 Noon
Gibraltar	1·00 p.m.
Halifax, Nova Scotia	8·00 a.m.
Hamilton, Bermuda	8·00 a.m.
Havana, Cuba	7·00 a.m.
Helsinki, Finland	2·00 p.m.
Hong Kong	8·00 p.m.
Honolulu, Hawaii	2·00 a.m.
Jerusalem, Israel	2·00 p.m.
Johannesburg, S. Africa	2·00 p.m.
Karachi, Pakistan	5·00 p.m.
Kingston, Jamaica	7·00 a.m.
Kuala Lumpur, Malaysia	7·30 p.m.
Lagos, Nigeria	1·00 p.m.
Leningrad, U.S.S.R.	3·00 p.m.
Lima, Peru	7·00 a.m.
Lisbon, Portugal	12 Noon
London	12 Noon
Los Angeles, U.S.A.	4·00 a.m.
Luxembourg	1·00 p.m.
Madrid, Spain	1·00 p.m.
Mandalay, Burma	6·30 p.m.
Melbourne, Australia	10·00 p.m.
Mexico City	6·00 a.m.
Montevideo, Uruguay	9·00 a.m.
Montreal, Canada	7·00 a.m.
Moscow, U.S.S.R.	3·00 p.m.
Nairobi, Kenya	3·00 p.m.
New York	7·00 a.m.
Nicosia, Cyprus	2·00 p.m.
Oslo, Norway	1·00 p.m.
Ottawa, Canada	7·00 a.m.
Panama	7·00 a.m.
Paris	1·00 p.m.
Peking, China	8·00 p.m.
Perth, Australia	8·00 p.m.
Port of Spain, Trinidad	8·00 a.m.
Prague, Czechoslovakia	1·00 p.m.
Quebec, Canada	7·00 a.m.
Quito, Ecuador	7·00 a.m.
Reykjavik, Iceland	11·00 a.m.
Rio de Janeiro	9·00 a.m.
Rome	1·00 p.m.
St. John's, Newfoundland	8·30 a.m.
Salisbury, Southern Rhodesia	2·00 p.m.
San Francisco, U.S.A.	4·00 a.m.
Santiago, Chile	8·00 a.m.
Seoul, Korea	8·30 p.m.
Singapore	7·30 p.m.
Stalingrad, U.S.S.R.	4·00 p.m.
Stockholm, Sweden	1·00 p.m.
Sofia, Bulgaria	2·00 p.m.
Suva, Fiji	12 Midnight
Sydney, Australia	10·00 p.m.
Teheran, Iran	3·30 p.m.
Tirana, Albania	1·00 p.m.
Tokyo, Japan	9·00 p.m.
Toronto, Canada	7·00 a.m.
Vancouver, Canada	4·00 a.m.
Vienna, Austria	1·00 p.m.
Warsaw, Poland	1·00 p.m.
Wellington, New Zealand	12 Midnight
Winnipeg, Canada	6·00 a.m.

AWARDS AND PRIZES

THE Republic Day Awards, discontinued since 1978, were re-instituted on January 26, 1980. The award winners of 1981 were as follows :

Bharat Ratna : Not awarded.

Padma Vibhushan : Ravi Shankar (maestro), Dr. Satish Dhawan (space scientist).

Padma Bhushan: (For distinguished service of high order) A. P. Jinalbuden Abdul Kalam (Engineer, Space Centre, Trivandrum), Mrinal Sen (Film Director, Calcutta), Dr. M. K. Vainu Bappu (Optical Astronomer, Kodaikanal Observatory), Dr. Prafulla B. Desai (Cancer Specialist, Maharashtra), Amrit Lal Nagar (Hindi Writer), Gopinath Mohanty (Novelist of Orissa), Prabhat Kumar Mukherjee (Historian, Viswa Bharati), Mrs. Avabai Bomanji Wadia, (Social worker), Mrs. Mekhala Jha (wife of L.K. Jha, former Governor of Kashmir).

Padma Shri: Abid Ali Khan (Journalist, Hyderabad), Mrs. Ao Chubalema (Social worker, Nagaland), Bahukodi Venkataraman Karanth (Music Director, Karnataka), Mrs. Bakulaben M. Patel (St. John's Ambulance Association, Ahmedabad), Dr. (Mrs.) Clare M. J. Vellut (Social worker in leprosy, Tamil Nadu), Dasrath Patel (Designer, Ahmedabad) , Dr. Dhanwant Singh (eye surgeon, Rajindra Hospital, Patiala), Dinkar Gangadhar Kelkar (Musicologist, Pune), Capt. Fakir Mohammed Juvale (Nautical trainer, Bombay), Gambir Singh Mura (Adivasi folk dancer, West Bengal), Dr. Gurcharan Singh Kalkat (Agricultural scientist, Washington, U.S.), Dr. H. K. Jain (Director, Indian Agricultural Research Institute, New Delhi), Dr. Jasbir Singh Bajaj (Professor of Medicine, All India Institute of Medical Science, New Delhi), Kanwar Singh Negi (pioneer in Gurumukhi literature for the blind, Dehra Dun), Dr. Krishna Datta Bharadwaj

(Sanskrit Scholar, New Delhi), Namagirinellai K. Krishnan (Nadaswara Vidwan, Tamil Nadu), Dr. K. V. Thiruvengadam (physician, Tamil Nadu), Dr. Madhav Dhananjaya Gadgil (Environmentalist, Bangalore), Bhagat Puran Singh (leprosy worker, Punjab), Dr. P. K. Sethi (Orthopaedist, Jaipur), Prof. Ram. P. Panjwani (Sindhi poet and author, Maharashtra), Sayed Haider Raza (Painter, Paris), Padma Subramaniyam (Dancer, Bharat Natyam, Tamil Nadu), Mrs. Sita Devi (Painter, Madhubani, Bihar), Sita Ram Pal (Blanket Weaver and sheep breeder, Ghazipur, U.P.), Sunderlal Bahuguna (a pioneer of chipko movement, Tehri Garhwal, U.P.), Vasudevan Bhaskaran (hockey player, Tamil Nadu) and Dr. Vishwanath Hari Salasar (Medico-social worker, Maharashtra).

DEFENCE AWARDS :

Param Vishist Seva Medal : Lt. Gen. Adi Meherji Sethna, Lt. Gen. Harish Chandra Dutta, Lt. Gen. Surindar Nath Sharma, Lt. Gen. Tirath Singh Oberoi, Lt. Gen. Amar Singh, Vice-Admiral Melville Raymond Schunker, Vice-Admiral Oscar Stanley Dawson, Air Marshal Saroj Jena, Air Marshal Hement Ramkrishna Chitnis (retd.), Air Marshal Trilochan Singh Brar, Maj. Gen. Som Nath Bhaskar (retd.), Maj. Gen. Baljit Kumar Mehta, Maj. Gen. Samir Chandra Sinha, Maj. Gen. (Miss) Pullode Kulathingal Lakshmikutty, Maj. Gen. Prikshat Raj Puri, Maj. Gen. Ram Chandra Vinayak Apte (retd.) and Air Vice Marshal Mulk Raj.

Kirti Chakra : Pioneer Ram Ahir (G. 105386), Village guard, Pukhu Khemmungan (5240), Nagaland, Village guard, Teangu Khemnungan (7169) (posthumous), Nagaland, Parshottam Dass (13729380), J. and K. Rifles (posthumous), Flt. Lt. Anil Kumar Mathur (13591) F(P).

Ati Vishisht Seva Medal : Maj. Gen. Lakshmna Singh Rawat, Maj. Gen. Shikarpur Nediga Manohar, EME, Air Vice-Marshal Mangalvedkar Jivanrao Vittal, AE(M), Brig. Kunwar Devendra Singh Katoch, Brig. Tripat Sing, EME, Brig. Sunder Lal Dhawan, Brig. Subramaniam Krishnamurthy, Brig. Dharmaraj Thamboo, Brig. Adi Gustadji Minwalla, Brig. Rathan Sabapathy Soma Sundaram, Engineers, Brig. Mahavir Singh, Brig. Francis Tiburtius Dias, Brig. Mahendra Singh Gosain, Brig. Rajinder Singh ; Brig. Gorakh Nath, Brig. Tilak Raj Malhotra (retd.), Brig. Naruthur Kumaran Menon (retd.), Commodore Chaman Lal Sachdeva, Commodore Hari Mohan Lal Saxena, Commodore Narindra Nath Anand, Surgeon Commodore Jai Krishan Suchdeva, Air Commodore Ram Lal Bhalla, Air Commodore Birman Kantha Mukherjee, Air Commodore Madan Lal Sethi, Air Commodore Denzil Edward Satur (retd.), Air Commodore Dilip Shankar Jog., Col. Jaswinder Singh, Col. Ravi Kumar Nanda, Col. Durjan Singh Shekhawat, Col. Raj Kumar, Col. Virender Singh Bajwa, Col. Vir Karan Chawla, Col. William Hector Grant (retd.), Col. Raj Chatterji (retd.), Gp. Capt. Mukund Chatterjee (retd.), Gp. Capt. Annaswami Sridharan.

Bar to Ati Vishisht Seva Medal : Brig. Vikram Singh Kanwar.

Shaurya Chakra : B. K. Sridhar Rao, BSF, Capt. Harsh Kaul, Maj. Gur Iqbal Singh Dhodi, Mt. Driver Kuppaswamy Ramaswamy, GREF, Driver Mechanical Equipment, Prem Chand, GREF, Pioneer Prem Singh, GREF, Sqn. Ldr. Ranbir Singh Chauhan, Mt. Driver Modi Lal Singh, GREF, Sepoy Pranay Kumar Bala, ASC, Pioneer Chinna Raju, GREF, Naib Subedar Bachan Singh, Garhwal Rifles, Lance Havildar Ayal Singh, Garhwal Rifles, Flt. Lt. Chandrashekhar Jayawant, Capt. Rahuvinder Kapoor, Flying Officer Pramod Kumar Jain, Flying Officer Rahul Dhar, Sergeant Sher Singh Kadian, Radar fitter, Chargeman Karnai Singh, GREF. Lance Naik Giri Bahadur Ghart, 5 Gorkha Rifles (FF), Naib Subedar Sawal Singh, Raj Rifles (posthumous), Mate Kedar Singh (posthumous), Mt. Driver Ram Singh, GREF, Sepoy Ranjodh Singh, Punjab, Flt. Lt. Sumit Mukherji, Village Guard Tanghiu Khemnungan, Nagaland, Village Guard Tsangsoi Khemnungan, Nagaland, Maj. Vijay Singh, Rifleman Krishna Bahadur Rana, 8, Gorkha Rifles, Naik Surender Singh, Dogra, Sepoy Halka Ram Dogra, GONYA Assistant Engineer (Civil) Sukumaran Hari, GREF, Sub-Overseer Anapparackal Thomass Varughese, GREF, Lance Naik Matgam Nokte, Assam, Flt. Lt. Jayaraman Lakshmi Narayanan, Mangi Lal Kathat, Flt. Lt. Rajdeep Singh Mann.

In addition to the above, 36 Sena Medals, one Bar to Sena Medal, six Nao Sena Medals and five Vayu Sena Medals have been awarded to Armed Forces personnel for distinguished gallantry services.

ARJUNA AWARDS (1979-80)

The awards were announced on the recommendation of the All India Council of Sports. *Winning Sportsmen :* Ramaswami Gnanasekharan (*Athletics*) ; Om Prakash (*Basket Ball*) ; Bakshish Singh (*Boxing*) ; Sunil Kumar Patra (*Body building*) ; Kapil Dev Nikhanj (*Cricket*) ; Prasun Banerjee (*Football*) ; Vasudevan Bhaskaran (*Hockey*) ; Rekha Mundphan (*Hockey—Women*) ; R. K. Manchanda (*Squash*) ; Indu Puri (*Table-tennis*) ; and Suresh Kumar Mishra (*Volleyball*).

ISA-KHATAU GOLD MEDAL

Instituted in 1958 by a past Chairman of Indian Society of Advertisers (ISA), Bombay, Mr. Dharamsey M. Khatau, an eminent industrialist. The medal is the highest recognition of lasting contribution to Indian advertising by an individual or company. During 1978 the *medal* was conferred on P. N. Sarma (posthumously). No medal was given during 1979. The award for 1980 was given to K. Kurian (Chief Executive of Radeus Advtg.) for his excellent work as a practitioner, teacher and commentator of advertising.

BAJAJ AWARDS (1980): Cash Award of Rs. 100,000 each to Gandhiniketan Ashram, Kallupatti, Madurai ; Dr. Anil Sadgopal, founder-leader of Kishore Bharati in Hoshangabad, M.P. for pioneering research on the application of science and technology for rural development ; and Rs. 100,000 was given to be shared equally by Mrs. Jaishreeben Raija (Freedom fighter, Bombay) and Mrs. Kamalbai Hospet (Matra Seva Sangh), Nagpur.

BHATNAGAR AWARD (1980): The award for physical sciences was shared by Prof. N. Mukunda, Indian Institute of Science, Bangalore and Dr. N. S. Satyamurthy, Bhabha Atomic Research Centre, Bombay.

The other winners were : Prof. Asis Datta of Jawaharlal Nehru University in Delhi and Dr. J. B. Singh of Kumaun University, Nainital (biological sciences) ; Dr. V. S. Arunachalam of the Defence Metallurgical Research Laboratory, Hyderabad (engineering sciences) ; Dr. P. R. Adiga and Prof. T. Desiraju of the Indian Institute of Mental Health and Neuro Sciences, Bangalore (medical sciences) ; Prof. R. Sridharan of the Tata Institute of Fundamental Research, Bombay (mathematical sciences) ; and Dr. J. G. Negi of the National Geophysical Research Institute, Hyderabad, and Prof. B. K. Sahu of the Indian Institute of Technology, Bombay (earth sciences).

No award has been given in chemical sciences.

RASHTRA BHUSHAN: The title was instituted by the Fuel Instrument Engineers Foundation, Ichalkaranji. Jayaprakash Narayan was conferred the title " Rashtra

Bhushan" with a cash award of Rs. 100,000 on May 17, 1977.

The winners for 1980 : Baba Amte (Social worker) and Lata Mangeshkar (Singer).

LALIT KALA AKADEMI AWARD (1980) : Karl Jamshed Khandalavala (Chairman, Prince of Wales Museum, Western India) and Prof. Vasant Raghunath Amberkar (Art Critic, Fine Arts College, Baroda) were honoured with the fellowship of the Lalit Kala Akademi.

SAHITYA AKADEMI AWARDS (1979 and 1980)

The akademi has recognised 22 languages (including English) for consideration of awards.

1979 :

The Hindi writer Jainendra Kumar was awarded the fellowship of the Akademi.

Following are the names of award winning books and authors in different languages :

Sonali Jahaj (Poetry), Bhaben Baruah, (*Assamese*) ; Aranyer Adhikar (Novel), Mahasweta Devi, (*Bengali*) ; Nanga Rukh (Novel), O. P. Sharma 'Sarthi', (*Dogri*) ; Inside the Havali (Novel), Rama Mehta (the late), (*English*) ; Vamal Na Van, Jagdish Joshi (the late), (*Gujarati*) ; Kal Sunana Mujhe (Poetry), Dhoomil (the late), (*Hindi*) ; Chitragalu Patragalu (Lit. Portraits), A. N. Moorthy Rao, (*Kannada*) ; Partavistan (Poetry), Marghoob Banihali, (*Kashmiri*) ; Dorya Gazota (Poetry), R. V. Pandit, (*Konkani*) ; Krishna-Charit (Poetry), Tantranath Jha, (*Maithili*) ; Vallatholinte Kavyasilpam (Lit. Criticism), N. V. Krishna Warrior, (*Malayalam*) ; Boro Saheb Ongbi Sanatombi (Novel), M. K. Binodini Devi, (*Manipuri*) ; Srishti, Saundarya Ani Sahityamulya (Lit. Criticism), Saratchandra Muktibodh, (*Marathi*) ; Maulo (Essays), Guman Singh Chamling, (*Nepali*) ; Mo Kahani (Autobiography), Kunjabihari Das (*Oriya*) ; Karuna Di Chho Ton Magron (Poetry), Jaswant Singh Naki, (*Punjabi*) ; Paagi (Poetry), Chandra Prakash Dewal, (*Rajasthani*) ; Keralodayah (Poetry), K. N. Ezhuthachan, (*Sanskrit*) ; Pal Pal Jo Parlao (Poetry), Hari Dilgir, (*Sindhi*) ; Sakthi-Vaithiyam (Short Stories), T. Janakiraman, (*Tamil*) ; Janapriya Ramayanam (Poetry), P. Narayanacharya, (*Telugu*) ; Nawa-e-Wara (Poetry), Ghulam Rabbani Tahan, (*Urdu*).

1980 :

Following are the names of authors and award winning books in different languages:

Jogesh Das, Prithibit Asukh (Short Stories), (*Assamese*); Samresh Basu, Shamba (Novel), (*Bengali*) ; Kumar Vijogi, Ghar (Poetry), (*Dogri*) ; K. R. Srinivasa Iyengar, On the Mother, Vol. I & II (Biography), (*English*) ; Jayat Pathak, Anunaya (Poetry), (*Gujarati*) ; Krishna Sohti, Jindaginama Jinda Rukh (Novel), (*Hindi*) ; Goruru Ramaswamy Iyengar, Americadalli Goruru (Travelogue), (*Kannada*) ; Manohar Sardesai, Pisollim (Poetry), (*Konkani*) ; Sudhanshu 'Shekhar' Choudhary, Ed Bataha Sansar (Novel), (*Maithili*) ; Punathil Kunjabdulla, Smaraka Silakal (Novel), (*Malayalam*) ; Mangesh Padgaonkar, Salam (Poetry), (*Marathi*) ; Okiyama Gwyne, Sunakhari, (Novel), (*Nepali*) ; Ananta Patnaik, Abantar (Poetry), (*Oriya*) ; Sukhpal Vir Singh, Suraj Te Kehkashan (Poetry), (*Punjabi*) ; Rameshwar Dayal Shrimali, Mharo Gaon (Poetry), (*Rajasthani*) ; P. C. Devassia, Kristubhagavatam (epic), (*Sanskrit*) ; Krishin Khatwani, Yad Hik Pyar Ji (Novel), (*Sindhi*) ; Kannadasan, Cheraman Kadali, (Novel), (*Tamil*) ; A. K. Ansari, Iqbal Ki Terah Nasmen (Literary Criticism), (*Urdu*).

SANGEET NATAK AKADEMI AWARDS (1980)

The musicologist, Dr. V. K. Narayana Menon, was elected fellow of the Akademi, for his eminence in the field of the performing arts and his contribution to their enrichment.

The recipients of Akademi awards were :

Music: Nivrittibua Sarnaik: Hindustani vocal ; Vishnu Govind Jog : Hindustani Instrumental (Violin) ; Seerkhazhi S. Govindarajan : Karnatak vocal ; Tanjavur K. P. Sivanandam : Karnatak Instrumental (Veena) ; Balappa Veerabhadrappa Hukkeri : Folk Music (ballad singing).

Dance: Leishangthem Thouranishabi Devi : Manipuri ; Raseshwar Saikia Bayan Moktar : Satriya ; R. K. Priyagopal Sana : Choreography ; Sheikh Gulab : Choreography (tribal dance).

Theatre: Rudraprasad Sengupta : Direction ; Narasinga Rao Parwathavadi : Playwriting (Kannada) ; Dina Pathak: Action ; G. Swaminathan : Bhagavatamela ; Chimanlal Amtharam Naik : Bhavai ; Raghunath Satapathy : Prahlada Nataka ; Fida Bai Markam : Nacha ; and K. L. Krishnan Kutty Pulavar : Thoi Pava Koothu.

BORLAUG AWARD (1980):

The award has been instituted by Coromandal Fertiliser Limited in honour of Dr. Norman Borlaug, Nobel laureate. The award consists of a gold medal and cash prize of Rs. 10,000.

Dr. Biswajit Choudhury, head of the Division of Vegetables and Floriculture, Indian Agricultural Research Institute, New Delhi, has been chosen for the award for his outstanding service to agriculture.

NEHRU AWARDS

Literacy : 1968 — Dr. (Mrs.) W. H. Fisher ; 1969 — Mrs. Kulsum Sayani ; 1971 — Mrs. Durgabai Deshmukh ; 1972 — Satyen Mitra ; 1974 — T. S. Avinashilingam Chettiar ; 1975 — Dr. Mohansingh Mehta ; 1976 — Dr. T. A. Koshy ; 1977 — A. R. Deshpande ; 1978 — G. K. Gaokar ; 1979 — Mrs. Krishna Aggarwal ; 1980 — Janardan Rai Nagar.

International Understanding : 1965 — U. Thant (Burma) ; 1966 — Martin Luther King (U.S.) ; 1967 — Khan Abdul Gaffar Khan (Afghanistan) ; 1968 — Yehudi Menuhin (U.S.) ; 1969 — Mother Teresa (India) ; 1970 — Dr. Kenneth Kaunda (Zambia) ; 1971 — President Josip Broz Tito (Yugoslavia) ; 1972 — Andre Malraux (France) ; 1973 — President Julius K. Nyerere (Tanzania) ; 1974 — Dr. Raul Prebison (Argentina) ; 1975 — Dr. Jonas Salk (U.S.) ; 1976 — Dr. Guiseppe Tucci (Italy) ; 1977 — Tulsi Meharji Shreshtha (Nepal) ; 1978 — Nichidatsu Fujii (Japan) ; 1979 — Nelson R. Mandela (South Africa) ; 1980 — Barbara Ward (British Economist).

HARI OM ASHRAM ALEMBIC RESEARCH AWARDS

Twenty-nine eminent researchers and medical teachers were awarded each Rs. 5,000 in cash and a medal. The winners were :

Basic research in medical sciences : Dr. Sarada Subramaniam (Madras), Prof. Maharani Chakravorty (Varanasi), Dr. V. M. Sivaramakrishnan (Madras), and Dr. N. C. Nayak (New Delhi) ; *Applied Research at field level* — Dr. R. K. Sanyal (Delhi), Dr. P. M. Dalal (Bombay) and Dr. R. J. Dash (Chandigarh) ; *Applied Research at institutional level :* Artificial Limb Centre (Armed Forces), Pune.

DR. B. C. ROY NATIONAL AWARDS

Dr. M. N. Ghosh (Pondicherry), Dr. P. S. Gupta (New Delhi), Dr. (Mrs.) Nirmala Bhailalbhai Swami (Baroda), Dr. R. S. Dayal (Agra), Dr. S. Kameswaran (Madras), Prof. H. D. Tandon (AIIMS — New Delhi), Prof. Indira Bhargava (New Delhi), Dr. H. B. Maheshwari (New Delhi), Dr. D. P. Burma (Varanasi), Dr. S. K. Kacker (New Delhi), Dr. P. N. Tandon (New Delhi), Dr. R. D. Ganatra (Bombay), Dr. R. K. Gandhi (Bombay), Dr. R. N. Chakravarti (Chandigarh), Dr. K. S. Chugh (Chandigarh), Dr. Murari Mohan Mukherjee (Calcutta), Prof. Shridhar Sharma (Panaji), Dr. (Capt.) A. B. Das (Calicut), Dr. T. V. Sivanandam (Coimbatore), Dr. Dinabandhu Banerjee (Howrah) and Dr. P. K. Dutta (Dhanbad).

KALINGA PRIZES

The prize named after the ancient Indian empire of that name, was offered as a Gift to the United Nations Education, Scientific & Cultural Organisation (UNESCO) by an Indian Industrialist Mr. Biju Patnaik of Orissa. The prize carries one thousand pounds sterling in cash. It was started in 1952.

1952 :— Prince Louis de Broglie, Professor of Physics, University of Paris (France) ; 1953 :— Dr. Julian Huxley, F.R.C.S. (U.K.) ; 1954 :— Waldemar Kaempffert, Science Editor of the "New York Times" (U.S.) ; 1955 :— Dr. August P. Sunner, Head of Physiology Dept., University of Caracas (Venezuela) ; 1956 :—Prof. George Gamond, University of Colorado (U.S.) ; 1957 :—Bertrand Russel (U.K.) ; 1958 :—Karl Von Frisch, German Scientist (Germany & Austria) ; 1959 :—Jean Rostand, French Scientist (France) ; 1960 :—Ritchi Calder (U.K.) ; 1961 :— Arthur C. Clarke, President, Ceylon Astronomical Association ; 1962 :—Gerard Piel, American Science writer ; 1963 :—Jagjit Singh (India) ; 1964 :—Dr. R. Warren Weaver (U.S.) ; 1965 :—Dr. Eugene Robinowitch (France); 1966 :—Paul Couderc, Astronomer & Writer (France) ; 1967 :—Prof. Fred Hoyle (U.K.) ; 1968 :—Sir Gavin de Beer (U.K.) ; 1970 :—Miss Margaret Mead (U.S.) ; 1971 :— Prof. Pierre Auger (France) ; 1973 :—Dr. Philip Ableson (U.S.) and Nigel Calder (U.K.) ; 1974 :—Dr. Luis Estrada Martinex (Mexico) ; 1976 :—Alexander Oparin (Soviet Union) ; Sir George Porter (U.K.).

JNANPITH AWARDS

1965 :—Mahakavi Sankara Kurup — "Odakuzhal".

1966 :—Tara Shanker Bannerjee — "Ganadevata".

1967 :—Dr. K. V. Puttappa—"Ramayana Darshanam"; Uma Shanker Joshi — "Nisheeth".

1968 :—Sumitranandan Pant — "Chidambaram".

1969 :—Raghupati Sahai Firaq — "Gul-e-Naghma".

1970 :—Dr. Vishwanatha Satyanarayana — "Ramayana Kalpavrikshanu".

1971 :—Bishnu Dey — "Smriti Satta Bhavishyat".

1972 :—Ramdhari Singh Dinkar — "Urvashi".

1973 :—Dr. Dattatreya Ramchandra Bendre — "Naku Tanthi"; Gopinath Mahanty — "Mati Matal".

1974 :—Vishnu Sakharam Khandekar — "Yayati".

1975 :—P. V. Akilandam — "Chittirappavai".

1976 :—Mrs. Ashapurna Devi—"Prathama Pratishruti".

1977 :—Dr. K. Shivarama Karanth — "Mukajjiya Kanasugalu".

1978 :—S. H. Vatsyayan — "Kitni Navon Men Kitni Bar".

1979 :—Birendra Kumar Bhattacharya—Mrityanjaya.

1980 :—S. K. Pottekkat—"Oru Desathinte Katha".

"Gopal Ratna" Award is awarded for outstanding performances and results in the fields of milk production. This award is given by the Ministry of Agriculture, Government of India.

The names of persons & institutions given below have been awarded the "*Gopal Ratna*" Award since its inception.

Agricultural Institute, Anand, Gujarat (1956-57); Ashram Gaushala, Urlikanchan, Maharashtra (1961-62); Satguru Hari Singh, Cattle Breeding Farm, Jivannagar, Hissar (1962-63) ; Adarsh Dugdhalaya, Malad, Bombay, Maharashtra (1970-71) ; Nasik Panchvati Pinjrapole, Nasik, Maharashtra (1971-72) ; Ajitbhai Karshanbhai Bhayani, Kalsari, Gujarat (1973-74) ; Nasik Panchvati Pinjrapole, Nasik, Maharashtra (1974-75) ; Harilal Chhaganlal Patel, Dhoraji, Gujarat (1975-76) ; Ghanshyambhai Vyas, Adhyaksha, Bhuvaneshwari Peeth Gaushala, Gondal, Gujarat (1976-77).

DANWANTARI AWARD

Dr. B. N. Purandare, renowned gynaecologist, Bombay was awarded the coveted "Dhanvantari award" for 1980 for his outstanding contribution to medical science.

NATIONAL FILM AWARDS

1979 :

Lotus Awards

The National Film Awards Scheme was reconstituted during 1975. "Lotus Awards" have replaced the earlier President's medals. The awards consist of Swaran Kamal (Gold Lotus), Rajat Kamal (Silver Lotus) and the Bronze Lotus. While the first two are for different categories of films, the Bronze Lotus is given to the leading actor and actress of the award winning films.

Best Feature Film : Shodh (Hindi) by Sitakant Misra, Directed by Bilab Ray Chaudhary.

Best Feature Film with mass appeal, wholesome entertainment and aesthetic value : Sankarabharanam (Telugu).

Film having National integration as its theme : '22 June, 1897' — Marathi.

Hindi : 'Sparsh' by Basu Bhattacharya and Directed by Sai Paranjpye.

Language-wise : *Assamese :* No award ; *Bengali :* 'Ek Din Prati Din' ; *English :* No award ; *Gujarati :* No award ; *Kannada :* 'Arivu' — Silver lotus ; *Kashmiri :* No award ; *Malayalam :* 'Peruvazhiambalam' — Silver lotus ; *Manipuri :* Olangthagu Wangmadasoo' — Silver lotus ; *Marathi :* 'Simhasan' — Silver lotus ; *Oriya :* 'Sri Krishna Rasa Lila' — Silver lotus ; *Punjabi :* No award ; *Sindhi :* No award ; *Tamil :* 'Pasi' — Silver lotus ; *Telugu ;* 'Nagnasathyam' — silver lotus ; *Best Children Film ;* 'Dangeyeddu Makkalu' — Kannada — silver lotus ; *Best Director :* Mrinal Sen 'Ek Din Prati Din' — (Bengali) — Silver lotus ; *Best Screenplay Award :* Sai Paranjpye 'Sparsh' ; *Best Actor :* Nasseruddin Shah 'Sparsh' ; *Best Actress :* Shobha in 'Pasi', (Tamil) ; *Best Child Star :* Geeta Khanna 'Aangan Ki Kali' ; *Best Cinematography* (black and white) : Kamal Nayek, 'Neem Annapurna' — Bengali ; *Best Cinematography* (Colour) : Rajan Kinagi 'Shodh' — Hindi ; *Best Editing :* Gangadhar Naskar 'Ek Din Prati Din' — Bengali ; *Best Music Direction :* K. V. Mahadevan, 'Sankarabharanam' — Telugu ; *Best Male Playback Singer :* S. P. Balasubramanyam, 'Sankarabharanam' — Telugu ; *Best Female Playback Singer :* Vani Jayaram, 'Sankarabharanam' — Telugu.

Short Film Awards : 'The Kalbellas — Nomads of Rajasthan' (English), Producer: Tejbir Singh, Director: Valmik Tapar; *Best Educational/Instructional Film:* 'A Matter of Life and Death'; *Best Promotional Film:* 'Story of Independence', Produced and Directed by: Lintas India and Film Media; *Best Experimental Film:* 'Child on a Chess Board' by the Films Division, produced by Vijay Chandra; *Best Newsreel Cameraman:* H. S. Advani; *Special Commendation:* 1. 'Acharya Kripalani' (English) by Films Division and directed by Girish Vaidya. 2. 'A Monument to Friendship, by Films Division and directed by P. N. Kaul.

1980 :

Best Feature Film: 'Aakaler Sandhane' (Bengali), Produced by Dhiresh Kumar Chakraborty was awarded Golden Lotus and a cash prize of Rs. 50,000.

Second Best Feature Film: 'Oppol' (Malayalam), Producer Rosamma George and Director K. S. Sethumadhavan were awarded Silver Lotus and cash prizes of Rs. 30,000 and Rs. 15,000 respectively.

Best Feature Film on National Integration: 'Bhavni Bhavai', Gujarati, Produced by Sanchar Film Co-op. Society Ltd. The producer was awarded 'Silver Lotus' and cash prize of Rs. 15,000; *Best Hindi Feature Film:* 'Aakrosh' directed by Govind Nihalani.

Language-wise: *Assamese:* 'Anirban'; *Bengali:* 'Hirak Rajar Deshe'; *English:* No award; *Kannada:* No award; *Kashmiri:* No award; *Malayalam:* 'Yagam'; *Manipuri:* No award; *Marathi:* No award; *Oriya:* No award; *Punjabi:* 'Chann Pardesee'; *Sindhi:* No award; *Tamil:* 'Menjatha Killathe'; *Telugu:* 'Hari Surendra'.

Best Actor: Balan K. Nair (Oppol); *Best Child Actor:* Aravind (Oppol); *Best Female Playback Singer:* S. Janaki (Oppol); *Best Actress:* Smita Patil (Chakra), Hindi; *Short Film Awards: Best Information Film* (Documentary) Dadil; *Best Promotional Film for Visual Excitement:* Oil Offshore — English.

Best Book on Cinema: 'Chal Chitra, Samaj O. Satyajit Ray', written by Amitabha Chattopadhyaya.

PHALKE AWARDS

In 1969, the centenary year of Dada Saheb Phalke, father of the Indian cinema, a special award named after him was created by the Ministry of Information and Broadcasting to be given in recognition of his outstanding service to Indian cinema which consisted of Rs. 20,000 (now increased to Rs. 40,000), a gold lotus and a shawl.

Devika Rani was the first recipient of the Phalke Award in 1969. The other recipients were: B. N. Sircar, 1970; Prithviraj Kapoor (Posthumous), 1971; Pankaj Mullick, 1972; Ruby Myers (Sulochana), 1973; B. N. Reddy, 1974; Dhiren Ganguli, 1975; Kanan Devi, 1976; Nitin Bose, 1977; Rai Chand Boral, 1978; Janakee of Madhu Movies, 1979; P. Jairaj (Film actor of Andhra Pradesh), 1980.

FILMFARE AWARDS

Best Picture : Do Bigha Zamin (Bimal Roy), 1953; Boot Polish (Raj Kapoor), 1954; Jagriti (S. Mukerji), 1955; Jhanak Jhanak Payal Baaje (V. Shantaram), 1956; Mother India (Mehboob), 1957; Madhumati (Bimal Roy), 1958; Sujata (Bimal Roy), 1959; Mughal-e-Azam (K. Asif), 1960; Jis Desh Men Ganga Behti Hai (Raj Kapoor), 1961; Sahib Bibi Aur Ghulam (Guru Dutt), 1962; Bandini (Bimal Roy), 1963; Dosti (Tarachand Barjatya), 1964; Himalay Ki Godmein (Shankerbhai J. Bhatt), 1965; Guide (Dev Anand), 1966; Upkar (Vishal Pictures), 1967; Brahmachari (G. P. Sippy), 1968; Aradhana (Shakti Samanta), 1969; Khilona, 1970; Anand (Hrishikesh Mukherji and N. C. Sippy), 1971; Be-imaan (Sohanlal Kanwar), 1972; Anuraag (Shakti Samanta), 1973; Rajnigandha (Basu Chatterji), 1974; Deewaar (Gulshan Rai), 1975; Mausam (Mallikarjun Rao), 1976; Bhumika (Lalit M. Bijlani & Freni M. Variava), 1977; Main Tulsi Tere Aangan Ki (Raj Khosla), 1978; Junoon (Shashi Kapoor), 1979; Khubsoorat (N. C. Sippy & Mukherjee), 1980.

Best Director : Bimal Roy (Do Bigha Zamin), 1953; Bimal Roy (Parineeta), 1954; Bimal Roy (Biraj Bahu), 1955; V. Shantaram (Jhanak Jhanak Payal Baaje), 1956; Mehboob (Mother India), 1957; Bimal Roy (Madhumati), 1958; Bimal Roy (Sujata), 1959; Bimal Roy (Parakh), 1960; B. R. Chopra (Kanoon), 1961; Abrar Alvi (Sahib Bibi Aur Gulam), 1962; Bimal Roy (Bandini), 1963; Raj Kapoor (Sangam), 1964; Yash Chopra (Waqt), 1965; Vijay Anand (Guide), 1966; Manoj Kumar (Upkar), 1967; Ramanand Sagar (Ankhen), 1968; Yash Chopra (Ittefaq), 1969; Asit Sen (Safar), 1970; Raj Kapoor (Mera Naam Joker), 1971; Sohanlal Kanwar (Be-imaan), 1972; Yash Chopra (Daag), 1973; Manoj Kumar (Roti, Kapada aur Makaan), 1974; Yash Chopra (Deewaar), 1975; Gulzar (Mausam), 1976; Basu Chatterji (Swami), 1977; Satyajit Ray (Shatranj ke Khilari), 1978; Shyam Benegal (Junoon), 1979; Govind Nihalani (Aakrosh), 1980.

Best Actor : Dilip Kumar (Daag), 1953; Bharat Bhooshan (Shri Chaitanya Mahaprabhu), 1954; Dilip Kumar (Azaad), 1955; Dilip Kumar (Devdas), 1956; Dilip Kumar (Naya Daur), 1957; Dev Anand (Kala Pani), 1958; Raj Kapoor (Anari), 1959; Dilip Kumar, (Kohinoor), 1960; Raj Kapoor (Jis Desh Men Ganga Behti Hai), 1961; Ashok Kumar (Rakhi), 1962; Sunil Dutt (Mujhe Jeene Do), 1963; Dilip Kumar (Leader), 1964; Sunil Dutt (Khandaan), 1965; Dev Anand (Guide), 1966; Dilip Kumar (Ram Aur Shyam), 1967; Shammi Kapoor (Brahmachari), 1968; Ashok Kumar (Ashirwad), 1969; Rajesh Khanna (Sachha Jutha), 1970; Rajesh Khanna (Anand), 1971; Manoj Kumar (Be-imaan), 1972; Rishi Kapoor (Bobby), 1973; Rajesh Khanna (Aavishkar), 1974; Sanjeev Kumar (Aandhi), 1975; Sanjeev Kumar (Arjun Pandit), 1976; Amitabh Bachchan (Amar Akbar Anthony), 1977; Amitabh Bachchan (Don), 1978; Amol Palekar (Gol Maal), 1979; Naseeruddin Shah (Aakrosh), 1980.

Best Actress : Meena Kumari (Baiju Bawra), 1953; Meena Kumari (Parineeta), 1954; Kamini Kaushal (Biraj Bahu), 1955; Nutan (Seema), 1956; Nargis, (Mother India), 1957; Vyjayanthimala (Sadhna), 1958; Nutan (Sujata), 1959; Bina Rai (Ghunghat), 1960; Vyjayanthimala (Gunga-Jumna), 1961; Meena Kumari (Sahib Bibi Aur Ghulam), 1962; Nutan (Bandini), 1963; Vyjayanthimala (Sangam), 1964; Meena Kumari (Kaajal), 1965; Waheeda Rehman (Guide), 1966; Nutan (Milan), 1967; Waheeda Rehman (Neel Kamal), 1968; Sharmila Tagore (Aradhana), 1969; Mumtaz (Khilona), 1970; Asha Parekh (Kati Patang), 1971; Hema Malini (Seeta Aur Geeta), 1972; Dimple Kapadia (Bobby) & Jaya Bhaduri (Abhimaan), 1973; Jaya Bhaduri (Kora Kagaz), 1974; Lakshmi (Julie), 1975; Raakhi (Tapasya), 1976; Shabana Azmi (Swami), 1977; Nutan (Main Tulsi Tere Aangan Ki), 1978; Jaya Bhaduri (Nauker), 1979; Rekha (Khubsoorat), 1980.

Best Supporting Actor : David (Boot Polish), 1954; Abhi Bhattacharya (Jagriti), 1955; Motilal (Devdas), 1956; Raj Mehra (Sharada), 1957; Johnny Walker (Madhumati), 1958; Man Mohan Krishna (Dhool Ka Phool), 1959; Motilal (Parakh), 1960; Nana Palsikar (Kanoon), 1961; Mehmood (Dil Tera Deewana), 1962;

Raj Kumar (Dil Ek Mandir), 1963; Nana Palsikar (Shehar Aur Sapna), 1964; Raaj Kumar (Waqt), 1965; Ashok Kumar (Afsana), 1966; Pran (Upkar), 1967; Sanjeev Kumar (Shikar), 1968; Pran (Ansoo Ban Gaye Phool), 1969; Feroz Khan (Aadmi Aur Insaan), 1970; Amitabh Bachchan (Anand), 1971; Pran (Be-imaan), 1972; Amitabh Bachchan (Namak Haram), 1973; Vinod Khanna (Haath ki Safai), 1974; Shashi Kapoor (Deewaar), 1975; Prem Chopra (Do Anjane), 1976; Shreeram Lagoo (Gharaonda), 1977; Saeed Jaffrey (Shatranj ke Khilari), 1978; Amjad Khan (Dada), 1979; Om Puri (Aakrosh), 1980.

Best Supporting Actress: Usha Kiron (Baadbaan), 1954; Nirupa Roy (Munimji), 1955; Vyjayanthimala (Devdas), 1956; Shyama (Sharada), 1957; Nalini Jaywant (Kala Pani), 1958; Lalita Pawar (Anari), 1959; Nanda (Aanchal), 1960; Nirupa Roy (Chhaya), 1961; Shashikala (Aarti), 1962; Shashikala (Gumrah), 1963; Nirupa Roy (Shehnai), 1964; Padmini (Kaajal), 1965; Simi (Do Badan), 1966; Jamuna (Milan), 1967; Simi (Saathi), 1968; Tanuja (Paisa Ya Pyar), 1969; Chand Usmani (Pehchan), 1970; Farida Jalal (Paras), 1971; Zeenat Aman (Hare Rama Hare Krishna), 1972; Raakhee (Daag), 1973; Durga Khote (Bidaai), 1974; Nadira (Julie), 1975; Kajri (Balika Badhu), 1976; Asha Sachdev (Priyatama), 1977; Reena Roy (Apnapan), 1978; Helen (Lahu ke do Rang), 1979; Padmini Kolhapure (Insaf ka Tarazu), 1980.

Best Comedian: Mehmood (Pyar Kiye Jaa), 1966; Om Prakash (Dus Lakh), 1967; Johnny Walker (Shikar), 1968; Mehmood (Waris), 1969; I. S. Johar (Johnny Mera Naam), 1970; Not awarded, 1971; Not awarded, 1972; Asrani (Aaj ki Taaza Khabar), 1973; Mehmood (Vardaan), 1974; Deven Varma (Chori Mera Kaam), 1975; Asrani (Balika Badhu), 1976; Deven Varma (Chor ke Ghar Chor), 1978; Utpal Dutt (Gol Maal), 1979; Not awarded, 1980.

Best Story Writer: Pt. Mukhram Sharma (Aulad), 1954; Pt. Mukhram Sharma (Vachan), 1955; Amiya Chakrabarty (Seema), 1956; Akhtar Mirza (Naya Daur), 1957; Pt. Mukhram Sharma (Sadhna), 1958; Subodh Ghosh (Sujata), 1959; Ruby Sen (Masoom), 1960; Shridhar (Nazrana), 1961; K. P. Kottarakkara (Rakhi), 1962; Jarasandha (Bandini), 1963; Ban Bhatt (Dosti), 1964; Akhtar Mirza (Waqt), 1965; R. K. Narayan (Guide), 1966; Manoj Kumar (Upkar), 1967; Sachin Bhaumick (Brahmachari), 1968; V. S. Kanetkar (Ansoo Ban Gaye Phool), 1969; Chandrakant Kakodkar (Do Raaste), 1970; Hrishikesh Mukerji (Anand), 1971; Basu Bhattacharya (Anubhav), 1972; Salim Javed (Zanjeer), 1973; Kaifi Azmi and Ismat Chugtai (Garam Hawa), 1974; Salim Javed (Deewaar), 1975; Dr. Balaichand Mukherjee (Arjun Pandit), 1976; Sarat Chandra (Swami), 1977; Dinesh Thakur (Ghar), 1978; Shanker Shesh (Dooriyan), 1979; Vijay Tendulkar (Aakrosh), 1980.

Best Music Director: Naushad (Baiju Bawra), 1953; S. D. Burman (Taxi Driver), 1954; Hemant Kumar (Nagin), 1955; Shanker-Jaikishen (Chori Chori), 1956; O. P. Nayyar (Naya Daur), 1957; Salil Choudhury (Madhumati), 1958; Shanker-Jaikishen (Anari), 1959; Shanker-Jaikishen (Dil Apna Aur Preet Parai), 1960; Ravi (Gharana), 1961; Shanker-Jaikishen (Professor), 1962; Roshan (Taj Mahal), 1963; Laxmikant Pyarelal (Dosti), 1964; Ravi (Khandaan), 1965; Shanker-Jaikishen (Suraj), 1966; Laxmikant Pyarelal (Milan), 1967; Shanker-Jaikishen (Brahmachari), 1968; Laxmikant Pyarelal (Jeene Ki Raah), 1969; Shanker-Jaikishen (Pehchan), 1970; Shanker-Jaikishen (Mera Nam Joker), 1971; Shanker-Jaikishen (Be-imaan), 1972; S. D. Burman (Abhimaan), 1973; Kalyanji Anandji (Kora Kagaz), 1974; Rajesh Roshan (Julie), 1975; Khayyam (Kabhi Kabhie), 1976; Laxmikant Pyarelal (Amar Akbar Anthony), 1977; Laxmikant Pyarelal (Satyam Shivam Sundaram), 1978; Laxmikant Pyarelal (Sargam), 1979; Laxmikant Pyarelal (Karz), 1980.

Best Photographer (Black & White): Tara Dutt (Boot Polish), 1954; Dwarka Divecha (Yasmin), 1955; Radhu Karmakar (Shree 420), 1956; Faredoon Irani (Mother India), 1957; Dilip Gupta (Madhumati), 1958; V. K. Murthy (Kaagaz Ke Phool), 1959; R. D. Mathur (Mughal-e-Azam), 1960; V. Babasaheb (Ganga-Jumna), 1961; V. K. Murthy (Sahib Bibi Aur Ghulam), 1962; Kamal Bose (Bandini), 1963; K. H. Kapadia (Woh Kaun Thi), 1964; Ramchandra (Yaadein), 1965; Jaywant Pathare (Anupama), 1966; Jal Mistry (Baharon Ke Sapne), 1967; Nariman A. Irani (Saraswatichandra), 1968; Kamal Bose (Anokhi Raat), 1969; Kamal Bose (Khamoshi), 1970; Kamal Bose (Dastak), 1971. Not Awarded since 1972.

Best Photographer (Colour): Krishnarao Vashirde (Sehra), 1963; Krishnarao Vashirde (Geet Gaya Pattharon Ne), 1964; Dharam Chopra (Waqt), 1965; Fali Mistry (Guide), 1966; M. N. Malhotra (Hamraaz), 1967; G. Singh (Ankhen), 1968; Faredoon Irani (Duniya), 1969; Jal Mistry (Heer Ranjha), 1970; Radhu Karmaker (Mera Naam Joker), 1971; P. Vaikunth (Seeta Aur Geeta), 1972; Jal Mistry (Jheelke Us Paar), 1973; A. Vincent (Premnagar), 1974; Kamal Bose (Dharmatma), 1975; Fali D. Mistry (Fakira), 1976; Munir Khan (Hum Kisise Kum Nahin), 1977; Radhu Karmakar (Satyam Shivam Sundaram), 1978; Govind Nihalani (Junoon), 1979; S. M. Anwar (Shaan), 1980.

Best Sound Recordist: Ishan Ghosh (Jeevan Jyoti), 1954; R. Kaushik (Amar), 1955; A. K. Parmar (Jhanak Jhanak Payal Baaje), 1956; R. Kaushik (Mother India), 1957; Ishan Ghosh (Chandan), 1958; A. K. Parmar (Navrang), 1959; George D'Cruz (Parakh), 1960; Kuldeep Singh (Junglee), 1961; S. Y. Pathak (Bees Saal Baad), 1962; Dinshaw Billimoria (Bandini), 1963; Allauddin (Sangam), 1964; Essa M. Suratwala (Yaadein), 1965; Manohar Amberkar (Mera Saaya), 1966; J. M. Barot (Jewel Thief), 1967; P. Thakkersey (Shikar), 1968; M. A. Shaikh (Ittefaq), 1969; S. C. Bhambri (Talash), 1970; Allauddin (Mera Naam Joker), 1971; Jehangir Nowroji (Amar Prem), 1972; Allauddin (Bobby), 1973; L. H. Bhatia (Amir Garib), 1974; M. A. Shaikh (Deewaar), 1975; P. Harikishan (Bairaag), 1976; Dinshaw Billimoria (Agent Vinod), 1977; Ranjit Biswas (Devata), 1978; Hitendra Ghosh (Junoon), 1979; P. Harikishan (Qurbani), 1980.

Best Art Director (Black & White): Rusi Banker (Mirza Ghalib), 1955; Kanu Desai (Jhanak Jhanak Payal Baaje), 1956; M. R. Acharekar (Pardesi), 1957; Sudhendu Roy (Madhumati), 1958; M. R. Acharekar (Kaagaz Ke Phool), 1959; Biren Naug (Chaudhvin Ka Chand), 1960; M. R. Acharekar (Jis Desh Men Ganga Behti Hai), 1961; D. R. Jadhav and Ram Yedekar (Son of India), 1962; Sudhendu Roy (Mere Mehboob), 1963; G. L. Jadhav & T. K. Desai (Kohraa), 1964; M. S. Sathyu (Haqeeqat), 1965; Sant Singh (Yeh Raat Phir Na Aayegi), 1966; H. V. Maharudria (Taqdeer), 1967; Ajit Banerjee (Majhli Didi), 1968; Ajit Banerjee (Anokhi Raat), 1969; Not awarded since 1970.

Best Art Director (Colour): Sant Singh (Jahan Ara), 1964; S. S. Samel (Gumnaam), 1965; Shanti Das (Phool Aur Patthar), 1966; Abdul Rahim (Chandan Ka Palna), 1967; A. A. Majid (Noor Jehan), 1968; A. R. Kakkad & Baburao T. Poddar (Tamanna), 1969; Shanti

Das (Talash), 1970 ; Bansi Chandragupta (Seema), 1971 ; N. B. Kulkarni (Pakeezah), 1972 ; A. Rangaraj (Bobby), 1973 ; Sudhendu Roy (Sagina), 1974 ; Bansi Chandragupta (Do Jhoot), 1975 ; S. S. Samel (Fakira), 1976 ; Shanti Das (Hum Kissise Kum Nahin), 1977; T. K. Desai (Des Pardes), 1978 ; Madhukar Shinde (Lahu ke do Rang), 1979 ; C. S. Bhati (Aakrosh), 1980.

Best Editor : Hrishikesh Mukherjee (Naukri), 1955 ; G. G. Mayekar (Shree 420), 1956 ; Shivaji Awdhut, (Sharda), 1957 ; Hrishikesh Mukherjee (Madhumati), 1958 ; Chintaman Borkar (Navrang), 1959 ; Moosa Mansoor (Kohinoor), 1960 ; G. G. Mayekar (Jis Desh Men Ganga Behti Hai), 1961 ; Keshav Nanda (Bees Saal Baad), 962 ; Pran Mehra (Gumrah), 1963 ; Raj Kapoor (Sangam), 1964 ; Pratap Dave (Himalay Ki Godmein), 1965 ; Vasant Borkar (Phool Aur Patthar), 1966 ; B. S. Glaad (Upkar), 1967 ; N. M. Shankar (Saathi), 1968 ; Balbir S. Glaad (Nanna Farishta), 1969 ; Vijay Anand (Johnny Mera Naam), 1970 ; Not awarded, 1971 ; Manoj Kumar (Shor), 1972 ; R. D. Mahadik (Zanjeer), 1973 ; Kamalakar Karkhanis (Roti), 1974 ; M. S. Shinde (Sholay), 1975 ; Bijoy Chowdhury (Balika Badhu), 1976 ; Kamalakar Karkhanis (Amar Akbar Anthony), 1977 ; B. Prasad (Badaltey Rishtey), 1978 ; Divkar Bhanudas (Junoon), 1979 ; S. B. Mane (Insaf ka Tarazu), 1980.

Best Lyricist : Shailendra (Yahudi), 1958 ; Shailendra (Anari), 1959 ; Shakeel Badayuni (Chaudhvin Ka Chand), 1960 ; Shakeel Badayuni (Gharana), 1961 ; Shakeel Badayuni (Bees Saal Baad), 1962 ; Sahir Ludhianvi (Taj Mahal), 1963 ; Majrooh Sultanpuri (Dosti), 1964 ; Rajendra Krishna (Khandaan), 1965 ; Hazrat Jaipuri, (Suraj), 1966 ; Gulshan Bawra (Upkar), 1967 ; Shailendra (Brahmachari), 1968 ; Neeraj (Chanda Aur Bijli), 1969 ; Verma Malik (Pehchan), 1970 ; Hazrat Jaipuri (Andaz), 1971 ; Verma Malik (Be-imaan), 1972 ; Gulshan Bawra (Zanjeer), 1973 ; Santosh Anand (Roti, Kapada aur Makaan), 1974 ; Indivar (Amanush), 1975 ; Sahir Ludhianvi (Kabhi Kabhie), 1976 ; Gulzar (Gharaonda), 1977 ; Anand Bakshi (Apnapan), 1978 ; Gulzar (Gol Maal), 1979 ; Gulzar (Thodisi Bewafaii), 1980.

Best Playback Singer* : Lata Mangeshkar (Madhumati), 1958 ; Mukesh (Anari), 1959 ; Mohammed Rafi (Chaudhvin Ka Chand), 1960 ; Mohammed Rafi (Sasural), 1961 ; Lata Mangeshkar (Bees Saal Baad), 1962 ; Mahendra Kapoor (Gumrah), 1963 ; Mohammed Rafi (Dosti), 1964 ; Lata Mangeshkar (Khandaan), 1965 ; Mohammed Rafi (Suraj), 1966 ; Mahendra Kapoor (Hamraaz), Asha Bhosle (Dus Lakh), 1967 ; Mohammed Rafi (Brahmachari), Asha Bhosle (Shikar), 1968 ; Kishore Kumar (Aradhana), Lata Mangeshkar (Jeene Ki Raah), 1969 ; Mukesh (Pehchan), Sharda (Jahan Pyar Miley), 1970 ; Manna Dey (Mera Naam Joker), Asha Bhosle (Caravan), 1971 ; Mukesh (Be-imaan), Asha Bhosle (Hare Rama Hare Krishna), 1972 ; Harendra Chanchal (Bobby), Asha Bhosle (Naina), 1973 ; Mahendra Kapoor (Roti, Kapada aur Makan) ; Asha Bhosle (Pran Jaye Par Vachan Na Jaye), 1974 ; Kishore Kumar (Amanush), & Sulakshana Pandit (Sankalp), 1975 ; Mukesh (Kabhi-Kabhie) & Hemlata (Chitchor), 1976 ; Mohammed Rafi (Hum Kisise Kum Nahin), Preeti Sagar (Manthan), 1977 ; Kishore Kumar (Don) & Asha Bhosle (Don), 1978 ; Yesu Das (Dada) & Vani Jairam (Meera), 1979 ; Kishore Kumar (Thodisi Bewafaii) & Nazia Hassan (Qurbani), 1980.

Best Dialogue Writer : Rajinder Singh Bedi (Madhumati), 1958 ; Ramanand Sagar (Paigham), 1959 ; Aman, Kamal Amrohi, Wajahat Mirza, Ehsan Rizvi (Mughal-e-Azam), 1960 ; Wajahat Mirza (Gunga-Jumna), 1961 ; Akhtar-ul-Iman (Dharmputra), 1962 ; Arjun Dev Rashk (Dil Ek Mandir), 1963 ; Govind Moonis (Dosti), 1964 ; Akhtar-ul-Iman (Waqt), 1965 ; Vijay Anand (Guide), 1966 ; Manoj Kumar (Upkar), 1967 ; Ali Raza (Saraswatichandra), 1968 ; Pandit Anand Kumar (Anokhi Raat), 1969 ; Rajinder Singh Bedi (Satyakam), 1970 ; Gulzar (Anand), 1971 ; Ramesh Pant (Amar Prem), 1972 ; Gulzar (Namak Haraam), 1973 ; Kaifi Azmi (Garam Hawa), 1974 ; Salim Javed (Deewaar), 1975 ; Sagar Sarhadi (Kabhi Kabhie), 1976 ; Vrajendra Gaur (Dulhan Wohi Jo Piya Man Bhaye), 1977 ; Dr. Rahi Masoon Raza (Main Tulsi Tere Aangan Ki), 1978 ; Satyadev Debey (Junoon), 1979 ; Shabd Kumar (Insaf ka Tarazu), 1980.

Best Screen Play Writer : Nabendu Ghosh (Majhli Didi), 1968 ; Hrishikesh Mukerjee (Anokhi Raat), 1969 ; Vijay Anand (Johny Mera Naam), 1970 ; Basu Chatterji (Sara Akash), 1971 ; Arvind Mukherjee (Amar Prem), 1972 ; Javed (Zanjeer), 1973 ; Kaifi Azmi and Shama Zaidi (Garam Hawa), 1974 ; Salim Javed (Deewaar), 1975 ; Basu Chatterji (Chhoti si Baat), 1976 ; Lekh Tandon, Vrajendra Gaur & Madhusudan Kalekar (Dulhan Wohi Jo Piya Man Bhaye), 1977 ; Kamleshwar (Pati Patni Aur Woh), 1978 ; Girish Karnad & B. V. Karanth (Godhuli), 1979 ; Vijay Tendulkar (Aakrosh), 1980.

Special Awards : Jaya Bhaduri (Uphaar) and Prithviraj Kapoor, 1971 ; V. Shantaram, 1972 ; Special Citation for "Anubhav", 1972 ; Amitabh Bachchan (Namak Haram) ; Raakhee (Daag) and Rajesh Khanna (Anuraag), 1973 ; "Ankur" (Producers : Mohan J. Bijlani and Freni Variava), 1974 ; Farida Jalal (Majboor) and Priti Sagar (Julie), 1975 ; Yesudas (Chitchor), 1976 ; Bhimsain (Gharaonda) ; Amol Palekar (Bhumika) ; Naseeruddin Shah (Manthan), 1977 ; Child artiste Raju (Kitab), 1978 ; Muzaffar Ali (Gaman), 1979 ; Mushir-Riaz (Apne Paraye), 1980.

Best Documentary Film : Handicrafts of Rajasthan (Clement Baptista), 1966 ; India 1967 (S. Sukhdev), 1967 ; Explorer (Pramod Patti), 1968 ; Then, the Rains (Ramesh Gupta), 1969 ; Koodal (Tyeb Mehta), 1970 ; Creations in Metal (Homi D. Sethna), 1971 ; Nine Months To Freedom (S. Sukhdev), 1972 ; A Day With The Builders (C. J Paulose), 1973 ; The Nomad Puppeteer (Mani Kaul), 1974 ; Sarojini Naidu (B. D. Garga), 1975 ; Marvel of Memory (Dir. N. K. Issar), 1976 ; Transformations (Zafar Hai), 1977 ; They Call Me Chamar, 1980.

REGIONAL FILM AWARDS†

Marathi†

Maza Hoshil Ka (L. B. Thakur), 1963 ; Sant Nivratti Gyandeo (Vinayak Sarasvate and Bal Chavan), 1964 ; Lakshmi Aali Ghara (Madhav Shinde), 1965 ; Gurukilli (Raja Paranjape), 1966 ; Pawankanthcha Dhondi (Vinayak Thakur), 1967 ; Ekti (G. Chaugule), 1968 ; Jiwhala (Atma Ram), 1969 ; Apradh (Sharad Pilgaonkar), 1970 ; Shantata ! Court Chaloo Ahe (Satyadev Dubey and Govind Nihalani), 1971 ; Kunku Mazhe Bhagyache (Shamrao Mane), 1972 ; Andhala Marto Dola, 1973 ; 1. Sugandhi Katta (Ram Kadam & Yasin S. Farehlal), 2. Not Awarded, 3. Shreeram Lagoo (Sugandhi Katta), 4. Sarala Yevlekar (Sugandhi Katta), 1974 ; 1. Samna (Ramdas Phutane), 2. Jabbar Patel (Samna), 3. Shreeram Lagoo (Samna), 4. Sandhya (Chandanachi Choli Ang Ang Jali), 1975 ; 1. Aram Haram Ahe (Kamlakar Torney), 2. Vasant Joglekar (Ha Khel Savalyancha), 3. Ravindra Mahajani (Zunj), 4. Asha Kale (Ha Khel Savalyancha), 1976 ; 1. Naon Mothen Lakshan Khoten (Sharad Pilgaonkar), 2. Murlidhar Kapdi (Naon Mothen Lakshan Khoten), 3. Sreeram Lagoo (Bhingree), 4. Usha Chavan (Naon Mothen Lakshan Khoten), 1977 ; 1. Devki Nandan Gopala (Daddy Deshmukh), 2. Jabbar Patel (Jait Re Jait), 3. Yeshwant Dutt (Bhairee Pahilwan ki Jai), 4. Smita Patil (Jait Re Jait), 1978 ; 1. Sinhasan (D. V. Rao & Jabbar Patel), 2. Jabbar Patel (Sinhasan), 3. Sachin (Ashtavinayak), 4. Ranjana (Sushila), 1979 ; 1. 22 June 1897, 2. Jayu Nachiket Patwardhan (22 June 1897), 3. Nilu Phule (Sahkar Samrat), 4. Usha Chavan (Ran Pakhare), 1980.

---

* Separate awards for male and female categories since 1967.

† Upto 1972 only best picture was given award in the case of Regional Films. Since 1972 onwards best director, best actor and best actress were also included in the award list.

Note : 1. Best picture and name of the producer, 2. best director and picture, 3. best actor and picture and 4. best actress and picture.

Tamil

1. Pattikada Pattanama (P. Madhavan), 2. P. Madhavan (Gnana Oli), 3. Sivaji Ganesan (Gnana Oli), 4. Jaya Lalita (Pattikada Pattanama), 1972 ; 1. Bharatha Vilas (T. Bharathi), 2. A. C. Trilokchander (Bharatha Vilas), 3. Sivaji Ganesan (Gowravam), 4. Jayalalitha (Suryakanthi), 1973 ; 1. Dikkatra Parvathi (S. S. Rao), 2. K. Balachander (Aval Oru Thodar Kathai), 3. Gemini Ganesh (Nan Avanillai), 4. Lakshmi (Dikkatra Parvathi), 1974; 1. Apoorva Ragangal (Kalakendra Movies), 2. K. Balachander (Apoorva Ragangal), 3. Kamalahasan (Apoorva Ragangal), 4. Sujatha (Uravu Solla Oruvan), 1975 ; 1. Annakkili (S. P. Tamilarasi), 2. S. P. Muthuraman (Oru Oothappu Kan Simithugirathu), 3. Kamalahasan (Oru Oothappu Kan Simithugirathu), 4. Sujatha (Annakkili), 1976 ; 1. Bhuvana Oru Kelvikuri (N. S. Mani), 2. S. P. Muthuraman (Bhuvana Oru Kelvikuri), 3. Kamalahasan (16 Vayadhile), 4. Sujatha (Avargal), 1977 ; 1. Mullum Malarum (V. Mohan), 2. Bharathi Rajaa (Sigappu Rojakkal), 3. Kamalahasan (Sigappu Rojakkal), 4. Latha (Vattuthukkul Chathuram), 1978 ; 1. Pasi (Dorai), 2. Mahendran (Uthiripookal), 3. Shiv Kumar (Rojappu Ravikkaikari), 4. Shobha (Pasi), 1979 ; 1. Varumavin Niram Sigappu (R. Venkatraman), 2. K. Balagangadhar (Varumavin Niram Sigappu), 3. Sivakumar (Vandi Chakram), 4. Sarita (Vandi Chakram), 1980.

Telugu

1. Pandanthi Kapuram (G. Hanumantha Rao), 2. K. V. Reddy (Sri Krishna Sathya), 3. N. T. Rama Rao (Badi Panthulu), 4. Jayalalitha (Sri Krishna Sathya), 1972 ; 1. Jeevanatarangalu (D. Rama Naidu), 2. T. Rama Rao (Jeevanatarangalu), 3. A. Nageswara Rao (Marupurani Manishi), 4. Vani Sri (Jeevanatarangalu), 1973 ; 1. O'Seetha Katha (Sharma), 2. K. Vishwanath (Kaidi Babai), 3. Sobhan Babu (O'Seetha Katha), 4. Vani Sri (Krishnaveni), 1974 ; 1. Jeevana Jyoti (D. V. S. Raju), 2. K. Vishwanath (Jeevana Jyoti), 3. Shobhan Babu (Jeevana Jyoti), 4. Vani Sri (Jeevana Jyoti), 1975 ; 1. Soggadu (D. Rama Naidu), 2. Bapu (Sita Kalyanam), 3. Sobhan Babu (Soggadu), 4. Jaya Sudha (Jyothi), 1976 ; 1. Adavi Ramudu (N. V. V. Satyanarayana & A. Suryanarayana), 2. Raghavendra Rao (Prema Lekhulu), 3. Krishnam Raju (Amara Deepam), 4. Jaya Sudha (Ame Katha), 1977 ; 1. Manavuri Pandavulu (Jayakrishna), 2. K. Balachander (Maro Charitra), 3. Chandra Mohan (Padharella Vayasu), 4. Rameshwari (Seetha Ma Lakshmi), 1978 ; 1. Gorintaaku (K. Murari), 2. Desari Narayana Rao (Gorintaaku), 3. Shobhan Babu (Karthika Deepam), 4. Sujatha (Guppidu Manasu), 1979 ; 1. Maa Bhoomi (B. Narsing Rao & G. Ravindranath), 2. Bapu (Vamsavriksham), 3. Somayajulu (Sankara bharanam), 4. Jyoti (Vamsavriksham), 1980.

Malayalam

1. Chemparathy (S. K. Nair), 2 K. S. Sethumadhavan (Punarjanmam), 3. Madhu (Swvayamvaram), 4. Shobhana (Chemparathy), 1972 ; 1. Panitheeratha Veedu (K. S. R. Moorthy), 2. K. S. Sethumadhavan (Panitheeratha Veedu), 3. P. J. Antony (Nirmalyam), 4. Nandita Bose (Swapnam), 1973 ; 1. Nellu (N. P. Ali), 2. K. S. Sethumadhavan (Chattakari), 3. Kamalahasan (Kanya Kumari), 4. Lakshmi (Chattakari), 1974 ; 1. Raagam (N. P. Ali), 2. Bharatan (Prayanam), 3. Adoor Bhasi (Raagam), 4. Lakshmi (Chalanam), 1975 ; 1. Mohiniyattam (Mrs. Raji S. Thampi & Mrs. V. Somasekhar), 2. P. Srikumaran Thampi (Mohiniyattam), 3. Madhu, 4. Lakshmi (Mohiniyattam), 1976 ; 1. Itha Ivvada Varu (Hari Pothan), 2. I. V. Sasi (Itha Ivvada Varu), 3. Madhu (Yuddha Kandam), 4. Sheela (Lakshmi), 1977 ; 1. Rathi Nirvedham (Hari Pothan), 2. I. V. Sasi (Yeeta), 3. Kamalahasan (Yeeta), 4. Jaya Bharathi (Vada Kakku Oru Hridayam), 1978; 1. Thakara (V. V. Babu), 2. Bharatan (Thakara), 3. Pratap Pothan (Thakara), 4. Sri Vidya (Idavazhiyile Poocha Minda Poocha), 1979 ; 1. Chamaram (Appachan), 2. Bharathan (Chamaram), 3. Pratap Pothan (Chamaram), 4. Sri Vidya (Puzha), 1980.

Kannada

1. Vamsha Vriksha (G. V. Iyer), 2. B. V. Karanth and Girish Karnad (Vamsha Vriksha), 3. Venkatrao Talagiri (Vamsha Vriksha), 4. Kalpana (Yavjahmatha Maitri), 1972 ; 1. Nagarahavu (N. Veeraswamy), 2. S. R. Puttanna (Edakallu Guddada Mele), 3. Rajkumar (Gandhada Gudi), 4. Jayanthi (Edakallu Guddada Mele), 1973 ; 1. Kaadu (K. N. Narayan & G. N. Lakshmipathi), 2. Girish Karnad (Kaadu), 3. Lokesh (Bhootayyana Maga Ayyu), 4. Aarti (Upasane), 1974 ; 1. Chomana Dudi (Ashok Katapadia), 2. B. V. Karanth (Chomana Dudi), 3. Rajkumar (Mayura), 4. Aarti (Shubhamangala), 1975 ; 1. Tulasi (K. N. Subbiah), 2. G. V. Iyer (Hamsa Geethe), 3. Srinath (Besuge), 4. Jayanthi (Tulasi), 1976 ; 1. Tabbaliyu Neenade Magane (B. M. Venkatesh and Chandulal Jain), 2. K. S. Prakash Rao (Ganda Hendathi), 2. Manu (Tabbaliyu Neenade Magane), 4. Manjula (Deepe), 1977 ; 1. Ondanondu Kaladalli (Girish Karnad), 2. Girish Karnad (Ondanondu Kaladalli), 3. Rajkumar (Shankar Guru), 4. Shobha (Aparachita), 1978 ; Dharmasere (Arathi), 2. Puttanna Kanagal (Dharmasere), 3. Anant Nag (Naa Ninna Biadalare), 4. Arathi (Dharmasere), 1979 ; 1. Ellindalo Bandavaru (Mohan Kumar Kondaji), 2. Shankar Nag (Minchina Ota), 3. Lokesh (Ellindalo Bandavaru), 4. Ashwini (Savitri), 1980.

Bengali

Mahanagar (R. D. Bansal), 1963 ; Charulata (R. D. Bansal), 1964 ; Atithi (S. N. Sircar), 1965 ; Balika Bodhu (Sunila Devi), 1966 ; Haatey Bazarey (Ashim Dutta), 1967 ; Apanjan (R. N. Malhotra), 1968 ; Kamal Lata (Niren Sil), 1969 ; Pratidvandi (Nepal Dutta and Ashim Dutta), 1970 ; Nimantran (Bharat Shumsher Jung Bahadur Rana), 1971 ; Mem Saheb (Ashima Bhattacharjee), 1972 ; Strir Patra, 1973 ; 1. Amanush (Shakti Samanta), 2. Pijush Bose (Bikaloy Bhorer Phool), 3. Uttam Kumar (Amanush), 4. Aparna Sen (Sujata), 1974 ; 1. Sansar Simante (Subir Ghosh), 2. Satyajit Ray (Sonar Kella), 3. Soumitra Chatterjee (Sansar Simante), 4. Suchitra Sen (Priya Bandhabi), 1975 ; 1. Jana Aranya (Subir Guha), 2. Satyajit Ray (Jana Aranya), 3. Pradeep Mukherjee (Jana Aranya), 4. Aparna Sen (Asamaya), 1976 ; E. K. J. Chhilo Desh (Raj Kapoor), 2. Ritwick Ghatak (Jukti Takko Aar Gappo), 3. Soumitra Chatterjee (Babu Moshai), 4. Supriya Devi (Sister), 1977 ; 1. Debabrata Sarkar (Baarbodhu), 2. Bijoy Chatterjee (Baarbodhu), 3. Uttam Kumar (Dhanraj Tamang), 4. Gita Siddarth (Baarbodhu), 1978 ; 1. Ganadevta (Dept. of Cultural Affairs, Govt. of W. Bengal), 2. Satyajit Ray (Joy Baba Felunath), 3. Soumitra Chatterjee (Ganadevta), 4. Sandhya Roy (Ganadevta), 1979 ; 1. Bachharamer Bagan, 2. Tapan Sinha (Bachharamer Bagan), 3. Manoj Mitra (Bachharamer Bagan), 4. Mahua Roy Chaudhury (Dadar Kirti), 1980.

CRITICS AWARD: Uski Roti (Mani Kaul), 1970 : Ashad Ka Ek Din (Mani Kaul), 1971 ; Maya Darpan (Kumar Shahani), 1972 ; Duvidha (Mani Kaul), 1973 ; Rajnigandha

---

Note. 1. Best picture and name of the producer, 2. best director and picture, 3. best actor and picture and 4. best actress and picture

(Babu Chatterji), 1974 ; Aandhi (Gulzar), 1975 ; Mrigaya (by Mrinal Sen), 1976 ; Satyajit Ray (Shatranj ke Khilari), 1977 ; Arvind Desai ki Ajeeb Dastan (Saeed Mirza), 1978 ; Basu Chatterji (Jeena Yahan), 1979.

NOBEL PRIZE AWARDS

Physics : W. C. Roentgan (G) (1901) ; H. A. Lorentz (D), P. Zeeman (D) (1902) ; H. Bequerel (F), P. Curie (F), Marie Curie (F) (1903); Lord J. W. S. Rayleigh (B) (1904) ; P. Lenard (G) (1905) ; J. J. Thomson (B) (1906) ; A. A. Michelson (A) (1907) ; G. Lippmann (I) (1908) ; F. Braun (G), G. Marconi (I) (1909); J. D. Van der Waals (D) (1910) ; W. Wien (G) (1911) ; G. Dalen (S) (1912) ; H. Kamerlingh Onnes (D) (1913) ; M. V. Laue (G) (1914) ; W. H. Bragg (B), W. L. Bragg (B) (1915) ;—(1916) ; C. G. Barkia (B) (1917) ; M. Planck (G) (1918) ; J. Stark (G) (1919) ; C. E. Guillaume (F) (1920) ; A. Einstein (G) (1921) ; N. Bohr (Da) (1922) ; R. A. Millikan (A) (1923) ; M. Seegbahn (S) (1924) ; J. Franck (G), G. Hertz (G) (1925) ; J. Perrin (J) (1926) ; A. H. Compton (A), C. T. R. Wilson (B) (1927) ; O. W; Richardson (B) (1928) ; L. de Broglie (F) (1929) ; C. V. Raman (In.) (1930) ; — (1931) ; W. Heisenberg (G.) (1932) ; P. A. M. Dirac (B), E. Schroedinger (Au) (1933) ; — (1934) ; J. Chadwick (B) (1935) ; V. F. Hess (Au), C. D. Anderson (A) (1936); C. J. Davisson (A), G. P. Thomson (B) (1937); E. Fermi (I) (1938) ; E. O. Lawrence (A) (1939) ; 1940 to 1942 (no awards) ; O. Stern (A) (1943) ; I. I. Rabi (A) (1944); W. Pauli (Au) (1945); P. W. Bridgman (A) (1946); Sir Edward Appleton (B) (1947) ; P. M. S. Blackett (B) (1948) ; H. Yukawa (J) (1949) ; Cecil F. Powell (B) (1950) ; Sir J. Cockcroft (B). E. T. S. Walton (In) (1951) ; E. Purcell (A), P. Bloch (A) (1952) ; F. Zernike (D) (1953) ; M. Born (B), W. Bothe (G) (1954) ; W. E. Lamb (A), P. Kusch (A) (1955) ; W. Shockley (A), J. Bardeen (A), W. H. Brattain (A) (1956) ; T. Dao-ee (Chi), C. Ning Yang (Chi) (1957); P. A. Corenkov (R), I. M. Frank (R), L. Tamm (R) (1958) ; E. Segre (A), O. Chamberlain (A) (1959) ; D. A. Glasser (A) (1960) ; R. Hofstadtar (A), R. Mossbauer (G) (1961) ; L. Davidovich Landau (R) (1962) ; Engene P. Wigner, Maria Geoppoert Mayer, Hans D. Jensen (1963) ; Charles Towns, Nikolai Basov, Alexander Prochorov (1964) ; Julian Schwingar, Richard Feynman. Shinichero Tomonaga (1965) ; Alfred Kastler (1966) ; Hans Albert Bethe (A) (1967) ; Louis W. Alvarez (A) (1968); Prof. Murray Gell-Mann (A) (1969) ; Prof. Manlouis Neel (F), Prof. Hannes Alfven (Sw) (1970) ; Dr. Dennis Gabor (B) (1971) ; Prof. John Bardeen (A), Prof. John Schrieffer (A), Prof. Leon Cooper (A) (1972) ; Dr. Leo Esaki (A), Dr. Ivar Gisevar (A), Dr. Brian D. Josephson (E) (1973) ; Prof. Martin Ryle (B), Prof. Antony Hewish (B) (1974) ; Prof. James Rainwater (A), Prof. Aage Bohr (Da), Prof. Ben Mottelson (Da) (1975) ; Prof. Gurton Richer (A), Prof. Samuel C. C. Ting (A) (1976) ; Philipp W. Anderson (A), Sir Novell F. Mott (B), John H. Van Vleck (A) (1977) ; Prof. Pyotr Kapitsa (R) (half the prize and another half was shared by Dr. Amo Penzas (A) and Dr. Robert Wilson (A) (1978) ; Prof. Sheldon S. Glashow (A), Prof. Steven Weinberg (A), Prof. Abdus Salam (Pk.) (1979) ; Prof. James W. Cronin (A), Prof. Val L. Fitch (A), 1980.

Chemistry : J. H. Van't Hoff (D) (1901) ; E. Fischer (G) (1902) ; S. Arhenius (S) (1903) ; W. Ramsay (B) (1904) ; A. V. Baeyer (G) (1905) ; H. Moissan (F) (1906) ; E. Buchner (G) (1907) ; E. Rutherford (B) (1908) ; V. Ostwald (G) (1909) ; O. Wallach (G) (1910) ; Marie Curie (F) (1911) ; V. Grignard (F), P. Sabatier (F) (1912) ; A. Werner (Sw) (1913) ; T. W. Richards (A) (1914) ; R. Willetaetter (G) (1915) ; — (1916) ; — (1917) ; F. Haber (G) (1918) ; — (1919) ; W. Nernst (G) (1920) ; F. Soddy (B) (1921) ; F. W. Aston (B) (1922) ; F. Pregi (Au) (1923) ; — (1924) ; R. Zaigmondy (G) (1925) ; T. Svedberg (S) (1926) ; H. Wieland (G) (1927) ; A. Windaus (1928) ; H. V. Eueler-Chelpin (S), A. Harden (B) (1929) ; H. Fischer (G) (1930) ; P. Bergins (G), K. Bosch (G) (1931) ; I. Langmuir (A) (1932) ; — (1933) ; H. C. Urey (A) (1934) ; F. Joliot-Curie (I), I. Joliot Curie (I) (1935) ; P. Debye (D) (1936) ; W. N. Haworth (B), P. Karrer (Sw) (1937) ; R. Kuhn (G) (1938) ; A. P. Butenandt (G), L. Ruzicka (Sw) (1939) ; 1940 to 1942 (no awards), G. Hevsey (H) (1943) ; O. Hahn (G) (1944) ; A. Virtanen (Fi) (1945) ; J. B. Sumner (A), J. H. Northrop (A), W. M. Stanley (A) (1946) ; Sir Robert Robinson (B) (1947) ; A. Tiselius (S) (1948) ; W. F. Giauque (A) (1949) ; Otto Diels (G), K. Alder (G) (1950) ; E. M. MacMillan (A), G. T. Seaborg (A) (1951) ; A. J. P. Martin (B), R. L. M. Synge (B) (1952) ; H. Staudinger (G) (1953) ; L. Pauling (A) (1954) ; Vincent du Vigneaud (A) (1955) ; Sir Cyril Hinshelwood (B), N. Semonov (R) (1956) ; Sir Alexander Todd (B) (1957) ; F. Sanger (B) (1958) ; J. Heyrovsky (Cz) 1959) ; W. F. Libby (A) (1960) ; M. Calvin (1961) ; M. F. Perutz (B), J. C. Kendreu (B) (1962) ; Prof. Karl Ziegler, Guilio Natta (I) (1963) ; Dorothy Crow Hodgkin (1964) ; Robert Burns Woodward (1965) ; Robert S. Mulliken (1966) ; Manfred Eigen (G), Ronald G. W. Norrish (B), George Porter (B) (1967) ; Lars Onsager (A) (1968) ; D. H. Barton (B), O. Hassal (N) (1969) ; Prof. Luis Leloir (Ar) (1970) ; Dr. Gerhard Herzberg (C) (1971) ; Dr. Christian B. Anfinsen (A), Dr. Stanford Moore (A), Dr. William H. Stein (A) (1972) ; Dr. Fischer (G), Dr. Wilkinson (B) (1973) ; Prof. Paul J. Flory (A) (1974) ; Prof. John Warcup Cornforth (Br.), Prof. Vladimir Prelog (Sw.) (1975) ; Prof. William Lipscomb (A) (1976) ; Prof. Ilya Prigogine (Be) (1977) ; Dr. Peter Mitchell (B), (1978); Prof. Herbert C. Brown (A), Prof. Geor Witting (G) (1979) ; Prof. Paul Berg (A), Prof. Walter Gilbert (A), Prof. Frederick Sanger (B) 1980.

Physiology & Medicine : E. V. Behring (G) (1901) ; R. Ross (B) (1902) ; N. R. Finsen (Da) (1903) ; I. P. Pavlov (R) (1904) ; R. Koch (G) (1905) ; C. Golgi (I), S. R. Y. Cajal (Sp) (1906) ; C. L. A. Laveran (F) (1907) ; P. Ehrlich (G), E. Metchnikoff (R) (1908) ; T. Kocher (Sw) (1909) ; A. Kossel (G) (1910) ; A. Gullstrand (S) (1911) ; A. Carrel (A) (1912) ; C. Richet (F) (1913) ; R. Barany (Au) (1914) ; — (1915) ; — (1916) ; — (1917) ; — (1918) ; J. Bordet (Be (1919) ; A. Krogh (Da) (1920) ; — (1921) ; A. Hill (B), O. Meyerhof (G) (1922) ; F. G. Banting (C), J. R. Macleod (C) (1923) ; W. E. Einthoven (D) (1924) ; — (1925) ; J. Fibiger (Da) (1926) ; J. Wagner-Jauregg (Au) (1927) ; C. Nicolle (F) (1928) ; C. Eijkman (D), F. G. Hopkins (B) (1929) ; K. Landsteiner (Au) (1930) ; O. Warburg (G) (1931) ; C. S. Sherrington (B), E. D. Adrian (B) (1932) ; T. H. Morgan (A) (1933) ; G. Minot (A), W. Murphy (A), G. Whipple (A) (1934) ; H. Spemann (G) (1935) ; Sir H. H. Dale (B), O. Loewi (G) (1936) ; A. V. Szent-Gyorgyl (H) (1937) ; C. Heymans (Be) (1938) ; G. Domagk (G) (1939) ; 1940 to 1942 (no awards) ; H. Dam (Da), F. A. Doisy (A) (1943) ; E. J. Erianger (A), H. S. Gasser (A) (1944) ; Sir A. Fleming (B), Sir H. Florey (B), E. B. Chain (B) (1945) ; H. J. Muller (A) (1946) ; B. A. Houssay (Ar), C. F. Cori (A), G. T. Cori (A) (1947) ; P. Muller (Sw) (1948) ; W. R. Hess (Sw), A. F. Moniz (Po) (1949) ; E. C. Kendall (A), P. S. Hench (A), R. Reichstein (Sw) (1950) ; M. Theiler (A) (1951) ; S. Waksman (A) (1952) ; H. A. Krebs (B), F. A. Lipmann (A) (1953) ; J. F. Enders (A), F. C. Robins (A), T. H. Weller (A) (1954) ; Hugo Theorell (S) (1955) ; A. F. Cournaud (A), D. W. Richards (A). W. Forssmann (G) (1956) ; D. Bovet (I) (1957) ; G. W. Beadle (A). E. L. Tatum (A) J. Lederberg (A) (1958) ; S. Ochoa (A), A. Kornberg (A) (1959) ; P. B. Medawar (B), Sir M. Burnet (Aus) (1960) ; G. von Brekesy (H) (1961) ; F. H. C. Crick (B), M. H. F. Wilkins (B), J. D. Watson (A)

(1962); Sir John Carow Eccles, Allan Lloyd Hodgkin, Andrew Fielding Huxley (1963); Konard Bloch, Feodor Lynen (1964); Jacques Monod, Francois Jacob, Andra Lwoff (1965); Peyton Rous, Charles B. Huggins (1966); Haldan Keffer Hartline (A), George Wald (A), Ragnar Granit (Swe) (1967); Robert W. Holley, H. Gobind Khorana, Marshall W. Nirenberg (all American) (1968); Dr. Max Delbrueck, Dr. Alfred Hershey, Dr. Salvador Luria (all American) (1969); Sir Bernar Katz (B); Dr. Ulfvon Euler (Sw), Dr. Julius Axelord (A) (1970); Dr. Earl Wilbur Sutherland (A) (1971); Dr. G. M. Edelman (A), Dr. R. Porter (B) (1972); Prof. Karl von Frisch (Au), Dr. Konard Lorenz (Au), Prof. Nikolaas Tinbergen (D) (1973); Dr. Albert Claude (Lux.), Dr. Christian De Duve (B), Dr. George Palade (Ru) (1974); Dr. David Baltimore (A), Dr. Martin Temin (A), Dr. Renato Dulbecco (A) (1975); Baruch S. Blumberg (A), D. Carleton Gajdusek (A) (1976); Dr. Roger Guillemin (A), Dr. Andrew Shally (A) & Dr. Rosalyn Yalow (A) (1977); Prof. Werner Arber (S), Daniel Nathans (A), Hamilton O. Smith (A) (1978); Allan M. Carmack (A), Godfrey N. Hounsfield (B) (1979); Prof. Baruj. Benaceraf (A), Prof. George Snell (A), Prof. Jean d'Ausset (F) (1980).

Literature : B. F. A. Sully Prudhomme (F) (1901); T. Mommsen (G) (1902); B. Bjornson (N) (1903); F. Mistral (F), Echegaray (Sp) (1904); H. Sieukiewic (P) (1905); G. Carducci (I) (1906); Rudyard Kipling (B) (1907); R. Eucken (G) (1908); S. Lageriof (S) (1909); P. Heyse (G) (1910); N. Maeterlinck (Be) (1911); G. Hauptmann (G) (1912); R. Tagore (In) (1913); — (1914) R. Rolland (F) (1915); V. Von Heidenstam (S) (1916); K. Gjellerup (Da), H. Pontoppidan (Da) (1917); — (1918); C. Spitteler (Sw) (1919); K. Hamsum (N) (1920); A, France (I) (1921); J. Benavente (Sp) (1922); W. B. Yeats (Ir) (1923); W. Reymont (P) (1924); G. B. Shaw (B) (1925); G. Deledda (I) (1926); H. Bergson (F) (1927); S. Undset (N) (1928); T. Mann (G) (1929); S. Lewis (A) (1930); E. A. Karifeldt (S) (1931); J. Galsworthy (B) (1932); Bunin (R) (1933); L. Pirandello (I) (1934); — (1935); E. O'Neill (A) (1936); R. Martin du Gard (F) (1937); Pearl S. Buck (A) (1938); F. E. Sillanpaa (Fi) (1939); 1940 to 1942 (no awards); — (1943); J. V. Jensen (Da) (1944); G. Mistral (1945); H. Hesse (Sw) (1946); Andre Gide (F) (1947); T. S. Fliot (B) (1948); W. Faulkner (A) (1949); Lord Russel (B) (1950); P. Lageirkvist (S) (1951); F. Maurisac (F) (1952); Sir W. S. Churchill (B) (1953); E. Hemingway (A) (1954); Halldor Laxness (Ic) (1955); J. Ramon Jimenez (Sp) (1956); A. Camus (F) (1957); B. Pasternak (R) (1958); S. Quasimode (I) (1959); A. St. Leger (F) (1960); J. Steinbeck (A) (1961); I. Andric (Y), J. Steinbeck (A) (1962); Giorgos Stylia nos Sefariads (1963); — (1964); Mikhail Sholokhov (1965); Samuel Joseph Agnon, Miss Nelly Sachs (1966); Miguel Angel Austurias (Greek) (1967); Yasunari Kawabata (J) (1968); Samuel Becket (Ir) (1969); Alexander Sozhenitsyn (R) (1970); Pablo Neruda (Ch) (1971); Heinrich Boell (G) (1972); Patrick White (Aus) (1973); Eyvind Johnson (Sw); Harry Martinson (Sw) (1974); Poet Eugenio Montale (I) (1975); Saul Bellow (A) (1976); Vicente Aleixandre (Sp) (1977); Isaac B. Singer (A) (1978); Odysseus Elytis (Gr) (1979); Czeslaw Milosz (P) (1980).

Peace : H. Dunant (Sw), F. Passy (F) (1901); E. Ducommun (Sw), A. Gobat (Sw) (1902); Sir W. R. Cremer (B) (1903); Institut de Droit International (1904); Bertha von Suttner (Au) (1905); T. Roosevelt (A) (1906); E. T. Moneta (I), L. Renault (F) (1907); K. P. Arnoldson (S), P. Bajer (Da) (1908); A. M. F. Beernaert (Be), Baron de Estournelles de Constant de Rebecque (F) (1909); The Bureau International Permanent De la Paix, Berne (1910); T. M. C. Asser (D), A. H. Fried (Au) (1911); E. Root (A) (1912); H. La Fontaine (Be) (1913); — (1914); — (1915); — (1916); Comite International de la Croix Rouge, Geneva (1917); — (1918); W. Wilson (A) (1919); L. Bourgeois (F) (1920); K. H. Branting (S), C. L. Lange (N) (1921); F. Nansen (N) (1922); — (1923); — (1924); Sir A. Chamberlain (B), C. G. Dawes (A) (1925); A. Briand (F), G. Stresemann (G) (1926); F. Buisson (F), L. Quidde (G) (1927); — (1928); F. B. Kellogg (A) (1929); L. O. J. Soderblom (S) (1930); Jane Addams (A), N. M. Butler (A) (1931); — (1932); Sir Norman Angell (B) (1933); Arthur Henderson (B) (1934); C. von Ossietzky (G) (1935); C. de S. Lamas (Ar) (1936); Viscount Cecil of Chilwood (B) (1937); Office International Nansenpour les Refugies (1938); — (1939); 1940 to 1942 (no awards); — (1943); Comite International de la Croix Rouge, Geneva (1944); Cordell Hull (A) (1945); Emily G. Balch (A), J. R. Mott (A) (1946); American & British Quaker Organisations (1947);—(1948); Lord Boyd-Orr (B)(1949); Ralph Bunche(A) (1950); Leon Jouhaux (F) (1951); A. Schweitzer (F) (1952); Gen. G. Marshall (A) (1953); U.N. High Commission for Refugees (1954); — (1955); — (1956); L. B. Pearson (C) (1957); Father George Pire (Be) (1958); P. J. Noel-Baker (B) (1959); A. Luthuli (S.A.) (1960); D. Hammarskjold (S) (1961); L. C. Phuling (A) (1962); International Red Cross and League of Red Cross Societies (1963); Martin Luther King (1964); UNICEF (1965); — (1966); — (1967); Bene Cassin (Fr) (1968); International Labour Organisation (1969); Norman Earnest Borlaug (A) (1970); Willy Brandt (W.G.) (1971); Dr. Henry Kissinger (A); Lee Duc Tho (N.V.) (1973); Eisoku Sato (J), Sean McBride (Ir) (1974); Dr. Andrei Dimitrievich Sakharov (Ru) (1975); Betty Williams, Mairead Corrigan and Claran Mekeown (Ir) (1976); Amnesty International (1977); Pres. Anwar Sadat (E) and Menachem Begin (Is) (1978); Mother Teresa (In) (1979); Adolf Perez Esquivel (Ar) (1980).

Economics : Prof. Jan Tinbergen (Dutch) (1969); Prof. Paul A. Samulson (A) (1970); Dr. Simon Kuznets (U.S.A.) (1971); Prof. John R. Hicks (B), Prof. Kenneth J. Arrow (A) (1972); Prof. Wassily Leontief (R) (1973); Prof. Gunner Myrdal (Sw), Friedrich Von Hayek (Br) (1974); Dr. Tjalling Roopmans (A), Dr. Leonid Kantorovich (Ru) (1975); Prof. Milton Friedman (A) (1976); Prof. Bertil Ohlin (S), Prof. James Meade (B) (1977); Prof. Herbert A. Simon (A) (1978); Prof. Theodore Schultz (A), Sir Arthur Lewis (W.I.) (1979); Lawrence Klein (A) (1980).

MAGSAYSAY AWARDS (1980): Shigeharu Matsumoto (Japan), *International Understanding ;* Francisco Sionil Jose (Philippines), *Journalism, Literature and Creative Communication Arts ;* Raja Muhammed Alias (Malaysia), *Government Service.*

A — American ; Ar — Argentine ; Au — Austrian ; Aus — Australian ; B — British ; Be — Belgian ; C — Canadian ; Ch — Chilean ; Chi — Chinese ; Cz — Czech ; D — Dutch ; Da — Danish ; E — Egypt ; F — French ; Fi — Finnish ; G — German ; Gr — Greek ; H — Hungarian ; I — Italian ; Ic — Icelandic ; In — Indian ; Ir — Irish ; Is — Israel ; J — Japanese ; Lux — Luxembourg ; N — Norwegian ; N.V. — North Vietnam ; P — Polish ; Pk — Pakistan ; Po — Portuguese ; R — Russian ; Ru — Rumanian ; S — Swedish ; S.A. — South African ; Sp — Spanish ; Sw — Swiss ; W.I. — West Indies ; Y — Yugoslav.

Note : N. A. — Not awarded.

MUSEUMS AND LIBRARIES

THE Government of India have set up or have been administering a chain of museums and libraries throughout the country. Some others, considered to be of great importance, have been getting substantial financial assistance.

Some important Museums are: *The National Museum* at New Delhi; *Salar Jung Museum*, Hyderabad; *The Victoria Memorial Hall*, Calcutta; *The Museum of Man*, Bhopal; *The National Research Laboratory for Conservation of Cultural Property, National Gallery of Modern Art, New Delhi*; and *Science Museums*.

National Museum: This is regarded as the premier museum in India. Significant among the art objects are Standing Vishnu of Pallava period (9th Century A.D.): Ravana Shaking Mount Kailash, Vijayanagar (17th Century A.D.); one Jeweller's mould, three seals and a very interesting inscribed coin of Ujjain.

Indian Museum, Calcutta: It has three sections—Art, Archaeology and Anthropology.

The Art section has (a) Chinese and Japanese art objects; (b) Burmese art collections; (c) Nepalese and Tibetan arts and crafts.

It has 285 selected specimens of applied, ritual and sculptural art.

Salar Jung Museum: They arrange to acquire, document, preserve, exhibit and interpret objects of ancient and medieval art and culture.

Victoria & Albert Museum, Bombay: Collection includes prints, maps, photographs etc. illustrating the history of Bombay. Building was started in 1862 and completed in 1871.

Prince of Wales Museum, Bombay: Its contents comprise Art, Archaeology and Natural history. A forestry section was later added and a small collection of rocks, minerals and fossils is exhibited.

Allahabad Municipal Museum, Allahabad, established 1931. Has a remarkable collection of great archaeological value from Bhita. The terra-cotta collection is unique.

Bangalore Museum, Bangalore (1865): In the vestibule of the Museum is a slab with twelve Persian distichs brought from Tipu's Palace. There is also an interesting collection of geological specimen, stuffed animals, butterflies, Indian ornaments and dresses and a most remarkable collection of fishes.

National History Museum, Darjeeling: Started in 1902 has an excellent collection of butterflies, moths, wasps and ants.

Central Museum, Madras (1854): Collection was formed in 1846. It has an interesting collection of antiquities particularly the bronze image of Krishna and the dancing Siva are superb.

Victoria Memorial Hall: This is a period Museum of Indian History (1700-1900). It has acquired contemporary Indian source materials consisting of maps, paintings, drawings, manuscripts, documents, coins, arms and weapons.

National Museum of Man: The main focus of the Museum is on (a) Evolution of Man and Human Variation; (b) Man and Culture; and (c) Material Culture in Indian Unity and Diversity. It has a useful library of books on ethnographic subjects.

National Research Laboratory for Conservation of Cultural Property: It was started in 1977-78 to train experts and acquire specialised equipment for the conservation of art objects. Some of the conservation programmes undertaken include: Preservation of wall paintings at Virupaksha Temple in Hampi; Conservation of stone sculptures in Mathura and preservation of wall paintings at Kusum Sarovar, Govardhan.

National Gallery of Modern Art: Endeavours to acquire and display outstanding pieces of art.

Science Museums: The national Council of Science Museums was registered on April 4, 1978, in West Bengal. It administers the Birla Industrial and Technological Museum, Calcutta; the Visvesvarayya Industrial and Technological Museum, Bangalore and the Nehru Science Centre, Bombay.

The Shri Krishna Vigyan Kendra at Patna has just been started.

The Visvesvarayya Industrial & Technological Museum at Bangalore has an Exhibition Production Centre with facilities for design and production of models, training of science teachers, hobby centres for students.

Nehru Memorial Museum and Library: It has on permanent display an exhibition entitled "Emergence of Gandhi, Non-Co-operation Movement and After," which covers the period 1915-29.

Dr. Zakir Hussain Memorial Museum, New Delhi: Opened to the public since 3rd May, 1976.

Gandhi Darshan Samiti, New Delhi set up to acquire, maintain and preserve personal papers and other historical material pertaining to life and work of Mahatma Gandhi.

LIBRARIES

National Library, Calcutta: Biggest library in the country. Has 1.7 million volumes. It has exchange relations with 144 institutions in 50 countries of the world.

Central Reference Library, Calcutta: Has been publishing Indian National Bibliography since 1957. *Index Indiana*, a quarterly publication containing indexes of articles appearing in Indian language periodicals is brought out by this Library.

Khuda Baksh Oriental Public Library, Patna: Has large collection of Arabic and Persian manuscripts. It has 65,000 printed books and 12,750 manuscripts.

Raja Rammohan Roy Library Foundation, Calcutta: Set up in 1972 to strengthen library movement in rural areas through mobile library services.

The Thanjavur Maharaja Serfoji Saraswati Mahal Library, Thanjavur, South India, has a rich collection of 40,000 manuscripts in Sanskrit, Marathi, Telugu and Tamil. It also has 23,000 books in Indian and European languages.

Delhi Public Library, Delhi: It has a main library, 4 branch libraries, 18 sub-branches, 14 deposit stations and 4 book mobiles. It has a book stock of 595,383 and 2,586 gramophone records.

Social Science Documentation Centre, 35, Ferozshah Rd., New Delhi 110001. It provides literature research services; offers interlibrary loans from its depository of periodicals and reports; does photocopying etc.

Indian Council of World Affairs Library, New Delhi: The only well equipped research library in Asia and Africa on international relations and area studies.

Central Library, Bombay was founded in 1804 to investigate and encourage Oriental Arts, Science and Literature. It has an excellent collection of maps.

Rampur Raza Library, Rampur: Has a valuable collection of manuscripts in Persian, Arabic, Urdu and other Oriental languages besides a collection of rare Moghul and Iranian paintings.

Library of Tibetan Works & Archives, Dharmsala: Acquires and conserves Tibetan books and manuscripts, provides intensive reference service and is centre for enquiries on Tibetan source material.

Central Secretariat Library, New Delhi provides reference and lending services to employees of ministries, departments and attached and subordinate offices of the Government of India, Delhi Administration, autonomous organisations and accredited correspondents.

SPORTS

THE history of the OLYMPIC GAMES is rich with famous names. Every four years, in some major city of the world, thousands of Olympians gather for athletic competition. In 1896 Baron Pierre de Coubertin fathered the modern Olympic Games. "The important thing" he said, "in the Olympic Games is not winning but taking part. The essential thing in life is not conquering but fighting well." The first recorded Olympic event took place in 776 B.C.

The U.S.A. boycotted 1980 Moscow Olympics because of the Soviet intervention in Afghanistan.

The other major powers who stayed away from joining the Olympics were China, Japan, West Germany and Canada. Only 81 nations took part in Olympic games in 1980.

OLYMPIC CHAMPIONS

Track and Field-Men

100 Metres

Year	*Winner*	*Country*	*Time (Seconds)*
1896	Thomas Burke	U.S.A.	12.0
1900	Francis Jarvis	”	10.8
1904	Archie Hahn	”	11.0
1908	Reginald Walker	S. Africa	10.8
1912	Ralph Craig	U.S.A.	10.8
1920	Charles Paddock	”	10.8
1924	Harold Abrahams	G.B.	10.6
1928	Percy Williams	Canada	10.8
1932	Eddie Tolan	U.S.A.	10.3
1936	Jessie Owens	”	10.3
1948	Harrison Dillard	”	10.3
1952	Lindy Remigino	”	10.4
1956	Bobby Morrow	”	10.5
1960	Armin Hary	Germany	10.0
1964	Bob Hayes	U.S.A.	10.0
1968	Hines	”	9.9
1972	Valeriy Borzov	U.S.S.R.	10.14
1976	Hasely Crawford	Trinidad	10.06
1980	Allan Wells	G.B.	10.25

200 Metres

Year	*Winner*	*Country*	*Time (Seconds)*
1900	J.Walter Tewksbury	U.S.A.	22.2
1904	Archie Hahn	”	21.6
1908	Robert Kerr	Canada	22.6
1912	Ralph Craig	U.S.A.	21.7
1920	Allan Woodring	”	22.0
1924	Jackson Scholz	”	21.6
1928	Percy Williams	Canada	21.8
1932	Eddie Tolan	U.S.A.	21.2
1936	Jessie Owens	”	20.7
1948	Mel Patton	”	21.1
1952	Andrew Stanfield	”	20.7
1956	Bobby Morrow	”	20.6
1960	Livio Berruti	Italy	20.5
1964	Henry Carr	U.S.A.	20.3
1968	Smith	”	19.8
1972	Valeriy Borzov	U.S.S.R.	20.0
1976	Donald Quarrie	Jamaica	20.23
1980	Pietro Mennea	Italy	

400 Metres

Year	*Winner*	*Country*	*Time (seconds)*
1896	Thomas Burke	U.S.A.	54.2
1900	Maxey Long	”	49.4
1904	Harry Hillman	”	49.2
1908	Wyndham Halswelle	G.B.	50.0
1912	Charles Reidpath	U.S.A.	48.2
1920	Beville Rudd	S. Africa	49.6
1924	Eric Liddell	G.B.	47.6
1928	Ray Barbuti	U.S.A.	47.8
1932	William Carr	”	46.2
1936	Archie Williams	”	46.5
1948	Arthur Wint	Jamaica	46.2
1952	George Rhoden	”	45.9
1956	Charles Jenkins	U.S.A.	46.7
1960	Otis Davis	”	44.9
1964	Mike Larabee	”	45.1
1968	Evans	”	43.8
1972	Vince Mathews	”	44.7
1976	Alberto Juantorena	Cuba	44.26
1980	Viktor Markin	U.S.S.R.	44.60

800 Metres

Year	*Winner*	*Country*	*(mts. seconds)*
1896	Edwin Flack	G.B.	2.11.0
1900	Alfred Tysoe	”	2.01.4
1904	James Lightbody	U.S.A.	1.56.0
1908	Melvin Shepperd	”	1.52.8
1912	James Meredith	”	1.51.9
1920	Albert Hill	G.B.	1.53.4
1924	Douglas Lowe	”	1.52.4
1928	Douglas Lowe	”	1.51.8
1932	Thos. Hampson	”	1.49.8
1936	John Woodruff	U.S.A.	1.52.9
1948	Mal Whitfield	”	1.49.2
1952	Mal Whitfield	”	1.49.2
1956	Thomas Courtney	”	1.47.7
1960	Peter Snell	New Zealand	1.46.3
1964	Peter Snell	”	1.45.1
1968	Doubell	Australia	1.44.3
1972	David Wottle	U.S.A.	1.45.9
1976	Alberto Juantorena	Cuba	1.43.50
1980	Steve Ovett	G.B.	1.45.40

1,500 Metres

Year	*Winner*	*Country*	*(mts. seconds)*
1896	Edwin Flack	G.B.	4.33.2
1900	Charles Bennett	”	4.06.2
1904	James Lightbody	U.S.A.	4.05.4
1908	Melvin Shepperd	”	4.03.4
1912	Arnold Jackson	G.B.	3.56.8
1920	Albert Hill	”	4.01.8
1924	Paavo Nurmi	Finland	3.53.6
1928	Harry Larva	”	3.53.2
1932	Luigi Beccali	Italy	3.51.2
1936	Jack Lovelock	New Zealand	3.47.8
1948	Henry Eriksson	Sweden	3.49.8
1952	Joseph Barthel	Luxembourg	3.45.2
1956	Ron Delaney	Ireland	3.41.2
1960	Herbert Elliot	Australia	3.35.6

1,500 Metres (Contd.)

Year	Winner	Country	Time (mts. seconds)
1964	**Peter Snell**	**New Zealand**	3.38.1
1968	**K. Keino**	**Kenya**	3.34.9
1972	**Pekka Vasala**	**Finland**	3.36.3
1976	**John Walker**	**New Zealand**	3.39.17
1980	Sebastian Coe	G.B.	3.38.40

5,000 Metres

Year	Winner	Country	Time (mts. seconds)
1912	**Hannes Kolehmainen**	**Finland**	14.36.6
1920	**Joseph Guillemot**	**France**	14.55.6
1924	**Paavo Nurmi**	**Finland**	14.31.2
1928	**Willie Ritola**	"	14.38.0
1932	**Lauri Lehtinen**	"	14.30.0
1936	**Gunnar Hockerd**	"	14.22.2
1948	**Gaston Reiff**	**Belgium**	14.17.6
1952	**Emile Zatopek**	**Czechoslovakia**	14.06.6
1956	**Vladimir Kuts**	**U.S.S.R.**	13.39.6
1960	**Murray Halberg**	**New Zealand**	13.43.4
1964	**Bob Schul**	**U.S.A.**	13.48.8
1968	**Gammoudi**	**Tunisia**	14.05.0
1972	**Lasse Viren**	**Finland**	13.26.4
1976	**Lasse Viren**	"	13.27.76
1980	Miruts Yifter	Ethiopia	13.21.00

10,000 Metres

Year	Winner	Country	Time (mts. seconds)
1912	**Hannes Kolehmainen**	**Finland**	31.20.8
1920	**Paavo Nurmi**	"	31.45.8
1924	**Willie Ritola**	"	30.23.2
1928	**Paavo Nurmi**	"	30.18.8
1932	**Janusz Kusocinski**	**Poland**	30.11.4
1936	**Ilmari Salmenin**	**Finland**	30.15.4
1948	**Emil Zatopek**	**Czechoslovakia**	29.59.6
1952	**Emil Zatopek**	"	29.17.0
1956	**Vladimir Kuts**	**U.S.S.R.**	28.45.6
1960	**Petr Bolotnikov**	"	28.32.2
1964	**Billy Mills**	**U.S.A.**	28.24.4
1968	**Temu**	**Kenya**	29.27.4
1972	**Lasse Viren**	**Finland**	27.38.4
1976	**Lasse Viren**	"	27.40.38
1980	Miruts Yifter	Ethiopia	27.42.70

Marathon

Year	Winner	Country	(hrs. mts. secs.)
1896	Spindon Loues	Greece	2.58.50.0
1900	Michel Teato	France	2.59.45.0
1904	Thomas Hicks	U.S.A.	3.28.53.0
1908	John Hayes	"	2.55.18.4
1912	Kenneth Macarthur	S. Africa	2.36.54.8
1920	Hannes Kolehmainen	Finland	2.32.35.8
1924	Albin Stenroos	France	2.41.22.6
1928	El Ouafi	"	2.32.57.0
1932	Juan Zabala	Argentina	2.31.36.0
1936	Kitei Son	Japan	2.29.19.2
1948	Delfo Cabrera	Argentina	2.34.51.6
1952	Emil Zatopek	Czechoslovakia	2.23.03.2
1956	Alain Mimoun	France	2.25.00.0
1960	Abebe Bikila	Ethiopia	2.15.16.2
1964	Abebe Bikila	"	2.12.11.2
1968	Wolde	"	2.20.26.4
1972	Frank Shorter	U.S.A.	2.12.19.7
1976	Waldemer Cierpinski	G.D.R.	2 09.55.0
1980	Waldemer Cierpinski		2.11.03.0

20,000-Metre Walk

Year	Winner	Country	Time (hrs. mts. secs.)
1956	Leonid Spirine	U.S.S.R.	1.31.27.0
1960	Vladimir Golubnichy	"	1.34.07.2
1964	Kenneth Mathews	G.B.	1.29.34.0
1968	Vladimir Golubnichy	U.S.S.R.	1.33.58.4
1972	Peter Frenkel	E. Germany	1.26.42.6
1976	Daniel Batista	Mexico	1.24.40.6
1980	Maurizio Damilano	Italy	1.23.35.5

50,000-Metre Walk

Year	Winner	Country	Time (hrs. mts. secs.)
1932	Thomas Greene	G.B.	4.50.10.0
1936	Harold Whitlock	"	4.30.41.4
1948	John Ljunggren	Sweden	4.41.52.0
1952	Guiseppe Dordoni	Italy	4.28.07.8
1956	Norm. Reed	New Zealand	4.30.42.8
1960	Donald Thomson	G.B.	4.25.30.0
1964	Abdon Pamich	Italy	4.11.12.4
1968	Hohne	G.D.R.	4.20.13.6
1972	B. Kannenberg	W. Germany	3.56.11.6
1980	Hartwig Gauder	G.D.R.	3.49 24 0

4x100-Metre Relay

Year and winner of gold medal (Country) respectively:

1912 Great Britain; 1920 United States; 1924 United States; 1928 United States; 1932 United States; 1936 United States; 1948 United States; 1952 United States; 1956 United States; 1960 Germany; 1964 United States; 1968 United States; 1972 United States; 1976 United States; 1980 USSR.

4x400-Metre Relay

1908 United States; 1912 United States; 1920 Great Britain; 1924 United States; 1928 United States; 1932 United States; 1936 Great Britain; 1948 United States; 1952 Jamaica; 1956 United States; 1960 United States; 1964 United States; 1968 United States; 1972 Kenya; 1976 United States; 1980 USSR.

110-Metre Hurdles

Year	Winner	Country	Time (Seconds)
1896	Thomas Curtis	U.S.A.	17.6
1900	Alvin Kraenzlein	"	15.4
1904	Fredrick Schule	"	16.0
1908	Forrest Smithson	"	15.0
1912	Fredrick Kelly	"	15.1
1920	Earl Thomson	Canada	14.8
1924	Daniel Kinsey	U.S.A.	15.0
1928	Sydney Atkinson	S. Africa	14.8
1932	George Saling	U.S.A.	14.6
1936	Forrest Townes	"	14.2
1948	William Porter	"	13.9
1952	Harrison Dillard	"	13.7
1956	Lee Calhoun	"	13.5
1960	Lee Calhoun	"	13.8
1964	Hayes Jones	"	13.6
1968	Davenport	"	13.3
1972	Rodney Milburn	"	13.24
1976	Guy Drut	France	13.30
1980	Thomas Munkelt	G.D.R.	13.39

Year	Winner	Country	Time (Seconds)
	400-Metre Hurdles		
1900	J. Walter Tewksbury	U.S.A.	57.6
1904	Harry Hillman	"	53.0
1908	Charles Bacon	"	55.0
1920	Frank Loomis	"	54.0
1924	F. Morgan Taylor	"	52.6
1928	Lord David Burghley	G.B.	53.4
1932	Robert Tisdall	Ireland	51.8
1936	Glenn Hardin	U.S.A.	52.4
1948	Roy Cochran	"	51.1
1952	Charles Moore	"	50.8
1956	Glenn Davis	"	50.1
1960	Glenn Davis	"	49.3
1964	Rex Cawley	"	49.6
1968	Hemery	G.B.	48.1
1972	John Akii-Bua	Uganda	47.82
1976	Edwin Moses	U.S.A.	47.64
1980	Volker Beck	G.D.R.	48.70
			(hrs. mts. secs.)
	3,000-Metre Steeplechase		
1920	Percy Hodge	G.B.	10.00.4
1924	Willie Ritola	Finland	9.33.6
1928	Toiva Laukola	"	9.21.8
1932	Volmari Iso-Hollo	"	10.33.4
1936	Volmari Iso-Hollo		9.03.8
1948	Thore Sjostrand	Sweden	9.04.6
1952	Horace Ashenfelter	U.S.A.	8.45.4
1956	Chris Brasher	G.B.	8.41.2
1960	Zdzislav Krzyszkowiak	Poland	8.34.2
1964	Gaston Roelants	Belgium	8.30.8
1968	Biwatte	Kenya	8.51.0
1972	Kip Keino	"	8.23.6
1976	Anders Garderud	Sweden	8.08.2
1980	Bronislaw Malinowski	Poland	8.09.70

Year	Winner	Country	Height
	Pole Vault		
1896	Welles Hoyt	U.S.A.	10' 9¾"
1900	Irving Baxter	"	10' 9.9"
1904	Charles Drovak	"	11' 6"
1908	Albert Gilbert	"	12' 2"
	Edward Cook	"	12' 2"
1912	Harry Babcock	"	12' 11½"
1920	Frank Foss	"	12' 5.9"
1924	Lee Barnes	"	12' 11½"
1928	Sabin Carr	"	13' 9.3"
1932	William Miller	"	14' 1.7"
1936	Earle Meadows	"	14' 3¼"
1948	O. Guinn Smith	"	14' 1¼"
1952	Robert Richards	"	14' 11¼"
1956	Robert Richards	"	14' 11½"
1960	Donald Bragg	"	15' 5.1"
1964	Fred Hansen	"	16' 8¾"
1968	Seagren	"	17' 8½"
1972	Wolfgang Nordwig	E. Germany	18' ½"
1976	Tedeusz Slusrasky	Poland	18' ½"
1980	Wladysdlaw Kozakiewicz		5.78 mtrs.

Year	Winner	Country	Height
	High Jump		
1896	Ellery Clark	U.S.A.	5' 11¼"
1900	Irving Baxter	"	6' 2.4"
1904	Samuel Jones	"	5' 11"
1908	Harry Porter	"	6' 3"
1912	Alma Richards	"	6' 4"
1920	Richard Landor	"	6' 4¼"
1924	Harold Osborn	"	6' 5.9"
1928	Robert King	"	6' 4.3"
1932	Duncan Mcnaughton	Canada	6' 5.5"
1936	Cornelius Johnson	U.S.A.	6' 7.9"
1948	John Winter	Australia	6' 6"
1952	Walter Davies	U.S.A.	6' 8¼
1956	Charles Dumas	"	6' 11¼"
1960	Robert Shavlakadze	U.S.S.R.	7' 1"
1964	Valerie Brumel	"	7' 1¾"
1968	Fosbury	U.S.A.	7' 4¼"
1972	Yuri Tarmak	U.S.S.R.	7' 3½"
1976	Jacek Wszola	Poland	7' 4½"
1980	Gerd Wessig	G.D.R.	2.36 mtrs.

Year	Winner	Country	Length
	Long Jump		
1896	Ellery Clark	U.S.A.	20' 10"
1900	Alvin Kraenzlein	"	23' 6.7"
1904	Myer Prinstein	"	24' .1"
1908	Frank Irons	"	24' 6½"
1912	Albert Gutterson	"	24' 11¼"
1920	William Pettersson	Sweden	23' 5½"
1924	DeHart Hubbard	U.S.A.	24' 5.1"
1928	Edward Hamm	"	25'. 4¾"
1932	Edward Gordon	"	25' ¾"
1936	Jesse Owens	"	26' 5.3"
1948	Willy Steele	"	25' 8"
1952	Jerome Biffle	"	24' 10"
1956	Gregory Bell	"	25' 8¼"
1960	Ralph Boston	"	26' 7¾"
1964	Lynn Davis	G.B.	26' 5½"
1968	Beamon	U.S.A.	29' 2½"
1972	Randy Williams	"	27'
1976	Amie Robinson	"	27' ½"
1980	Leet Dombrowski	G.D.R.	8.54 (mtrs.)
	Triple Jump		
1896	James Connoly	U.S.A.	45'
1900	Myer Prinstein		47' 4¼"
1904	Myer Prinstein	"	47'
1908	Timothy Ahearne	G.B.	48' 11½"
1912	Gustaf Lindblom	Sweden	48' 5.1"
1920	Vilho Tuulos	Finland	47' 6.7"
1924	Archibald Winter	Australia	50' 11.1"
1928	Mikio Oda	Japan	49' 10¹³⁄₁₆"
1932	Chuhei Nambus	"	51' 7"
1936	Naoto Tajima	"	52' 5.7"
1948	Arne Ahman	Sweden	50' 6¼"
1952	Adhemar Farreira da Silva	Brazil	53' 2½"
1956	Adhemar Farreira da Silva	"	53' 7½"
1960	Jozef Schmidt	Poland	55' 1¾"
1964	Jozef Schmidt	"	55' 3½"
1968	Viktor Saneev	U.S.S.R.	57' ¾"
1972	Viktor Saneev	"	56' 10"
1976	Viktor Saneev	"	50' 8.7"
1980	Jaak Uudmae		17.35 mtrs.

16-lb. Shot-Put

Year	Winner	Country	Length
1896	Robert Garett	U.S.A.	36' 9¾"
1900	Richard Sheldon	"	46' 3.1"
1904	Ralph Rose	"	48' 7"
1908	Ralph Rose	"	46' 7½"
1912	Patrick McDonald	"	50' 4"
1920	Ville Porhola	Finland	48' 7.1"
1924	Clarence Houser	U.S.A.	49' 2½"
1928	John Kuck	"	52' 11/16"
1932	Leo Sexton	"	52' 6 3/16"
1936	Hans Woelke	Germany	53' 1¾"
1948	Wilbur Thompson	U.S.A.	56' 2"
1952	Parry O'Brein, Jr.	"	57' 1½"
1956	Parry O'Brein, Jr.	"	60' 11"
1960	William Nieder	"	64' 6¾"
1964	Dallas Long	"	66' 8½"
1968	Matson	"	67' 4¾"
1972	Wladyslaw Komar	Poland	69' 5"
1976	Udo Beyer	G.D.R.	69' ¾"
1980	Vladimir Kiselyov	U.S.S.R.	21.35 mtrs.

Discus Throw

Year	Winner	Country	Length
1896	Robert Garett	U.S.A.	95' 7½"
1900	Rudolf Bauer	Hungary	118' 2.9"
1904	Martin Sheridan	U.S.	128' 10½"
1908	Martin Sheridan	"	134' 2"
1912	Armas Taipale	Finland	145' 9/16"
1920	Elmer Niklander	"	146' 7"
1924	Clarence Houser	U.S.A.	151' 5¼"
1928	Clarence Houser	"	155' 2 4/5"
1932	John Anderson	"	162' 4.7"
1936	Kenneth Carpenter	"	165' 7½"
1948	Adolfo Consolini	Italy	173' 2"
1952	Sim Iness	U.S.A.	180' 6½"
1956	Alfred Oerter	"	184' 10½"
1960	Alfred Oerter	"	194' 2"
1964	Alfred Oerter	"	200' 1½"
1968	Alfred Oerter	"	212' 6½"
1972	Ludwik Danek	Czechoslovakia	210' 2"
1976	Mac Wilkins	U.S.A.	221' 5.4"
1980	Viktor Resshchupkin	U.S.S.R.	66.64 mtrs.

16-lb. Hammer Throw

Year	Winner	Country	Length
1900	John Flanagan	U.S.A.	167' 4"
1904	John Flanagan	"	168' 1"
1908	John Flanagan	"	170' 4¼"
1912	Mathew McGarth	"	179' 7.1"
1920	Patrick Ryan	"	173' 5.5"
1924	Frederick Tootell	"	174' 10¼"
1928	Patrick O'Callaghan	Ireland	168' 7½"
1932	Patrick O'Callaghan	"	176' 11.1"
1936	Karl Hein	Germany	185' 4¼"
1948	Imre Nemeth	Hungary	183' 11½"
1952	Jozsef Csermak	"	197' 11¾"
1956	Harold Connolly	U.S.A.	207' 3½"
1960	Vasily Rudenkov	U.S.S.R.	220' 1.5"
1964	Romuald Klim	"	228' 10½"
1968	Zsivotzky	Hungary	240' 8"
1972	Bandarchuck	U.S.S.R.	247' 8"
1976	Yuri Sedykh	"	254' 3¾"
1980	Yuri Sedykh	"	81.80 mtrs.

Javelin Throw

Year	Winner	Country	Length
1908	Erik Lemming	Sweden	179' 10½"
1912	Erik Lemming	"	198' 11¼"
1920	Jonni Myyra	Finland	215' 9¾"

Javelin Throw—(Contd.)

Year	Winner	Country	Length
1924	Jonni Myyra	Finland	206' 6¾"
1928	Erik Lundquist	Sweden	218' 6⅛"
1932	Matti Jarvinen	Finland	238' 7"
1936	Gerhard Stoeck	Germany	235' 8 5/16"
1948	Tapio Rautavaara	Finland	228' 10½"
1952	Cy Young	U.S.A.	242' ¾"
1956	E. Danielson	Norway	281' 2¼"
1960	Viktor Cybulenko	U.S.S.R.	277' 8 3/8"
1964	Pauli Nevala	Finland	271' 2¼"
1968	Lusis	U.S.S.R.	295' 7¼"
1972	Klaus Wolfermann	W. Germany	296' 9½"
1976	Miklos Nemeth	Hungary	310' 3¾"
1980	Dainis Kula	U.S.S.R.	91.20 mtrs.

Decathlon

Year	Winner	Country	Points
1912	Hugo Wislander	Sweden	7724.49
1920	Helge Lovland	Norway	6804.35
1924	Harold Osborn	U.S.A.	7710.77
1928	Paavo Yrjola	Finland	8053.29
1932	James Bausch	U.S.A.	8462.23
1936	Glenn Morris		7900.00
1948	Robert Mathias	"	7139.00
1952	Robert Mathias	"	7887.00
1956	Milton Campbell	"	7937.00
1960	Rafer Johnson	"	8392.00
1964	Willie Holdorf	Germany	7877.00
1968	Toomey	U.S.A.	8193.00
1972	Nikolai Avilow	U.S.S.R.	8454.00
1976	Bruce Jenner	U.S.A.	8618.00
1980	Daley Thompson	Britain	8495.00

WOMEN'S

Track and Field

100-metre

Year	Winner	Country	Time (Seconds)
1928	Elizabeth Robinson	U.S.A.	12.2
1932	Stanislawa Walasiewicz	Poland	11.9
1936	Helen Stephens	U.S.A.	11.5
1948	Fanny Blankers-Koen	Netherlands	11.9
1952	Marjorie Jackson	Australia	11.5
1956	Betty Cuthbert	"	11.5
1960	Wilma Rudolph	U.S.A.	11.0
1964	Wyomia Tyus	"	11.4
1968	Wyomia Tyus	"	11.0
1972	Renate Stecher	G.D.R.	11.07
1976	Annegret Richter	W. Germany	11.01
1980	Lyudmila Kondratyeva	U.S.S.R.	11.06

200-Metre

Year	Winner	Country	Time (Seconds)
1948	Fanny Blankers-Koen	Netherlands	24.4
1952	Marjorie Jackson	Australia	23.7
1956	Betty Cuthbert	"	23.4
1960	Wilma Rudolph	U.S.A.	24.0
1964	Edith Mcguire	"	23.0
1968	Szewinska	Poland	22.5
1972	Renate Stecher	G.D.R.	22.4
1976	Baerbel Eckert	"	22.37
1980	Barbel Woekel		22.03

Year	Winner	Country	Time (Seconds)
	400-Metre		
1976	Irena Szewinska	Poland	49.29
1980	Marita Koch	G.D.R.	48.88
	800-Metre		(mts. seconds)
1928	Linda Radke	Germany	2.16.8
1960	Ljudmilla Sehvcova	Poland	2.04.3
1964	Ann Packer	G.B.	2.01.1
1968	Manning	U.S.	2.00.9
1972	H. Falck	W. Germany	1.58.6
1976	Tatyana Kazankina	U.S.S.R.	1.54.94
1980	Nadezhda Olizarenko		1.53.50
	1,500-Metre		
1976	Tatyana Kazankina	U.S.S.R.	4.05.48
1980	Tatyana Kazankina	"	3.56.60
	4x100-Metre Relay		
1976		G.D.R.	0.42.55
1980		"	0.41.60

4x400-Metre Relay

Year and winner respectively: 1928 Canada; 1932 U.S.; 1936 U.S.; 1948 Netherlands; 1952 U.S.; 1956 Australia; 1960 U.S.; 1964 Poland; 1968 U.S.; 1972 W. Germany; 1976 G.D.R.; 1980 U.S.S.R.

Year	Winner	Country	Time (Seconds)
	80-Metre Hurdles		
1932	Mildred Didrikson	U.S.A.	11.7
1936	Trebisonda Villa	Italy	11.7
1948	Fanny Blankers-Koen	Netherlands	11.2
1952	Shirley Strickland de la Hunty	Australia	10.9
1956	Shirley Strickland de la Hunty	"	10.7
1960	Irina Press	U.S.S.R.	10.8
1964	Karin Balzer	Germany	10.5
1968	Caird	Australia	10.3
	100-Metres Hurdles		
1972	Annelie Ehrhardt	G.D.R.	12.59
1976	Johanna Schaller	"	12.77
1980	Vera Komisera	U.S.S.R.	12.56

High Jump

Year	Winner	Country	Height
1928	Ethel Catherwood	Canada	5' 3"
1932	Jean Shiley	U.S.A.	5' 5¼"
1936	Ebolya Csak	Hungary	5' 3"
1948	Alice Coachman	U.S.A.	5' 6⅛"
1952	Esther Brann	S. Africa	5' 5¾"
1956	Mildred Macdaniel	U.S.A.	5' 9¼"
1960	Iolanda Balas	Rumania	6' ¼"
1964	Iolanda Balas	"	6' 2 2/3"
1968	Rezkova	Czechoslovakia	5' 11¾"
1972	Ulrike Meyfarth	G.D.R.	6' 3¼"
1976	Rosemarie Ackermann	"	6' 3¾"
1980	Sara Simeoni	Italy	1.97 mtrs

SWIMMING

Men

Year	Winner	Country	Time (mts. seconds)
	100-Metre Freestyle		
1980	Woithe Jarg	G.D.R.	0.50.40
	200-Metre Freestyle		
1980	Sergei Kopliakov	U.S.S.R.	1.49.81
	400-Metre Freestyle		
1980	Vladimir Salnikov	U.S.S.R.	3.51.31
	1,500-Metre Freestyle		
1980	Vladimir Salnikov	U.S.S.R.	14.58.29
	4x200-Metre Freestyle		
1980	Sergei Kopliakov Vladimir Salnikov Ivor Stukolkin Anderi Kryov	U.S.S.R.	7.23.50
	100-Metre Breaststroke		
1980	Duncan Goodhew	G.D.R.	1.03.34
	200-Metre Breaststroke		
1980	Roberto Zulpa	U.S.S.R.	2.15.85
	100-Metre Butterfly		
1980	Par Arvidsson	Swe.	0.54.92
	200-Metre Butterfly		
1980	Sergei Fesenko	U.S.S.R.	1.59.76
	100-Metre Backstroke		
1980	Bengt Baron	Swe.	0.56.33
	200-Metre Backstroke		
1980	Sandor Wladar	Hun.	1.93.00
	400-Metre Individual Medley		
1980	Aleksandr Sidorenko	U.S.S.R.	4.22.89
	4 x 100-Metre Medley		
1980	Mark Kerry Peter Evans Mark Tonelli Neil Brooks	Aus.	3.45.70
	WOMEN		
	100-Metre Freestyle		
1980	Barbara Krause	G.D.R.	0.54.79
	200-Metre Freestyle		
1980	Barbara Krause	G.D.R.	1.58.33
	400-Metre Freestyle		
1980	Ines Diers	G.D.R.	4.08.76
	800-Metre Freestyle		
1980	Michelle Ford	Aus.	8.28.90

Year	Winner	Country	Time (mts. seconds)
	4 x 100-Metre Freestyle		
1980	Barbara Krause Caren Metschuch Ines Diers Sarina Hulsenbeck	G.D.R.	3.42.71
	100-Metre Breaststroke		
1980	Ute Geweniger	G.D.R.	1.10.22
	200-Metre Breaststroke		
1980	Lina Kachushite	U.S.S.R.	2.29.54
	100-Metre Butterfly		
1980	Caren Metschuck	G.D.R.	1.00.42
	200-Metre Butterfly		
1980	Ines Geissler	G.D.R.	2.10.44
	100-Metre Backstroke		
1980	Rica Reinisch	G.D.R.	1.00.86
	200-Metre Backstroke		
1980	Rica Reinisch	G.D.R.	2.11.77
	400-Metre Individual Medley		
1980	Petra Schneider	G.D.R.	4.36.29
	4 x 100-Metre Medley Relay		
1980	Rica Reinisch Ute Geweniger Andrea Pollack Caren Metschuck	G.D.R.	1.01.51

DIVING

Men's

Year	Winner	Country	Points
	Springboard		
1980	Aleksandr Pertna	U.S.S.R.	905.025
	Platform		
1980	Falk Hoffmann	G.D.R.	835.650
	Women's		
	Springboard		
1980	Irina Kalinina	U.S.S.R.	725.910
	Platform		
1980	Martina Jaschke	G.D.R.	596.250

Discus Throw

Year	Winner	Country	Length
1928	Helena Konopacka	Poland	129' 11 7/8"
1932	Lillian Copland	U.S.A.	133' 2"
1936	Gisela Mauermayer	Germany	156' 3³/₁₆"
	Discus Throw (Contd.)		
1948	Micheline Ostermayer	France	137' 6½"
1952	Nina Romaschkova	U.S.S.R.	168' 8½"
1956	Olga Fikotova	Czechoslovakia	165' 7"
1960	Nina Ponomareva	U.S.S.R.	180' 8¼"
1964	Tamara Press	"	187' 10¾"
1968	Manoliu	Rumania	191' 2½"
1972	Faina Melnik	U.S.S.R.	218' 7"
1976	Evelin Schlaak	G.D.R.	226' 4½"
1980	Evelin Jahl		69.96 mtrs.
	Javelin Throw		
1932	Mildred Didrikson	U.S.A.	143' 4"
1936	Tilly Fleischer	Germany	148' 2¾"
1948	Herma Bauma	Austria	149' 6"
1952	Dana Zatopekova	Czechoslovakia	165' 7"
1956	Inessa Janzeme	U.S.S.R.	176' 8"
1960	Elvira Ozolina	"	183' 8"
1964	Mihaela Penes	Rumania	198' 7½"
1968	Nemeth	Hungary	198' ½"
1972	Ruth Fuchs	G.D.R.	209' 7"
1976	Ruth Fuchs	"	216' 4"
1980	Maria Colon	Cuba	68 40 mtrs.
	Pentathlon		
1976	Sigrun Siegl	G.D.R.	4,745 pts.
1980	Nadezhda Tkachenko	U.S.S.R.	5,038 pts.
	Shot-Put		
1948	Micheline Ostermayer	France	45' 1½"
1952	Galina Zybina	U.S.S.R.	50' 1½"
1956	Tamara Tishkyeovich	"	54' 5"
1960	Tamara Press	"	56' 9⅞"
1964	Tamara Press	"	59' 6¼"
1968	Gummel	E. Germany	64' 4"
1972	Nadezhda Chizhova	U.S.S.R.	69' 0"
1976	Ivanka Khristova	Bulgaria	69' 5"
1980	Ilona Slupianek	G.D.R.	22.41 mtrs.
	Long Jump		
1948	Olga Gyarmati	Hungary	18' 8¼"
1952	Yvette Williams	New Zealand	20' 5¾"
1956	Elizbeita Krezeskinska	Poland	20' 9¾"
1960	Vera Krepkina	U.S.S.R.	20' 10¾"
1964	Mary Rand	G.B.	22' 2½"
1968	Niscopoleanu	Rumania	22' 4½"
1972	Heide Rosendahl	W. Germany	22' 3"
1976	Angela Voigt	G.D.R.	22' 2½"
1980	Tatyana Kolpakova	U.S.S.R.	7.06 mtrs.

YACHTING (1980)

Soling Class (Den.) Paul Jensen, Valdeman Bandolowski, Erik Hansen: **Star Class** (USSR): Velentin Mankin, Alexandr Muzymchenko. **Flying Dutchman Class** (Spain) Alejandro Abascal, Miguel Noguer. **470 Class** (Braz) Marcas Soares, Eduardo Penido. **Finn Class** (Fin.) Esko Rechardt: **Tornado Class** (Braz.) Alexandre Welter, Lars Bjorkstorm

JUDO (1980)

Winners:

Open Category (No Weight limit): Dietmar Loreng (G.D.R.); *Heavyweight (Over 95 kg.):* Angelo Parisi (France); *Light Heavyweight* (upto 95 kg.): Robert Van der Walle (Bel.); *Middleweight* (upto 86 Kg.): *Jureg Roethlisberger* (Swi.); *Light Middleweight* (upto 78 Kg.): Shota Khambarelin (U.S.S.R.); *Lightweight* (upto 71 Kg.): Ezio Gamba (Ita.); *Featherweight* (upto 65 Kg.): Nikolai Solodukhin (USSR); *Bantamweight* (upto 60 Kg.): Thierry Rey (France).

MODERN PENTATHLON (1980)

Individual: Anatoly Starostin (USSR); **Team:** Anatoly Starostin, Pavel Lednev, Evgeny Lipeev (USSR).

GYMNASTICS (1980)

Men

Winners: **Team Competition:** USSR 589.6; **Combined Exercises** (Individual: Alexandr Dityatin (USSR) 118.65; **Floor Competition:** Roland Bruckner (GDR) 19.75; **Side Horse:** Zoltan Magyar (Hun.) 19.925; **Rings:** Alexandr Dityatin (USSR) 19.875; **Horse Vault:** Nikolai Andrianov (USSR) 19.825; **Parallel Bars:** Alexandr Tkachyov (USSR) 19.775; **Horizontal Bars:** Stoyan Deltchev (Bul.) 19.825.

Women

Team Competition: (USSR) 394.9; **Combined Exercises** (Individual): Yelena Davydova (USSR) 79.15; **Horse Vault:** Nataliya Shaposhnikova (USSR): 19.725; **Asymmetrical Bars:** Maxi Gauck (GDR) 19.875; **Balance Beam:** Nadia Comaneci (Rum.) 19.8; **Floor Exercises:** Nadia Comaneci (Rum) 19.875; Nelli Kim (USSR) 19.875.

WRESTLING (1980)

FREESTYLE: Lightweight (upto 48 Kg.): Clandio Pollio (Ita.); **Flyweight** (upto 52 Kg.): Anatoly Beloglazon (USSR); **Bantamweight** (upto 57 Kg.): Sergei Beloglazov (USSR); **Featherweight** (upto 62 Kg.): Magomidgasan Abushev (USSR); **Lightweight** (upto 68 Kg.): Saipula Absaidovan (USSR); **Welterweight** (upto 74 Kg.): Valentin Raitchev (Bul.); **Middleweight** (upto 82 Kg.): Ismail Abilov (Bul.); **Light Heavyweight** (upto 90 Kg.): Senasar Oganesyan (USSR); **Heavyweight** (upto 100 Kg.): Ilya Mate (USSR); **Super Heavyweight** (Over 100 Kg.): Soslan Andiev (USSR).

Greco-Roman Style:

Light Flyweight (upto 48 kg.): Zaksylik Ushkemparov (USSR); **Flyweight** (upto 52 kg.): Vakhtang Blagidze (USSR); **Bantamweight** (upto 57 kg): Shamll Serikov (USSR); **Featherweight** (upto 62 kg.): Stilianos Migiakis (Gre.); **Lightweight** (upto 68 kg.): Stefan Rusu (Rom.); **Welterweight** (upto 74 kg.): Ferenc Kocois (Hun.); **Middleweight** (upto 82 kg.): Gennady Korban (USSR); **Light Heavyweight** (upto 90 kg.): Nobort Nottny (Hun.); **Heavyweight** (upto 100 kg.): Ghearghi Raikov (Bul.); **Super Heavyweight** (Over 100 kg.): Alexandr Koichimsky (USSR).

WEIGHTLIFTING (1980)

Winner and weight (kg.) respectively:

Flyweight (upto 52 kg.): Kanybekosmonaliev (USSR) 245; **Bantamweight** (upto 56 kg.): Daniel Nunez (Cuba) 275; **Featherweight** (upto 60 kg.): Viktor Mazin (USSR) 290; **Lightweight** (upto 67.5 kg.): Yanko Ronssev (Bul.) 342.5; **Middleweight** (upto 75 kg.): Assen Zlatev (Bul.) 360; **Light Heavyweight** (upto 82.5 kg.); Yurik Vardhanyan (USSR) 400; **Middle Heavyweight** (upto 90 kg.): Peer Baczako (Hun.) 377.5; (upto 90 kg.): Ota Zaremba (Czech.) 395; **Heavyweight** (upto 110 kg.): Leonid Teranonko (USSR) 422.5; **Super Heavyweight** (Over 110 kg.): Sultan Rakhmanov (USSR) 440

HANDBALL (1980)

Winner: Men (GDR); Women (USSR).

BASKETBALL (1980)

Winner: Men: (Yug) Women (USSR.)

SHOOTING (1980)

Winner (Country) and points scored respectively.

Rapid Fire Pistol: Jurgen Wiefel (GDR), 299; **Small-bore Rifle:** Viktor Vlasov (USSR), 1,173; **Trap:** Luciano Giovannelli (Italy), 198.2; **Skeet:** Hans-Kjeld Rasmussen (Denmark), 196; **Running Boar Target:** Igor Sokolov (USSR), (Normal run: 298; Fast Run: 297), 589.

VOLLEYBALL (1980)

Men's: USSR; Women's: Bulgaria.

BOXING (1980)

Winners: Light Flyweight: (upto 48 kg.): Shamil Sabirov (USSR); **Flyweight** (upto 51 kg.): Petar Lessov (Bul.); **Bantamweight** (upto 54 kg.): Juan Hernandez (Cuba); **Featherweight** (upto 57 kg.): Rudi Fink (G.D.R.); **Lightweight** (upto 60 kg.): Angel Herreara (Cuba); **Light Welterweight** (upto 63.5 kg.), Patrizio Oliva (Ita); **Welterweight** (upto 67 kg.): Andres Aldama (Cuba); **Light Middleweight** (upto 71 kg.): Armando Martinez (Cuba); **Middleweight** (upto 75 kg.): Jose Gomez (Cuba); **Light Heavyweight** (upto 81 kg.): Slobodar Kacar (Yug.); **Heavyweight** (Over 81 kg.): Teofilio Stevenson (Cuba).

CYCLING (1980)

1,000-metre Sprint: Lutz Hosslich (GDR); **1,000-Metre Time Trial:** Lothar Thoms (GDR) 1:0295; **4,000-Metre Individual Pursuit:** Robert Dill-Bundi (Swit.) 4:35.66; **4,000-Metre Team Pursuit** (USSR) 4:15.7; **Individual Road Race:** Sergei Sukhoruchenkov (USSR) 4h. 48:28.9; **Road Team Trial** (USSR), 2h.01:27.7; **Individual Road Race:** Sagei Sukhrechenav (USSR).

EQUESTRIAN SPORTS (1980)

Grand Prix (Jumping): Jan Kowalozk (Pol.); **Grand Prix** (Dressage): Elisabeth Thewer (Aus.).

FENCING (1980)

Men

Foil: Vladimir Smimov (USSR); **Epee:** Johan Harmenberg (Swe.); **Sabre:** Viktor Krovopuskov (USSR).

Women

Foil: Pascale Trinquest (Fra.).

ROWING (1980)

Winner and country respectively:

Men

Single Sculls: Pertti Karppinen (Fin.); **Double Sculls:** Joachim Dreifke, Klaus Krepplien (GDR); **Coxless Quadruple Sculls:** Frank Dundr; Karsten Bunk, Uwe Heppner, Martinwinter (GDR); **Coxless Pairs:** Bernd Landvoigt, Jorg Landvigt (GDR); **Coxed Pairs:** Harald Jahrling, Friedrich Ulrich (GDR); **Coxless Fours:** Siegfried Brietzke, Jurgin Thicle, Andreas Decker, Stefan Semmler (GDR); **Coxed Fours:** Diter Wendisch, Ulrich Diessner, Walter Diessner, Gottifried Dohn (GDR); **Eights:** Bernd Krauss, Hans-Peter Koppe, Ulrich Kons, Jorg Friedrich, Jens Doberschutz, Ulrich Karnets, Uwe Duhrmg, Bernd Hoing (GDR).

Women

Single Sculls: Sanda Toma (Rum.); **Double Sculls:** Yelen Khlopeeva, Lurissa Poppova (USSR); **Coxless Pairs:** Ute Steindorf, Cornelia Klier (GDR); **Coxed Quadruple Sculls:** Jutta Ploch, Jutta Lal, Sybille Reinhardt, Roswitha Zobelt (GDR); **Coxed Fours:** Remona Kapheim, Silvia Frohlich, Angelika Noack, Remy Salfeld, Kirsten (GDR); **Eights:** Martina Boesler, Kersten Neisser, Christiane Kopke, Birght Schultz, Gabrille, Kuhn, Ilona Richter, Marita Sandig, Karin Metze.

CANOEING (1980)

Winner and country respectively:

Men

Kayak Singles—500 Metres: Vladimir Parfenovich (USSR) 1:43.42; **Kayak Singles**—1,000 Metres: Rudigor Holm (GDR)

3:48.77; **Kayak Pairs**—500 Metres: (USSR) 1:32.38; **Kayak Pairs**—1,000 Metres (USSR): 3:26.72; **Kayak Fours**—1,000 Metres (GDR); **Canadian Singles**—500 Metres: Sergei Postrekhin (USSR) 1:53.37; **Canadian Singles**—1,000 Metres: Lubomir Lubenov (Bul.) 4:12.38; **Canadian Pairs**—500 Metres: (Hungary) 1:43.3; **Canadian Pairs**—1,000 Metres (Rum.).

Women

Kayak Singles—500 Metres: Birgit Fischer (GDR) 1:57.96; **Kayak Pairs**—500 Metres: (GDR) 1:43.88.

ARCHERY (1980)

Men: Double FITA Round: Tomi Poikolainen (Fin)
Women: Double FITA Round: Keto Losaberidze (USSR).

OLYMPIC FOOTBALL

Year and winner respectively: 1912 Great Britain; 1920 Belgium; 1924 Uruguay; 1928 Uruguay; 1936 Italy; 1948 Sweden; 1952 Hungary; 1956 Soviet Union: 1960 Yugoslavia; 1964 Hungary ; 1968 Hungary; 1972 Poland; 1976 G.D.R.; 1980 Czechoslovakia.

WORLD CUP SOCCER

The Jules Rimett Cup: 1930 Uruguay; 1934 Italy; 1938 Italy; 1950 Uruguay; 1954 W. Germany; 1958 Brazil; 1962 Brazil; 1966 England; 1970 Brazil; 1974 West Germany; 1978 Argentina.

NATIONAL FOOTBALL

Santosh Trophy: Year and winner respectively: 1953 Bengal; 1954 Bombay; 1955 Bengal; 1956 Hyderabad; 1957 Hyderabad; 1958 Bengal; 1959 Bengal; 1960 Services; 1961 Railways; 1962 Bengal; 1963 Maharashtra; 1964 Bengal; 1965 (not played); 1966 Andhra Pradesh; 1967 Mysore; 1968 Mysore; 1969 Bengal; 1970 Punjab; 1971 Bengal; 1972 Bengal; 1973 Kerala; 1974 Punjab; 1975 Bengal; 1976 Bengal; 1977 Bengal; 1978 Bengal; 1979 Bengal; 1980 Bengal; 1981 Punjab.

Rovers Cup: Year and winner respectively: 1953 Hyderabad Police; 1954 Hyderabad Police; 1955 Mohun Bagan; 1956 Mohamedan Sporting; 1957 Hyderabad Police; 1958 Caltex; 1959 Mohamedan Sporting; 1960 Andhra Pradesh Police; 1961 E.M.E., Secunderabad; 1962 East Bengal—Andhra Pradesh Police; 1963 Andhra Pradesh Police; 1964 Bengal Nagpur Railway; 1965 (not held); 1966 Mohun Bagan; 1967 East Bengal; 1968 Mohun Bagan; 1969 East Bengal; 1970 Mohun Bagan; 1972 East Bengal and Mohun Bagan; 1973 East Bengal; 1974 Dempo S.C.; 1975 East Bengal Club; 1976 Mohun Bagan; 1977 Mohun Bagan; 1978 Dempo S.C.; 1970 Dempo S.C.; 1980 East Bengal and Mohamedon Sporting (Jointly); 1981 Mohun Bagan.

I.F.A. Shield: Year and winner respectively: 1954 Mohun Bagan; 1955 Rajasthan S.C.; 1956 (not held); 1957 Mohamedan Sporting; 1958 East Bengal; 1959 Abandoned; 1960 Mohun Bagan; 1961 Mohun Bagan; 1962 Mohun Bagan; 1963 Bengal Nagpur Railway; 1964 East Bengal; 1965 (not held); 1966 Mohun Bagan; 1967 East Bengal — Mohun Bagan; 1968 Mohun Bagan — Mohamedan Sporting; 1969 (not held); 1970 East Bengal; 1971-1972 (not held) 1973 East Bengal; 1974 East Bengal; 1975 East Bengal Club; 1976 Mohun Bagan & East Bengal; 1977 Mohun Bagan: 1978 Mohun Bagan; 1979 Mohun Bagan.

Durand Cup: Year and winner respectively: 1953 Mohun Bagan; 1954 Hyderabad Police; 1955 Madras Regimental Centre; 1956 East Bengal: 1957 (not held); 1958 (not held); 1959 Mohun Bagan; 1960 East Bengal; 1961 Andhra Pradesh Police; 1962 (not held); 1963 Mohun Bagan; 1964 Mohun Bagan; 1965 (not held); 1966 Gorkha Brigade; 1967 East Bengal; 1968 Border Security Force; 1969 Gorkha Brigade; 1970 East Bengal; 1971 (not played); 1972 East Bengal; 1973 Border Security Force; 1974 Mohun Bagan; 1975 J.C.T. Mills (Phugwara); 1976 J.C.T. Mills (Phugwara) & B.S.F. (Jullundur); 1977 Mohun Bagan; 1978 East Bengal; 1979 Mohun Bagan; 1980 Mohun Bagan.

TENNIS

Davis Cup: Year and winner respectively: 1900 U.S.; 1902 U.S.; 1903 British Isles.; 1904 British Isles.; 1905 British Isles.; 1906 British Isles.; 1907 to 1909 Australia; 1911 Australia; 1912 British Isles.; 1913 U.S.; 1914 Australia; 1919 Australia; 1920 to 1926 U.S.; 1927 to 1932 France; 1933 to 1936 G.B.; 1937-38 U.S.; 1939 Australia; 1946 to 1949 U.S.; 1950 to 1953 Australia; 1954 U.S.; 1955-1957 Australia; 1958 U.S.; 1959 to 1962 Australia; 1963 U.S.; 1964 to 1967 Australia; 1968 to 1972 U.S.: 1973 Australia; 1974 South Africa (by default); 1975 Czechoslovakia; 1976 Sweden; 1977 Australia; 1978 United States; 1979 United States.

OLYMPIC HOCKEY

Year and winner respectively : 1908 Great Britain; 1920 Great Britain; 1928 India; 1932 India; 1936 India; 1948 India 1952 India; 1956 India; 1960 Pakistan; 1964 India; 1968 Pakistan; 1972 W. Germany; 1976 New Zealand; 1980 India.

NATIONAL HOCKEY

Rangaswamy Cup: Year and winner respectively—1953 Services; 1954 Madras-Services; 1955 Services; 1956 Railways; 1957 Railways; 1958 Railways; 1959 Services; 1960 Services; 1961 Railways; 1962 Railways; 1963 Railways; 1964 Punjab; 1965 (not held); 1966 Railways-Madras; 1967 Railways; 1968 Punjab; 1969 Punjab-Railways; 1970 Punjab; 1971 Punjab; 1972 Punjab 1973 Services; 1974 Railways; 1975 Railways; 1976 Railways; 1977 Railways and Indian Airlines (Jointly); 1978 Indian Airlines; 1979 Railways.

Aga Khan Cup: Year and winner respectively: 1953 Lusitanian S.C.; 1954 Punjab; 1955 Bombay City Police; 1956 (not held); 1957 Burmah-Shell; 1958 Northern Railway; 1959 Punjab Police; 1960 I.H.F. President's XI; 1961 Maratha L.I.; 1962 North Eastern Railway; 1963 Mohun Bagan; 1964 Punjab Police; 1965 (not held); 1966 Punjab Police; 1967 Western Railway; 1968 Punjab Police; 1969 (not played); 1970 (not played); 1971 Indian Airlines; 1972-74 (not played); 1975 Northern Railway; 1976 Eastern Railway; 1977 Tournament Abandoned; 1978 (not held): 1980: Northern Railway.

Beighton Cup: Year and winner respectively: 1953 Tata S.C.; 1954 Western Railway-Uttar Pradesh; 1955 Services; 1956 East Bengal; 1957 Mohun Bagan; 1958 Corps of Signals; 1959 Mohun Bagan; 1960 Central Railway; 1961 Central Railway; 1962 Central Railway; 1963 Mohun Bagan; 1964 Mohun Bagan-Customs A.C. (Jt. holders); 1965 (not held); 1966 East Bengal; 1967 Mohun Bagan; 1968 (not held); 1969 Western Railway; 1970 Western Railway; 1971 Mohun Bagan and B.S.F. (Jt. holders); 1972 (not held); 1973 Mohun Bagan and Indian Hockey Federation Dark Blues (Jt. holders); 1974 Mohun Bagan; 1975 Mohun Bagan; 1976 Army Supply Corps (Jullundur); 1977 Mohun Bagan; 1978 Mohun Bagan; 1979 Mohun Bagan; 1980 Western Railway.

CRICKET

TEST MATCHES: **with England:** 1932 (in England) India lost the only match played by 158 Runs; 1933-34 (in India) India lost 2 and drew 1; 1936 (in England) India lost 2 and drew 1; 1946 (in England) India lost 1 and drew 2; 1951-52 (in India) India won 1, lost 1 and drew 3; 1952 (in England) India lost 3 and drew 1; 1959 (in England) India lost 5; 1962 (in India) India won 2 and drew 3; 1964 (in India) All 5 Tests drawn; 1967 (in England) India lost all 3 tests; No matches were held during 1968 to 1970; 1971 (in England) India won one and drew two; 1972 (in India) India won two, lost one, and drew two; 1974 (in England) India lost all 3 tests; 1976-77 (in India) India won 1, lost 3 and drew 1; 1979 (in England) India lost 1 and drew 3; 1980 (in India) India lost the Golden Jubilee Test.

Australia: 1947 (in Australia) India lost 4 and drew 1; 1956 (in India) India lost 2 and drew 1; 1959-60 (in India) India won 1, lost 2 and drew 2; 1964 (in India) India won 1, lost 1 and drew 1; 1967-68 (in Australia) India lost all 4; 1969-70 (in India) India won 1, lost 3 and drew 1; 1977-78 (in Australia) India won 2, lost 3; 1979 (in India) India won 2, drew 4; 1980-81 (in Australia) India lost 1, won 1 and drew 1.

West Indies: 1948 (in India) India lost 1 and drew 4; 1953 (in West Indies) India lost 1 and drew 4; 1958 (in India) India lost 2 and drew 3; 1962 (in West Indies) India lost all 5; 1966-67 (in India) India lost 2 and drew 1; 1971 (in West Indies) played 5 test matches (India won 1, drew 4) India got rubber; 1974-75 (in India) played 5 tests (India won 2 and lost 3); 1976 (in West Indies) India lost two, won one and drew one; 1978-79 (in India) played 6. (India won one and drew 5).

Pakistan: 1952 (in India) India won 2, lost 1 and drew 3; 1954 (in Pakistan) all 5 Tests drawn; 1960-61 (in India) all 5 Tests drawn; 1978 (in Pakistan) India lost 2 and drew 1; 1979-80 (in India) India won 2 and drew 4.

New Zealand: 1955-56 (in India) India won 2 and drew 3; 1965 (in India) India won 1 and drew 3; 1968 (in New Zealand) India won 3 and lost 1; 1969 (in India) India won 1, lost 1 and drew 2; 1970 (in India) India won 1, lost 1 and drew 1; 1976 (in New Zealand) India won 1, lost 1 and drew 1; 1981 (in New Zealand) India lost 1 and drew 2.

BILLIARDS

1977—World Amateur Champion: Michael Fereira (India); 1979—Paul Misfield (Malta). 1981—Michael Fereira (India).

RANJI TROPHY

Championship 1934-1981

Year	*Winner*	*Runner-up*
1934-35	Bombay	Northern India
1935-36	Bombay	Madras
1936-37	Nawanagar	Bengal
1937-38	Hyderabad	Nawanagar
1938-39	Bengal	Southern Punjab
1939-40	Maharashtra	United Provinces
1940-41	Maharashtra	Madras
1941-42	Bombay	Mysore
1942-43	Baroda	Hyderabad
1943-44	Western India	Bengal
1944-45	Bombay	Holkar
1945-46	Holkar	Baroda
1946-47	Baroda	Holkar
1947-48	Holkar	Bombay
1948-49	Bombay	Baroda
1949-50	Baroda	Holkar
1950-51	Holkar	Gujarat
1951-52	Bombay	Holkar
1952-53	Holkar	Bengal
1953-54	Bombay	Holkar
1954-55	Madras	Holkar
1955-56	Bombay	Bengal
1956-57	Bombay	Services
1957-58	Baroda	Services
1958-59	Bombay	Bengal
1959-60	Bombay	Mysore
1960-61	Bombay	Rajasthan
1961-62	Bombay	Rajasthan
1962-63	Bombay	Rajasthan
1963-64	Bombay	Rajasthan
1964-65	Bombay	Hyderabad
1965-66	Bombay	Rajasthan
1966-67	Bombay	Rajasthan
1967-68	Bombay	Madras
1968-69	Bombay	Bengal
1969-70	Bombay	Rajasthan
1970-71	Bombay	Maharashtra
1971-72	Bombay	Bengal
1972-73	Bombay	Tamil Nadu
1973-74	Karnataka	Rajasthan
1974-75	Bombay	Karnataka
1975-76	Bombay	Bihar
1976-77	Bombay	Delhi
1977-78	Karnataka	U.P.
1978-79	Delhi	Karnataka
1979-80	Delhi	Bombay
1980-81	Bombay	Delhi

DULEEP TROPHY

Year	*Winner*	*Runner-up*
1961-62	West Zone	South Zone
1962-63	West Zone	South Zone
1963-64	West Zone South Zone	
1964-65	West Zone	Central Zone
1965-66	South Zone	Central Zone
1966-67	South Zone	West Zone
1967-68	South Zone	West Zone
1968-69	West Zone	South Zone
1969-70	West Zone	North Zone
1970-71	South Zone	East Zone
1971-72	Central Zone	West Zone
1972-73	West Zone	Central Zone
1973-74	North Zone	Central Zone
1974-75	South Zone	West Zone
1975-76	South Zone	North Zone
1976-77	West Zone	North Zone
1977-78	West Zone	North Zone
1978-79	North Zone	West Zone
1979-80	North Zone	West Zone

1980-81 Not played*

See Chapter on State Associations for State-wise list of Sports Associations. *As on March 2, 1981.

HIMALAYAN CAR RALLY (1981)

Winners: First Prize—**Air-India Trophy** and a cash award of Rs. 30,000—Ramesh Khoda (a Kenyan businessman) and his driving partner Aslam Khan; Second Prize—**Modi Rubber Trophy** and a cash award of Rs. 15,000—Maj. Ravi Kapur and Lt. G. J. Singh; Third Prize—A trophy and a cash prize of Rs. 10,000—Minoo Nanavathy and his driving partners Darayus Bhathena and Gavin Hurtis.

CORPORATE GIANTS IN INDIA (1979-80)

(Private Sector)

Rank	Name of the Company	Total Assets (Rs. Million)
1.	Tata Engineering & Locomotive Co. Ltd.	4,003·7
2.	Tata Iron & Steel Co. Ltd.	3,987·8
3.	Scindia Steam Navigation Co. Ltd.	2,183·4
4.	Gwalior Rayon Silk Mfg. (Weaving) Co. Ltd.	1,720·6
5.	Hindustan Lever Ltd.	1,691·3
6.	Great Eastern Shipping Co. Ltd.	1,612·7
7.	Delhi Cloth & General Mills Co. Ltd.	1,517·5
8.	Associated Cement Cos. Ltd.	1,506·2
9.	Calcutta Elec. Supply Corpn. Ltd.	1,442·1
10.	J. K. Synthetics Ltd.	1,439·5
11.	India Tobacco Co. Ltd.	1,425·1
12.	Gujarat State Fertiliser Co. Ltd.	1,394·8
13.	Southern Petrochemicals Industries Corpn. Ltd.	1,221·7
14.	Dunlop India Ltd.	1,207·5
15.	Hindustan Aluminium Corpn. Ltd.	1,176·9
16.	Century Spg. & Mfg. Co. Ltd.	1,158·9
17.	Larsen & Toubro Ltd.	1,125·8
18.	Indian Steamship Co. Ltd.	1,108·1
19.	Reliance Textile Industries Ltd.	1,101·7
20.	Hindustan Motors Ltd.	1,068·6
21.	Indian Aluminium Co. Ltd.	1,065·6
22.	Ashok Leyland Ltd.	1,027·0
23.	Voltas Ltd.	1,012·6
24.	Engineering Construction Corpn. Ltd.	922·0
25.	Ahmedabad Electricity Co. Ltd.	919·5
26.	Calico Mills	888·5
27.	Union Carbide India Ltd.	884·1
28.	Ballarpur Industries Ltd.	854·7
29.	Mahindra and Mahindra Ltd.	852·4
30.	Guest Keen Williams Ltd.	839·4
31.	ACC-Vickers-Babcock Ltd.	820·1
32.	Escorts Ltd.	791·7
33.	Indian Explosives Ltd.	786·9
34.	Mangalore Chem.	780·5
35.	Bombay Dyeing & Mfg. Co. Ltd.	764·1
36.	Tata Power Co. Ltd.	756·6
37.	Peico Electronics Ltd.	738·9
38.	National Organic Chemical Industries Ltd.	722·5
39.	Bombay Suburban Electric Supply Ltd.	696·4
40.	Mahindra Ugine Steel Co. Ltd.	675·0
41.	Metal Box Co. of India Ltd.	663·2
42.	Chowgule Steamship Ltd.	644·9
43.	Birla Jute Mfg. Co. Ltd.	636·2
44.	Nirlon Synthetic Fibres & Chemicals Ltd.	635·3
45.	Zuari Agro Chemicals Ltd.	623·3
46.	Brooke Bond India Pvt. Ltd.	620·8
47.	Tata Chemicals Ltd.	599·7
48.	Siemens India Ltd.	585·9
49.	Indian Tube Co. Ltd.	585·4
50.	Rallis India Ltd.	573·6
51.	East India Hotels Ltd.	571·3
52.	Standard Mills Co. Ltd.	567·9
53.	Modi Rubber Ltd.	559·6
54.	Madura Coats Ltd.	546·6
55.	Renusagar Power	539·3
56.	Tata Oil Mills Co. Ltd.	529·5
57.	J. K. Industries Ltd.	527·2
58.	Crompton Greaves Ltd.	521·6
59.	Alkali & Chemical Corpn. of India Ltd.	518·7
60.	Coromandel Prodorite Pvt. Ltd.	513·0
61.	Glaxo Laboratories (India) Ltd.	508·7
62.	Kesoram Industrial Cotton Mills Ltd.	502·4
63.	Tata Finlay Ltd.	498·9
64.	Mafatlal Industries Ltd.	496·6
65.	Indian Dyestuff Industries Ltd.	486·4
66.	Orient Paper Mills Ltd.	477·2
67.	Mafatlal Fine Spg. & Mfg. Co. Ltd.	475·3
68.	Kamani Engg. Ltd.	465·4
69.	Binny Ltd.	464·1
70.	Jiyajeerao Cotton Mills Ltd.	463·1
71.	National Rayon Corpn. Ltd.	460·7
72.	Motor Industries Co. Ltd.	458·7
73.	Ratnakar Shipping Co. Ltd.	458·6
74.	Mukand Iron Steel Works Ltd.	453·2
75.	Damodar Bulk Carriers Ltd.	446·8
76.	Atul Products Ltd.	446·2
77.	Raymond Woollen Mills Ltd.	439·2
78.	Bata Shoe Co. Pvt. Ltd.	435·2
79.	Ceat Tyres of India Ltd.	433·3
80.	Madras Rubber Factory Ltd.	430·4
81.	Straw Products Ltd.	426·5
82.	Andhra Valley Power Supply Co. Ltd.	425·0
83.	Kirloskar Oil Engines Ltd.	420·7
84.	Bihar Alloy Steels Ltd.	416·4
85.	EID Parry Ltd.	415·1
86.	Duncan Agro Industries Ltd.	409·1
87.	Golden Tobacco Co. Ltd.	405·5
88.	Colour Chem Ltd.	405·0
89.	Baroda Rayon Corpn. Ltd.	389·5
90.	Indian Oxygen Ltd.	387·1
91.	Bombay International Trading Corpn.	384·8
92.	Modipon Ltd.	382·3
93.	Textile Machinery Corpn. Ltd.	381·6
94.	Mafatlal Fine Spg. & Mfg. Co. Ltd.	380·5
95.	Premier Automobiles Ltd.	371·9
96.	Greaves Cotton & Co. Ltd.	371·5
97.	Tinplate Co. of India Ltd.	366·8
98.	Shree Ambika Mills	359·1
99.	Hindustan Construction Co. Ltd.	357·8
100.	General Electric Co. of India Ltd.	353·9
101.	Kothari Madras Ltd.	353·6

COMPANY AFFAIRS

As on 31st March 1979, there were 51,051 companies limited by shares at work in the various States and Union Territories of India. Their aggregate paid-up capital was Rs. 118,781 million. The Government companies numbered 782 with a paid-up capital of Rs. 83,152 million. The balance of 50,269 non-Government companies had a paid-up capital of Rs. 35,629 million.

In addition to the companies limited by shares, there were 1,414 companies limited by guarantee at work in the country as at the end of 1978–79.

Non-Government Companies at Work (Capital in Rs. million)

Year ended	Public Ltd.		Private Ltd.		Total	
	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital
31-3-71	6,599	19,483	23,409	4,909	30,008	24,392
31-3-72	6,703	20,359	25,212	5,358	31,915	25,717
31-3-73	6,819	21,756	27,147	5,745	33,966	27,501
31-3-74	7,071	23,233	29,964	6,626	37,035	29,859
31-3-75	7,275	24,844	32,736	7,504	40,011	32,348
31-3-76	7,465	25,361	35,149	7,833	42,614	33,194
31-3-77	7,585	25,544	37,346	8,193	44,931	33,737
31-3-78	7,725	26,494	39,485	8,473	47,210	34,967
31-3-79	7,893	26,880	42,376	8,749	50,269	35,629

Statewise Distribution of Government Companies as on 31st March 1979

(Capital in Rs. million)

States/Union Territories	Public Ltd.		Private Ltd.		Total	
	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital
Andhra Pradesh	20	537	27	2,051	47	2,588
Assam	6	42	18	1,039	24	1,081
Bihar	13	59	28	4,183	41	4,242
Gujarat	26	244	8	2,009	34	2,253
Haryana	2	11	6	84	8	95
Himachal Pradesh	6	63	6	86	12	149
Jammu & Kashmir	2	3	11	303	13	306
Karnataka	22	262	35	4,654	57	4,916
Kerala	20	1,452	51	1,165	71	2,617
Madhya Pradesh	6	113	13	256	19	369
Maharashtra	29	772	41	4,345	70	5,117
Nagaland	1	17	3	364	4	381
Orissa	19	381	14	115	33	496
Punjab	4	8	3	4	7	12
Rajasthan	7	104	10	830	17	934
Tamil Nadu	34	1,102	26	2,860	60	3,962
Uttar Pradesh	47	1.110	39	780	86	1.890
West Bengal	21	1,150	38	7,708	59	8,858
Chandigarh	20	65	21	318	41	383
Delhi	6	925	44	41.360	50	42,285
Goa, Daman & Diu	5	27	1	3	6	30
Manipur	—	—	3	27	3	27
Meghalaya	2	64	7	30	9	94
Pondicherry	—	—	2	18	2	18
Tripura	2	1	3	28	5	29
Arunachal Pradesh	—	—	2	4	2	4
Mizoram	—	—	1	1	1	1
Andaman & Nicobar Islands	1	15	—	—	1	1·5
Total	321	8,527	461	74,625	782	83,152

There were also 62 companies with unlimited liability at work in India as at the end of 1978–79.

New Registrations: During the year 1978–79, 33 Government companies and 3,455 non-Government companies with liability limited by shares, 15 non-Government companies with unlimited liability and 34 non-Government companies with liability limited by guarantee, were registered under the Companies Act, 1956, making a total of 3,537 companies.

The 33 Government companies registered during 1978–79 had an authorised capital of Rs. 703 million. During 1977–78, the number of Government companies registered totalled 44 with an authorised capital of Rs. 10,962 million.

The 3,455 non-Government companies registered during 1978–79 had an authorised capital of Rs. 3,094 million compared to 2,624 companies registered during 1977–78 with an authorised capital of Rs. 2,624 million.

Liquidations : As on March 31, 1979, there were 3,512 companies in liquidation. Out of the total number of companies in liquidation, nearly 40 per cent were under the charge of voluntary liquidators.

During the year 1978–79, as many as 174 companies were declared defunct and their names were struck off the registers maintained by the Registrar of Companies.

Distribution of Foreign Companies* and Their Country of Origin as on 31st March

Country of origin	1975	1976	1977	1978	1979
United Kingdom	301	277	276	265	189
U.S.A.	81	80	81	80	64
Japan	20	20	20	20	17
West Germany ..	12	11	11	11	5
Pakistan ..	6	6	6	6	6
Switzerland ..	9	8	8	8	5
France	7	8	8	8	7
Canada	7	6	6	7	6
Netherlands ..	7	7	7	7	5
Other countries	60	58	59	61	54
TOTAL ..	510	481	482	473	358

* As defined under Sec. 591 of the Companies Act.

State-wise Distribution of non-Government Companies as on 31st March 1978

(Capital in Rs. million)

States/Union Territories	Public Ltd.		Private Ltd.		Total	
	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital
Andhra Pradesh	234	1,159	1,332	325	1,566	1,484
Assam	94	512	531	77	625	589
Bihar	116	223	695	139	811	362
Gujarat	376	2,262	2,136	694	2,512	2,956
Haryana	88	212	323	76	411	288
Himachal Pradesh	15	52	111	20	126	72
Jammu & Kashmir	13	18	131	23	144	41
Karnataka	375	974	1,890	323	2,265	1,297
Kerala	369	459	1,072	132	1,441	591
Madhya Pradesh	127	556	573	161	700	717
Maharashtra	1,357	7,762	10,185	2,512	11,542	10,274
Nagaland	1	1	11	1	12	2
Orissa	76	279	318	31	394	310
Punjab	89	214	1,217	228	1,306	442
Rajasthan	143	228	677	181	820	409
Tamil Nadu	814	2,543	3,508	611	4,322	3,154
Uttar Pradesh	334	1,094	2,015	288	2,349	1,382
West Bengal	2,671	6,165	9,574	1,526	12,245	7,691
Chandigarh	26	78	156	28	182	106
Delhi	533	1,797	5,473	1,160	6,006	2,957
Goa, Daman & Diu	21	275	287	191	308	466
Manipur	1	—	7	—	8	—
Meghalaya	12	9	47	2	59	11
Pondicherry	7	8	83	19	90	27
Tripura	—	—	7	—	7	—
Andaman & Nicobar	—	—	4	—	4	—
Dadra & Nagar Haveli	—	—	7	1	7	1
Arunachal Pradesh	1	—	5	—	6	—
Mizoram	—	—	1	—	1	—
TOTAL	7,893	26,880	42,376	8,749	50,269	35,629

Capital Raised: During the year 1978–79, an amount of Rs. 13,664 million was reported to have been raised by way of paid-up capital by Government companies.

Also during 1978-79, an amount of Rs. 794 million was reported to have been raised by way of paid-up capital by non-Government companies.

During the year 1978-79, 14 foreign companies established their places of business in India while 129 companies were reported to have closed down their places of business.

After taking into account the newly established branches of foreign companies and those which were closed down during the year, the total number of foreign companies at work as on 31-3-1979 was 358, compared to 473 at the end of the previous year.

Industrial Pattern of Government & Non-Government Companies as on 31st March 1978

(Capital in Rs. million)

Industrial Classification	Government Companies						Non-Government Companies					
	Public Ltd.		Private Ltd.		Total		Public Ltd.		Private Ltd.		Total	
	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital	No.	Paid-up Capital
Agriculture & Allied Activities	25	158	44	653	69	811	494	765	1,087	245	1,581	1,010
Mining & Quarrying ..	10	407	33	15,715	43	16,122	248	636	762	307	1,010	943
Processing & Manufacture — Foodstuffs, Textiles, Leather & Products thereof	62	756	80	3,257	142	4,013	1,333	5,421	4,044	1,382	5,377	6,803
Processing & Manufacture — Metals, Chemicals & Products thereof ..	97	3,985	92	21,735	189	25,720	2,123	11,765	12,312	2,732	14,435	14,497
Processing & Manufacture — Not elsewhere classified	41	1,304	37	4,043	78	5,347	910	3,575	4,710	939	5,620	4,514
Construction & Utilities ..	12	237	29	1,394	41	1,631	255	771	1,055	184	1,310	955
Commerce (Trade & Finance)	39	1,018	70	3,121	109	4,139	1,936	2,921	12,562	2.015	14,498	4,936
Transport, Communication & Storage	13	221	12	601	25	822	227	570	2,134	362	2.361	932
Community & Business Services	11	392	51	24,026	62	24,418	169	201	1,784	205	1,953	406
Personal & Other Services	11	49	13	80	24	129	198	255	1,926	378	2,124	633
TOTAL	321	8,527	461	74,625	782	83.152	7,893	26,880	42,376	8,749	50,269	35,629

PUBLIC SECTOR

PUBLIC Sector plays a vital role in India's mixed economy. It activates the whole economy by promoting crucials and key sector which, due to heavy investment and low returns does not provide enough incentive to the private sector.

The growth of public sector has been impressive and now it covers 176 public enterprises with a total investment of Rs. 156,020 million as at end of March, 1979 against 83 enterprises with an aggregate investment of Rs. 33,330 million as at the end of March, 1968. The compound growth rate works out to be 10·3 per cent. Both the equity holding and long term loans take equal share of 50 per cent each. The turnover of the public sector undertakings was Rs. 189,360 million in 1978-79 against Rs. 23,930 million in 1968–69. The compound growth rate was 23 per cent. The gross profit of operational enterprises i.e. those excluding insurance companies rose from Rs. 850 million in 1968–69 to Rs. 10,760 million in 1978–79. The account of profit making and loss making enterprises is given in table 1 and table 2.

The public sector performed rather badly during 1979–80 due to the shortage of power, steel, difficult transport and post situation and labour trouble. However, it is reported to be doing better during the first months of 1980–81 in the field of minerals and metals, coal, medium and light engineering, transport equipment and consumer goods but petroleum, chemicals, and pharmaceuticals and heavy engineering were not equally active.

The sixth plan estimates public sector plan outlay at Rs. 693,800 million and the proposed financing is as stated in table 3.

The outlook for the coming decade for public sector is quite bright in the sense that the growth in industrial field will be accelerated due to new and effective allocation of resources e.g. in the field of power generation and distribution, the National Thermal Power Corporation and the National Hydro Electric Power Corporation may add substantially to the power generation capacity. As a result of planned investment of Rs. 8,000 million or more the production of coal is expected to look up.

Public Sector occupies predominant position in the country and not only will it be the producer of important and strategic goods of basic nature but will also help stabilise the supplies and prices of essential commodities to the consumers.

Table 1 : Trend in profitability of Public Enterprises (excluding insurance companies)

(Rs. million)

	Net Profit	Net Loss	Total Net Profit (+) or Loss (−)
1968–69	660·7 (41)	942·0 (32)	− 281·3 (73)
1969–70	722·6 (41)	756·6 (32)	− 34·0 (73)
1970–71	749·0 (52)	782·8 (35)	− 33·8 (87)
1971–72	996·5 (58)	1,186·1 (35)	− 189·6 (93)
1972–73	1,044·6 (67)	867·2 (34)	+ 177·4 (101)
1973–74	1,607·5 (72)	963·3 (42)	+ 644·2 (114)
1974–75	3,223·4 (81)	1,387·9 (39)	+ 1,835·5 (120)
1975–76	2,551·3 (87)	1,260·2 (34)	+ 291·1 (121)
1976–77	3,943·7 (93)	2,104·8 (56)	+ 1,838·9 (149)
1977–78	3,848·5 (81)	4,759·2 (73)	− 910·7 (155)
1978–79	4,847·5 (88)	5,167·1 (69)	− 319·6 (159)
1978–79*	4,847·5 (88)	3,045·5 (64)	+ 1,802·0 (154)

The bracketed figures indicate number of enterprises.
* Excludes five coal companies under C.I.L.

Table 2 : Top ten profit making Public Enterprises 1978-79

Name of the Company	Amount (Rs. million)
1. Oil & Natural Gas Commission	725·2
2. Indian Oil Corporation Ltd.	692·0
3. Steel Authority of India Ltd.	658·4
4. Air India	340·9
5. Bharat Heavy Electricals Ltd.	251·5
6. Madras Fertilizers Ltd.	181·5
7. Minerals & Metals Trading Corpn.	167·5
8. State Trading Corpn. of India	136·4
9. Hindustan Petroleum Corpn. Ltd.	119·6
10. Indian Airlines	114·2
Total	3,387·2

Table 3 : Top nine loss making Public Enterprises 1978-79

Name of the Company	Amount in (Rs. million)
1. Coal India Ltd. including its subsidiaries	2,121·6
2. Shipping Corpn. of India Ltd.	370·1
3. Heavy Engineering Corpn. Ltd.	274·8
4. Indian Iron & Steel Co. Ltd.	271·9
5. Hindustan Fertilizer Corpn.	229·2
6. Delhi Transport Corpn.	174·9
7. Fertilizer Corpn. of India	152·4
8. Indian Petro-Chemicals Corpn. Ltd.	131·0
9. Mining & Allied Machinery Corpn. Ltd.	100·6
Total	3,826·5

Table 4 : Estimated Budgetary Resources for the Public Sector Plan

(Rs. million at 1977–78 prices)

1. Central and State Government resources on revenue account at 1977–78 rates of taxation	128,890
(a) Balance from current revenues	127,660
(b) Net transfer from current revenues to funds	1,230
2. Contribution of public enterprises at 1977–78 fares, freights, tariffs and rates	102,960
(a) Centre	78,810
(b) States	24,150
3. Additional resources mobilisation	130,000
(a) By Centre	90,000
(b) By States	40,000
4. Market borrowings of Government, public enterprises and local bodies (net)	159,860
5. Small savings	31,500
6. State provident funds	29,530
(a) Centre	14,170
(b) States	15,360
7. Term loans of financial institutions (net)	12,960
(a) from L.I.C.	9,800
(b) from R.B.I.	1,660
(c) from R.E.C.	6,700
(d) Less repayments to financial institutions (−)	5,200
8. Miscellaneous capital receipts (net)	4,500
9. External assistance (net)	59,540*
10. Utilisation of foreign exchange reserves	11,800
11. Total	671,540
12. Uncovered gap	22,260
13. Aggregate resources	693,800

* Net of repayments only. Interest has been allowed for under item 1(a).

GOVERNMENT OF INDIA UNDERTAKINGS

THE growth of public sector has been impressive and now it covers 176 public enterprises with a total investment of Rs. 156,020 million as at the end of March, 1979 against 83 enterprises with an aggregate investment of Rs. 33,330 million as at the end of March, 1968. The turnover of the public sector undertakings was Rs. 189,360 million in 1978-79 against Rs. 23,930 million in 1968-69. The gross profit of operational enterprises i.e. those excluding insurance companies rose from Rs. 850 million in 1968-69 to Rs. 10,760 million in 1978-79.

Agricultural Finance Corpn. Ltd., Dhanraj Mahal, Chhatrapati Shivaji Maharaj Marg, Bombay 400039.

Eastern Region Office : Calcutta ; Northern Region Office : Lucknow ; Southern Region Office : Madras ; Branch Offices : Patna, Kota, Shillong & Surat.

Functions : The Corporation offers services to World Bank/Food & Agriculture Organisation, Asian Development Bank, Central and State Governments, commercial banks, institutions and individuals. AFC undertakes promotional activities including publication of a journal, holding of seminars on industries, participation in rural development etc., training/orientation programmes for bankers, Govt. officers and those involved in financing activities both in India and in the Third World countries, mounting of missions to flood/cyclone affected areas for supporting economic activities, etc.

Chairman : V. M. Bhide ; *Mg. Director :* Ghulam Ghouse.

Agricultural Refinance and Development Corpn., Shriniketan, Dr. A. Besant Rd., P. B. No. 6552, Worli, Bombay 400018.

Regional Offices : Central Bank of India Bldg., Lal Darwaja, P.B. No. 208, Ahmedabad 380001 ; 40, Kempegowda Rd., P.B. No. 9728, Bangalore 560009 ; M. P. State Co-op. Bank Bldg., Malviya Nagar, Bhopal 462003; Plot No. 101, Janpath, Station Square, P.B. No. 179, Bhubaneswar 751001 ; Old R.B.I. Bldg., 8, Council House St., P.B. No. 71, Calcutta 700001 ; S.C.O. No. 17, 18 & 19, Sector 17-B, P.B. No. 35, Chandigarh 160017 ; Lakshmi Bhavan, Dr. J. C. Das Rd., Pan Bazar, P.B. No. 81, Gauhati 781001 ; 6-1-91, Vasavi Nagar, Saifabad, Hyderabad 500004 ; C-93, Subhash Marg, C. Scheme, P.B. No. 10, Jaipur 302001 ; Sahakari Kisan Bhawan, 2, Mahatma Gandhi Marg, Lucknow 226001 ; Regina Mansion, 46, Second Line Beach, Madras 600001 ; Arunachal Bhavan, 4th Floor, Crossing of Dak Bungalow & Exhibition Rd., Patna 800001 ; " Bella Vista ", Kowdiar Avenue, P.B. No. 804, Trivandrum 695003 ; C/o R.B.I., Parliament St., N. Delhi 110001.

Functions : It is primarily a refinancing agency and its object is to provide financial accommodation to the various special schemes of agricultural development.

Chairman : M. Ramakrishnayya ; *Mg. Director :* Sant Dass.

Air India (See chapter on "Civil Aviation").

Air India Charters Ltd. (See chapter on "Civil Aviation").

Alloy Steels Plant, Durgapur 713202, is a subsidiary of Steel Authority of India Ltd.

Andaman and Nicobar Islands Forest & Plantation Devpt. Corpn. Ltd., Port Blair 744102 (Andamans).

Functions: At present the Corpn. is engaged in: (*i*) logging, regeneration and forest plantation, (*ii*) commercial plantations of red oil palm, (*iii*) establishment of wood based industries in Little Andaman and North Andaman Islands. It is proposed to take up plantations of commercial crops like rubber, spices and aromatic plants.

Chairman : S. L. Sharma ; *Mg. Director :* Bharat Singh.

Artificial Limbs Manufg. Corpn. of India, G. T. Rd., Kanpur 208016, (Dept. of Social Welfare, Min. of Educ. & Social Welfare).

Functions: To mass produce prosthetics, orthotics and rehabilitation aids for the less privileged and physically handicapped.

Chairman : Dr. Balu Sankaran ; *Mg. Director :* Maj.-Gen. K. Raghunath (Retd.).

Ashoka Hotel, Chanakyapuri, New Delhi 110021. (Five star deluxe hotel).

No. of rooms 589 ; no. of beds 958. The highest and lowest charge per day : Rs. 2,000 & Rs. 350.

Gen. Manager : P. B. Mathur.

Atomic Reactors, Trombay, Bombay 400071. (See chapter on "Atomic Energy").

Balmer Lawrie & Co. Ltd. (Containers Division), P-4/1, Oil Installation Rd., Paharpur, Calcutta 700043.

Chairman & Mg. Director : A. P. Bhalla.

Banana & Fruit Development Corpn. Ltd., 5/7, S. S. Iyengar Rd., Venus Colony, Alwarpet, Madras 600018.

It has been set up by the Governments of Tamil Nadu, Andhra Pradesh, Kerala and Karnataka to promote cultivation and marketing of various horticultural products including export of bananas. Government of India has become the major shareholder. Governments of Orissa, Gujarat, West Bengal, Madhya Pradesh and the Union Territory of Goa have also become members of the corporation.

✓ **Bengal Potteries Ltd.**, 45, Tangra Rd., Calcutta 700015.

Bharat Aluminium Co. Ltd., Registered Office : Punj House, 18, Nehru Place, New Delhi 110019.

The company is involved in constructing and operating the Korba (Madhya Pradesh) aluminium project and planning for export oriented alumina/aluminium projects based on bauxite deposits on the east coast.

Korba Aluminium Project : It consists of a 200,000 tonnes per annum capacity alumina plant, a 100,000 tonnes per annum capacity smelter for production of aluminium metal and facilities for manufacture of aluminium semis. The project has technical assistance from Chemokomplex of Hungary up to the alumina stage and technical and financial assistance from Messrs. Tsvetmetpromexport of the U.S.S.R. for the smelter and fabrication facilities.

Chairman-cum-Mg. Director : T. B. Singh.

Bharat Dynamics Ltd., Regd. Office : 10-3-310, Masab Tank, Hyderabad 500028.

The company was established in July 1970 to manufacture sophisticated guided missiles and light precision mechanical and electronic equipment.

Mg. Director : Z. P. Marshall.

Bharat Earth Movers Ltd., Unity Bldg., J. C. Rd., Bangalore 560002.

BEML was set up in 1964 under the Ministry of Defence with the transfer of HAL's Railcoach Division. In 1967 the Earth Mover Division commenced production at Kolar Gold Fields.

The railcoach factory at Bangalore manufactures different models of 2nd class broad-gauge Integral Coaches — meeting about 25 per cent needs of the Indian Railways. The earth mover factory manufactures 11 different types of wheeled and crawler type earth moving equipment. BEML holds a dominant position in earth moving industry in India.

Chairman & Mg. Director : Maj. Gen. S. N. Bhaskar.

Bharat Electronics Ltd., Regd. Office : Trade Centre, 29/4, Race Course Rd., Bangalore 560001.

Unit Offices : P. O. Jalahalli, Bangalore 560013 ; Bharat Nagar P.O., Ghaziabad 201008 ; 14, Ramnagar Colony, NDA Rd., Pashan, Pune 411021.

The Bangalore unit manufactures : (*i*) Electronic Equipment : Communication equipment in the HF, VHF and UHF ranges, high power HF SSB and ISB transmitters, high stability communication receivers, medium wave broadcast transmitters upto 100 KW output, television transmitters and studio equipment, fire control radars, functional radars of various types for naval ships, storm and cyclone warning radars, gun control equipment for tanks, 3 KW FM broadcasting transmitters, mini computers and 4 GHz microwave radio relay system. (*ii*) Components : Receiving and transmitting tubes, X-Ray tubes, TV picture tubes, cathode ray tubes, magnetrons, germanium and silicon transistors and diodes, hybrid microcircuits, integrated circuits, ceramic and vacuum capacitors, quartz crystals, crystal filters, transformers and coils and printed circuit boards.

The Ghaziabad unit manufactures : 3-D static and mobile radars, secondary surveillance radars, troposcatter and line of sight microwave equipment, and VHF transreceivers. The Pune unit manufactures image converter tubes.

Chairman : Prof. M. G. K. Menon (Part time) ; *Mg. Director :* N. L. Krishnan.

Bharat Gold Mines Ltd., Regd. Office : Suvarna Bhavan, Oorgaum (KGF) 563120, Karnataka.

This public sector undertaking has taken over from April 1, 1972 the assets and liabilities of the Kolar Gold Mining Undertakings.

It becomes the principal gold producing undertaking. The gold production during 1979-80 was 1,649,513 gms. worth Rs. 13·92 million at IMF rates.

Chairman-cum-Mg. Director : P. D. Gupta.

Bharat Heavy Electricals Ltd., Regd. Office : 18-20, K. Gandhi Marg, New Delhi 110001.

The company has under it the following eight manufacturing units :— (1) Two plants in Hardwar ; (2) Hyderabad ; (3) Tiruchirapalli ; (4) Bhopal ; (5) Jhansi and (6) Bangalore.

BHEL offers a comprehensive range of equipment and services for thermal, hydro electric & nuclear power generation, transmission and distribution.

Chairman & Managing Director : K. L. Puri.

Bharat Heavy Plate and Vessels Ltd., B. H. P. V., P. O. Visakhapatnam 530012, Andhra Pradesh.

The factory produces sophisticated equipment required by the process industry. The equipment manufactured include light, medium and heavy columns for absorpion, distillation etc., tanks and pressure storage vessels, heat exchangers, pipe fabrication, vessels with agitators and mixers, technological structures, air and gas separation plants, high pressure vessels, paper plants, evaporators, biological containers, cryogenic storage vessels, etc.

Chairman & Mg. Director : M. R. Naidu.

Bharat Leather Corporation Ltd., Hemkunt House, 10th Floor, 6, Rajendra Place, New Delhi 110008. *Regd. Office :* B-113, Sector 18, NOIDA, Ghaziabad Dist. (U.P.).

Chairman : S. L. Atal ; *Secretary :* M. L. Chandok.

Bharat Ophthalmic Glass Ltd., Lenin Sarani, Durgapur 713210, West Bengal.

Manufactures ophthalmic blanks for spectacle lenses and optical glasses required for Defence and other optical instruments and coloured glasses.

Mg. Director : P. K. Roy.

Bharat Petroleum Corpn. Ltd., (See Chapter on " Petroleum Industry " under Bharat Refineries Ltd.).

Bharat Pumps & Compressors Ltd., Regd. Office : Naini, Allahabad 211010.

The company was established in 1970 to cut down imports of heavy duty equipment. It has two projects: one for the production of reciprocating compressors and centrifugal and reciprocating pumps, and the other for the manufacture of high pressure seamless gas cylinders and other seamless tubular bodies.

Chairman & Mg. Director : K. L. Puri.

Bharat Wagon & Engg. Co. Ltd., P. Box No. 10, Muzaffarpur 842001. (Bihar State).

Bhilai Steel Plant, Bhilai 490001.

This is the biggest operating steel plant in India with an annual capacity of 2·5 million tonnes of ingot steel currently under expansion to 4 million tonnes. See also " Steel Authority of India Ltd.

Mg. Director : N. Mitra.

Biecco Lawrie Ltd., 6, Mayurbhanj Rd., Calcutta 700023.

(Works : P54, Hide Rd. Extn., Calcutta 700027).

Functions : Manufactures electric motors upto 250 H.P. for crane duty and industrial applications; bulk oil LT & HT switchgear upto 11 KV 350 MVA ; repair service of electrical rotating machines upto 10 MW at 11 KV.

Mg. Director : A. K. Sarkar.

Bihar Industrial and Technical Consultancy Organisation Ltd.

(A subsidiary of Industrial Development Bank of India), Udyog Bhawan, East Gandhi Maidan, Patna 800004.

To identify industrial potential through surveys or otherwise ; to prepare project profiles, feasibility reports and pre-investments studies about specific industries ; to undertake techno-economic appraisal of projects and market research and surveys and to act generally as an industrial, management and financial consultant.

Mg. Director : Dr. S. M. Prasad.

Bird & Co. Ltd., Chartered Bank Bldgs., Calcutta 700001.

Bokaro Steel Plant, Bokaro Steel City 827011. Dhanbad Dist., Bihar (A subsidiary of Steel Authority of India).

Bongaigaon Petro-Chemicals Ltd., Bongaigaon Dist., Goalpara, Assam.

Braithwaite & Co. Ltd., 5, Hide Rd., Calcutta 700043.

Chairman & Mg. Director: R. Datta.

Bridge & Roof Co. (India) Ltd., 427/1, Grand Trunk Rd., Howrah 711101.

Functions : Complete erection and civil engg. construction of refineries, fertilizer plants, steel plants, power plants, storage tanks etc., fabrication of steel structures, fabrication and erection of steel bridges, design and construction of R.C.C./prestressed bridges and erection of pipelines.

Chairman : A. P. Bhalla ; *Mg. Director :* Dr. P. K. Chaudhuri.

Burn Standard Co. Ltd., 10-C, Hungerford St., Calcutta 700017.

Functions : The company has two engineering units at Howrah and Burnpur respectively and nine refractory units in different parts of the country. The company specialises in the manufacture of railway rolling stock & components, railway track material, special crossings, steel castings, SG iron castings, structural steel work, pressed steel tanks, technological structures, springs, forgings, stampings & pressings, mining accessories & equipment, turnkey coal handling plant, transfer cars, tram cars and ash handling plant.

The nine refractory units manufacture basic refractories (magnesite, chrome, mag. chrome, chrome mag. bricks), calcined magnesite & cupels, silica refractories, insulating bricks, chemical stoneware, stoneware pipes & fittings, fireclay refractories.

Chairman & Mg. Director : Lalit Chandra Chib.

Calcutta Tramways Co. Ltd., 12, R. N. Mukherjee Rd., Calcutta 700001.

Administrator : A. K. Dutt.

Cashew Corpn. of India Ltd., P. B. 1216, M. Gandhi Rd., Cochin 682011. (Regd. Office : 'Chandralok', 36, Janpath, New Delhi 110001).

Functions : A wholly owned subsidiary of S.T.C., through which imports of raw cashewnuts are canalised. It ensures regulated imports for distribution to the export oriented sector of the cashew processing industry at reasonable prices.

(Also see Chapter on 'Cashew Industry').

Chairman : B. S. Thacker.

Cement Corporation of India Ltd., Shakuntala Apartments, 59, Nehru Place, New Delhi 110019.

Functions : To set up cement factories in various parts of the country and to survey and prospect for limestone deposits in the country. The Corporation has six cement plants of annual installed capacity of 1.78 million tonnes at Mandhar, Madhya Pradesh (0.38 M.T.), Kurkunta, Karnataka (0·20 M.T.), Bokajan, Assam (0·20 M.T.), Rajban, Himachal Pradesh (0·20 M.T.), Neemuch, Madhya Pradesh (0·40 M.T.) and Akaltara, Madhya Pradesh (0·40 M.T.). Clinker production at Yerraguntla Project has already started and it will go into production during this financial year. Neemuch and Yerraguntla are proposed to be expanded by 1·1 million tonnes each. The work at Adilabad, Andhra Pradesh (0·40 M.T.) and Tandur, Andhra Pradesh (1 M.T.) is also in progress. CCI also offers consultancy services.

(Also see Chapter on 'Cement Industry').

Chairman & Mg. Director : A. P. Maheshwary.

Central Coalfields Ltd., Darbhanga House, Ranchi 834001.

The Central Coalfields Ltd. was set up on November 1, 1975, and its collieries are spread over in the States of Bihar, Orissa, Madhya Pradesh and Uttar Pradesh. It is a subsidiary of Coal India Ltd. At present CCL owns 66 collieries, four coal washeries, one coke-oven and by-product plant, one beehive coke plant and one central workshop. The manpower of CCL at present is about 111,000. The production of CCL was 24.15 million tonnes in 1979-80.

Chairman-cum-Mg. Director : Dr. B. L. Wadehra.

Central Cottage Ind. Corpn. of India Ltd., Janpath, New Delhi 110012.

Central Electronics Limited, Factory : 4, Ind. Estate, Sahibabad 201010, U.P.

Manufactures, professional ferrites for television communication and power electronic applications viz. pot-cores, RM cores, E&I cores, UU&UI cores, memory cores for computers, ceramic capacitors for radio and television, fluorescent tube light starters, piezoelements for ultrasonic transducers and gaslighters, cartridges, high purity alumina ceramics for power rectifier housing, substrates for cement potentiometers and feed-thrus for vacuum coating units, combustion boats, crucibles etc. Solar photovoltaic cells, solar panels for power supplies, light emitting diodes and displays for panel indicators, digital instruments, calculators and clocks etc., nitrogen laser for UV radiation, holographic gratings for instruments, high intensity monochromators, photon counters, automatic slide projectors, synchronised projection systems for audio visual aids etc.

CEL is India's seventh public sector unit manufacturing sophisticated electronic components and systems using purely indigenous know-how and technology.

Mg. Director: U. Venkatswarlu.

Central Inland Water Transport Corpn. Ltd., Regd. Office : 4, Fairlie Place, Calcutta 700001.

Branches: 10, Ishakhan Rd., Narayanganj, Bangladesh. In Assam: M. Gandhi Rd., P. O. Uzanbazar Ghat, Gauhati 781001; S. W. Ardfin, P. O. Dhubri, Goalpara Dist. 783301.

Functions: (*i*) Ship-building, ship repairing and general engineering ; (*ii*) River transport from Calcutta to Assam via Bangladesh ; (*iii*) Grain lightering on high seas steamer agents ; (*iv*) Lighterage, river conservancy and dredging.

Chairman & Mg. Director : M. K. Varma.

Central Institute of Plastics Engg. & Tools (Min. of Petroleum), Guindy, Madras 600032.

Conducts training courses in plastics mould design, mould making, plastics engineering and tool engineering; develops and evolves upto date methods in die and mould making; undertakes physical testing and assessment of plastics materials ; conducts quality control inspection and also advisory service to small scale industry to serve as an information centre.

Chairman : Dr. D. Banerjee; *Director :* M. S. Francis.

Central Mine Planning & Design Institute Ltd., Gondwana Place, Ranchi 834008.

Functions: To render engineering consultancy services to clients for exploring coal, lignite, rock phosphate and other minerals and to plan and design projects for mining, handling, beneficiation and utilisation of these minerals; offering consultancy on construction supervision, project management and training of client's personnel.

Chairman & Mg. Director : A. N. Banerjee.

Central Warehousing Corporation, "Warehousing Bhawan", 4/1, Siri Institutional Area, Hauz Khas, New Delhi 110016.

Functions: To build and run warehouses for the storage of agricultural produce and notified commodities; to arrange transport of commodities to and from warehouses; to provide disinfestation services; to act as agent of Government, Public Sector Organisations, Cooperatives and Registered Companies for the purpose of purchase, sale, storage and distribution of agricultural produce, inputs and notified commodities, etc.

At the end of December, 1980 Central Warehousing Corpn. was running 310 warehouses with a total capacity of over 3·6 million tonnes, including its own modern warehouses of 2·1 million tonnes.

Mg. Director: K. R. Ganesh.

Chittaranjan Locomotive Works, Head Office & Works: Chittaranjan 713331, Burdwan Dist., W. Bengal; Calcutta Office: 4, Chittaranjan Avenue, Calcutta 700013.

Chittaranjan Locomotive Works was set up in 1950 for the production of steam locomotives. With the rolling out of the 60th YG class metre gauge steam locomotive in February 1972 the Works stopped the production of steam locomotives and has now switched over completely to the manufacture of electric and diesel locomotives. The Works had, upto the end of March 1979, produced 3,517 locomotives — steam 2,351, electric (both AC and DC) 759, and diesel 407.

At present Chittaranjan is engaged in the manufacture of AC mixed traffic electric locomotives, DC freight locomotives, AC/DC dual current locomotives, diesel shunting-cum-shuttle locomotives and WAPI AC electric locomotive for hauling Rajdhani Express.

Coal India Ltd., 10, N. Subhas Rd., Calcutta 700001.

Subsidiary Companies: **Eastern Coalfields Ltd.,** Sanctoria, P.O. Dishergarh 718333, Burdwan Dist., W. Bengal; **Central Coalfields Ltd.,** Koila Bhavan, Koila Nagar, Dhanbad; **Western Coalfields Ltd.,** Bisesar House, Temple Rd., Nagpur 440001, Maharashtra; **Bharat Coking Coal Ltd.,** Bhuggatdih Bldgs., Jharia 828111, Dhanbad, Bihar; **Central Mine Planning & Design Inst. Ltd.,** Gondwana Place, Kanke Rd., Ranchi 834008; *Regional Offices:* 32, Shamla Rd., Civil Lines, Bhopal 462001, Madhya Pradesh; Hotel Waldorf, 16, A. Bunder Rd., Bombay 400005; Kannamai Bldg., 122, Mount Rd., Madras 600006; Hotel Clark Avadh, Apt. 20, M. Gandhi Rd., Lucknow 226001; 10, Camac St., Calcutta 700016; P. O. Margherita 786181, Assam; SCO 125 216, Sector 17C, Chandigarh 160017; Kumud Niwas, Ramdas Rd., Tikrapara, Bilaspur 495001, Madhya Pradesh.

A holding company set up by the Govt. of India to be in overall charge of planning and production of coal mines in India.

Cochin Refineries Ltd., P. Bag 2, Ambalamugal 682302, Ernakulam Dist. (See Chapter on "Petroleum Industry").

Cochin Shipyard Ltd., P. Bag 1653, Cochin 682015.

Ship building, ship repairs and allied activities. It went into production on February 11, 1976. The first ship 75,000 DWT bulk carrier was launched in January 1980.

Chairman-cum-Mg. Director: D. Jayachandran; *Gen. Manager:* P. U. Canappa.

Computer Maintenance Corpn. Ltd., Regd. Office: 115, Sarojini Devi Rd., Secunderabad 500003.

Chairman: A. Krishnaswami; *Mg. Director:* P. D. Jain.

Cotton Corpn. of India Ltd., Air India Bldg., 12th Fl., Nariman Point, Bombay 400021.

Functions: Serves as an agency for purchase, sale and equitable distribution of domestic cotton and cotton staple fibre imported from abroad. It exports long staple cotton.

Chairman-cum-Mg. Director: N. S. Kulkarni.

(Also see chapter on 'Cotton and Cotton Textiles').

Deposit Insurance and Credit Guarantee Corpn., Novelty Chambers, Grant Rd., Bombay 400007.

Functions: The Corporation performs twin functions of giving protection to small bank depositors and providing guarantee cover to credit facilities extended to certain categories of small borrowers belonging to the weaker sections of society.

The Corpn. provides insurance to the extent of Rs. 30,000 to a depositor in respect of all deposits held by him in an insured bank in the same right and capacity.

Every commercial bank functioning in India and every eligible Co-op. bank functioning in the States of Andhra Pradesh, Gujarat, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Rajasthan, Tamil Nadu, Tripura, Uttar Pradesh, West Bengal and the Union Territories of Delhi, Pondicherry, Goa, Daman and Diu to which the Deposit Insurance Scheme has so far been extended, is registered as an insured bank with the Corporation and all its depositors get the protection afforded by the Corporation.

The total number of insured banks at the end of 1980 was 1,582.

The Corporation also provides guarantee cover to credit facilities extended to by (*a*) commercial banks to small transport operators, retail traders, professional and self-employed persons, small business enterprises and farmers and agriculturists, (*b*) by State Financial Corporations to small transport operators and small business enterprises and (*c*) by commercial banks and certain State and Central Co-operative banks to service co-operative societies engaged in industrial activity, providing for its members inputs and technical and marketing assistance.

The Corporation has a capital of Rs. 150 million entirely held by the Reserve Bank. The Deposit Insurance Fund and Credit Guarantee Fund amounted to Rs. 1,096·3 million and Rs. 441·8 million respectively as on 31st December 1980.

Chairman: Dr. K. S. Krishnaswamy; *Gen. Manager:* C. S. Subramaniam.

Diesel Locomotive Works, Varanasi 221001, Uttar Pradesh.

This is one of the production units of the Indian Railways. Set up in 1961 in technical collaboration with M/S. ALCO Products INC, USA, DLW has matured into Asia's leading designer and manufacturer of diesel-engines/locomotives with a product range comprising of: 1. 2,600 HP Broad Gauge Main Line locomotives type WDM2; 2. 1,350 HP Metre Gauge Main Line Locomotives type YDM4; 3. 1,350 HP Broad Gauge Heavy Duty Shunting Locomotives type WDS6.

Till January 1981, 1104 WDM2, 250 YDM4 and 73 WDS6 locomotives have been produced with a power potential of about 3·3 million HP. In addition rehabilitation of the imported 1,950 HP type WDM1 locomotives, and old engine blocks are also being undertaken.

General Manager: M. G. Verma.

Dredging Corpn. of India Ltd., *Registered Office:* Room No. 528, Transport Bhawan, 1, Parliament St., New Delhi 110001. *Head Office:* Jeevan Prakash, Visakhapatnam 530004.

Chairman & Mg. Director: Capt. S. K. Somayajulu.

Electronics Corpn. of India Ltd., Ind. Development Area, Cherlapalli, Hyderabad 500762.

Functions: To manufacture and supply sophisticated and precision electronic systems, instruments and components for nuclear power plants, industry, defence, railways, communication, research, etc.

Chairman: A. Krishnaswamy; *Mg. Director:* S. R. Vijayakar.

Electronics Trade & Technology Development Corpn. Ltd., 15/48, Malcha Marg, New Delhi 110021. *Regional Offices:* 1-7-241/11-B & G, Sarojini Devi Rd., Secunderabad 500003; 8th Flr., Air India Bldg., Nariman Point, Bombay 400021.

Resident Representatives: 15, Shiv Darshan Infantry Rd., Bangalore 560001; 225-E, A. Jagdish Chandra Bose Rd., Calcutta 700020; Suriya Mansions, III Fl., 621, Mount Rd., Cathedral P.O., Madras 600006; *Foreign Offices:* 4, Obukha Ulista, Moscow, U.S.S.R.; ul. Rajtana, 15, Mokotov, Warszawa, Poland 3001; Red Hill Avenue, Esplanade 1, Suite 219, Costa Mesa, California 92626 U.S.A.

Chairman-cum-Mg. Director: Vacant.

Employees' State Insurance Corpn., Hqrs. Office: ESIC Building, Kotla Road, New Delhi 110002.

The Scheme applies to power-using factories employing 10 or more persons and non-power using factories employing 20 or more workers, shops, theatres, cinemas, hotels, restaurants, motor transport undertakings and newspaper establishments employing 20 or more persons. All employees in receipt of remuneration not exceeding Rs. 1,000 per month working in a Factory/Establishment to which the Act applies are covered by the Act.

The scheme provides for medical care for insured persons and their families and cash benefits viz. sickness, maternity, disablement, dependants and funeral expenses. The scheme is in force in all the States except Jammu and Kashmir, Sikkim, Manipur and Tripura.

(Also see chapter on 'Labour').

Chairman: Narain Datt Tiwari; *Dir. General:* Har Mander Singh.

Engineering Projects (India) Ltd., Kailash Bldg., K. Gandhi Marg, New Delhi 110001.

Functions under Ministry of Industry for executing industrial and civil engineering projects on turnkey basis in India and abroad. The company is presently engaged in implementation of 50 turnkey projects of the value of Rs. 7,768 million out of which 13 orders of the value of Rs. 5,440 million are in the Middle East and Gulf countries.

Chairman & Mg. Director: Brig. O. P. Narula.

Engineers India Ltd., PTI Bldg., 4, Sarsad Marg, New Delhi 110001.

The company provides complete consultancy services such as techno-economic studies, process design, engineering, procurement, construction supervision, etc. for projects in the fields of petroleum refining, pipelines, petrochemical, chemical, fertilizer, synthetic fibre, non-ferrous metallurgy, refractories and allied fields. Also undertakes design of heat and mass transfer equipment, engineering of ports and harbours, off-shore structures, environmental engineering, systems engineering, computer services and specialist maintenance services.

Chairman & Mg. Director: Dr. S. Varadarajan.

Export Credit & Guarantee Corpn. Ltd., **Express Towers**, 10th Fl., Nariman Point, Bombay 400021.

Functions: To promote the growth of India's export trade by providing insurance facilities to Indian exporters, covering certain commercial and political risks involved in exports on credit terms and furnishing guarantees to banks enabling the exporters to get advances from the banks on liberal terms.

Chairman & Mg. Director: D. D. Sathe, I.C.S. (Retd.); *Gen. Manager:* U. K. Sarma.

Ferro Scrap Nigam Ltd., Post Box 73, Jamshedpur 831001.

Fertilisers & Chemicals (Travancore) Ltd., Udyogamandal 683501, Kerala.

Udyogamandal Divn. Produces Ammonium Sulphate, Superphosphate, Ultrafos, Ammonium Phosphate, Ammonium Chloride etc.; Cochin Divn. Produces Urea, NPK Complexes; FACT Engg. & Design Orgn. (FEDO) undertakes complete designing and engineering of chemical and fertiliser plants; FACT Engg. Works (FEW) caters to the specialised needs of the industry in the field of fabrication of plant and equipment as well as structural and erection works.

Fertilizer Corpn. of India Ltd., Madhuban, 55, Nehru Place, New Delhi 110019.

Chairman & Managing Director: P. L. Kukreja; *General Managers:* H. S. Kohli (*Sindri*); O. P. Agarwal (*Gorakhpur*); J. S. Bhalla (*Talcher*); K. C. Madan (*Ramagundam*); *General Project Manager:* K. P. Tiwari (*Korba*).

Fertilizer (Planning and Devpt.) India Ltd., C.I.F.T. Bldg., P. O. Sindri 828122, Dhanbad Dist., Bihar. This new company was formed by constituting the Planning and Devpt. Division of the Fertilizer Corpn. of India into a separate independent Govt. Company.

Functions: Consultants & RD centre for fertilizer & allied plants and manufacturers of full range of fertilizer catalysts.

Chairman & Mg. Director: K. S. Sarma; *Director:* D., B. S. Sachdev (Finance).

Food Corpn. of India, 16-20, Barakhamba Lane, New Delhi 110001.

Functions: To provide the farmer an assured price for his produce, supply quality foodgrains to the consumer at reasonable prices.

FCI today has 4 zonal offices, one each at Bombay, Calcutta, Delhi and Madras, 19 regional offices, over 130 district offices and nearly 1,300 storage centres. FCI has over 20·52 million tonnes of storage capacity.

Chairman: P. Ramachandran; *Mg. Director:* K. V. Sheshadri, I.A.S.

Garden Reach Shipbuilders & Engineers Ltd., 43/46, Garden Reach Rd., Calcutta 700024.

The company has its main workshops at Garden Reach Road, and branch units at Baranagore, Taratala Road, Netaji Subhas Dock (Calcutta Port Trust); 61, Garden Reach Road, Belur and Sinthee in West Bengal, at Nagpur in Maharashtra and a marine diesel engine plant at Ranchi, Bihar.

The company has 3 slipways and 2 building docks. It is one of the major ship-building and ship-repairing yards in India and is fully equipped to undertake all types of marine repairs of sea-going vessels as well as inland and harbour crafts. It builds all types of inland and harbour crafts and the smaller coastal vessels, and has specialised in the building of dredgers, tugs, barges and has started building ocean-going vessels upto 26,000 DWT with its own design. This is a major effort for the first time in the country to develop the basic design of an ocean-going ship.

The company also manufactures electrical overhead travelling cranes, deepwell turbine pumps, steel plant equipment, conveyors, diesel road rollers, fibreglass life boats, pressure vessels, heat exchangers and deck machinery items like cargo winches, windlasses etc. and portable steel bridges.

They are also manufacturing marine diesel engines of three types at Ranchi and Calcutta with power range varying from 225 BHP to 20,000 BHP.

Chairman & Mg. Director: Commodore A. K. Sarkar.

General Insurance Corpn. of India Ltd., Ind. Assurance Bldg., Churchgate, Bombay 400020.

(See Govt. of India Personnel).

Goa Shipyard Ltd., Vasco-da-Gama, Goa (A subsidiary of Mazagon Dock Ltd.)

Undertakes construction of vessels upto 1,000 tonnes and 70 metres length like fishing vessels, warships, self-propelled ore barges, tugs, dredgers etc.

Also undertake repairs to such crafts and ships visiting the port. Specialists in hull marine engineering, electrical radio and radar repair work.

Chairman & Mg. Director: Vice Admiral N. P. Datta; *General Manager:* Com. V. A. Dhaneshwar.

Govt. Opium & Alkaloid Works Undertaking, Neemuch 458441, Madhya Pradesh. Exports opium to various parts of the world and the Alkaloid Works is engaged in the manufacture of five main alkaloids of opium viz. morphine, codeine, narcotine, papaverine and the baine and their finished salts, which are widely used for pharmaceutical purposes. A 'Research and Development' Wing has been set up in the Alkaloid Works to undertake research work in the field of opium and its alkaloids.

Gen. Manager: T. R. S. Krishnan.

Handicrafts & Handlooms Exports Corpn. of India Ltd., Lok Kalyan Bhavan, 11A, Rouse Ave. Lane, New Delhi 110001.

Functions: It undertakes export of handicrafts and handloom goods, with the main object of introducing new items and exploring new markets.

The corpn. has *Sona* retail shops in New York, Paris, Nairobi and Tokyo. It has a carpets warehouse in Hamburg, a branch office in Madras, and regional offices in Bombay, Calcutta, Ludhiana and Bhadohi.

Chairman: Dr. N. C. B. Nath ; *Mg. Director:* R. S. Pal.

Heavy Engineering Corpn. Ltd., Administrative Building Plant. Plaza Rd., P.O. Dhurwa, Ranchi 834004, Bihar

The Corporation has established the following projects.

Heavy Machine Building Plant, Ranchi: (Collaboration with U.S.S.R.). The plant has a production capacity of 80,000 tonnes of machinery items for steel plants and heavy engineering industries and 25,000 tonnes of steel structural items per year. *Foundry Forge Plant*, Ranchi: (Collaboration with Czechoslovakia). This plant has the following production capacity per year from its main production shops: Grey Iron Foundry (shaped castings) 33,345 tonnes; Steel Foundry (shaped castings) 40,182 tonnes; Non-ferrous Foundry (castings) 700 tonnes; Forgings 50,000 tonnes; Grey Iron Steel and Forged Rolls 21,310 tonnes. *Heavy Machine Tools Plant*, Ranchi: (Collaboration with Czechoslovakia) This plant has an annual production capacity of 278 diverse items of heavy machine tools, weighing 10,000 tonnes approximately. The plant has gone into production of items like radial drilling machines, central lathes, double column planning machines etc.

Chairman-cum-Mg. Director: S. R. Jain.

Heavy Vehicles Factory, Avadi, Madras 600054.

The factory is an integrated unit for the manufacture of components and fabrication and assembly of the Vijayanta Tank and its modified versions. The first 'Vijayanta' medium tank produced in this factory rolled out on Dec. 29, 1965 as scheduled and since then, regular production of tanks has been established. The factory has also established production of armoured recovery vehicles required for the Army.

The planning of the factory has been done in a manner that manufacturing capacity is available not only for the manufacture of tracked vehicles but also for other items of heavy engineering required for military as well as civilian purposes.

General Manager: C. Madhavan, I.O.F.S.

Hindustan Aeronautics Ltd., Indian Express Building, Vidhana Veedhi, Bangalore 560001.

The Hindustan Aeronautics Limited, came into being on 1st October 1964 by the amalgamation of Hindustan Aircraft Ltd. of Bangalore with Aeronautics India Ltd. It has three Complexes viz. *Bangalore Complex* comprising of six units, *MiG Complex* comprising of Nasik and Koraput divisions and *Accessories Complex* comprising of Hyderabad and Lucknow divisions besides a separate unit at Kanpur.

It is currently manufacturing: (*a*) the Supersonic interceptor *MiG*-21; (*b*) the Jet fighter Ajeet; (*c*) the Jet trainer HJT-16 (Kiran—designed and developed by HAL); (*d*) the Alouette III (Chetak) & SA-315 *Cheetah* Helicopters; (*e*) the transport aircraft HS-748; (*f*) several types of aero-engines and (*g*) several items of airborne electronic equipment.

Work on the manufacture of a modified version of the MiG-21 aircraft under licence is progressing. The company has also successfully designed, developed and test flown HPT-32 piston engined aircraft which will go into production shortly.

HAL also undertakes the overhaul of aircraft, aero-engines and allied equipment.

Shortly it is going to manufacture Jaguar Aircraft with the collaboration of British Aerospace.

Chairman: GP. Capt. B. K. Kapur (Retd.): *Director (Corporate Planning)*: S. C. Keshu; *Director (Finance)*: L. K. Joshi; *Mg. Director (Design and Development)*: Raj Mahindra; *Executive Director (MiG Complex)*: G. Narasimhan; *Executive Director (Bangalore Complex)*: K. K. Kirtikar.

Hindustan Antibiotics Ltd., Pimpri, Pune 411018, Maharashtra.

This factory came into being as a result of the tripartite agreement between the Government of India, the World Health Organisation and the UNICEF.

It produces antibiotics like penicillin, streptomycin, semisynthetic penicillin like ampicillin and formulations. The present capacity of production of penicillin is about 105 mmu. and streptomycin 80-90 tonnes per annum.

Projects are under implementation for doubling the capacity of penicillin and streptomycin. Also under implementation is one tonne capacity Gentamicin plant a new formulation plant and expansion of semi-synthetic penicillin from 5 to 35 tonnes per annum.

Mg. Director: Y. H. Gharpure.

Hindustan Cables Ltd., P. O. Hindustan Cables, Hyderabad 500051, Andhra Pradesh.

The company produces paper insulated underground telephone cables, polyethylene insulated jelly filled telephone cables and various other types of communication cables.

Chairman and Mg. Director: K. L. Reddi.

Hindustan Coir, P. O. Kalavoor, Alleppey Dist., Kerala.

This powerloom factory is under the Coir Board (Govt. of India) for the production of coir mattings — first of its kind under public sector. Started production on commercial scale on 1st Jan. 1969.

General Manager-in-Charge : A. N. Ramanna.

Hindustan Copper Ltd., Regd. Office: Industry House, 10, Camac St., Calcutta 700017.

Khetri Copper Complex, Rajasthan: Capacity: (*i*) Production of 31,000 tonnes of electrolytic grade copper metal per annum; (*ii*) Production of about 200,000 tonnes of triple super phosphate per annum.

Some quantity of gold and silver would also be recovered as by-products. The electrolytic flash smelter at the plant was commissioned in early 1975.

Indian Copper Complex, Bihar : The current production of copper metal at Ghatsila is about 15,000 tonnes per annum. The company plans for the expansion of production of copper metal at this complex to about 20,000 tonnes.

Rakha Copper Project, Bihar: Located in District Singhbhum and comprising 3 blocks (*i*) Rakha Mines Block; (*ii*) Roam Sideshwar; and (*iii*) Tama Pahar. Work on the first phase development of Rakha Copper Project started in August, 1969. A new concentrator plant has been set up.

Dariba Copper Plant, Alwar District, Rajasthan: The project with a capacity production of 100 tonnes of ore per day or copper concentrates equivalent to about 600 tonnes of copper metal per year, went into production in August, 1973.

Malanjkhand Copper Project, Madhya Pradesh: Work to exploit the Malanjkhand deposits in Balaghat District has begun. The targets is to produce 20,000 to 30,000 tonnes of copper metal per year.

Chandmari Copper Project, Jhunjhunu Dist., Rajasthan: Open-cast mining operations started at Chandmari to produce 500 tonnes of copper ore per day. The mine is being planned to be expanded to produce 1,000 tonnes per day.

Chairman & Mg. Director : O. P. Vasudeva.

Hindustan Diamond Co. Ltd., Atlanta, 15th Floor, Nariman Point, Bombay 400021.

Chairman & Mg. Director : S. N. Sharma.

Hindustan Fertilizer Corpn. Ltd. (HFCL), Madhuban, 55, Nehru Place, New Delhi 110019. One of the five companies of the reorganised Fertilizer Corpn. of India Ltd., and National Fertilizers Ltd., HFCL has three fertiliser producing units namely — Namrup, Durgapur and Barauni and a Project — Haldia which is on commissioning stage. It has an annual production capacity of 500,000 tonnes of Nitrogen, 75,000 tonnes of P_2O_5 and 75,000 tonnes of K_2O.

Chairman & Mg. Director : R. K. Ghosh.

Hindustan Insecticides Ltd., Regd. Office: Hans Bhavan, Wing 1, 1, Bahadur Shah Zafar Marg, New Delhi 110002.

Factories at Delhi, Udyogmandal (Kerala), Rasayani (Maharashtra), and *Regional Sales Offices* at Delhi, Hyderabad, Ahmedabad and Calcutta.

Manufacturers of well known pesticides like DDT, BHC, ENDOSULFAN, Malathian Dicofol, Methoxychlor, Vitavax, and Plantavax, etc. used extensively for the pest control in agriculture and health programmes.

HIL entered into the field of marketing of agro-pesticides in 1977 and introduced 3 quality pesticides under HIL's own brand names i.e. HILDAN, HILDIT & HILBEECH. In 1978 HIL entered into collaboration with Uniroyal Chemical of U.S.A. and obtained formulation and sales right for Vitavax.

The company has more than 1,500 employees in its various units.

Chairman & Mg. Director : Dr. Ram S. Hamsagar.

Hindustan Latex Ltd., Nirodh Factory, Peroorkada, Trivandrum 695005, Kerala.

Registered Office: Latex Bhavan, Mahilamandiram Rd., Poojapura, Trivandrum 695012 (Under the Ministry of Health and Family Welfare).

The company set up with Japanese collaboration, manufactures upto 288 million pieces of Nirodh (Rubber condoms) per year.

Hindustan Machine Tools Ltd., No. 36, Cunningham Rd., Bangalore 560052.

The company was incorporated on 7th February, 1953 under the Indian Companies Act, 1913 as a Private Limited Company and was converted into a Public Company with effect from May 13, 1977.

It is engaged in the manufacture of high precision machine tools, tractors, wrist watches, horological machinery, printing machines and lamps and lamp-making machinery.

The company's manufacturing units are as under: HMT I & II, Bangalore (Karnataka); HMT III Pinjore, (Haryana); HMT IV, Kalamassery (Kerala); HMT V, Hyderabad (Andhra Pradesh); HMT VI, Ajmer (Rajasthan); Watch Factory I & II, Bangalore (Karnataka); Watch Factory III, Srinagar (Jammu & Kashmir); Watch Factory IV, Tumkur (Karnataka); Horological Machinery Divn., Bangalore (Karnataka).

Production & Sales: The company's production and sales for the year 1979-80 were Rs. 1,825 million and Rs. 1,833 million respectively.

Exports: The company's products are exported through HMT (International) Limited, the wholly-owned subsidiary which is acting as sole export agent.

During the year 1979-80, the exports of HMT (International) Limited amounted to Rs. 143 million, of which company's products contributed Rs. 83 million as against Rs. 68 million during the previous year.

Dairy Machinery Project: Is being set up at Aurangabad in Maharashtra at a total estimated cost of Rs. 44·4 million.

Electronic Watches: The company has proposed to set up assembly facilities for electronic watches.

Central Metal Forming Institute : This institute is being set up by the company at Hyderabad for the purpose of promoting metal forming technology in India. The cost of the project is Rs. 36·2 million. The foundation stone was laid on January 27, 1980 and the construction activities have been progressing.

Indo-Nippon Precision Bearings Limited: Indo-Nippon Precision Bearings Limited, Hyderabad, has come under the management of HMT with effect from February 1980.

Research & Development : Independent R & D centres are being set up for each business group of the Co.

Chairman & Mg. Director: T. V. Mansukhani; *Exec. Director, Watches :* I. K. Amitha; *Directors :* M. Nageswara Rao (*Finance*); N. K. Krishnan Kutty (*International Operations and Corporate Planning*); P. S. Banerjee (*Machine Tools*) ; *Gen. Managers:* G. V. Appa Rao (*HMT I & II, Bangalore*); H. C. Gandhi (*Tractors, HMT III, Pinjore*) ; K. R. Nayar (*HMT IV, Kalamassery*) ; C. P. Roy (*HMT V, Hyderabad*); C. Kesavan (*HMT VI, Ajmer*); K. S. Namdev Rao (*HMT WF I & II, Bangalore*); R. Raghurama Reddy (*WF IV, Tumkur*); *Gen. Technical Managers:* K. S. Gergan (*HMT WF III, Srinagar*); B. Nataraj (*Horological Machinery Division, Bangalore*).

Hindustan Organic Chemicals Ltd., P.O. Rasayani 410207, Raigad Dist., Maharashtra.

A Rs. 200 million project, set up on December 12, 1960 to manufacture a wide range of organic chemicals and intermediates which are the basic raw materials for the manufacture of drugs, dyestuffs, insecticides, lamination, rubber chemicals, etc.

The company manufactures Aniline, Acetanilide, Nitro-benzene, Dinitro-benzene, Hydrogen, Sulphuric Acid/Oleums, Meta Amino Phenol, Formaldehyde, Benzene Hexachloride (Tech), Nitrotoluenes, Chlorobenzenes, Nitrochlorobenzenes, Resorcinol etc.

Expansion plans costing Rs. 160 million were to be completed by 1980-81 including setting up a concentrated Nitric Acid Plant.

The company is also setting up a Phenol/Acetone plant at Cochin at a cost of Rs. 500 million.

For the Sixth Five-Year Plan the company has drawn up expansion plan estimated to cost about Rs. 4,000 million.

Chairman & Mg. Director : H. Krishnamurthy.

Hindustan Paper Corpn. Ltd., Regd. Office: Vishal Bhavan, 95, Nehru Place, New Delhi 110019. *Head Office :* 75-C, Park St., Calcutta 700016.

Project Offices : Nowgong Paper Project, Jagi Rd., Nowgong 782001; Cachar Paper Project, P.O. Panchgram, Cachar, Assam 788802; Kerala Newsprint Project, P.O. Kerala Newsprint Nagar, Kerala 686616. *Subsidiaries:* Nagaland Pulp & Paper Co. Ltd., P.O. Paper Nagar, Mokakchung 798601, Nagaland; Mandya National Paper Mills Ltd., Belagula 571606, Karnataka.

Functions : To establish newsprint, paper and pulp factories in the public sector. Registered in May, 1970 the Corpn. is setting up four plants. Two of these plants are located in Assam, each with a capacity of producing 100,000 tonnes of paper annually. Another plant which is almost ready for commissioning, is being set up in Nagaland with an annual capacity of 33,000 tonnes of paper. The fourth project, a newsprint mill is being set up in Kerala at Velloor, Kottayam Dist. with a capacity of 80,000 tonnes per annum.

Chairman : A. B. Das Gupta; *Mg. Director :* B. Misra; *Gen. Manager :* D. Lahiri (Marketing).

Hindustan Petroleum Corpn. Ltd., 17, J. Tata Rd., Bombay 400020.

(See Chapter on " Petroleum Industry ".)

Hindustan Photo Films Mfg. Co. Ltd., Indunagar, Ootacamund 643005, Tamil Nadu.

This factory was set up in collaboration with a French firm Bauchet and Co. The production during 1980-81 was 11·62 m. sq. m. valued at Rs. 668·10 million and the turnover during the year is Rs. 595·50 million (approx.). The company produces cinema positive (B & W), cinema sound, medical X-ray film and photographic paper in addition to converting cine positive colour and roll film out of imported jumbo rolls. The company also converts the industrial X-ray film and graphic arts film out of imported jumbo rolls. As an adjunct to the main plant a silver nitrate plant, a silver sludge recovery plant and a unit for synthesising organic chemicals are also in operation. For the last six years the company has been making reasonable profits.

Mg. Director : P. R. S. Rao.

Hindustan Prefab Ltd., Jungpura, New Delhi 110014.

Main products : Prefabricated components for multistoreyed buildings ; prestressed concrete electric transmission and street-light poles; P.C.C. beams and trusses for industrial sheds with sheeted roofs; hollow core roofing and flooring components; hollow blocks for roofing and walling; overhead concrete water storage tanks; prestressed concrete monoblock railway sleepers, precast R.C.C./P.C.C. components of bridges; Vayuthan cellular concrete blocks for cold storage and air-conditioned buildings and for light weight partitions; machine-made doors, window frames and shutters; R.C.C. channel slabs for roofing, seasoning of timber; design and execution of prefab residential, commercial and industrial constructions on turn-key basis : consultancy services as recommended by bureau of public enterprises.

Mg. Director : G. K. Majumdar.

Hindustan Salts Ltd., O-12, Parijat Bhawan, Ashok Marg, P. B. 146, Jaipur 302001, Rajasthan.

The salt sources at Kharaghoda (Gujarat) and the salt mines at Mandi (Himachal Pradesh) are under the administrative control of the company. At Kharaghoda the salt is manufactured from sub-soil brine and at Mandi it is excavated from mines. At Mandi there is also a salt refinery.

The Bromine plant at Kharaghoda started functioning since March 1979. It produces 500 kg. Bromine per day from salt bitterns discarded after the manufacture of salt.

The Sambhar Salts Ltd., is a subsidiary of Hindustan Salts Ltd. It has a unit at Sambhar Lake in Rajasthan where the salt is manufactured out of lake water.

Chairman & Mg. Director: R. R. Purohit.

Hindustan Shipyard Ltd., Visakhapatnam 530005, Andhra Pradesh.

The shipyard has four building berths with a capacity of general cargo vessels upto 15,000 dwt. each, and bulk carriers/tankers upto 30,000 dwt. The capacity of the dry dock constructed at a cost of Rs. 48·2 million is 70,000 dwt. Hindustan Shipyard has so far built 79 ships of different sizes and types aggregating more than 823,126 dwt.

Chairman & Mg. Director : S. Anandaramam, I.P.S.

Hindustan Steel Ltd., Durgapur 713208, West Bengal (Refer to " Steel Authority of India " in this list). (Also see Chapter on " Steel Industry ").

Hindustan Steel Works Construction Ltd., 1, Shakespeare Sarani (8th Floor), Calcutta 700071.

The company undertakes entire responsibility for the construction of steel plates; better and closer co-ordination of various activities during the construction phase;

conservation of trained personnel for steel plant construction programmes. The diversified activities of the company cover the existing as well as the new steel plants under construction. The company has also undertaken construction of dams, bridges, mining complexes, dry docks, townships, etc. This technology and expertise are also available for export abroad.

Hindustan Teleprinters Ltd., G.S.T. Rd., Guindy, Madras 600032.

Regional Offices: (1) E-65, Himalaya House, 23, Kasturba Gandhi Marg, New Delhi 110001. (2) 33-A, Jawahar Lal Nehru Road, Chatterjee International Centre, Sixth Floor, Flat No. 5, Calcutta 700016. (3) Office No. 2, 12th Floor, Regent Chambers, Backbay Reclamation, Nariman Point, Bombay 400021.

Manufacturers of: Teleprinters in Latin, Devanagari and Arabic scripts and bilingual teleprinters and teleprinter ancillaries such as reperforator attachments, tape transmitter attachments, independent automatic tape transmitters, line units etc., data modems, telegraph distortion measuring sets, telegraph distortion signal generators, computer peripheral, etc.

Exporters of teleprinters and ancillaries.

Chairman & Managing Director: Dr. B. C. Seetharam.

Hindustan Zinc Ltd., 6, New Fatehpura, Udaipur 313001 (Rajasthan).

The units administered by this company are:

Under Production: 1. **Agnigundala Lead Mine,** near Bandalamottu, Guntur Dist., Andhra Pradesh, has an installed capacity of 36,000 tonnes mining and 72,000 tonnes milling per annum. 2. **Maton Rockphosphate Mine,** Udaipur Dist., Rajasthan, has an installed capacity of producing 180,000 tonnes of rockphosphate ore and matching capacity for beneficiated ore with +32 per cent P_2O_5 per annum. 3. **Rajpura-Dariba Mines,** Udaipur Dist., Rajasthan, has an installed capacity of 900,000 tonnes of zinc-lead ore per annum with about 7·8 per cent zinc and lead metal content. 4. **Zawar group of mines (Mochia and Balaria Mines),** Udaipur Dist., Rajasthan, has an installed capacity of 1·2 million tonnes of zinc-lead ore with about 5 per cent zinc and lead metal content. 5. **Debari Zinc Smelter,** Udaipur Dist., Rajasthan, has an installed capacity of 45,000 tonnes of zinc, 87,000 tonnes of sulphuric acid, 192 tonnes of cadmium, 26,000 tonnes of phosphoric acid, 1,500 tonnes of zinc sulphate, 300 tonnes of copper sulphate and 3,600 tonnes of zinc dust per annum. 6. **Tundoo Lead Smelter,** Dhanbad Dist., Bihar. This pyrometallurgical smelter produces 8,000 tonnes of lead and 12 tonnes of silver per annum. 7. **Vizag Zinc Smelter,** Visakhapatnam, Andhra Pradesh. This zinc-lead smelting complex has a designed capacity of 30,000 tonnes of zinc, 10,000 tonnes of lead, 66,000 tonnes of sulphuric acid, 115 tonnes of cadmium and 20 tonnes of silver per annum. The lead production capacity is being increased to 22,000 tonnes per annum now.

Under Construction: **Sargipali Lead Mine Project,** Sundergarh Dist., Orissa, with about 7 per cent lead and copper metal content is now under construction.

Chairman & Mg. Director: R. P. Kapur.

Hotel Corpn. of India Ltd., Centaur Hotel, Bombay Airport, Bombay 400099.

Functions: A wholly-owned subsidiary of Air India, aims at carrying on the business of Hotel Management and Flight Catering providing lodging and boarding facilities for the tourist trade.

At present it operates two Flight Kitchens at Bombay and Delhi under the name — "Chefair", Restaurants and Snack Bars at Bombay and Delhi Airports.

The Corporation opened its first 288 room luxury class Centaur Hotel at Santacruz in May 1975; The Centaur Beach Resort, Bangaram, Lakshadweep Islands in December 1975. The Corporation has 3 new hotels under construction, 2 luxury class hotels in Bombay (Centaur Juhu Beach — 350 rooms) and Srinagar (Centaur Lake View — 275 rooms) and at Delhi airport, a 4-star hotel with 400 beds. It also plans to build 2 Japanese style inns in U.P. and Bihar. Two new Flight kitchens will also be built at the new international airport complexes in Bombay and Delhi.

Chairman: Raghu Raj; *Mg. Director:* S. K. Oberoi.

Hotel Janpath, Janpath, New Delhi 110001.

This Hotel is a unit of India Tourism Development Corporation having 214 rooms. It is moderately priced and very centrally situated.

Housing & Urban Development Corpn. Ltd., 12-A, HUDCO House, Lodi Rd., New Delhi 110003.

Functions: To finance or undertake housing and urban development programmes in the country, to offer consultancy services for Housing & Urban Devpt. Projects in India and abroad and also setting up of new or satellite towns and building material industries etc. In ten years it has approved loans for 1,375 projects for about Rs. 6,657·1 million spread over almost all States and Union Territories.

Chairman & Mg. Director: H. U. Bijlani.

Hydro Carbons (India) Pvt. Ltd. (See Chapter on Petroleum Industry).

IISCO Stanton Pipe & Foundry Ltd., IISCO House, 50, Chowringhee Rd., Calcutta 700071.

India Firebricks & Insulation Co. Ltd., 'Nirmal' (21st Fl.), Nariman Point, Bombay 400021.

Works: P. O. Marar, Near Ranchi Rd. Rly. Stn., Hazaribagh 829117.

Mg. Director: N. C. Mukherjee.

India Tourism Development Corpn. Ltd., Jeevan Vihar, 3, Parliament St., New Delhi 110001.

Regional Offices: Nirmal, Nariman Point, Bombay 400021; 3G, Everest Bldg., 46C, Chowringhee Rd., Calcutta 700016; 35, Mount Rd., Madras; 'L' Block, Connaught Place, New Delhi 110001.

Functions: It provides a range of tourist services throughout the country: Accommodation, transport, entertainment, tourist literature, duty free shops and also offers consultancy-cum-managerial services.

ITDC runs 21 hotels, 2 beach resorts, 3 forest lodges, 11 travellers' lodges, 3 sound and light shows, 5 duty free shops, 17 transport units and 13 restaurants (including six airport restaurants).

Chairman: S. K. Mishra.

Indian Airlines (See Chapter on Civil Aviation).

Indian Dairy Corpn., Darpan Bldg., R. C. Dutt Rd., Vadodara 390005.

Branches: Delhi, Bombay, Madras & Calcutta.

Functions: To promote dairying in India and to execute the World Food Programme assisted project "Operation Flood" on behalf of the Government. The project aims at improvement of milk marketing and dairy development by enabling the organised dairy sector to obtain a commanding share of the markets in the four major cities of Bombay, Calcutta, Delhi and Madras.

The dairy projects are now being implemented in 22 districts in ten States included in Operation Flood. Operation Flood II is now being planned to be implemented in 155 districts with commodity assistance from E.E.C. countries and financial assistance from World Bank.

During the period July, 1970 to 30th April 1979, the total quantity of skim milk powder and butter oil received by the Indian Dairy Corporation from World Food Programme was 116,478 tonnes and 37,180 tonnes respectively. In addition, I.D.C. received 7,000 tonnes Skim Milk powder and 4,000 tonnes butter oil from EEC under Operation Flood II Project. Upto 31st March 1979, the funds generated by the I.D.C. have been Rs. 1,025·02 million and a total of Rs. 879·8 million (including Rs. 764·5 million to States/implementing agency) was disbursed for implementing the "Operation Flood".

The Corporation also acts as the canalising agency for the export of cattle and buffaloes for breeding purpose.

Chairman: Dr. V. Kurien; *Mg. Director:* G. M. Jhala.

Indian Drugs and Pharmaceuticals Ltd., *Head Office:* Dundahera Industrial Complex, Delhi-Gurgaon Road, Gurgaon 122001 (Haryana). *Postal Address:* P. B. No. 3816, New Delhi 110049.

IDPL has five plants—IDPL Virbhadra for antibiotics; IDPL Hyderabad for synthetic drugs; IDPL Madras for surgical instruments and pharmaceutical specialities; IDPL Gurgaon for pharmaceutical specialities and IDPL Muzaffarpur for alcohol based chemicals and allied products.

At IDPL's Fine Chemicals Division at Hyderabad, a wide range of fine chemicals are being produced for industry and research. IDPL's Design Development & Process Engineering Division (DDPE) at Hyderabad provides the technical expertise for designing, erection and commissioning of pharmaceutical plants. It has its Research & Development wings both at Hyderabad and Rishikesh.

Apart from these projects, IDPL is in collaboration with the Govt. of Uttar Pradesh through Pradeshiya Industrial and Investment Corpn. Ltd., Govt. of Rajasthan through Rajasthan State Industrial and Minerals Development Corpn. Ltd., and Govt. of Punjab through Punjab State Industrial Development Corpn. Ltd., has set up formulation units at Lucknow, Jaipur and a starch-cum-glucose-cum-destrose plant at Sangroor.

IDPL complex consists of 10 plants in India employing over 12,000 people.

Chairman & Mg. Director: P. N. Devarajan.

Indian Investment Centre, Jeevan Vihar, Sansad Marg, New Delhi 110001.

The Indian Investment Centre (IIC), an autonomous organisation sponsored by the Government of India, was established in 1960. It provides information and advice on all aspects of industrial investments in India including promotion of projects with foreign collaboration within the framework of government's policies. It also assists Indian industrial investments abroad. It works in close co-operation with the Central and State Governments and official industrial promotion agencies. It renders free assistance to public and private firms for setting up joint ventures in India and abroad. To stimulate the flow of foreign private capital and technical know-how into India, the Centre identifies and brings together potential collaborators for joint ventures in the country. It also disseminates information on commercially viable indigenous technologies to the prospective investors and provides effective assistance to Indian entrepreneurs for the setting up of joint ventures in third countries in collaboration with suitable foreign concerns. For encouraging industrial investment in the country it provides guidance and assistance to the entrepreneurs regarding government's policies, procedures, available incentives, availability of raw materials etc.

The IIC brings out a monthly 'Newsletter' containing information on latest developments in industrial investment policy and procedures and on the investment opportunities in various sectors of industries. The IIC also brings out, from time to time, a number of publications providing authentic information in respect of government policies/procedures on and facilities/incentives etc. Besides the head office at New Delhi, the IIC has 5 offices in the country and 4 offices abroad, viz. 18-A, Nyaya Marg, Allahabad 211001; SCO 90-91 Sector 17C, Chandigarh 160017; Mezzanine Floor, Panchanan Bldg., Malaviya Nagar, Bhopal 426003; 19, Netaji Subhas Road, Grindlays Bank Bldg., Calcutta 700016; No. 48 Anna Salai T.N.K. House, Madras 600002; 445, Park Avenue, New York, N.Y. 10022; Edinburgh House, 40 Great Portland Street, London WIN 5 AH; Duesseldorf 4, 76 — Kalstrasse, West Germany; Embassy of India 2-11 Kudan Minami, 2-Chome Chiyado-Ku, Tokyo.

Chairman & Exec. Director: Harbans Singh.

Indian Iron & Steel Co. Ltd., 50, Chowringhee Rd., Calcutta 700071. (A subsidiary of Steel Authority of India).

Mg. Director: D. R. Ahuja.

Indian Oil Blending Ltd., Pirpau, Trombay, Bombay 400074.

Mg. Director: R. Gurumoorthy.

Indian Oil Corporation Ltd., (See Chapter on Petroleum Industry.)

Indian Petrochemicals Corpn. Ltd., P.O. Petrochemicals, 391346, Vadodara Dist., Gujarat. (For details see chapter on Petrochemical Industry.).

Indian Railway Construction Co. Ltd., Rattan Jyoti, 18, Rajendra Place, New Delhi 110008.

Director & Gen. Manager: V. K. J. Rane.

Indian Rare Earths Ltd., Pil Court, 111, M. Karve Rd., Bombay 400020. (Also see Chapter on "Atomic Energy").

Chairman & Mg. Director: M. A. Hadi; *Secretary:* R. K. Ramanathan; *Chief Project Manager:* K. Subramanian.

Gen. Manager, Rare Earths Division, Alwaye: B. P. Nair.

Manager, Minerals Division, Quilon: P. O. Titus.

Manager, Thorium Division, Trombay: G. K. Kelkar.

Indian Road Construction Corpn. Ltd., 30-31, Raja House, Nehru Place, New Delhi 110019.

Chairman & Mg. Director: Maj. Gen. J. S. Soin, P.V.S.M.

Indian Standards Institution, Manak Bhavan, 9, Bahadur Shah Zaffar Marg, New Delhi 110002.

Regnl. Offices: Novelty Chambers, Grant Rd., Bombay 400007; 5, Chowringhee Approach, Princep St., Calcutta 700072; C.I.T. Campus, Adyar, Madras 600020. *Branch Offices:* 'Pushpak', 3rd Flr., Nurmohamed Shaikh Marg, Khanpur, Ahmedabad 380001; 'F' Block, Unity Bldg., Narasimharaja Square, Bangalore

560002; Gangotri Complex (6th Fl.), Bhadbhada Rd., T. T. Nagar, Bhopal 462003 ; 22E, Kalpana Area, Bhubaneswar 751014 ; Ahimsa Bldg., (1st Flr.), SCO 82-83, Sector 17C, Chandigarh 160017; R-14, Yudhister Marg, 'C' Scheme, Jaipur 302005 ; 5-8-56/57, L. N. Gupta Marg., Hyderabad 500001 ; 6-7/28 Sarvodaya Nagar, Kanpur 200005 ; Patliputra Indl. Estate, Patna 800013 ; Hantex Bldg. (2nd Floor), Railway Station Rd., Trivandrum 600095.

Aims and Objects : Preparation of standards relating to products, commodities, etc. and their promotion on national & intnl. basis. The Insttn. operates, under an Act of Parliament, ISI Certification Marks Scheme under which items manufactured in conformity with the relevant Indian Standards are certified with ISI Marks as a third party assurance to the purchaser. The Insttn. also assists in developing in-plant standardization in industrial units, promotes educational utilisation of Indian Standards, and imparts training in industrial standardisation to scientists & technologists from developing countries.

Director General : Dr. A. K. Gupta.

Indian Telephone Industries Ltd., *Corporate Office :* 16, Museum Road, Bangalore 560001. *Regd. Office :* Dooravani Nagar, Bangalore 560016, Karnataka.

Regional Offices, Sales & Services: High Gate Arcade, 33, Church St., Bangalore; 62/63, "Advent", 12-A, Gen. J. R. Bhosale Marg, Bombay 400021; United India Life Assurance Bldgs., 22, Chittaranjan Ave., Calcutta 700013; 3, Tolstoy Marg., New Delhi 110001; 8A, Greames Rd., Madras 600006.

The ITI is a multi-unit industrial complex in the public sector with nine units in operation: four at Bangalore, two at Naini and one each at Srinagar, Rae Bareili and Palghat. The ITI manufactures the entire range of telecommunication equipment — automatic exchanges of Strowger, Crossbar and Electronic types — telephone instruments, long distance transmission equipment, microwave equipment, specialised equipment for Railways and Defence, electronic measuring instruments, automatic road traffic signals etc.

Indo Burma Petroleum Co. Ltd., Gillander House, Netaji Subhash Rd., Calcutta 700001.

Mg. Director: Anand Prakash Bhalla.

Industrial Credit Co. Ltd., 4, Scindia House, New Delhi 110001.

Industrial Credit & Investment Corpn. of India Ltd., 163, Backbay Recl., Bombay 400020.

Regional Offices : 2-B, Victoria Terrace, Calcutta 700017; 1, Cenotaph Rd., Madras 600018; Hindustan Times House, 18-20, Kasturba Gandhi Marg, New Delhi 110001.

Functions: To assist Industrial enterprises by providing finance in both rupee and foreign currencies in the form of long or medium-term loans or equity participation, sponsoring and underwriting new issues of shares and securities, guaranteeing loans from other sources, providing managerial and technical assistance to enterprises in industrial sector.

Chairman & Mg. Director : S. S. Nadkarni.

Industrial Development Bank of India, Nariman Bhavan, 227, Vinay K. Shah Marg, Backbay Reclamation Scheme, Nariman Point, Bombay 400021. *Regional Offices:* Neptune Towers, Near Nehru Bridge, Ashram Rd., P.B. No. 22, Ahmedabad 380009; Apeejay House, 15, Park St., P.B. No. 9010, Calcutta 700016; Udyog Vikas Bhavan, Bhangagarh, G.S., Gauhati 781005; Tamil Nadu State Co-op. Bank Bldg., 233, NSC Bose Rd., P.B. 5030, Madras 600001; Indian Red Cross Society Bldg., 1, Red Cross Rd., P.B. No. 231, New Delhi 110001. *Branch Offices:* Bangalore, Bhopal, Bhubaneswar, Chandigarh, Cochin, Hyderabad, Jaipur, Jammu, Kanpur, Patna and Simla.

Functions: (*a*) To co-ordinate the activities and to supplement the resources of other financial institutions including banks; (*b*) to plan and promote industries of key significance to the industrial structure; (*c*) to provide direct and refinance assistance to industrial concerns and (*d*) to adopt and enforce a system of priorities in promoting future industrial growth specially in small sector and backward areas.

In order to enlarge the role of the IDBI it was delinked from the Reserve Bank of India and made an autonomous Corpn. owned by the Govt. of India with effect from 16th February 1976.

The Bank has sanctioned financial assistance (excluding guarantees) totalling Rs. 61,701 million of which Rs. 40,677 million has been disbursed upto 31st December, 1980.

Chairman & Mg. Director : N. N. Pai; *Exec. Directors :* M. R. B. Punja, Dr. S. A. Dave, C. R. Sen Gupta.

Industrial Finance Corpn. of India, Head Office: Bank of Baroda Bldg., 16, Parliament St., New Delhi 110001.

Regional Offices: Regent Chambers, Backbay Reclm., Bombay 400021; Chatterjee International Centre, 33A, Chowringhee Rd., Calcutta 700071; 54, Sterling Rd., Nangambakkam, Madras 600034; Indian Red Cross Society Bldg., 1, Red Cross Rd., New Delhi 110001. *Branch Offices:* IFC Bhavan, 3-6-15, Himayatnagar, Hyderabad 500029; IFC Bhavan, C. Girdharlal Rd., Ahmedabad 380009; IFC Bhavan, Narasimharaja Square, 2, Cubbonpet Main Rd., Bangalore 560002; Upper India Chambers of Commerce Bldg., 14/69, Civil Lines, Kanpur 208001.

Functions: It supplies medium and long-term capital to both private and public limited companies and co-operative societies incorporated and registered in India. The facilities offered by IFCI include: (*a*) Granting of loans in rupees and foreign currencies; (*b*) Guaranteeing deferred payments for machinery and for foreign currency loans; (*c*) Subscribing to and underwriting of equity, preference and debenture issues.

Chairman: B. Singh.

Industrial Reconstruction Corpn. of India Ltd., 19, (2nd Fl.), N. Subhas Rd., Calcutta 700001.

Delhi Office: Vandhna, 11, Tolstoy Marg, New Delhi 110001.

Functions: It has been set up jointly by the Govt. of India, Reserve Bank of India, IDBI and other leading financial institutions as well as nationalised banks in the country. It aims at providing financial, managerial and other assistance to sick industrial units which are potentially viable towards their revival, rehabilitation and modernisation.

Chairman & Managing Director: T. Tiwari, *General Manager:* P. Choudhury.

Instrumentation Ltd., Kota 324005, Rajasthan.

The largest manufacturers of Industrial Process Control Instruments in India. The product-mix of the company includes a variety of sensors and transmitters, indicating, controlling and recording instruments for the measurement of temperature, pressure, flow, level and other process variables in different measuring systems such as magneto-electric, electronic, ferrodynamic and the pneumatic range of products.

Manufactures control valves and allied items with technical collaboration of Japan at the company's second unit at Palghat (Kerala).

Under its diversification scheme an agreement for manufacture of gas analysers in the line of pollution control instruments has been signed with Messrs. Hartmann & Braun of West Germany and production has commenced. A technical assistance and know-how agreement has also been signed with Messrs. George Kent of U.K. under its modernisation programme which covers the introduction of electronic loop instruments and pneumatic instruments with unified current output.

The company is also setting up an electronic milk analyser plant in Rajasthan as a joint venture with the Govt. of Rajasthan with technical know-how from Denmark.

The company provides specialised turn-key services of instrumentation to steel plants, thermal power stations, fertilizer and chemical based plants and other process industries. It has developed capabilities to design, fabricate, erect and commission instrumentation systems with indigenous know-how.

Chairman & Mg. Director: Brig. Y. Nirula.

Integral Coach Factory, Perambur, Madras 600 038.

This factory was established in collaboration with the Swiss Car and Elevator Mfg. Corpn. Ltd., Schlieren, Zurich, Switzerland, and the production was inaugurated on Oct. 2, 1955.

ICF meets the major requirements of passenger coaches of the Indian Railways. The output is 750 coaches per annum. So far, ICF has turned out over 14,500 coaches of 70 different types.

The factory has exported bogies to Burma, Thailand and Taiwan and coaches to Taiwan, Philippines, Zambia, Tanzania, Uganda and Vietnam.

An order for export of 32 MG Brake Vans to Nigeria is under execution.

Gen. Manager: I. M. Saini.

ISRO Satellite Centre (ISAC), A-1-6, Peenya Electronic Industrial Estate, Peenya, Bangalore 560058. Set up under the Indian Space Research Organisation of the Department of Space, Government of India, to design, develop and fabricate artificial earth satellites for activities related to space science and applications. The first Indian satellite ARYABHATA designed and fabricated at this place has been successfully launched using a Soviet rocket from Soviet Union on April 19, 1975. This satellite which has, since then, been orbiting the earth with all its technological systems functioning according to the design calculations, has successfully accomplished the primary mission goal of developing indigenous satellite making capability. This was followed up with the making of an experimental remote sensing satellite BHASKARA, which was successfully launched using a soviet rocket on June 7, 1979. BHASKARA has been successfully sending visible and microwave pictures taken over the Indian continent and data which is very useful for resource survey and meteorological applications. ROHINI, the first satellite to be launched from Indian soil using SLV-3 rocket on July 18, 1979, was also made here and it successfully completed its mission functions. APPLE, India's first experimental communication satellite has been made at the Centre and already taken to Kourou, French Guiana for its launch on ARIANE (L03) during 1981. Fabrication of BHASKARA-II as a follow up to BHASKARA is at an advanced stage presently. Work is in full stream on the next ROHINI satellite as well. Recently work on the first semi-operational Indian Remote Sensing satellite IRS has commenced.

Director: Prof. U. R. Rao.

Jessop & Co., Ltd., 63, N. Subhas Rd., Calcutta 700001.

Manufacturers of structural and bridge steel work, railway wagons and coaches, electric multiple unit coaches, machine tools, leaf and coil springs, vibratory rollers, aerial ropeways, earth moving equipments, all types of cranes, road rollers etc.

Chairman & Mg. Director: P. K. Banerji.

Jute Corpn. of India Ltd., 1, Shakespeare Sarani, Calcutta 700071.

Regional Offices: New Poddar Bldg., N. N. Road, Cooch-Behar 736101; Bengal Silk Co-op. Bldg., Bund Rd. P.O. & Dist. Malda 732101; Hill Cart Rd., Siliguri 734401, Darjeeling Dist.; 26/13, S. S. Sen Rd., Gorabazar, Berampore 742101, Murshidabad Dist.; 35, R. N. Tagore Rd., P.O. Krishnagar 741101, Nadia Dist.; 8/1, G. T. Rd., P.O. Baidya Beti, Shewraphuli 712223, Hooghly Dist.; N.H.-31, Purnea; Zoo Rd., Near Commerce College, Gauhati 781021; Ward No. 2, Elliot Rd., Dhubri, Goalpara Dist., Amalapatty, Nowgong 782001; Opp. S.B.I., M. Gandhi Rd., Vizianagaram 531201; Haripriya Bhawan, Dalmundai, Cuttack 753009; Krishnagar, B. K. Rd., P.O. Agartala 799001.

Functions: (*i*) to undertake price support operations in respect of raw jute, (*ii*) to ensure remunerative prices to the growers through judicious commercial operations and improvements in the marketing of raw jute, (*iii*) to operate a buffer stock in raw jute in order to stabilise the prices of raw jute, (*iv*) to undertake import and export of raw jute and (*v*) to export jute goods and undertake their export promotion.

Chairman & Mg. Director: A. K. Moitra.

Kudremukh Iron Ore Co. Ltd., 25, M. Gandhi Rd., Bangalore 560001. *Project Office:* Kudremukh (Malleswaram), Via Kalasa 577124, Chikmagalur Dist., Karnataka.

Functions: A contract for the sale of 150 million tonnes of concentrates over a period of 20 years has been entered into with Iran, which will fetch an estimated total foreign exchange earnings of over 3,300 million U.S. dollars.

Chairman-cum-Mg. Director: B. Ramachandra.

Lubrizol India Ltd. (See Chapter on Petroleum Industry).

Machine Tool Corpn. of India Ltd., Beawar Rd., Ajmer 305001, Rajasthan.

Functions: Under this project, a total of 650 Grinding Machines and a large variety of special accessories at full rated capacity valued at about Rs. 44 million are expected to be manufactured every year. The company's plant will provide employment to approximately 1,700 persons and will also give plenty of scope for the development of ancillary industries in and around Ajmer.

Machine-Tool Prototype Factory, Ambernath 421502, Maharashtra.

Estd. 1953. The Factory, apart from meeting vital defence requirements, has established production of several types of precision machine tools.

General Manager: B. L. Khurana.

Madras Fertilizers Ltd., Manali, Madras 600068.

Production capacity is 164,000 tonnes of nitrogen and 105,000 tonnes of phosphates. It is a joint venture in which the Govt. of India holds 51 per cent of the equity capital while the remaining 49 per cent is equally shared between Amoco India Inc. of USA and the National Iranian Oil Co. of Iran.

Chairman : T. N. Lakshminarayanan *Mg. Director:* Joseph Kurian.

Madras Refineries Ltd., Refinery House, Manali, Madras 600068.

Mandhar Cement Factory, Mandhar 493111, Near Raipur, Madhya Pradesh.

For details see Cement Corporation of India in this list.

Mandhya National Paper Mills Ltd. (Subsidiary of HPCL), Belagula 571606, Karnataka.

The mill is based on sugarcane bagasse and is the only mill in the country to manufacture fine grades of writing and printing papers using more than 90 per cent of bagasse pulp. Under the expansion scheme, the rated capacity is expected to be increased to 16,500 tonnes per annum.

Manganese Ore (India) Ltd., 3, Mount Rd. Ext., P.O. 34, Nagpur 440001.

The company at present is operating 10 manganese ore mines in Madhya Pradesh/Maharashtra region, one in Keonjhar, Orissa and one in Adilabad, Andhra Pradesh. The minerals produced are: high (ferro-manganese) grade manganese ore, low (blast furnace) grade manganese ore and battery grade dioxide ore.

The expansion programmes envisage the installation of a ferro-manganese plant, for which letter of intent has been issued by the Govt. of India, and beneficiation and agglomeration plant/s.

Labour employed: 13,000; Turnover: Rs. 120 million; Paid up capital Rs. 21·5 million; Reserves & Surplus: Rs. 22·7 million.

Mg. Director: P. C. Gupta.

Mazagon Dock Ltd., Dockyard Rd., Bombay 400010.

A ship-building, ship-repair and general engineering concern the company can build various types of ships — like frigates, corvettes, submarines, passenger ships, passenger-cum-cargo ships, water tankers, dredgers, tugs, barges, trawlers, etc. — up to 27,000 dwt. It has three building berths, three dry docks and an impounded wet dock Kasara Basin.

The company has commenced construction of fully Indian designed frigate for the Navy. It has also built for the Navy 6 leander class frigates, a bucket dredger, two inshore minesweepers, two *Avcat* tankers (designed to carry aviation fuel) and several other ships and harbour crafts.

The company has diversified its activities in the field of manufacturing off-shore fixed platforms and other off-shore structures.

Chairman & Mg. Director: Vice-Admiral N. P. Datta; *Directors:* N. K. Sawhney (Commerce); A. K. Sud (Finance); S. S. Dotiwala (Ship-building).

Metal Scrap Trade Corpn. Ltd., 225F, A.J. Bose Rd., Calcutta 700020. (A subsidiary of 'Steel Authority of India Ltd.')

Functions: Canalised iron and steel scrap importer and exporter as well as canalised importer of old ships for breaking, with diversified activities in other allied fields.

Chairman-cum-Mg. Director: Rup Rai.

Metallurgical & Engineering Consultants (India) Ltd., P.O. Hinoo, Ranchi 834002, Bihar.

MECON is fully equipped to undertake the design and supply of custom-built rolling mills and auxiliary equipment for metallurgical industries, technical consultancy and detailed engineering for ferrous and non-ferrous metallurgical and chemical industries.

Chairman-cum-Mg. Director: P. C. Laha.

Mica Trading Corporation of India Ltd., 137, Patliputra Colony, Patna 800013.

Functions: A subsidiary of Minerals & Metals Trading Corpn. of India Ltd. and it is the sole canalising agency for export of mica. It is also undertaking fabrication and manufacture of mica based products and their marketing. It renders technical consultancy as also marketing intelligence services to entrepreneurs for setting up mica based industries. It is also promoting research for finding new uses of mica.

Regional Offices: Calcutta, Madras, Giridih, Jhumritelaiya (both in Bihar) and Bhilwara (Rajasthan).

Mineral Development Board, 9th Floor, Vandhana, 11, Tolstoy Marg, New Delhi 110001.

An autonomous Organisation set up by the Govt. of India to ensure proper regulation, conservation and development of minerals as specified from time to time by the Central Govt. It advises on (*a*) planning and development on all aspects of development of resources of minerals, (*b*) analysis, testing etc. of ore samples, market survey; other special studies and (*c*) development of the minerals in the country with particular regard to location of reserve, export requirements, the need of Indian industry, railway facilities, port facilities and scientific conservation of the specified minerals and their production, beneficiation and use, etc.

Mineral Exploration Corpn. Ltd., Seminary Hills, Nagpur 440006.

Functions: To carry out detailed exploration of mineral deposits in the country for proving and assessing gradewise reserves of minerals.

Chairman & Mg. Director: K. S. Mahapatra. *Director:* (Technical); T. Poonnoose.

Minerals & Metals Trading Corpn. of India Ltd., Express Bldg., 9 & 10, Bahadur Shah Zaffar Marg, New Delhi 110002.

Functions: Undertakes export of iron ore, manganese ore, chrome ore, coal barytes and other minor minerals and import of stainless steel, non-ferrous metals, raw asbestos, fertilizers and fertilizer raw materials and other strategic industrial raw materials for supply to industrial units in the country. The Corporation has launched a scheme for export of finished products, manufactured out of the raw materials imported by it and for the supplies of duty free raw material for export production. The Corporation has Regional Offices at Bombay, Calcutta, Madras, Visakhapatnam, Vasco da Gama, Cuttack, Haldia and Nalda and a foreign office in Tokyo (Japan).

Chairman: D. K. Dhaon.

Mining & Allied Machinery Corpn. Ltd., P.O. Durgapur 713210, West Bengal; Branch Offices: 77, Park St., Calcutta 700016; Chanakya Bhavan, Chanakyapuri, New Delhi 110021.

Chairman & Mg. Director: D. R. R. Sastri.

Mishra Dhatu Nigam Ltd., Kanchanbagh, Hyderabad 500258.

The company was incorporated under the administrative control of the Ministry of Defence to set up a special metals and superalloys plant to manufacture nickel and cobalt base superalloys, high strength iron alloys, titanium and titanium alloys, controlled expansion alloys, thermostatic bimetals, high elastic modulus alloys, hard and soft magnetic alloys and tungsten and molybdenum products required by aircraft, electronic and other sophisticated industries. The plant has commenced commercial production.

Chairman: Dr. Brahm Prakash; *Mg. Director:* Z. P. Marshall.

Modern Bakeries (India) Ltd., 25-B, Local Shopping Centre, Pashchimi Marg, Vasant Vihar, New Delhi 110057.

It was registered in October, 1965 and has 13 units (16 lines) at Ahmedabad, Bangalore, Bombay (2), Calcutta (2), Chandigarh, Cochin, Delhi (2), Hyderabad, Indore, Jaipur, Kanpur, Madras, Ranchi, one oil mill at Ujjain and one beverages unit at Faridabad. The capacity of each unit is about 40,000 loaves of 400 grams per day excepting those of Bombay, Calcutta and Delhi where the rated capacity is 78,000 loaves of 400 grams per day.

All the bakery products produced by the company are fortified with Vitamin A, Vitamin B Complex (Riboflavin, Thiamine & Niacin), Iron and Calcium propionate.

During 1978 the company has entered in the beverage industry and has introduced a new soft drink "Double Seven", "77" based on a concentrate developed by the Central Food Technological Research Instt., Mysore. The company has also introduced lemon and orange flavours recently.

Chairman & Mg. Director: Kedar Nath Singh.

Mogul Line Ltd., 16, Bank St., Bombay 400023.

Operates Haj pilgrim service between Bombay and Jeddah, regular cargo-cum-passenger service between Bombay and Red Sea ports, Bombay and West Asia gulf ports, cruises to Malaysia and Singapore, Konkan passenger service, coastal cargo services and overseas tramp service. (Tonnage: 304,933 DWT.)

Chairman & Mg. Director: J. G. Saggi.

Nagaland Pulp & Paper Co. Ltd., P.B. 18, Jorhat, Assam.

National Agricultural Cooperative Marketing Federation of India Ltd., (NAFED), Sapna Bldg., 54, East of Kailash, New Delhi 110065.

Sponsored by the Govt. of India & consists of all Co-op. Mktg. Fedns. and Societies, Central Govt. & National Co-op. Devpt. Corpn., promotes co-op. mktg., assists its constituents by undertaking exports & imports, inter-State, intra-State & internal trade in agricultural, horticultural and forest produce, farm inputs, agricultural machinery & implements ensuring fair returns to the farmers; arranges supply of foodgrains to deficit areas; processing and storage of foodgrains, fresh fruits & vegetables, conducts research and disseminates information on cooperative marketing etc.; runs fruit & vegetable processing factories in New Delhi, Vellore and Khushalnagar and jute mill in Orissa jointly with Indl. Development Corporation of Orissa; runs a cold storage & ice factory in New Delhi; Branches at various important sea ports & terminal markets in the country. *Regnl./Branch/Liaison Offices:* (1) Raj Mahal, 84, Veer Nariman Road, Bombay 400020; (2) 12-B, Lord Sinha Rd., Calcutta 700016; (3) 20, British India St., Calcutta 700001; (4) NAFED Godowns, 148, J. N. Mukherjee Rd., Shalkia, Howrah; (5) 158, Linghi Chetty St., Madras 600001; (6) 2423/29, Surekha Bldg., Shradhanand Mrg., Delhi 110006; (7) 14/10-B, Palluruthy Rd., Mattancherry, Cochin 682002; (8) 13/94, Maniram Dawan Lane, Ulubari, Gauhati 781007; (9) No. 29, Neela South St., Nagapattinam 611001 (T. Nadu); (10) 42, Budha Nagar, Bhubaneswar 751006; (11) Kothi 160, Sector 19-A, Chandigarh 160019; (12) 5-2-68, Jambagh, Hyderabad 500001; (13) DS-10, Nirala Nagar, Lucknow 226007; (14) Laj Bhawan, Sanyogitaganj Mandi, Indore 452001; (15) Anuradha Theatre Bldg., M. G. Rd., Nasik Rd., 422102; (16) Flat No. S-9, 'C' Scheme, Bhawani Singh Rd., Jaipur 302001; (17) MIT Bldg., Budha Marg, Patna 800001; (18) Agricultural Machinery Divn., Cold Storage & Tractor-cum Service-Centre, Plots Nos. 7 & 8, Lawrence Rd., Industrial Area, Delhi 110035; (19) Fruit & Vegetables Unit, Shop No. D-392, New Fruit Mktg., Azadpur, Delhi 110033; (20) NAFED Godown, Byculla, Bombay; (21) NAFED Warehousing & Processing Industries, Bay 'A', APM Yard, Vashi-Turbhe, New Bombay 400703; (22) 14/4, Ravi Chambers, Relief Rd., Ahmedabad 380001; (23) NAFED PROCESSED FOODS, i) 7-8, Lawrence Rd., Delhi 110035; ii) 40, Katpadi Rd., Vellore 632004; iii) Kushalnagar 571234, Dist. Coorg (Karnataka); (24) Konark Jute Mill Ltd., Post Box 163, Bhubaneshwar 751001; (25) Shamina Bldg., Mewa Mandi, Srinagar (J & K); (26) Pocket Mansion, 5th Floor, Upper Kaithu, Simla 171003 (H.P.); (27) 18, Galaxy Commercial Centre, 2nd Floor, Jawahar Rd., Rajkot 360001.

Mg. Director: S. P. Shrivastava.

National Aluminium Co. Ltd., Chiranjiv Tower, 43, Nehru Place, New Delhi 110019.

National Bicycle Corporation of India Ltd., 250, Worli, Bombay 400025.

Manufactures: Speed King, Norton, Ambassador, Bunny Hind Superb, Unibike, Paprika Bicycles and Bicycle parts.

Branch Works: Hind Nagar, Ghaziabad 201001, U.P.

Director in-charge: B. C. Shukla.

National Buildings Construction Corporation Ltd., Integrated Office Complex, Lodi Road, New Delhi 110003.

Functions: (*a*) To undertake civil construction works in India and abroad; (*b*) to improve the quality of construction works; (*c*) to bring down construction costs; (*d*) to take up construction work in border areas and inaccessible places where private contractors quote fancy rates; and (*e*) to take on the responsibility for supervising the works in such a way that the clients reduce their supervisory engineering personnel so as to bring down the ultimate construction costs.

NBCC is equipped to undertake jobs on turn-key basis right from planning and designing to execution and completion stage.

Chairman-cum-Mg. Director: S. C. Kapur.

National Cooperative Development Corporation, 4, Siri Institutional Area, Behind Hauz Khas, New Delhi 110016.

Regional Offices: Chatterjee International Centre, 4th Floor, 33A, Chowringhee Road, Calcutta 700007; 8, Cunningham Road, Bangalore 560052; Pachhi House, 1st Floor, SCO No. 98-100, Sector-17D, Chandigarh 160017; Bora Service Station Building, 2nd Floor, G.S. Road, Ulubari, Gauhati 781007; B-7B, Durgadas Colony, Bhawani Singh Road, Jaipur 302001; 14, Vidhan Sabha Marg, Sahakarita Bhawan, Lucknow 226001; 1025, Sadashiv Peth, Opp., Shivaji Mandir, Pune 411030; Biscomun Compound West Gandhi Maidan, Patna 800001; M.P. State Cooperative Bank Building, Ground Floor, New Market, T. T. Nagar, Bhopal 462003.

Functions: To plan and promote country-wide programmes through cooperative societies, for the production, processing, marketing, storage, export and import of agricultural produce, food stuffs and notified commodities. The Corpn. also deals with programmes for development of poultry, dairy, fishery, coir, handlooms and distribution of consumers articles in rural areas and minor forest produce in the Cooperative Sector.

Mg. Director: V. B. L. Mathur.

National Dairy Development Board, Anand 388001, Gujarat was constituted as an autonomous body (1965).

Functions: To speed up the overall development of milk production, procurement, processing and marketing in the country, the Board offers (*a*) technical services for development of dairy and allied projects; (*b*) manpower development services; (*c*) bulk procurement services; (*d*) specialised dairy engineering services; (*e*) consultation services on dairy and allied operations and (*f*) international liaison.

Chairman: Dr. V. Kurien.

National Fertilizers Ltd., 20, Community Centre, East of Kailash, New Delhi 110065.

NFL is the sixth largest company in the country in terms of investment — Rs. 5,780 million.

NFL plants at Nangal, Bhatinda and Panipat have a combined production capacity of about 700,000 tonnes of nitrogen per annum.

NFL has retained its position as the largest producer of nitrogenous fertilizers in the country during 1980-81 with a turnover of Rs. 1,560 million — registering an increase of about 23 per cent from the previous year.

Kisan Khad and Kisan Urea produced at NFL plants are easily available to farmers through a large network of dealers, cooperatives and agro-industries.

Mg. Director: B. S. Kakar.

National Film Development Corporation Ltd. (N.F.D.C.), 13-16, Regent Chambers, Nariman Point, Bombay 400021. (For details see chapter on Film Industry).

National Hydroelectric Power Corporation Ltd., 'Manjusha', 57, Nehru Place, New Delhi 110019 is an enterprise of the Central Government set up in November 1976.

It has six important hydroelectric projects under execution, namely, Loktak (Manipur), Baira Siul (H.P.), Salal (J. & K.), Devighat (Nepal), Koel (Bihar) and Dulhasti (J. & K.) besides a number of transmission works in the country.

The Corporation is geared up to plan, promote and organise the development of hydroelectric power in all its aspects including planning, investigation research, designing, preparation of feasibility and definite project reports, construction, generation, operation and maintenance of hydroelectric power stations and projects, and undertake the complete designing and construction of transmission lines and ancillary works.

Chairman & Mg. Director: P. M. Belliappa.

National Industrial Development Corpn. Ltd., P.B. 5212, Chanakya Bhavan, Vinay Marg, New Delhi 110021.

Functions: The Corporation provides the entire range of engineering, economic and management consultancy services for the implementation of new industrial projects and infrastructure and modernisation/rehabilitation of existing investment. Its fields of specialisation include engineering industries, pulp and paper mills, cement works, textile mills, chemical and metallurgical industries, industrial estates, urban planning and development etc. The services of the Corporation are being made use of by Central Government, various State Governments, public sector enterprises and private entrepreneurs in India. The services have also been increasingly availed of by international agencies like UNIDO, Commonwealth Secretariat, over 30 foreign countries and entrepreneurs abroad.

Chairman-cum-Mg. Director: Dr. Ram K. Iyengar.

National Instruments Ltd., 1/1, Raja S. C. Mullick Rd., Jadavpur, Calcutta 700032.

This company manufactures and repairs precision surveying instruments, meteorological and optical instruments, pressure and vacuum gauges and high precision defence instruments.

Chairman-cum-Mg. Director: P. R. Rao.

National Insurance Co. Ltd., 3, Middleton St., Calcutta 700071.

National Mineral Development Corpn. Ltd., Pioneer House, 6-3-653, Somajiguda, Hyderabad 500004.

Founded in 1958; *Regional Offices:* 13, Camac St., Calcutta 700017; Haroon Manzil, Thompson St., Visakhapatnam 530001; 10/2, Kasturba Road, Bangalore 560001; 109, Surya Kiran, K. Gandhi Marg, New Delhi 110001.

Functions: Exploration, development and exploitation of iron ore deposits, diamond mining in the 'Panna' area of Madhya Pradesh and prospecting for other miscellaneous minerals such as bentonite. NMDC's Consultancy Services include mineral investigation, evaluation and feasibility study; development of sampling system, process selection and flow sheets; analysis, bench scale and pilot plant testing and ore beneficiation; preparation of DPR; basic engineering, mine construction, commissioning and performance tests; market studies and training etc. During 1980-81, NMDC has produced 9·40 million tonnes of iron ore and 13,756 carats of diamonds. Presently, NMDC is having 3 working iron ore mines: Bailadila deposits No. 5 and 14 in Bastar District of M.P., Donimalai in Bellary District, Karnataka and Diamond Mine at Majhgawan in Panna of M.P.

A number of projects are under investigation, viz: Iron Ore: Bailadila Deposit No. 4, 11 & 13, Bastar Dist., Madhya Pradesh; Kumaraswamy, Bellary Dist., Karnataka; Bababudan Magnetite Deposits, Chickmagalur Dist., Karnataka; Malangtoli, Keonjhar Dist. Orissa; Ongole in Andhra Pradesh; for diamonds at Vajra-Karur in Andhra Pradesh. Bailadila-11C Iron Ore Deposit is under development.

Import of Sponge iron (Direct Reduced Iron) from Indonesia, in the capacity of canalising agency, has started as a new activity from the second half of 1980.

Chairman-cum-Managing Director: C. S. Venugopala Rao; *Directors:* M. R. Kamra (Production); A. Ramachandra Rao (Finance).

National Newsprint & Paper Mills Ltd., Nepanagar 450221, Nimar Dist., Madhya Pradesh.

Chairman-cum-Mg. Director: A. D. Singh.

(Also see Chapter on " Paper Industry ".)

National Projects Construction Corpn. Ltd., Raja House, 30-31, Nehru Place, New Delhi 110019.

Functions: To provide the Central and State Governments with an organisation capable of undertaking the execution of river valley projects, industrial structures and allied civil engineering works requiring high technical skill, strict adherence to specifications and quality standards.

Chairman-cum-Mg. Director: D. R. Sikka.

National Research Development Corpn. of India, 61, Ring Road, Lajpat Nagar III, New Delhi 110024.

Functions: To stimulate development and commercial exploitation of patents and inventions arising from national research efforts and also patented inventions from individuals.

The Corporation also develops scientific research by arranging pilot plant and instituting developmental projects. Till March 1978 the Corporation has instituted 71 projects at a cost of about Rs. 83·29 million.

Chairman: Vacant; *Gen. Manager:* Dr. H. S. Rao.

National Seeds Corpn. Ltd., Beej Bhavan, Pusa, New Delhi 110012.

Functions: Chief co-ordinator of the National Seed Programme, responsible for organising a sound seed industry in India; concentrates on production of foundation and certified seeds of promising varieties of cereals, vegetables, fibre, fodder, pulses and other crops evolved by research; handles inter-state marketing and export of certified seeds; provides consultancy services in different fields of seed production, processing, quality control, marketing, information communication, advertising and public relations, training and project formulation and project management.

Mg. Director: T. Balaraman.

National Small Industries Corpn. Ltd., Near Ind. Estate, Okhla, New Delhi 110020.

Functions: To assist, counsel, finance and promote the interest of small industries in the country.

Chairman: T. S. Kannan.

National Textile Corpn. Ltd., 8th Fl., Surya Kiran Bldg., 19, Kasturba Gandhi Marg, New Delhi 110001.

Functions: To manage textile mills which may be taken over under the Industries (Development & Regulation) Act, 1951 and under the Sick Textile Undertakings (Taking over of Management) Act, 1972. The NTC is managing 105 nationalised mills having an installed capacity of 3·2 million spindles and 47,787 looms.

Subsidiary Corporations: National Textile Corpn. (A. Pradesh, Karnataka, Kerala, Mahe) Ltd., 29/2, K. Hanumanthiah Rd., Bangalore; National Textile Corpn. (Gujarat) Ltd., 1791, Ashram Road, Ahmedabad; National Textile Corpn. (Maharashtra) Ltd., N.T.C. House, 15, N. Morarjee Marg, Ballard Estate, Bombay; National Textile Corpn. (W. Bengal, Assam, Bihar & Orissa) Ltd., 7, J. L. Nehru Road, Calcutta; National Textile Corpn. (Uttar Pradesh), Ltd., Sylverton, 14/82, Civil Lines, Kanpur; National Textile Corpn. (Delhi, Punjab & Rajasthan) Ltd., Vandhana Bldg., 11, Tolstoy Marg, New Delhi; National Textile Corpn. (Madhya Pradesh) Ltd., 27, Yeshwant Niwas Road, Indore; National Textile Corpn. (Tamil Nadu & Pondicherry) Ltd., NTC House, P.B. No. 2409, 1064, Somasundaram Mills Rd., Coimbatore.

Chairman: K. Sreenivasan; *Mg. Director:* Moosa Raza, I.A.S.

National Thermal Power Corpn. Ltd., N.T.P.C. Square, 62-69, Nehru Place, New Delhi 110019.

Functions: Set up under the Ministry of Energy to provide an integrated approach to development of thermal power in the country. The NTPC is responsible for the designing, construction, commissioning and operation of super thermal power stations at coal pitheads in the country.

Functions: Responsible for design, construction, commissioning and operation of centrally-owned pithead thermal power stations. Projects under implementation include Singrauli (U.P.), Korba (M.P.), Ramagundam (A.P.), and Farakka (W. Bengal) with cumulative capacity of 8300 M.W. along with associated 400 kV transmission systems. Also presently responsible for the management of Badarpur thermal power station & project.

Chairman & Mg. Director : D. V. Kapur.

New India Assurance Co. Ltd., New India Assurance Bldg., 87, M. Gandhi Road, Bombay 400023.

Neyveli Lignite Corpn. Ltd., Neyveli 607801, South Arcot Dist., Tamil Nadu.

This is a Rs. 2,802 million project. The integrated project envisages the mining of about 6·5 million tonnes of lignite per annum.

The 600 M.W. Thermal Power Station at Neyveli is the largest and the first lignite fire thermal power station in India and Asia located close to the pit-head.

The Urea Plant of Neyveli switched over to oil gasification from July 1979.

The Briquetting and Carbonisation Plant at Neyveli produces carbonised briquettes (Trade name: LECO) a smokeless domestic and industrial fuel from lignite.

The following tar products are also produced in the B & C plant: tar, neutral oil, carbolic acid (phenol), ortho cresol, meta-para cresols, xylenols and polyvalent phenols.

Chairman-cum-Mg. Director: G. L. Tandon.

North Eastern Electric Power Corpn. Ltd., Shillong-Jowai Rd., Laitumkhrah, Shillong 793003, Meghalaya.

Chairman-cum-Mg. Director: S. B. Majumdar.

North Eastern Handicrafts and Handlooms Development Corpn. Ltd., Upper Lachaumiere, Shillong 793001.

Main objects of the corporation is to develop and promote handicrafts and handlooms in all aspects in the North Eastern Region, by providing financial, technical and other assistance to craftsmen, weavers, co-operative and any establishment, undertaking or enterprise, connected with handicrafts, handlooms and other allied products.

Chairman : Vacant ; *General Manager :* M. P. Bezbaruah, I.A.S.

Optical Glass Plant, Central Glass and Ceramic Research Institute, Calcutta 700032.

The pilot plant located at the institute produces different types of optical glass the plant has supplied till the end of March 1979 optical glass worth approximately Rs. 10 million to consumers.

The process has been released to Bharat Ophthalmic Glass Ltd., Durgapur for production of major types of optical glass.

Director: Dr. S. Kumar.

Oriental Fire & General Insurance Co. Ltd., Jeevan Udyog, Asaf Ali Road; New Delhi 110001.

Petrofils Co-operative Ltd., New Delhi House, Barakhamba Rd., New Delhi 110001.

A joint venture of the Govt. of India and weavers' co-op. societies. The plant with an annual capacity of 3,500 tonnes of polyester filament yarn is situated at P.O

Petrochemicals, Vadodara Dist., Gujarat State. The capacity is going upto 7,000 mts. shortly.

Chairman & Mg. Director: V. N. Jikar.

Power Engineers Training Society, R. No. 207, 2nd Flr., Charanjiv Tower, 43, Nehru Place, New Delhi 110019.

Acts as an apex body for meeting the trg. needs of the power sector. It will set up a National Trg. Resources Unit for producing trg. materials, analysing skills and tasks for review & development of major trg. schemes, producing audio-visual material, etc. The Unit will also assess trg. needs & priorities, and keep liaison with the trg. units of the State Electricity Boards and suppliers of power plants and equipments, etc.

Praga Tools Ltd., 6-6-8/82, Kavadiguda Rd., Secunderabad 500003.

The company produces machine tools and allied accessories, forgings for auto and diesel spares and railroad components, defence items, etc.

Chairman & Mg. Director : Brig. T. A. Abraham (Retd.).

Projects & Equipment Corpn. of India Ltd., Hansalaya, 15, Barakhamba Road, New Delhi 110001.

Formed in April 1971 as a subsidiary of the State Trading Corporation of India with complete autonomy in its marketing and commercial operations.

Functions : To export engineering, industrial and railway equipment from India, to undertake turnkey jobs abroad and to co-ordinate efforts of public and private sector industries and help them with marketing opportunities abroad, tendering and negotiations, finance and foreign exchange, procurement of materials, equality control, delivery schedules, etc.

Chairman & Mg. Director: Vikram Prakash.

Pyrites, Phosphates & Chemicals Ltd., *Registered Office:* Pali Road, Dehri-on-Sone 821307, Rohtas Dist., Bihar. *Units:* 1. Mining Project, Amjhore, Rohtas Dist., Bihar; 2. Mussoorie Phosphorite Project, Ravindra Nath Tagore Marg, Dehra Dun, Uttar Pradesh ; 3. Saladipura Project, P. O. Khandela, Sikar Dist., Rajasthan. *Branch Offices:* 6, Community Centre, East of Kailash, New Delhi 110065 ; 9, Sayed Amir Ali Avenue, Park Circus, Calcutta 700017 ; B-69, Sector-C, Mahanagar, Lucknow ; B-4, Door No. 17, Sennathi Street, Subramania Nagar, Salem 636005 ; Prashant Puri, Varanasi 221002 ; Vidyapati Nagar, Kanke Road, Ranchi 834008 and Godipolhari Sahi, P.O. Bhubaneshwar 751002.

Mining Programme: Pyrites: It has been planned to produce 270,000 tonnes of pyrites ore per annum (+33 per cent 'S') to feed the pyrites based sulphuric acid plant in Sindri at a capital cost of Rs. 133·2 million. However, the present mine capacity has been scaled at 120,000 tonnes per annum to the reduced requirement of ore at Sindri at present.

In addition to the above production of low grade pyrites, 10-25 per cent ('S' Agriculture Grade) is also being mined and marketed by the company for reclamation of usar (Alkali soils). The demand of this material is going up.

Rock Phosphate: The company is mining rock phosphate at Maldeota and Durmala mines in Dehra Dun. This material is being marketed as a straight phosphatic fertiliser in acidic soils situated in the States of Kerala, Karnataka, Tamil Nadu, Orissa, Bengal, Assam, Uttar Pradesh and Himachal Pradesh etc. The demand for phosphate is growing year after year. The sales during 1980-81 was about 57,000 tonnes.

Saladipura Production-cum-Exploratory Mining Project: Exploratory work for exploitation of pyrites deposit is being undertaken.

Financial: The expected turn over of the company during 1980-81 was Rs. 65·00 million and profit during 1980-81 would be about Rs. 7·00 million.

Mg. Director : T. N. Jaggi.

Radio & Electricals Mfg. Co. Ltd., P.B. No. 2606, Mysore Rd., Bangalore 560026. (A subsidiary of Bharat Heavy Electricals Ltd.)

Products Manufactured: Single & Polyphase electricity meters, water meters, paper, electrolytic and polyster capacitors.

Rail India Technical & Economic Services Ltd., New Delhi House, 27, Barakhamba Rd., New Delhi 110001.

Chairman: P. N. Kaul ; *Mg. Director :* R. Parthasarathy.

Rajasthan Atomic Power Project. (See Chapter on "Atomic Energy".)

Rashtriya Chemicals & Fertilisers Ltd. (RCF), Chembur, Bombay 400074.

One of the five companies of the Reorganised Fertiliser Corpn. of India Ltd. and National Fertilisers Ltd., RCF will include besides the Trombay complex, the two giant fertiliser plants based on Bombay High gas at Thal in Raigad Dist. and also all the marketing operations in the Western and Southern regions.

Chairman & Mg. Director: Duleep Singh.

Rehabilitation Industries Corpn. Ltd., 25, Free School St., Calcutta 700016.

Functions : To create employment opportunities through industries for the displaced persons from Bangladesh and to the migrants from West Pakistan (who have entered Indian territory as a result of the conflict with Pakistan), repatriates from Burma and Sri Lanka and persons of Indian origin migrated from other countries with the intention of permanently settling in India.

Richardson & Cruddas (1972) Ltd., *Head Office:* Byculla Ironworks, Bombay 400008. *Branch Offices & Works:* L.B. Shastri Marg, Mulund, Bombay 400080 ; Post Box No. 1276, Madras 600001 ; MIDC Ind. Estate, Hingna Road, Nagpur 440001 ; Hindustan Bldgs., 4, Chittaranjan Avenue, Calcutta 700013.

Liaison Office : Surya Kiran, K. Gandhi Marg, New Delhi 110001.

Established in 1858, this company became a wholly owned Government of India Undertaking from 1-4-1973.

Product Lines: Byculla : Fabricated steel structures, points & crossings, rubber & sugar machinery and grey iron castings; Mulund: pressure vessels, heat exchangers & chemical processing equipment ; Madras : Structurals, refrigeration equipment & public health engineering; Nagpur : Transmission line towers.

Rural Electrification Corpn. Ltd., D.D.A. Bldg., Nehru Place, New Delhi 110019.

Functions: (1) To finance rural electrification schemes; (*ii*) to subscribe to special rural electrification bonds that may be issued by the State Electricity Boards ; (*iii*) To promote and finance rural electric co-operatives; (*iv*) To administer the funds received from the Government of India and other sources as grants or otherwise.

Chairman-cum-Mg. Director: Dr. T. G. K. Charlu.

Salem Steel Plant, SA-150, Rly. West Colony, Salem 636005, Tamil Nadu. (Refer to Steel Authority of India in this list and see also the chapter on Steel Industry).

Sambhar Salts Ltd., Badnor House, Bhagwandas Road, Box No. 146, Jaipur.

(A subsidiary of Hindustan Salts Ltd.).

Scooters India Ltd., P.B. 1, P.O. Sarojininagar, Lucknow 226008.

Commenced production in February, 1975 with present rated capacity 80,000 two-wheeler Vijai Super scooters and 2,400 three-wheelers per annum.

Chairman & Mg. Director: V. Krishnan.

Semiconductor Complex Ltd., Phase VIII, S. A. S., Nagar 160051 (Punjab).

Shipping Corpn. of India Ltd., *Registered Office:* Shipping House, 245, M. Cama Road, Bombay 400021. *Branch Offices:* Shipping House, 13, Strand Road, Calcutta 700001; Chandralok Bldg., Janpath. New Delhi 110001; Renmar House, Kilindini Road, P.B. 82364, Mombasa; 24, St. Mary Axe, London, EC3 ASDE.

Number of Vessels: Cargo vessels 79, passenger-cum-cargo 6, bulk carriers 20, timber carriers 2, bulk coal carriers 3, tankers 21, combination carriers 12, very large crude carriers 2, cattle carrier 1, total 146.

Total g.r.t. 2·94 million ; d.w.t. 4·89 million.

Vice Chairman & Mg. Director: Vice-Adm. R. K. S. Gandhi (Retd.).

Smith Stanistreet Pharmaceuticals Ltd., 18, Convent Rd., Calcutta 700014.

State Chemicals & Pharmaceuticals Corpn. of India Ltd. (CPC), Chandralok, 36, Janpath, New Delhi 110001.

(A subsidiary of State Trading Corpn. of India).

Chairman: P. K. Kaul ; *Mg. Director :* B. S. Thacker.

State Farms Corpn. of India Ltd., Beej Bhavan, C.T.O. Bldg., Pusa Complex, New Delhi 110012.

Established in 1969 to administer the Central State Farms.

Functions: Production of quality seeds of high-yielding varieties of wheat, paddy, maize, bajra and jawar ; advises on soil conservation, reclamation and development of waste and forest land, consultancy services on farm mechanisation.

Chairman: Mrs. Anna R. Malhotra; *Mg. Director:* K. Rajan.

State Trading Corpn. of India Ltd., Chandralok, 36, Janpath, New Delhi 110001.

Functions: To broaden and enlarge the scope of Indian exports and to arrange for essential imports on an economical basis. For this purpose S.T.C. has 20 offices abroad.

Chairman: P. K. Kaul.

Steel Authority of India Ltd. (SAIL). Ispat Bhawan, Lodhi Rd., New Delhi 110003.

SAIL, a Govt. of India Enterprise under the Ministry of Steel & Mines, controls all the integrated steel plants at Bhilai, Bokaro, Burnpur, Durgapur, Rourkela excepting one at Jamshedpur. With the present combined annual capacity of 9·4 million tonnes of ingot steel, which accounts to 81% of country's total installed capacity, SAIL provides a strong base for India's industrial development. The Company accounts for an investment of nearly Rs. 40,000 million and has a gross turn over of over Rs. 19,000 million per annum. Besides controlling all the public sector integrated steel plants, SAIL has an Alloy Steels Plant at Durgapur and also holds 40 per cent shares in the Visvesvaraya Iron and Steel Ltd. at Bhadravati, a Govt. of Karnataka Enterprise. The special steels plant under construction at Salem in Tamil Nadu to produce 32,000 tonnes of cold rolled stainless steel sheets/strips per annum and other new integrated steel plant to come up at Visakhapatnam in Andhra Pradesh with a capacity of 3·4 million tonnes of liquid steel per annum are also controlled by SAIL. With the expansion plans for the eighties SAIL will be responsible for 20·4 million tonnes of crude steel capacity annually.

Subsidiaries: 1. Indian Iron & Steel Company Ltd. 2. IISCO Stanton Pipe & Foundry Company Ltd. 3. Metal Scrap Trade Corporation Ltd. 4. Ferro Scrap Nigam Ltd.

Chairman: S. Samarapungavan; *Vice-Chairman :* Dr. Gokul Mukherjee; *Mg. Director:* J. R. Sangameswaran.

Directors : S. N. Kaza (Commercial) ; V. Subramony (Technical) ; A. R. Sankar Narayanan (Marketing).

Managing Directors: Dr. N. S. Datar (Rourkela Steel Plant) ; N. Mitra (Bhilai Steel Plant) ; Vacant (Durgapur Steel Plant) ; D. R. Ahuja (Bokaro Steel Plant); S. Samarapungavan (Indian Iron & Steel Co. Ltd.); V. Subramaniam (Visakhapatnam Steel Project).

Executive Directors: D. Mukherjee (Alloy Steels Plant, Durgapur) ; A. A. Raju (Salem Steel Project).

Secretary: L. A. K. Prasad.

Sukinda Nickel Project (A joint enterprise of Govt. of India and Orissa State Govt.), 9, Forest Park, Bhubaneshwar 751009, Orissa.

Tannery and Footwear Corpn. of India Ltd., 13/400, Civil Lines, Kanpur 208001.

Functions : It manufactures boot/shoes of all types for civilian and military use under trade name "FLEX". It also manufactures leather, leather goods, leather board, industrial leathers, adhesives, shoe finishes and myrobalan extract powder for tanning and water purification.

The Corpn. has the capacity to manufacture about 1·18 million pairs of footwear per shift per annum and has a network of wholesale and retail dealers all over India for the sale of its products.

Mg. Director: R. Harendra Singh.

Tarapur Atomic Power Project (See Chapter on 'Atomic Energy').

Tea Trading Corpn. of India Ltd., 7, Wood Street, 2nd Floor, Calcutta 700016.

Chairman & Mg. Director : P. K. Dasgupta.

Telecommunications Consultants India Ltd., *Regd. Office :* Manisha (2nd Floor), 75-76, Nehru Place, New Delhi 110019.

The company provides consultancy services and undertakes turnkey projects in different fields of telecommunications e.g. telephone switching, long distance transmission, outdoor plant and cables comprising techno-economic feasibility studies, survey, planning, installation commissioning and maintenance of all types of local telephone and long distance systems, cable networks and PCM systems on junction cables. Network management in large metropolitan cities; long distance telecommunications including modern radio relay systems, satellite, microwave, U.H.F., H.F., V.H.F., modern coaxial systems, overhead and underground carrier systems. Other specialised services include telex, paging systems, structural, architectural design of telecommunication centres including airconditioning, contract administration, computerised billing for large telephone systems etc. etc.

Chairman & Mg. Director: M. P. Shukla; *Gen. Managers:* Y. L. Agarwal (*Technical*); K. K. Mathur (*Switching*); L. C. Kapur (*Projects*).

Trade Development Authority, Bank of Baroda Bldg., 16, Parliament St., New Delhi 110001.

Established to promote selective development of exports of non-traditional products. In discharge of this function, TDA identifies technically competent and commercially viable production units in large, medium and small sectors in the expansion of export oriented production facilities, undertakes product development/adaptation and helps raise the technological levels of selected industrial exports.

Its current product range includes selected engineering, plastics and consumer items while the market range covers USA, Canada, U.K., Western Europe, Japan, Australia, New Zealand, Yugoslavia, Middle East and ASEAN.

It provides entrepreneurial guidance, handles enquiries and disseminates information in foreign trade to exporters and other interested parties. Besides regional offices at the Air India Bldg., Nariman Point, Bombay 400021; at 8, Camac St., Calcutta 700017, and at 'Laxmi', 1-A, Ulsoor Road, Bangalore-560042, it has also set up foreign offices to provide on-the-spot, personalised services. The addresses are: (a) 6000, Frankfurt/Main, Wilhelm-Leuschner-Str. 93, W. Germany; (b) 445, Park Avenue, New York, N.Y. 10022, U.S.A. and (c) Atagoyama Bengoshi Bldg. (Room No. 302, 303), 6-7 Atago-Cho.-I-Chome, Minatoku, Tokyo, Japan.

Executive Director: S. Gopalan.

Trade Fair Authority of India, Pragati Maidan, New Delhi 110001.

TFAI, a national agency to organise Indian Trade Fairs and exhibitions at home and abroad, is an autonomous, non-profit making Central Govt. undertaking and also helps export promotion through the printed word. During 1980-81, it organised 13 events abroad; participation in 9 international fairs/exhibitions and 4 exclusive Indian exhibitions abroad. During 1981-82, it proposes to participate in 16 international fairs/exhibitions abroad and about 8 fairs will be organised at Pragati Maidan including the India International Trade Fair (IITF '81) during November-December, 1981.

Chairman: Mohammad Yunus; *Managing Director:* Surendra Singh; *General Manager:* B. L. Sharma.

Triveni Structurals Ltd., Naini 211010, Allahabad Dist., Uttar Pradesh.

It is a joint enterprise of Government of India and Messrs. Voest, Alpine Linz, Donau, Austria. The main functions are: Building structures, towers, bridges, pressure vessels, penstocks and storage tanks, crucibles, blast furnace and plate work, hydraulic structures, cranes, mechanical equipment, material and passenger ropeways, compost plants, water treatment plants, cement and dairy plant equipments.

Mg. Director: R. R. Mukerjee.

Tungabhadra Steel Products Ltd., P.O. Tungabhadra Dam 583225, Bellary Dist., Karnataka, It is a joint venture of Govt. of India and Govts. of Karnataka and Andhra Pradesh.

Production: Steel structures, including gates, hoists, gantries, penstocks and rubber seals required for river valley projects, cranes, pressure vessels, heavy structurals and galvanised high tension transmission line towers.

A galvanising plant with a capacity of 3,000 tonnes per annum working in a single shift has been commissioned. The company has its own design branch, grey iron foundry, rubber seal section, X-ray and photographic section.

Chairman: T. V. Mansukhani; *Mg. Director:* Y. Adinarayana Sastri.

United India Insurance Co. Ltd., 24, Whites Road, Madras 600014.

The company was formed out of a merger of 23 companies nationalised on Jan. 1, 1973.

Chairman-cum-Mg. Director: M. R. Rayakar.

Unit Trust of India, Head Office: 13, Sir Vithaldas Thackersey Marg, New Marine Lines, Bombay 400020.

Regional Offices: 13, Sir Vithaldas Thackersey Marg, Bombay 400020; Gulab Bhavan (Rear Block), 2nd Floor, 6, Bahadur Shah Zafar Marg, New Delhi 110002; 4, Fairlie Place, Calcutta 700001; Regina Mansion, 46, Second Line Beach, Madras 600001.

Functions: It pools the savings of the community and invests them in securities of various types. To pool the savings, the Trust sells 'units'. All units rank equal for the distribution of income, regardless of when they are acquired. The Trust offers one other important and unique advantage: it is always ready both to sell and buy its units at prices published by it. A unit-holder is thus assured complete liquidity for his investment.

The Trust is exempt from payment of income tax and other taxes on income. Income from units enjoys exemption from income tax upto an overall limit of Rs. 5,000 (Rs. 2,000 is available exclusively for units while Rs. 3,000 is available for units together with certain other specified investments). Investment in units qualify for exemption from wealth tax upto Rs. 1·75 lakhs (Rs. 25,000 is exclusively applicable to units while Rs. 1·50 lakhs is for units together with certain other specified categories of investments.

The Trust paid a dividend of 10 per cent for 1979-80.

Chairman: G. S. Patel.

Uranium Corpn. of India Ltd., P.O. Jaduguda Mines 832102, Singhbhum Dist., Bihar.

Functions: It is a wholly-owned Government of India enterprise under the Department of Atomic Energy. Its objectives are to provide the uranium requirements for the Atomic Energy Programme of the country. The corpn. is to mine and process uranium ore and other ores and minerals containing uranium in any form. It also produces copper and molybdenum concentrates and magnetite as by-products.

Chairman: Dr. Brahm Prakash; *Mg. Director:* M. K. Batra.

Wagon (India) Ltd., 10B, Atma Ram House, 1, Tolstoy Marg, New Delhi 110001.

A servicing and co-ordinating agency between the Ministry of Railways, Ministry of Industry and various wagon builders both in public and private sectors.

Chairman & Mg. Director: V. C. Paranjape.

Water & Power Consultancy Services (India) Ltd., 26, Kasturba Gandhi Marg, New Delhi 110001.

Chairman & Mg. Director: O. P. Chadha.

STATE GOVERNMENT UNDERTAKINGS

ANDHRA PRADESH

Agro Pumpsets & Implements Ltd., 10-2-3, Intekhabmanzil, A.C. Guards, Hyderabad 500004.

A marketing organisation set up by the A.P. State Agro Industries Corpn. Ltd. with the chief object of standardising oil engines and electric motor pump sets manufactured in the State and arranging their supply to the farmers at competitive rates. It also offers good after-sales service facilities to the loanees.

Chairman : P. L. Sanjeeva Reddy.

Andhra Pradesh Automobiles Tyres & Tubes Ltd., 1-11-252/52, Motilal Nagar, Hyderabad 500016.

Andhra Pradesh Carbides Ltd., Shivaram Nagar, Kurnool 518002.

Andhra Pradesh Dairy Devpt. Corpn. Ltd., Lalapet, Hyderabad 500789.

Vice-Chairman & Mg. Director : D. Aurora, I.A.S.

Andhra Pradesh Fisheries Corpn. Ltd., *Regd. Office :* 8-4-9, Tirumalarao St., Kakinada 533004 ; *Regional Office :* Visakhapatnam 533008.

Chairman : Dr. M. S. Sanjeevirao, M.P. ; *Mg. Director :* Mohan Kanda.

Andhra Pradesh Forest Development Corpn. Ltd., 10-2-289/16, 1st Main Rd., Shantinagar, Hyderabad 500028.

Andhra Pradesh Govt. Power Alcohol Factory, Shakarnagar 503180, Nizamabad Dist.

Andhra Pradesh Ind. Devpt. Corpn. Ltd., Parisrama Bhavanam, 5-9-58/B, Fateh Maidan Rd., P.B. No. 1049, Hyderabad 500029.

Chairman : S. R. Ramamurthy, I.A.S. ; *Mg. Director :* K. Jayabharath Reddy, I.A.S.

Andhra Pradesh Industrial and Technical Consultancy Organisation Ltd., 10-2-289/21, Shantinagar, Hyderabad 500028. (A subsidiary of the Industrial Devpt. Bank of India).

Andhra Pradesh Industrial Infrastructure Corpn. Ltd., 5-9-58/B, Parisrama Bhavanam, Fateh Maidan Rd., Hyderabad 500029.

Andhra Pradesh Mining Corpn. Ltd., 6-3-672, Panja Gutta, Hyderabad 500004.

Functions : Prospecting and commercial exploitation of some of the important minerals in the State such as Barytes, Asbestos, Copper, Black Granite and Clay. Setting up of mineral based industries with the collaboration of private sector.

Andhra Pradesh Rayons Ltd., 1-2-597/15, Gaganmahal, Hyderabad 500029.

Manufacturers of Rayon grade pulp.

Andhra Pradesh Refractories Ltd., 6-3-655/2/4, Somajiguda, Hyderabad 500004.

Chairman : Ganga Ram Agarwal.

Andhra Pradesh Small Scale Ind. Devpt. Corpn. Ltd., 5-10-174, Fateh Maidan Rd., Hyderabad 500004.

Andhra Pradesh State Agro Industries Development Corpn. Ltd., Agro Bhavan, 10-2-3, A. C. Guards, Hyderabad 500004.

Chairman : I. Ramakrishna Raju ; *Vice-Chairman & Mg. Director :* P. L. Sanjeeva Reddy, I.A.S.

Andhra Pradesh State Civil Supplies Corpn. Ltd., 5-9-35/5, Bashir Bagh, Hyderabad 500029.

Andhra Pradesh State Construction Corpn. Ltd., 6-3-1119, Begumpet, Hyderabad 500016.

Andhra Pradesh State Film Devpt. Corpn. Ltd., Gruhakalpa, Mukharamjahi Rd., Nampally, Hyderabad 500001.

Functions : Estd. in Oct. 1975 to formulate & implement schemes for the devpt. of film industry & fine arts in the State. Granting of loans for the construction of studios & cinema halls, production of documentaries/newsreels of educative & informative value, grants for construction of multi-purpose auditoria are some of the schemes taken up by the Corpn.

Mg. Director : Binod U. Rao.

Andhra Pradesh State Financial Corpn., 5-9-194, Chirag Ali Lane, Hyderabad 500001.

Andhra Pradesh State Irrigation Devpt. Corpn. Ltd., 7-1-46, Begumpet, Hyderabad 500016.

Chairman : K. V. Sreenivasa Rao ; *Mg. Director :* M. Hanumantha Reddy.

Andhra Pradesh State Meat & Poultry Development Corpn. Ltd., Shantinagar, Hyderabad 500028.

Andhra Pradesh State Police Housing Corpn. Ltd., 'Sumangal', 10-1-1195/2/1, A. C. Guards, Hyderabad 500004.

Andhra Pradesh State Seeds Devpt. Corpn. Ltd., 11-5-471/1, Red Hills, Hyderabad 500004.

Chairman : T. N. R. Rao ; *Mg. Director :* N. V. Raja Rao.

Andhra Pradesh State Textile Devpt. Corpn. Pvt. Ltd., Posnett Bhavan, Tilak Rd., Hyderabad 500001.

Functions : To provide various facilities to weavers for producing exportable variety of cloth, undertaking execution of large scale orders of readymade handloom and leather garments for export.

Andhra Pradesh State Trading Corpn. Ltd., 5-10-174, Fateh Maidan, Hyderabad 500004.

Andhra Pradesh State Warehousing Corpn., D.B.R. Mills, Kavadiguda, Secunderabad 500005.

Andhra Pradesh Steels Ltd., 3-6-111/8, Liberty Rd., Himayatnagar, Hyderabad 500029.

Producers of mild steel, high carbon and spring steel continuously cast billets.

Chairman & Mg. Director : N. K. Seth.

Andhra Pradesh Travel & Tourism Development Corpn. Ltd., Diamond House, Himayatnagar, Hyderabad 500029.

Government Ceramic Factory, Gudur, Nellore Dist. The factory produces sanitaryware and L. T. Electrical Insulators.

Hyderabad Chemicals & Fertilizers Ltd., 10-2-3, A. C. Guards, Hyderabad 500004.

Factory : Maula Ali, Hyderabad 500040.

Manufactures *Acids :* (1) Sulphuric acid commercial grade, (2) Battery grade acid, (3) Alum ferric, (4) Superphosphate, (5) Mixed fertilizers for all food and cash crops.

Chairman : I. Ramakrishna Raju ; *Mg. Director :* P. L. Sanjeeva Reddy, I.A.S.

Indo-Nippon Precision Bearings Ltd., Moula Ali, Hyderabad 500040.

Taken over in 1969 by the Govt. of Andhra Pradesh to manufacture ball, taper & cylindrical roller bearings including railway journal bearings in collaboration with Koyo Seiko Co. Ltd., Osaka (Japan). The factory was inaugurated in Aug. 1970. Presently, it produces 2·5 million pcs. of bearings against the licensed capacity of 2·678 million pcs. per annum.

Leather Ind. Devpt. Corpn. of Andhra Pradesh Ltd., 3-6-150, Himayatnagar, Hyderabad 500029.

Chairman : C. Narayana ; *Vice-Chairman & Mg. Director :* J. Harinarayan.

Nizam Sugar Factory Ltd., B-1-174, Fateh Maidan Rd., Khairatabad, Hyderabad 500004.

Prodattur Milk Foods Ltd., House No. 1-8, Plot No. 25, Sadashivnagar, Tarnaka, Hyderabad 500007.

Republic Forge Co., Ltd., Moula Ali, Hyderabad 500040.

The Company manufactures open forgings and precision drop forgings for Railways, automobiles, Defence, high pressure vessels and fertiliser plants.

Singareni Collieries, P.O. Kothagudem Collieries 507101, Khammam Dist.

Coal is mined from the coal fields at Kothagudem, Yellandu, Manuguru, Belampalli, Mandamari, Ramakrishnapur and Ramagundam.

The Coal Chemicals Complex of the collieries is at Naspur in Adilabad District.

Chairman & Mg. Director : C. N. Shastry, I.A.S.

Sponge Iron India Ltd., 3-6-185/2, Hyderguda, Hyderabad 500029.

The Company's direct reduction plant utilising 100% coal as reductant for producing sponge iron from lump ore has gone into production. The unit is the largest project of its kind set up anywhere in the world with assistance from UNDP/UNIDO.

Mg. Director : S. Vangala.

ARUNACHAL PRADESH

Arunachal Pradesh Forest Corpn. Ltd., Deomali 786629.

ASSAM

Aseb Meter Works, Short Round Rd., Shillong 793001.

An Assam State Electricity Board enterprise. Manufactures single phase house service meters and polyphase meters.

Assam Agro-Industries Devpt. Corpn. Ltd., Ulubari, Gauhati 781007.

Functions : To assist farmers in modernising their cultivation and to provide farm machinery on rent to those farmers ; to undertake setting up of and to assist entrepreneurs in setting up agro-based industries. The activities of the Corporation cover the States of Assam, Meghalaya, Tripura, Manipur and Nagaland and the territories of Arunachal Pradesh and Mizoram.

Assam Conductors & Tubes Ltd., Bamuni Maidan, Gauhati 781021.

Assam Financial Corpn., G. S. Rd., Ganeshguri Charali, Gauhati 781005.

Functions : To contribute to the industrialisation of the States of Assam, Meghalaya, Tripura, Manipur and the Union Territory of Mizoram by providing credit (medium and long term) to industries.

Assam Fisheries Development Corpn. Ltd., Pub-Sarania Rd., Chandmari, Gauhati 781003.

Assam Gas Co., Ltd., Duliajan 786602, Dibrugarh Dist. Utilisation and distribution of natural gas available from the oil and gas fields in Assam as feedstock for petrochemical industries and as industrial fuel for production of power, manufacture of fertiliser and tea through a compressor-pipeline network.

Assam Glass Ind. Ltd., Kahlipara, Gauhati 781016.

Assam Govt. Construction Corpn. Ltd., Rupnagar, Gauhati 781005.

Chairman : Dulal Chandra Baruah ; *Mg. Director :* K. D. Lahkar.

Assam Govt. Marketing Corpn. Ltd., Naojan Rd., Uzanbazar, Gauhati 781001.

Assam Hills Small Ind. Devpt. Corpn. Ltd., Zoo Rd., Gauhati 781006.

Assam Industrial Devpt. Corpn. Ltd., Zoo Rd., Gauhati 781024.

Functions : To promote major and large industrial projects and render assistance including share participation to entrepreneurs. *New Projects now under production :* (1) Assam Petro-chemicals Ltd. at Namrup, (2) Fertichem Ltd., at Gauhati, a Fertilizer Plant, (3) Cachar Sugar Mill Ltd., at Ratabari, Cachar Dist. *Sick industries now under production :* Assam Conductors and Tubes Ltd., at Gauhati, and Chemical Unit of Associated Ind. (Assam) Ltd. at Chandrapur, Gauhati.

Assam Petro-Chemicals Ltd., Namrup 786621.

Assam Plains Tribes Devpt. Corpn. Ltd., Zoo Rd., Gauhati 781003.

Assam Plantation Crops Devpt. Corpn. Ltd., Zoo Rd., Gauhati 781003.

Assam Seeds Corpn. Ltd., Nawjan Rd., Uzanbazar, Gauhati 781001.

Assam Small Industries Devpt. Corpn. Ltd., Bamunimaidan, Gauhati 781021.

Assam Spun Silk Mills Ltd., P.O. Jogi Rd., Nowgong Dist.

Assam State Film Finance & Devpt. Corpn. Ltd., Rabindra Bhawan, Ambari, Gauhati 781001.

Assam State Textbook Production & Publication Corpn. Ltd., Panbazar, Gauhati 781001.

Assam Tea Corpn. Ltd., G. N. Bordoloi Rd., Chandmari, Gauhati 781003.

Cachar Sugar Mill Ltd., Kannachal Rd., Gauhati 781003.

Fertichem Ltd., AIDC Campus, Zoo Rd., Gauhati 781024.

Meets the fertiliser needs of agriculturists of Assam.

Jyoti Chitraban (Film Studio) Society, Kahilipara, Gauhati 781005.

The basic objective is to encourage private film producers to undertake production of films at the minimum cost.

North Eastern Handicrafts & Handlooms Development Corpn. Ltd., Bora Service Stn., G. S. Rd., Gauhati 781007.

North Eastern Industrial & Technical Consultancy Organisation Ltd., (NEITCO), Moniram Dewan Rd., Bamunimaidan, Gauhati 781021.

Jointly set up by the Central and State level financial institutions, State development corporations and the lead banks to provide technical, financial & managerial consultancy services for the industrial development of north eastern region of India.

Chairman : C. R. Sen Gupta ; *Mg. Director :* P. C. Patnaik.

BIHAR

Bacon Factory, Kanke, Ranchi 834007.

Bihar Hill Area Lift Irrigation Corpn. Ltd., Morabadi, Ranchi 834008.

Bihar Mica Syndicate Ltd., P.O. Jhumri Telaiya, Hazaribagh.

Bihar Police Building Construction Corpn. Pvt. Ltd., Mokameh House, Boring Canal Rd., Patna 800001.

Bihar Scooters, P. O. Fatwah 803201, Patna Dist.

A subsidiary of the Bihar State Ind. Devpt. Corpn. Ltd., to manufacture 'Vijeta Supreme' scooters.

Chairman : L. Dayal.

Bihar State Agro-Industries Devpt. Corpn. Ltd., Krishi Udyog Bhawan, Sinha Library Rd., Patna 800001.

Chairman-cum-Mg. Director : K. K. Shah.

Bihar State Construction Corpn. Ltd., Boring Canal Rd., Patna 800001.

Bihar State Credit & Investment Corpn. Ltd., Biscomaun Bldg., W. Gandhi Maidan, Patna 800001.

Bihar State Dairy Corpn. Ltd., P.O. Bihar Veterinary College, Patna 800014.

Chairman : T. Azad.

Bihar State Electronics Development Corpn. Ltd., Prabhat Kunj, Patna 800013.

Chairman : S. P. Shukla ; *Mg. Director :* R. N. Singh.

Bihar State Export Corpn. Ltd., Biscomaun Bldg., West of Gandhi Maidan, Patna 800001.

Bihar State Financial Corpn., Fraser Rd., Patna 800001.

Functions : To provide financial assistance for setting up industrial concerns in the State.

Bihar State Food & Civil Supplies Corpn. Ltd., East Boring Canal Rd., Patna 800001.

Bihar State Forest Devpt. Corpn. Ltd., 27, Pataliputra, Patna 800013.

Mg. Director : P. Mishra.

Bihar State Handloom, Powerloom & Handicrafts Devpt. Corpn. Ltd., Udyog Bhavan, East Gandhi Maidan, Patna 800004.

Bihar State Industrial Devpt. Corpn. Ltd., Bandar Bagicha, Patna 800001.

Functions : Setting up medium and large scale industries in the public/joint sectors, and giving financial assistance to medium and large scale industries in the private sector. The Corpn. has at present ten factories under operation :—Bihar State Superphosphate Factory, Sindri ; High Tension Insulator Factory, Ranchi ; Electric Equipment Factory, Ranchi ; Bihar Spun Silk Mills, Bhagalpur ; Bihar Air Products, Adityapur ; Jute Mill, Kishanganj ; Paper Project, Saharsa ; Malleable Cast Iron Foundry, Ranchi ; Fertilizer Granulation Plant, Sindri ; Scooter Project, Fatwah.

Bihar State Leather Ind. Devpt. Corpn., Opp. A. N. College, Boring Rd., Patna 800013.

Bihar State Mineral Devpt. Corpn., Raj Hotel, Main Rd., Ranchi 834001.

Bihar State Pharmaceutical & Chemical Development Corpn. Ltd., West Boring Rd., Patna 800001.

Bihar State Small Industries Corpn. Ltd., West Gandhi Maidan Biscomaun Bldg., (Annex-1), Patna 800004.

Functions : Supply of scarce raw materials along with marketing assistance to S.S.I. units ; sale of handloom & handicraft products through emporia ; display & marketing of S.S.I. products through trade centre.

Bihar State Sugar Corpn. Ltd., Harihar Bhawan, Boring Canal Rd., Patna 800001.

Chairman-cum-Mg. Director : V. V. Nathan.

Bihar State Superphosphate Factory, P.O. Sindri Institute 828123, Dhanbad Dist.

Installed capacity of plants : (*i*) 10 tonnes of single superphosphate per hour ; (*ii*) 25 tonnes of 98 per cent sulphuric acid per day. At present the factory produces about 18,000 tonnes of superphosphate a year. A new plant for N. P. K. (granulation) has been installed to produce 36,000 tonnes per annum.

Bihar State Textbook Publishing Corpn. Ltd., White House, Budh Marg, Patna 800001.

Bihar State Textile Corpn. Ltd., D-69, Srikrishnapuri, Patna 800001.

Bihar Water Devpt. Corpn. Ltd., 13, Pataliputra Colony, Patna 800013.

Bokaro Industrial Area Devpt. Authority, Biada Bhawan, Balidih, Bokaro Steel City 827014, Dhanbad Dist.

This Authority provides land/shed and infrastructure facilities to entrepreneurs for setting up ancillary industries to Bokaro Steel Ltd., Bharat Coking Coal Ltd., Central Coalfields Ltd. and Fertilizer Corpn. of India Ltd.

Electric Equipment Factory, Tatisilwai, Ranchi 834001.

This factory is a unit of the Bihar State Industrial Development Corporation Ltd.

High Tension Insulator Factory, P.O. Namkum, Ranchi 834010.

This factory has been set up by the Government of Bihar with the technical collaboration of Czechoslovakia. The present installed capacity is 2,400 metric tonnes per annum with the varying range of production as transmission line insulators upto 220 KV, bushings and Pin & Post insulators upto 33 KV besides L.T. Pin, Shackles and Guy insulators.

North Bihar Industrial Area Devpt. Authority, P.O. Ramkrishna Ashram, Muzaffarpur 843116.

CHANDIGARH

Chandigarh Small Industries Devpt. Corpn. Ltd., 9-A, Madhya Marg, Sector 7-C, Chandigarh 160017.

Chairman : R. S. Mann, I.A.S. ; *Mg. Director :* S. P. Sharma.

DELHI

Delhi Financial Corpn., Saraswati Bhavan, E-Block, Connaught Place, New Delhi 110001.

Functions : To stimulate industrial growth, the Corporation advances loans to industrial units set up or to be set up in the Union Territories of Delhi and Chandigarh.

Delhi Small Industries Devpt. Corpn. Ltd., A-3/4, State Emporia Bldg., Baba K. Singh Marg, New Delhi 110001.

Delhi State Industrial Devpt. Corpn. Ltd., N-Block, Bombay Life Bldg., Con. Circus, New Delhi 110001.

Delhi Tourism Development Corpn., N Block, Connaught Place, New Delhi 110001.

New Okhla Industrial Development Authority, 17, Barakhamba Rd., New Delhi 110001.

GOA

Economic Devpt. Corpn. of Goa, Daman & Diu Ltd., Shree Saraswathi Mandir Bldg., 18th June Rd., Panaji 403001.

Subsidiary Companies : Goa Electronics Ltd., Margao. Supplies ATQ coils to I.T.I., Bangalore ; has set up its TV wing at Mapusa as an ancillary to ECIL, Hyderabad. Goa Time Movers Ltd., to assemble 2·5 lakh hand-wound watches annually.

Chairman & Mg. Director : J. C. Almeida.

GUJARAT

Gujarat Agro-Foods Ltd., Khet Udyog Bhawan, Navrangpura, Ahmedabad 380014. (A subsidiary of GAIC).

Gujarat Agro-Industries Corpn. Ltd. (GAIC), Khet Udyog Bhavan, Opp. High Court, Navrangpura, Ahmedabad 380014.

Mg. Directors : P. P. Rathod, V. A. Shah.

Gujarat Agro-Marine Products Ltd., Khet Udyog Bhawan, Navrangpura, Ahmedabad 380014.

Gujarat Agro-Oil Enterprises Ltd., Opp. High Court, Navrangpura, Ahmedabad 380014.

Gujarat Alkalies And Chemicals Ltd., Yashkamal, Sayaji Gunj, Vadodara 390005.

Located at P.O. Petrochemicals, Vadodara Dist., the plant has an annual capacity of 37,425 tonnes of Caustic Soda, 33,000 tonnes of Liquid Chlorine, 15,000 tonnes of Hydrochloric Acid. The Company is implementing further expansion to reach 100,425 T/Yr. Caustic Soda, and is also holding letters of intent for manufacture of 2,000 T/Yr. Sodium Cyanide and 16,500 T/Yr. Chloromethanes.

Chairman : J. J. Mehta ; *Mg. Director :* H. R. Patankar.

Gujarat Carbon Ltd., Harikripa, Alkapuri, Vadodara 390005.

Director & Chief Executive : V. M. Kamat.

Gujarat Communications & Electronics Ltd., Express Bldg., R. C. Dutt Rd., Vadodara 390005.

To promote and develop the electronic industry in the State by manufacture of professional grade equipments. The products of the company include point to point radio relay equipment in the UHF and microwave bands, instrument landing system for civil aviation, extended range VHF equipment, rural radio telephones, pulse code modulation systems, video equipment for low cost TV broadcast systems, video display and data processing systems, data collection platforms and flood control systems.

Chairman & Mg. Director : Brig. Pessie Madan.

Gujarat Dairy Devpt. Corpn. Ltd., Sector 16, Gandhinagar 382016.

Chairman : Prafull H. Bhatt ; *Mg. Director :* P. S. Medora.

Gujarat Industrial Devpt. Corpn., Fadia Chambers, Ashram Rd., Ahmedabad 380009.

Chairman : K. S. Pradyumansinhji ; *Chief Executive Officer :* L. M. Sud.

Gujarat Industrial Investment Corpn. Ltd., Natraj Chambers, Ashram Rd., Ahmedabad 380009.

Chairman & Mg. Director : H. K. Khan.

Gujarat Mineral Devpt. Corpn. Ltd., Khanij Bhavan, Ashram Rd., Ahmedabad 380009.

Functions : To undertake mining and development of minerals in Gujarat. The Corporation has already set up five projects at Vadodara, Surendranagar, Jamnagar, Kutch and Banaskantha districts.

Chairman : Narendra L. Bhuva ; *Mg. Director :* C. K. Shah.

Gujarat Narmada Valley Fertilizers Co. Ltd., P.O. Narmadanagar 392015, Bharuch Dist.

Gujarat Nylons Ltd., Mistry Chambers, Khanpur, Ahmedabad 380001.

Gujarat Sheep & Wool Devpt. Corpn. Ltd., " Shreekunj ", Opp. Navrangpura Telephone Exchange, Ahmedabad 380006.

Gujarat Small Industries Corpn. Ltd., Bhagwati Chambers, Opp. Gujarat Vidyapith, Ashram Rd., Ahmedabad 380014.

Chairman : Prafull Anubhai.

Gujarat State Construction Corpn. Ltd., G. 1/163, Sector-30, Gandhinagar 382030.

Gujarat State Export Corpn. Ltd., Gujarat Chambers Bldg., Near Natraj Theatre, Ahmedabad 380009.

Gujarat State Financial Corpn., Jaldarshan Bldg., Ashram Rd., P.B. 4030, Ahmedabad 380009.

Chairman : B. R. Patel, I.C.S. (Retd.) ; *Mg. Director :* A. M. Amin.

Gujarat State Forest Development Corpn. Ltd., Vangana, 78, Alkapuri, Vadodara 390005.

Gujarat State Handicraft & Handloom Devpt. Corpn. Ltd., Opp. Sanyas Ashram, Ashram Rd., Ahmedabad 380009.

Chairman : Mrs. Mrinalini Sarabhai ; *Mg. Director :* K. K. Kak.

Gujarat State Machine Tools Corpn. Ltd., P. O. Vartej 364060. (Vadodara Dist.).

Gujarat State Road Transport Corpn., Vahan Vyavahar Bhavan, Ahmedabad 380022.

Gujarat State Rural Devpt. Corpn. Ltd., Capital Project Bldg. Annexe, Sector 16, Gandhinagar 382016.

Gujarat State Seeds Corpn. Ltd., Sector 16, Gandhinagar 382016.

Gujarat State Textile Corpn. Ltd., Preema Chambers, Near Mithakhali Circle, Sardar Patel Nagar Rd., Ellis Bridge, Ahmedabad 380006.

Chairman : R. C. Mehta.

Gujarat State Warehousing Corpn., Anand, Shanti Sadan Est., Opp. Dinbai Tower, Mirzapur, Ahmedabad 380001.

Chairman : Jayantilal P. Shah ; *Mg. Director :* V. P. Shah.

Gujarat Tractor Corpn. Ltd., Vishwamitri, Vadodara 390001.

Mg. Director : S. R. Diwanji.

Gujarat Tyres Ltd., C/o G.I.I.C. Ltd., Mistry Chambers, Khanpur, Ahmedabad 380001.

Gujarat Water Resources Devpt. Corpn. Ltd., Danapith, Ahmedabad 380001.

Polymers Corpn. of Gujarat Ltd., 'Giriraj', Opp. G. E. Board, Race Course, Vadodara 390007.

Functions : To manufacture (1) Methyl Methacrylate Monomer (MMA), (2) Polymethyl Methacrylate (PMMA) Sheets and (3) Polymethyl Methacrylate (PMMA) Pellets in technical collaboration with Mitsubishi Rayon Co. of Japan.

Chairman & Mg. Director : J. J. Mehta.

Tourism Corpn. of Gujarat Ltd., Nigam Bhavan, Sector 16, Gandhinagar 382016.

HARYANA

Haryana Agro-Industries Corpn. Ltd., S.C.O.-825-26, Sector 22-A, Chandigarh 160022.

Haryana Breweries Ltd., *Regd. Office :* 49 kms. Stone, G. T. Rd., Murthal 131027, Sonepat Dist.

Haryana Concast Ltd., P.O. Satrod 125044, Hissar.

Haryana Dairy Devpt. Corpn. Ltd., S.C.O. Nos. 127-128, Sector 17C, Chandigarh 160017.
Chairman : Kulwant Singh, I.A.S. ; *Mg. Director :* J. S. Chauhan.

Haryana Financial Corpn., 17, 18, 19, Sector 17A, Chandigarh 160017.

Haryana Land Reclamation & Devpt. Corpn. Ltd., S.C.O. Nos. 32, 33, 34, Sector 17C, Chandigarh 160017.

Haryana Minerals Ltd., Narnaul 123001.

Haryana Seeds Devpt. Corpn. Pvt. Ltd., S.C.O. 169-170, Sector 8-C, Chandigarh 160008.

Haryana State Industrial Devpt. Corpn. Ltd., P.B. 22, S.C.O. Nos. 40 & 41, Sector 17A, Chandigarh 160017.
Chairman : V. K. Sibal, I.A.S. ; *Mg. Director :* A. N. Mathur, I.A.S.

Haryana State Minor Irrigation (Tube Wells) Ltd., S.C.O. Nos. 66-67, Bank Square, Sector 17-B, Chandigarh.

Haryana State Small Industries & Export Corpn. Ltd., Flat No. 104-105, Sector 17-D, Chandigarh 160017.
Functions : To export quality goods at competitive prices such as handlooms, handicrafts, automobile parts, bicycles, machine tools, industrial fasteners, laboratory instruments, leather goods, diesel engines etc. etc.
Mg. Director : P. R. Kaushik.

Haryana Tanneries Ltd., S.C.O. No. 2A, Sector 7-C, Chandigarh 160017. (*Factory :* Hansi Rd., Jind).

Haryana Tourism Corpn. Ltd., S.C.O. Nos. 53-55, Rattan Bldg., Sector 17D, Chandigarh.

HIMACHAL PRADESH

Himachal Pradesh Agro-Industries Corpn. Ltd., Summer Seat, Simla 171001.
Functions : To establish, develop and promote schemes relating to horticultural produce and agro-based industries in the State. To develop marketing infrastructure, the Corporation has formed a subsidiary company H.P. Horticultural Produce Marketing & Processing Corpn. P. Ltd.

Himachal Pradesh Horticultural Produce Mktg. & Processing Corpn. Ltd., " Nigam Vihar ", Simla 171002.

Himachal Pradesh Mineral & Industrial Devpt. Corpn. Ltd., " Himrus ", Near Himland Hotel, Simla 171001.

Himachal Pradesh State Forest Corpn. Ltd., Willow Bank, The Mall, Simla 171001.

Himachal Pradesh State Handicraft and Handloom Corpn. Ltd., Rhagwati Niwas, Sanjauli, Simla 171006.

Himachal Pradesh State Small Industries & Export Corpn. Ltd., Kishore Bhavan, The Mall, Simla 171001.

Himachal Pradesh Tourism Devpt. Corpn. Ltd., Ritz Annexe, Simla 171001.

Himachal Wood Processors Ltd., Kishore Bhavan, The Mall, Simla 171001.

Himachal Worsted Mills Ltd., " Himrus ", Cart Rd., Simla 171002.

Himalaya Fertilizers Ltd., Nigam Vihar, Cart Rd., Simla 171002.
Chairman : K. C. Pandeya, I.A.S. ; *Gen. Manager :* A. R. Chauhan.

Nahan Foundry Ltd., Nahan 173001, Sirmur Dist.
Production consists of improved type of sugar-cane crushers, bullock as well as power driven, wheat threshers, mono-block pumps, electric motors from 3 h.p. to 15 h.p. and C. I. castings to buyers specifications.
Chairman : R. S. Verma ; *Gen. Manager :* Attar Singh.

Rosin & Turpentine Factory, Nahan 173001, Sirmur Dist.
From crude resin, the factory manufactures turpentine oil grade II (ISI) and rosin high grades of international repute. The gum of pine trees is obtained from forests of Himachal Pradesh. They also manufacture high quality varnish and phenyl.

JAMMU & KASHMIR

Government Silk Weaving Factory, Raj Bagh, Srinagar 190001.
Biggest silk weaving factory in India producing quality silk fabrics out of 100 per cent pure univoltine Kashmir silk.

Government Woollen Mills, Srinagar 190001.
The average annual production on the basis of one shift working is one hundred thousand metres.

Himalayan Wool Combers (P) Ltd., Bari Brahmana 181133. Jammu.

Jammu & Kashmir Bank Ltd., Residency Rd., Srinagar 190001.

Jammu & Kashmir Cements Ltd., The Band, Srinagar 190001.

Jammu & Kashmir Handicrafts (Sales & Export) Corpn. Ltd., Emporium Bldg., Sheerwani Rd., Srinagar 190001.
Mg. Director : G. N. Naik, I.A.S.

Jammu & Kashmir Ind. Ltd., Stone Bldg., Old Secretariat, Srinagar 190001.
The Company runs woollen mills, silk wvg. factories, leather tanneries, rosin factories, joinery mills, pharmaceutical works, knitting factory and silk filatures.
Chairman : M. K. Tikku ; *Mg. Director :* G. O. Lone.

J. & K. Minerals Ltd., The Bund, Srinagar 190001.
This Orgn. is engaged in extraction of coal, gypsum, lignite, limestone, marble, borax and sulphur in the State. Besides, it runs a mini cement plant of 60 TPD capacity and two prestressed concrete factories manufacturing PC poles, spun pipes, pressed tiles, hollow blocks, PC beams, fencing posts, terrazo tiles in the State.
Mg. Director : Dr. F. Ahmed.

Jammu & Kashmir Projects Construction Corpn. Ltd., Jallu Bldg., New Secretariat Rd., Srinagar 190001.

Jammu & Kashmir State Agro Ind. Devpt. Corpn. Ltd., Gogjibagh, Srinagar 190008.
Chairman : Mohd. Ashraf Khan ; *Mg. Director :* B. R. Singh.

Jammu & Kashmir State Financial Corpn., Durga Nag, Opp. Burn Hall School, P. B. No. 8, Srinagar 190001; Auqaf Bldg., Veer Marg, P.B. No. 14, Jammu 180001.
Chairman : D. D. Thakur ; *Mg. Director :* S. L. Pushp.

Jammu & Kashmir State Industrial Devpt. Corpn. Ltd., Haft Chinar, Srinagar 190001.

Chairman : M. K. Tikku ; *Mg. Director :* N. A. Kamili, I.A.S.

Jammu & Kashmir Tourism Devpt. Corpn. Ltd., Tourist Reception Centre, Srinagar 190001.

KARNATAKA

Canara Fertilisers & Chemicals Ltd., Hariniwas, 36, Cunningham Rd., Bangalore 560001.

Chitradurga Copper Co. Ltd., 16/1, Ali Asker Rd., Bangalore 560052.

The company's copper mine is situated near Ingaldhal village, 8 kms. south of Chitradurga town and is known as Ingaldhal Copper Mine producing copper concentrates.

Mg. Director : C. N. Venkat Kumaran.

Government Silk Weaving Factory, Mananthody Rd., Mysore 570008.

The factory is engaged in the manufacture of high grade 100 per cent pure silk fabrics manufactured out of re-reeled filature silk.

Director : V. Balasubramanian, I.A.S. ; *Gen. Manager :* A. R. Khan.

Hutti Gold Mines Co., Ltd., P.O. Hutti 584115, Via Raichur.

The current production is at the rate of 1,86,000 tonnes of ore treated per annum with a recovery of 787 kgs. of gold due to shortage of power supply.

Karnataka Agro-Industries Corpn. Ltd., Hebbal, Bangalore 560024.

Functions : Supply of agricultural machines on hire basis/manufacture and sale of agricultural implements and fruit products/procurement and distribution of tractors, trailers, agricultural implements and agricultural inputs like fertilisers, seeds and pesticides/promote agricultural industries.

Subsidiaries : 1. Karnataka State Agro Corn Products Ltd., Hebbal, Bangalore 560024. 2. Karnataka State Compost Development Corpn. Ltd., 85, K. H. Rd., Bangalore 560027. 3. Mysore Tobacco Co. Ltd., 17, Richmond Rd., Bangalore 560025.

Chairman : M. K. Venkateshan ; *Mg. Director :* C. T. Benjamin.

Karnataka Backward Classes & Minorities Development Corpn. Ltd., 89/1, Narasamma Commercial Complex, J. C. Rd., Bangalore 560002.

Karnataka Cashew Development Corpn. Ltd., No. 6. Kumara Park East, Bangalore 560001.

Chairman & Mg. Director, R. R. Parvathikar.

Karnataka Dairy Devpt. Corpn. Ltd., 'Poornima', 22, J. C. Rd., I Cross, Bangalore 560027.

Karnataka Film Ind. Devpt. Corpn. Ltd., 27, Sri Sai Sudha, Palace Lower Orchard, Bangalore 560003.

Karnataka Fisheries Devpt. Corpn. Ltd., Hoige Bazar, Mangalore 575001.

Functions Owns ice-cum-cold storage and freezing plants, five insulated vans, two deep sea trawlers, 4 carrier boats ; processes 500 tonnes of frozen fish products for export. and inland marketing under 'Cold Chain' scheme.

Chairman K. S. N. Murthy; *Mg. Director:* H. N. Chandrasekharaiah

Karnataka Food & Civil Supplies Corpn. Ltd., E-Block, Combined Administrative Bldg. Complex, Kempegowda Rd., Bangalore 560009

Karnataka Forest Plantations Corpn. Ltd., 6, Kumara Park East, Bangalore 560001.

Chairman & Mg. Director : R. R. Parvathikar

Karnataka Handloom Devpt. Corpn. Ltd., 8, Cunningham Rd., Bangalore 560052.

Karnataka Implements and Machineries Co. Ltd., Mysore Rd., Bangalore 560026.

It manufactures 1. Heavy duty trailers from 20 tonnes to 200 tonnes capacity ; 2. Chemical plants and equipments ; 3. Insulator pin ; 4. Road rollers and construction machinery ; 5. Farm machineries, tools and implements.

Chairman : K. P. Surendranath.

Karnataka Industrial Area Devpt. Board, Rashtrothanaparishat Bldg., No. 14/3, Nrupathunga Rd., Bangalore 560002.

Karnataka Land Army Corpn. Ltd., 32, Sankey Rd., Bangalore 560052.

To promote rural development in all its socio-economic facets. In the process, it tackles the pervasive problems of rural poverty and unemployment and works with the rural people to solve these problems by securing their active participation in rural development programmes.

Mg. Director : R. C. Sachdev.

Karnataka Leather Industries Development Corpn. Ltd., No. 14, 'Lakshmi Bldg'., J. C. Rd., Bangalore 560002.

Mg. Director : G. Nagaraju.

Karnataka Power Corporation Ltd., Bharatiya Vidya Bhavan, Race Course Road, Bangalore 560001.

The Corpn. owns Sharavati & Bhadra Hydro Electric Projects. The Linganamakki Dam Power House at the toe of the Linganamakki Dam of Sharavati Hydro Electric Project has been completed by the Corpn. Two Generating Units of Kalinadi Hydro Electric Project have been commissioned. The Corpn. is engaged in the construction of (1) the remaining components of 1st Stage of Kalinadi Hydro Electric Project in Uttara Kannada Dist., (2) Varahi Hydro Electric Project in Shimoga Dist. (3) Chakra Diversion Scheme in Shimoga Dist. — Savehaklu Dam — one of the main components is now ready. (4) Gangavali Hydro Electric Project (Stage I), Bedthi in Uttara Kannada Dist., (5) Raichur Thermal Power Stn. near Raichur.

Chairman : R. Gundu Rao ; *Mg. Director :* K. C. Reddy.

Karnataka Scheduled Castes & Scheduled Tribes Devpt. Corpn. Ltd., 5. Palace Rd., Bangalore 560001.

Karnataka Silk Industries Corpn. Ltd., Public Utility Bldg., M. Gandhi Rd., Bangalore 560001.

Karnataka Small Industries Devpt. Corpn. Ltd., Administrative Office Bldg., Ind. Estate, Rajaji Nagar, Bangalore 560044.

Karnataka Soaps & Detergents Ltd., P. Box No. 5531, Rajajinagar, Bangalore 560055. Sandalwood Oil Divisions at Mysore & Shimoga.

Exec. Dir. : V. Jayappa.

Karnataka State Agro-Corn Products Ltd., Bellary Rd., Hebbal, Bangalore 560024. (Branches at **Mysore &** Belgaum).

The Company has established a maize milling plant for converting commercial hybrid maize into Soji, Maida, Grits, Flour, Germs, Semolina, Bran, etc., and also a plant to produce cattle and poultry feeds.

Chairman : M. K. Venkatesan ; *Exec. Director :* N. R. Goudar.

Karnataka State Agro-Seeds Corpn. Ltd., 10, Ali Askar Rd., Bangalore 560052.

Karnataka State Construction Corpn. Ltd., 20/1, Railway Parallel Rd., Kumar Park West, Edward Rd., Bangalore 560020.

Karnataka State Electronics Devpt. Corpn. Ltd., 'Emlyn Haven', 30, Race Course Rd., Bangalore 560001.

Karnataka State Financial Corpn., 25, M. Gandhi Rd., Bangalore 560001.

Chairman : N. K. Prabhakara Rao ; *Mg. Director :* S. B. Muddappa, I.A.S.

Karnataka State Forest Ind. Corpn. Ltd., No. 19/1, (Old No. 3), I Cross, Lalbagh Fort Rd., Bangalore 560004.

Functions : To establish industries based on forest produce.

Chairman : A. S. Melkote ; *Mg. Director :* G. M. Shankaraiah.

Karnataka State Handicrafts Devpt. Corpn. Ltd., Webbs Complex, 26, M. Gandhi Rd., Bangalore 560001.

Functions : The Corpn. is running handicrafts emporia under the name "KAVERI" at Bangalore, New Delhi, Madras, Mysore, Mangalore, Gulbarga, Hubli and Belgaum.

The Corpn. has also started production centres/craft complexes for high quality sandalwood carving, bronze castings, bidriware, lacquerware, wood carving and potteryware. Financial, technical and marketing assistance are provided to artisans. The Corpn. is also undertaking export of handicrafts.

Mg. Director : Narendra Singh.

Karnataka State Industrial Investment & Devpt. Corpn. Ltd., "Hari Nivas", 36, Cunningham Rd., Bangalore 560052.

Chairman & Mg. Director : P. R. Nayak.

Karnataka State Tourism Devpt. Corpn. Ltd., 10/4, Kasturba Rd., Bangalore 560001.

Karnataka State Veneers Ltd., Regd. Office : Plywood Colony, Dandeli 581325, *Factory :* Kavachur, P.O. Siddapur 581355, Uttar Kannada.

Chairman : A. S. Melkote ; *Mg. Director :* B. M. Sapat.

Karnataka Vidyuth Karkhane Ltd., P. B. 2610, Mysore Rd., Bangalore 560026.

Main products : Transformers in various capacities and survey instruments ; will shortly manufacture aluminium foil wound Transformers in collaboration with Westinghouse, U.S.A.

Chairman & Mg. Director : C. B. Cariappa.

Karnataka Woollens Ltd., IIIrd Flr., Blumoon Blocks, M. G. Rd., Bangalore 560001.

Mahaboob Shahi Kulburga Mills, Gulbarga 585101.

A unit of National Textile Corpn. (Andhra Pradesh, Karnataka, Kerala and Mahe) Ltd., the mill runs 35,000 spindles and 606 looms with processing and printing sections.

Mysore Chrome Tanning Co., Ltd., G.E.F. Post, Mysore Rd., Bangalore 560026.

The company manufactures all kinds of chrome upper leathers, sole leathers, besides manufacturing leather goods.

Chairman & Mg. Director : V. Krishnan, I.A.S.

Mysore Cosmetics Ltd., Govt. Soap Factory Bldgs., Bangalore 560055.

Mysore Lac & Paint Works Ltd., P.B. 82, Mysore 570001.

The factory manufactures paints, varnishes, duplicating & printing inks, sealing wax and other allied products.

Chairman & Mg. Director : A. C. Lakshmana.

Mysore Match Co. Ltd., B. H. Rd., Shimoga 577401

Mysore Minerals Ltd., 39, M. Gandhi Rd., Bangalore 560001.

This company deals with mining and marketing of the following minerals : Iron ore, manganese ore, kaolin, kyanite, chromite, steatite, soapstone, limestone, bauxite, feldspar and dolomite.

The total sales by the company during the year 1978-79 amounted to Rs. 51·5 million.

Mysore Sales International Ltd., Hariniwas, 36, Cunningham Rd., Bangalore 560001.

Mysore Sugar Co. Ltd., Sri J. Wadiyar Rd., Bangalore 560002.

NGEF Ltd., P. Bag No. 3876, Bangalore 560038.

Main products : Transformers, motors, switchgears, thyristor converters, silicon power diodes and thyristors ; also undertakes turnkey electrification projects.

Chairman & Mg. Director : N. A. Muthanna.

Technical Consultancy Services Organisation of Karnataka, Dte. of Inds. & Commerce, 14/3A, Rashtrothana Parishat Bldg., Nrupathunga Rd., Bangalore 560002.

Tungabhadra Steel Products Ltd., P. O. Tungabhadra Dam 583225, Bellary Dist.

(See under Govt. of India Undertakings).

Visvesvaraya Industrial Trade Centre, Kasturba Rd., Bangalore 560001.

Functions : To exhibit the various industrial products manufactured in the State, establish contacts between the producer and the purchaser, maintain Information-cum-Documentation Centre for catering to the needs of the exporters/visitors for development of marketing and maintain a close liaison with the research organisations & institutions within the country and abroad.

Visvesvaraya Iron & Steel Ltd., Bhadravati 577301, Shimoga Dist.

It is an integrated steel plant producing alloy and special steels, mild steel, tor steel, ferro-silicon, steel castings, grey iron castings, refractory bricks, cement etc

Chairman : R. A. Naik ; *Mg. Director :* K. V. Irniraya.

KERALA

Chalakudy Refractories Ltd., Railway Station Rd., Chalakudy 680307.

Estd. : 1969. Subsequent to a major diversification/expansion programme involving over a crore of rupees, the production capacity has been increased to 16,800 M. Tonnes per annun. Product range includes zircon nozzles to bricks, sillimanite stds. & specials, graphite stopper heads, insulating refractories in fire clay silica and sillimanite base for hot face and cold face, fire clay items, mortars, high heat duty ramming mass etc., etc.

Fibre Foam Ltd., Valaparam, Cannanore 670001.

Foam Mattings (India) Ltd., Post Box 283, Alleppey 688001.

Forest Industries Travancore Ltd., Post Box No. 18, Alwaye 683101.

Handicrafts Devpt. Corpn. of Kerala Ltd., Putenchanthai, Trivandrum 695001.

Keltron Counters Ltd., Chavadimukku, Sreekariyam, Trivandrum 695017.

Chairman : K. P. P. Nambiar ; *Gen. Manager :* N. Navakumar.

Kerala Agro-Industries Corpn. Ltd., *Regd. Office :* Kissan Jyothi, Fort, Trivandrum 695023.

Kerala Agro-Machinery Corpn. Ltd., *Regd. Office :* 38/697, Kateson Bldg., M. G. Rd., Ernakulam 682011.

Factory : P.O. Athani, Augamali South, Ernakulam Dist.

Function : Manufacturers of Kubota power tillers with a licenced capacity of 12,000 numbers per year.

Mg. Director : P. Shanmugha Sundaram.

Kerala Automobiles Ltd., P.B. No. 4, Poojapura, Trivandrum 695012.

Kerala Ceramics Ltd., P.O. Kundara 691501.

The Company consists of two divisions (1) The Porcelain Division producing porcelain crockery, and low tension electrical insulators. (2) The Kaolin Division, consisting of china clay mines and modern plant producing refined china clay of various grades including paper coating clay.

Kerala Electrical & Allied Engg. Co., Ltd., P.O. Mamala, Cochin 682305.

Products manufactured : Transformers, switchgears, transmission line towers, electric motors, centrifugal pumps, bakelite mouldings, G. I. castings, fuse units, etc., etc.

Kerala Financial Corpn., K.F.C. Bldgs., Vellayambalam, Trivandrum 695001.

Chairman : M. K. Hemachandran ; *Mg. Director :* G. J. Jeothi.

Kerala Fisheries Corpn. Ltd., XVI/848B, Shanmugham Rd., Ernakulam, Cochin 682011.

Functions : Export of Frozen Shrimps, Frozen Lobster tails, Frozen Frog legs, Frozen Fishes, Canned Shrimps, Canned Mussels, Canned Fish, Canned Crab meat, Fishmeal, Fishoil, Fish pickles, Nylon & Polythene Twine and Fishnets. At present it has 4 Ice & Freezing Plants, 2 Fishmeal Plants, 1 Nylon Net Factory, 1 Canning Factory, 1 Fleet Section with four Mexican Trawlers, 1 Purse-Seine Project with eight Purse-Seiners.

Mg. Director : S. Sundaresan.

Kerala Forest Devpt. Corpn. Ltd., Chemparathimoottil Bldg., Kottayam 686006.

Kerala Garments Ltd., P.M. 32/249, Thillery Rd., Cannanore 670001.

Kerala Handloom Finance & Trading Corpn. Ltd., P.M. 32/249, Thilleri Rd., Cannanore 670001.

Kerala Industrial & Technical Consultancy Organisation Ltd. (KITCO), Shema Bldg., M. Gandhi Rd., P. Box No. 1820, Cochin 682016.

KITCO a subsidiary of the Indl. Devpt. Bank of India, co-sponsored by national level and State level financial institutions and State Government for promotion of industrial development.

Chairman : Dr. S. A. Dave ; *Mg. Director :* G. I. Vurgese.

Kerala Inland Navigation Corpn. Ltd., XXXV/492, Pallimukku, Cochin 682016.

Functions : To establish, maintain and operate transportation services for the transport of goods and passengers in the backwaters of Kerala.

Chairman : D. B. Paul.

Kerala Land Devpt. Corpn. Ltd., 44, Shanti Nagar, Trivandrum 695001.

Functions : To promote, undertake, finance and execute land development schemes for agriculture and allied activities. The Kuttanand Development Project has been taken up to augment output of rice and coconut in the region. Similarly a project for development of 38,000 acres of Kole Lands in Trichur District and 267 hectares of Kole Lands in Ponnani (Malappuram District) have also been taken up to augment paddy cultivation.

Chairman : K. V. Vidhyadharan ; *Mg. Director :* E. P. Jos.

Kerala Livestock Devpt. & Milk Marketing Board Ltd., 9/1148, "Mani Bhavan", Sasthamangalam, Trivandrum 695010.

Kerala Minerals & Metals Ltd., P. Box No. 30, Quilon 691001.

Mining & beneficiating of coastal minerals and manufacture of titanium dioxide.

Chairman : K. T. Chandy ; *Mg. Director :* M. Joseph

Kerala Premo Pipe Factory Ltd., P.O. Puthenthura, Neendakara 691582. Quilon Dist. *Registered Office :* Near High School Junction, Quilon 691009.

In this factory prestressed concrete pipes and R.C.C. pipes are manufactured by a special Norwegian 'Premo' Method. R.C.C. NP 2 pipes are also manufactured.

Mg. Director : K. Mathew Thomas.

Kerala Shipping Corpn. Ltd., 2nd Main Rd., Post Box No. 593, Willingdon Island, Cochin 682003.

Engaged in operating ships.

Mg. Director : P. Sankaran Nair.

Kerala Soaps & Oils Ltd., West Hill, Calicut 673005.

The Company consists of 3 units viz. Soap Division, Oil Division and Hydrogenation Division.

The Company manufactures soaps, Vitamin A & D, Shark liver oil products and glycerine.

Mg. Director : M. Satyanarayana.

Kerala State Bamboo Corpn. Ltd., Angamally 683572.

Kerala State Cashew Devpt. Corpn. Ltd., P. B. No. 13, Quilon 691001.

Chairman : N. Raman Pillai ; *Mg. Director :* K. Bharathan.

Kerala State Civil Supplies Corpn. Ltd., P. B. No. 1789, M. G. Rd., Ernakulam, Cochin 682016.

Kerala State Coconut Devpt. Corpn., Janaki Nivas, Vazhuthacaud, Trivandrum 695014.

Chairman : K. P. Aravindakshan ; *Mg. Director :* A. K. Singh, I.A.S.

Kerala State Coir Corpn. Ltd., P. B. No. 191, Alleppey 688001.

Kerala State Construction Corpn. Ltd., Thycaud, Trivandrum 695014.

It is engaged in construction bldgs., bridges & roads in the State. It has also taken up several works in Libya in association with National Bldg. Construction Corpn. Ltd. & Projects & Equipment Corpn. Ltd., New Delhi.

Mg. Director, V. Subramania Iyer.

Kerala State Devpt. Corpn. for Scheduled Castes & Scheduled Tribes Ltd., XXV/300, M. Gandhi Rd., Trichur 680001.

Kerala State Drugs & Pharmaceuticals Ltd., Kalavoor, Alleppey 688522.

Kerala State Electronics Devpt. Corpn. Ltd., Keltron House, Vellayambalam, Trivandrum 695001.

Functions : To promote establishment of electronic industry in the State. The Corporation has promoted several companies such as Keltron Component Complex Ltd., Keltron Crystals Ltd., Keltron Resistors Ltd., Dielectro Magnetics Ltd., etc. etc., for the manufacture of T.V. receivers, electronic calculators, voltage stabilisers, etc.

Kerala State Film Devpt. Corpn. Ltd., Cotton Hill, Trivandrum 695014.

Chairman : K. T. Mohamed ; *Mg. Director :* M. Kochunarayanan.

Kerala State Financial Enterprises Ltd. 'Bhadratha', P.B. No. 172, Museum Rd., Trichur 680004.

The only Public Sector company in India that conducts chit funds to cater to the public and also conducts hire purchase financing under which durable consumer articles such as motor vehicles, refrigerators, sewing machines, fans, radios, pump sets, etc. are made available to the public at reasonable rates of finance charge. It has 31 branches in important towns of the State.

Kerala State Industrial Devpt. Corpn. Ltd., Trivandrum 695003.

Chairman : R. Gopalaswamy ; *Mg. Director :* S. K. Warrier.

Kerala State Ind. Enterprises Ltd., Post Box 806, Kaudiar, Trivandrum 695003.

Subsidiary Companies : Trivandrum Rubber Works Ltd., Trivandrum, Kerala Ceramics Ltd., Kundara. Travancore Plywood Industries Ltd., Punalur, Kerala Electrical & Allied Engg. Co. Ltd., Mamala, Kundara & Olavakot, Kerala Soaps & Oils Ltd., Calicut, Kerala State Drugs & Pharmaceuticals Ltd., Alleppey, Kerala State Detergents & Chemicals Ltd., Super Clays and Minerals Mining Company Private Ltd.. Cannanore (Relief Undertaking).

Kerala State Industrial Products Trading Corpn. Ltd., Kipcor House, Veli Rd.. Shangbumughom, Trivandrum 695007.

Chairman : Dr. P. J. Alexander ; *Gen. Manager :* R. P. Pillai.

Kerala State Small Industries Devpt. & Employment Corpn. Ltd., Kerala State Housing Board Bldgs., Santhinagar, Trivandrum 695003.

Kerala State Textile Corpn., Ltd., 'Pankaj', Vellayambalam, Trivandrum 695010.

Functions : Assisting or managing textile manufacturing & processing units in Kerala State.

Chairman : G. V. S. Desikan.

Kerala Tourism Devpt. Corpn. Ltd., Elenjikal Bunglow, T.C. No. 26/342, P.O. Box 46, Trivandrum 695001.

Kerala Urban Devpt. Finance Corpn. Ltd., Tej Bhawan, New Rd., Calicut 673005.

Malabar Cements Ltd., T.C. No. 9/1719, Vellayambalam, Trivandrum 695010.

Metropolitan Instruments Ltd., Chavadimukku Junction, N. H. 47, Sreekariam, Trivandrum 695001.

National Traffic Planning & Automation Centre (a divn. of KELTRON), Sreekanteswaram Rd., Trivandrum 695023.

Functions : Undertakes traffic and transportation planning in the State, national and international levels. The Centre is supplemented by the manufacturing unit of Keltron by way of producing traffic signalling equipment, closed circuit television system etc.

Overseas Devpt. & Employment Promotion Consultants Ltd., Y.W.C.A. Bldgs., Trivandrum 695001.

Chairman & Mg. Director : K. V. Rajagopalan Nair.

Pallathra Bricks & Tiles Ltd., P.O. Kochuramapuram, Shertallay 688524.

The object of the Company is to produce and distribute sand lime bricks, a new architectural brick of high strength and finish. The designed capacity of the factory is 44,000 bricks per working day of 16 hours.

Plantation Corpn. of Kerala Ltd., P. B. 12, Kottayam 686004.

Area under *rubber :* — 7460 hectares ; Area under yielding: 5,755 hectares ; Area under *oil palm :* 1,750 hectares ; Area under yielding : 420 hectares ; Area under *cashew :* 5,290 hectares ; Area under yielding : 2,600 hectares. The Corporation manufactures all grades of sheets, crepe and crumb rubber, 60 per cent centrifuged latex, and red palm oil.

Rehabilitation Plantations Ltd., Power House Rd., Punalur 691305.

Scooters (Kerala) Ltd., P.B. No. 290, Alleppey 688001.

State Farming Corpn. of Kerala Ltd., Karimbu Bhavan, P.O. Nellipally, Punalur 691305.

Chairman : Prof. P. S. Velayudhan.

Steel Industrials Kerala Ltd., 89/1720, Vellayambalam Jn., Trivandrum 695010.

Functions : To set up steel casting foundry, ship breaking unit, steel forgings/springs, steel structurals and roller bearings of radiographic quality for use in railways, power plants, power tillers, etc.

Mg. Director : V. K. S. Menon.

Traco Cable Co. Ltd., XXXVI/890-5, Hospital Rd., Ernakulam, Cochin 682011.

The Company manufactures all kinds of PVC cables and wires upto and including 1100 volts grade, AAC and ACSR conductors, paper insulated lead sheathed polyethylene jacketted underground telephone cables of size upto 100 pairs.

Chairman : K. P. Vishwanathan Nayar ; *Mg. Director :* K. P. Pillay.

Transformer & Electricals Kerala Ltd., Angamalli P.O., Ernakulam Dist.

Travancore-Cochin Chemicals Ltd., P.O. Udyogamandal 683501.

Only public sector Caustic Soda Unit in the country -- Established in 1952. The daily licensed production capacity of the factory is 200 tonnes of rayon grade caustic soda, 10 tonnes of sodium hydrosulphite, 7 tonnes of iron-free sodium sulphide, 360 tonnes of hydrochloric acid and 60 tonnes of liquid chlorine. It is the largest caustic soda unit in the country.

Chairman & Mg. Director : T. N. Menon.

Travancore Plywood Industries Ltd., Punalur 691305.

The installed capacity of the factory is 2·28 million sq. metres of plywood panels per annum in two shifts. Annual turnover is Rs. 16 million.

Travancore Titanium Products Ltd., Kochuveli, Trivandrum 695021.

The factory is the only unit in India producing titanium dioxide pigments. It has now a production capacity of 24,500 tonnes per annum.

Mg. Director : C. Subramoniam.

Trivandrum Rubber Works Ltd., Trivandrum 695007

Trivandrum Spinning Mills Ltd., Balaramapuram 690501. Equipped with modern superhigh draft machinery for 25,200 spindles and 800 spindles of doubling frames, this mill manufacture quality yarn of counts varying from 40s and 60s in hanks and cones.

United Electrical Industries Ltd., Pallimukku, Quilon 691001.

The company manufactures electricity metres, motor starters, switchgears, carbon film resistors and plastic film capacitors.

Chairman : K. Sivasankaran Nair ; *General Manager :* T. G. Paul.

MADHYA PRADESH

Madhya Pradesh Audyogik Vikas Nigam Ltd., Panchanan, Malviya Nagar, Bhopal 462003.

Functions : It aims to promote the establishment of medium & large scale industries in the State by providing them with financial, technical and other assistance.

Mg. Director : S. K. Misra, I.A.S.

✓ **Madhya Pradesh Financial Corpn.,** Finance House, Bombay-Agra Rd., Indore 452001.

Madhya Pradesh Laghu Udyog Nigam Ltd., 23, New Shopping Centre, New Market, T. T. Nagar, Bhopal 462003.

The Nigam has undertaken the following activities :—

(1) Procurement and distribution of scarce and controlled materials. (2) Sale of handloom and handicraft products, through 9 emporia and participation in exhibitions and export promotion. (3) Marketing of small industries products. (4) Construction of industrial estates, rural work sheds and development of industrial sheds, etc.

Madhya Pradesh Lift Irrigation Corpn., Ltd., 54, New Mkt., T. T. Nagar, Bhopal 462003.

✓ **Madhya Pradesh State Agro-Industries Devpt. Corpn. Ltd.,** New Market, Tatyatope Nagar, Bhopal 462001.

Functions : It helps promote and establish agro-based industries ; distributes and hires farm machinery and equipments and sells agricultural inputs ; and trains and finances educated unemployed to set up agro-service centres and industries. It has developed a mechanical farm at Hoshangabad, a pesticide factory at Bina, oil and cattle-feeds factory at Morena, a fertiliser granulation plant at Itarsi and a cold storage at Chhindwara.

Madhya Pradesh State Dairy Devpt. Corpn. Ltd., Guru Teg Bahadur Complex, Roshanpura, Bhopal 462003.

Chairman : M. S. Choudhary ; *Mg. Director :* R. V. Gupta.

Madhya Pradesh State Forest Devpt. Corpn. Ltd., 'Panchanan', Malviya Nagar, Bhopal 462003.

Madhya Pradesh State Industries Corpn. Ltd., 'Panchanan', Malviya Nagar, Bhopal 462003.

Functions : To run the State Sector industries and to participate in Joint Sector.

Chairman & Mg. Director : S. S. Seth.

Madhya Pradesh State Mining Corpn. Ltd., E-1/2, Area Colony, Bhopal 462014.

Functions : The Corporation is engaged in mining and marketing of rockphosphate, limestone, dolomite, tin, fluorite, bauxite, corrundum, diaspore, pyrophyllite, fireclay, soapstone and marble.

Madhya Pradesh State Textile Corpn. Ltd., 9-A, Civil Lines, Bhopal 462002.

Functions : The Corpn. controls a composite Textile mill, spg. mills and processing plant. The Corpn. looks after the development of sericulture, both mulberry and tasar, in the State. It also looks after the development of handlooms, the main products being furnishings, bed spreads and Janta saris. It also markets the famous saris of Chanderi and Maheshwar in addition to tasar saris.

Chairman : Babulal Jain ; *Mg. Director :* Arun Kumar.

Madhya Pradesh State Tourism Development Corpn., Gangotri, T. T. Nagar, Bhopal 462003.

Madhya Pradesh Textbook Corpn., Bhopal 462011.

Madhya Pradesh-Vidyut Yantra Ltd., 781, Wright Town, P.B. No. 300, Jabalpur 482002.

Functions : Manufactures electricity distribution transformers.

Chairman : B. S. Seth, I.A.S. ; *Mg. Director :* M. B. Tambakad.

MAHARASHTRA

City & Industrial Devpt. Corpn. of Maharashtra Ltd. (CIDCO), Nirmal, Nariman Point, Bombay 400021.

Functions : It was established in March 1970 with the object of developing (1) A new city across the harbour of Bombay. The new city, to be called New Bombay, will extend over an area of about 343·70 sq. kms. in the Panvel-Thane-Uran Tehsils of Thane and Kulaba Districts ; (2) New Aurangabad, to facilitate urban development of Marathwada ; (3) A residential complex for industrial workers at Tarapur and (4) New townships in Nasik and Nanded notified areas.

Chairman : Suresh A. Keswani ; *Vice-Chairman & Mg. Director :* L. C. Gupta.

Dairy Corpn. of Maharashtra Ltd., Mistry Bhavan, 6th Flr., D. Vachha Rd., Bombay 400020.

Dairy Devpt. Corpn. of Marathwada Ltd., Vikas Bhavan, Dr. R. Prasad Rd., Aurangabad 431001.

Development Corpn. of Konkan Ltd., Warden House, Sir P. Mehta Rd., Bombay 400001.

Functions : To promote industrial growth in the districts of Thane, Kulaba and Ratnagiri.

Mg. Director : D. T. Joseph, I.A.S.

Development Corpn. of Vidarbha Ltd., Mahajan Bldg., Main Rd., Sitabuldi, Nagpur 440012.

Functions : To achieve orderly industrialisation of the 8 districts of Vidarbha. To this end the Corporation is setting up units on its own or as joint sector ventures, and is also preparing viable schemes to help would-be entrepreneurs. Accordingly the Corporation has under implementation projects on seeds, dairy, tussar silk, palma rosa oil etc. The Corporation has revived sick unit of Gondwana Paints and Minerals Ltd. at Kamptee.

Forest Development Corpn. of Maharashtra Ltd., 6A, Nawab Layout, Tilak Nagar, Nagpur 440010.

Gondwana Paints & Minerals Ltd., Near Rly. Goods Shed, Kamptee 441001. Nagpur Dist.

Haffkine Bio-Pharmaceutical Corpn. Ltd., Parel, Bombay 400012.

Functions : Manufactures bacterial and viral vaccines, antitoxins, plasma products, diagnostic reagents and other biologicals and other pharmaceutical formulations, including infusions. For the benefit of the general public, the life saving biologicals are sold day and night at the telephone room of the Corpn.

Chairman : Dr. B. K. Goyal.

Irrigation Devpt. Corpn. of Maharashtra Ltd., New Adm. Bldg., Agricultural College Compound, Shivajinagar, Pune 411005.

Leather Ind. Corpn. of Marathwada Ltd., Vikas Bhavan, Dr. R. Prasad Rd., Aurangabad 431001.

Leather Ind. Devpt. Corpn. of Maharashtra Ltd., Bombay Life Bldg., 45, Veer Nariman Rd., Bombay 400023. *Chairman :* N. S. Chavan ; *Mg. Director :* Dr. J. D. Joshi.

MAFCO Ltd., Mistry Bhavan, D. Vachha Rd., Bombay 400020.

Functions : To develop the storage, processing and marketing and export of perishable agricultural produce (viz. vegetables, meat, dairy products) in order to ensure that the agricultural producer gets a fair price and the consumer obtains a quality product at a reasonable rate.

Chairman : B. V. Nimbar ; *Mg. Director :* V. Sundaram.

MAFCO Factory, National Park, Borivli (East), Bombay 400066.

This factory has a capacity to slaughter 100 pigs a day and produce meat, bacon, ham, sausages and canned meat products.

MAFCO Factory : Gokhale Nagar, Pune.

This Poultry Dressing Plant has a capacity of dressing 1,200 birds per hour. The factory produces broilers, culls, fruits and vegetables, fish and procures eggs from poultry farms in the vicinity.

MAFCO Factory : Turbhe.

This factory has a capacity of producing 1,200 tonnes of frozen material per year, and cold storage of 1,100 tonnes and deep freeze of 900 tonnes. The factory produces fish, fruit and vegetables.

MAFCO Factory : Koregaon.

This cold store with a capacity of 100 tonnes of cold storage, also has a slaughter house. The factory has now a production capacity of 1,200 tonnes per year of buffalo meat, mutton, fruits and vegetables and procures country eggs from small farmers in the vicinity.

MAFCO Factory : Nanded.

The factory has a capacity of producing 1,800 tonnes per year of buffalo meat, mutton, frogs legs, sweet water fish, fruit and vegetables.

MAFCO Cold Store : Gultekdi, Pune.

This cold store has a capacity of 1,700 tonnes of cold storage and 300 tonnes of deep freeze. It stores potatoes, cotton seed, dairy products, frozen fruits and vegetables.

Maharashtra Agro-Industries Devpt. Corpn. Ltd., Rajan House, Near Century Bazar, Bombay 400025.

Maharashtra Antibiotics & Pharmaceuticals Ltd. (A Joint Venture of HAL & SICOM), 145, Ramdaspeth, Nagpur 440010.

Maharashtra Electronics Corpn. Ltd., Plot No. 214. Backbay Reclamation, Raheja Centre, 13th Flr., Nariman Pt., Bombay 400021.

Chairman : Harish Mahindra ; *Mg. Director :* N. Jayaraman.

Maharashtra Film, Stage & Cultural Devpt. Corpn. Ltd., Film City, Goregaon East, Bombay 400065.

Chairman & Mg. Director : P. Subrahmanyam ; *Vice-Chairman :* Dr. V. Shantaram.

Maharashtra Fisheries Developmeut Corpn. Ltd., Taraporewala Aquarium, N. Subhas Rd., Bombay 400002.

Director-in-Charge : V. Sundaram.

Maharashtra Industrial Devpt. Corpn., Marol Ind. Area, Mahakali Caves Rd., Mulgaon, Andheri (East), Bombay 400093.

Chairman : Vacant ; *Ch. Ex. Officer :* L. N. Doshi, I.A.S.

Maharashtra Land Devpt. Corpn. Ltd., Administrative Bldg. of the Agriculture Dept., Shivajinagar, Pune 411005.

Maharashtra Small-Scale Industries Devpt. Corpn. Ltd., Krupanidhi, 9, W. Hirachand Marg, Bombay 400038.

Functions : Procurement and distribution of scarce and controlled raw materials like ferrous and non-ferrous items, pig iron, cement, etc. etc., contract mktg. assistance ; devpt. of handicrafts and mktg. of handicraft articles ; import assistance scheme ; commercial warehousing facility ; permanent Trimourti Indl. Exhibition ; publication of Laghu Udyog monthly and weekly news bulletin.

Chairman : Mustafa Fakih ; *Mg. Director :* Dr. V. V. Kale.

Maharashtra State Co-op. Marketing Fedn. Ltd., Kanmoor House, Narsi Natha St., Bombay 400009.

Maharashtra State Co-op. Tribal Devpt. Corpn. Ltd., 2059, Vijay Nagar Colony, Sadashiv Peth, Pune 411030.

Maharashtra State Farming Corpn. Ltd., 270, Bhamburda, S. Bapat Marg, Pune 411016.

Functions : Cultivation and management of the surplus lands of the joint stock sugar companies in Maharashtra vesting in the Government under the provisions of the Maharashtra Agricultural Lands (Ceiling on Holdings) Act, 1961, and granted to the Corporation.

Chairman : Mrs. Shalinitai V. Patil ; *Mg. Director :* P. T. Ghoghale.

Maharashtra State Financial Corpn., New Excelsior Bldg., A. K. Nayak Marg, Bombay 400001.

Functions : The Corporation provides financial assistance to medium and small-scale industrial concerns in Maharashtra State and in the Union Territory of Goa, Daman and Diu. Assistance is also available to qualified technicians and educated unemployed persons.

Chairman : S. R. Damani ; *Mg. Director :* Y. L. Rajwade.

Maharashtra State Handlooms Corpn., 50, Central Avenue, Ahmad Manzil, Nagpur 440018.

A subsidiary of the Maharashtra State Textile Corpn. Ltd., it manages the affairs of the handloom industry in the State.

Maharashtra State Mining Corpn. Ltd., 5, Abhyankar Nagar, Nagpur 440010.

Maharashtra State Oilseeds Commercial & Ind. Corpn. Ltd., 201, Jolly Bhavan No. 2, 7, New Marine Lines, Bombay 400020.

Maharashtra State Powerlooms Corpn. Ltd., Vashani Chambers. 47, New Marine Lines, Bombay 400020.

Functions : To rehabilitate the powerloom industry and to assist the weavers, who are economically weak ; the Corporation undertakes various operations in production, marketing and sale of cloth.

Maharashtra State Seeds Corpn. Ltd., Plot No. 8, Shastri Nagar, Akola 444001.

Maharashtra State Textile Corpn. Ltd., 'Lotus House', 33-A. New Marine Lines, Bombay 400020.

Functions : Originally established in 1966 to take over sick textile mills in the State. Now controls eight cotton textile mills. A new export oriented composite textile mill — Devagiri Textile Mills Ltd. was commissioned in 1979. A similar composite mill at Kalameshvar, Kalameshvar Textile Mills Ltd., is under construction.

Chairman & Mg. Director : S. P. Upasani.

Maharashtra State Warehousing Corpn., Plot 'B', Survey No. 583, Marketyard. Gultekadi, Pune 411009.

Functions : The Corporation has established warehouses at 99 centres all over Maharashtra State. Against warehouse receipts issued by the Corporation, the depositors can secure advances from Scheduled Banks. The Corporation also provides agricultural needs.

Mg. Director : V. R. Dravid.

Maharashtra Tourism Devpt. Corpn., Express Towers, 9th Flr., Nariman Pt., Bombay 400021.

Mg. Director : P. Subrahmanyam.

Marathwada Devpt. Corpn. Ltd., Vikas Bhavan, Dr. R. Prasad Rd., Aurangabad 431001.

Functions : The Corpn. has set up its own resource-based six projects in the region. These are : Textile Corpn. of Marathwada Ltd., Dairy Development Corpn. of Marathwada Ltd., Leather Industries Corpn. of Marathwada Ltd., Godavari Garments Ltd., Kinwat Roofing Tiles Ltd., Parbhani Krishi Gosamvardhan Ltd. It is establishing a network of 40 Mini-Industrial Estates throughout the regn. at rural growth centres. It extends promotional and escorting assistance to small and medium industries by coordinating activities of all devpt. agencies.

Mg. Director : Anand Bhadkamkar.

Overseas Employment Corpn. of Maharashtra Ltd., 11th Flr., Administrative Bldg., Madame Cama Rd., Bombay 400032.

Chairman : Umar Kazi.

State Industrial & Investment Corpn. of Maharashtra Ltd., 'Nirmal', Nariman Point, Bombay 400021.

Chairman : H. G. Vartak; *Mg. Director :* B. N. Bhagwat.

Textile Corpn. of Marathwada Ltd., Anvikar Bldg., Adalat Rd., Aurangabad 431001.

Functions : A subsidiary company of the Marathwada Development Corpn. Ltd. ; it has set up its pre-weaving unit and process house in Nanded. The present processing capacity is 125.000 metres per day. Production started in April 1972.

Mg. Director : L. N. Gangakhedkar.

Vidarbha Quality Seeds Ltd., Mahajan Bldg., Main Rd., Sitabuldi, Nagpur 440012.

Western Maharashtra Devpt. Corpn. Ltd., Redross House, 11, Mahatma Gandhi Rd., Pune 411001.

Mg. Director : A. H. Abhyankar.

MANIPUR, MEGHALAYA & NAGALAND

Forest Devpt. Corpn. of Meghalaya Ltd., Lower Lachumiere, Shillong 793001.

Manipur Small Industries Corpn. Ltd., Paona Bazar, Imphal 795001.

Mawmluh-Cherra Cements Ltd., Taxation Bldg., Shillong 793001.

The Company has its factory at Cherrapunjee for manufacture of Portland Cement. Production capacity 590 T.P.D. Capacity after implementing expansion scheme will be 930 T.P.D.

Mg. Director : H. Suchiang.

Meghalaya Essential Oil & Chemicals Ltd., Nongrim Hills, Shillong 793003.

Chairman : J. M. Jala, I.A.S.

Meghalaya Industrial Devpt. Corpn. Ltd., P. Box No. 9, Shillong 793001.

Chairman : U. Kharbuli ; *Mg. Director :* J. M. Thangkhiew, I.A.S.

Nagaland Industrial Devpt. Corpn. Ltd., Ind. Estate, P. B. No. 5, Dimapur 797112

Chairman : I. Imkong.

Nagaland Sugar Mills Ltd., Dimapur 797112.

ORISSA

Cuttack Iron & Steel Products Ltd., Ind. Estate, Cuttack 753003.

The company manufactures fabricated steel goods. It undertakes all types of fabrication work. Its products can be divided into three categories ; (1) Heavy Goods ; (2) Semi-Heavy Goods ; (3) Light Goods.

East Coast Salt & Chemical Ind. Ltd., Sardar Patel Hall Premises, Bhubaneswar 751009.

Industrial Devpt. Corpn. of Orissa Ltd., P. B. 78, Bhubaneswar 751001.

Functions: The Corporation has eight running industries: (1) Kalinga Iron Works, Barbil ; manufacturers of superior foundry grade pig iron ; (2) Hira Cement Works, Bargarh, Sambalpur 768001 ; (3) Ferro-chrome Project, Jajpur Rd., Cuttack 753001 ; manufacturers of high carbon ferro-chrome and high carbon silicon-chromium ; (4) Hira Cable Works, Hirakud 786016 ; manufacturers of ACSR & AAC Cables, enamelled copper and paper covered wires and strips ; (5) Re-rolling Mill, Hirakud 768016 ; manufacturers of bars, rods, angles, tor-steel and light structurals ; (6) Hirakud Industrial Works, Hirakud 768016 ; manufacturers of Khandsari sugar machinery, pugmill title presses, rice haulers etc. ; (7) Tile Factory, Choudwar, Cuttack 754025 ; manufacturers of various kinds of tiles and (8) East Coast Salt & Chemical Industries, Sumandi, Ganjam ; manufacturers of edible and industrial grade salt. Several other projects have also been taken up under joint venture.

Industrial Promotion & Investment Corpn. of Orissa Ltd., IPICOL House, Janpath, Sahidnagar, Bhubaneswar 751007.

Leather Corpn. of Orissa Ltd., Shree Vihar, Tulsipur, Cuttack 753008.

Mayurbhanj Textiles Ltd., P.O. Baripada 757001.

Orissa Agrico Ltd., B-9, Ind. Estate, Cuttack 753010.

Orissa Agro Industries Corpn. Ltd., Killa Maidan, Cuttack 753001.

Orissa Construction Corpn. Ltd., Gopabandhu Nagar, Unit No. 8, P.O. New Capital, P.B. 82, Bhubaneswar 751003.

Orissa Co-operative Handicrafts Corpn. Ltd., A-128, Saheed Nagar, Bhubaneswar 751007.

Orissa Forest Corpn. Ltd., Bhubaneswar 751001.

Functions : The Corporation undertakes proper exploitation of forest resources of the State and markets raw and finished forest products such as timber, props, colliery materials, sleepers, charcoal, Kendu leaves, Sal seeds, etc.

Orissa Foundry Co. Ltd., New Barracks St., Berhampur Town, Ganjam 760001.

Orissa Indl. Infrastructure Development Corpn., IPICOL House, Bhubaneswar 751007.

Orissa Industrial & Technical Consultancy Organisation Ltd., 363, Sabidnagar, Janpath, Bhubaneswar 751007.

Orissa Instruments Ltd., B-8 & B-9, Ind. Estate, Cuttack 753010.

Orissa Lift Irrigation Corpn. Ltd., Bhubaneswar 751001.

Orissa Mining Corpn. Ltd., Bhubaneswar 751001.

Orissa Road Transport Co., Ltd., Station Rd., Berhampur 760001

Orissa Small Ind. Corpn. Ltd., Barabati Stadium, Cuttack 753005.

Orissa State Commercial Transport Corpn. Ltd., Old Secretariat Bldgs., Killa Maidan, Cuttack 753001.

Orissa State Financial Corpn., OMP Square, Cuttack 753003.

Orissa State Handloom Devpt. Corpn. Ltd., 363, Sahidnagar, Bhubaneswar 751007.

Orissa State Seeds Corpn., Santarapur, Bhubaneswar 751002.

Orissa Tiles Ltd., P.O. Barang 754005.

Orissa Tyres Ltd., Garkan P.O. Sainik School, Bhubaneswar 751005. (A Joint Sector Project of Transport Corpn. of India Ltd. & Industrial Promotion & Investment Corpn. of Orissa Ltd. with technical collaboration of General Tires International Co., U.S.A.) To manufacture 500,000 each of tyres and tubes per annum. The project is expected to be completed in 1982.

Rourkela Fabrications Pvt. Ltd., Ind. Area, Rourkela 769004. The factory manufactures sophisticated mechanical spares for steel plant including import substitution items and general fabrications, light, medium and heavy.

Turn-over for 1979-80 : Rs. 1·90 million.

Spark Battery Manufg. Works Ltd., Ind. Estate, Cuttack 753003.

Tribal Devpt. Co-op. Corpn. of Orissa Ltd., Post Box 148, Bhubaneswar 751001.

Functions : To save the tribals from exploitation by procuring their minor forest and surplus agricultural produce at reasonable prices, to supply their daily needs through fair price shops and to give them interest free loans.

Utkal Foundry & Engg. Co. Ltd., P.O. Remed, Sambalpur 768101.

PONDICHERRY

Pondicherry Distilleries Ltd., Goubert Avenue, Pondicherry 605001.

It produces 6,000 litres of industrial alcohol per day.

Chairman : P. V. Jaikrishnan, I.A.S. ; *Mg. Director :* C. Saravanaperumal.

Pondicherry Industrial Promotion, Devpt. & Investment Corpn. Ltd., 38, Romain Rolland St., Pondicherry 605001.

PUNJAB

Land Devpt. & Seed Corpn. Ltd., 62, Sector 9-A, Chandigarh 160017.

Malwa Cotton Spg. Mills Ltd., SCO 54, 55 & 56, Sector 17-A, Chandigarh 160017.

Punjab Agro-Industries Corpn. Ltd., 166, Sector 19-A, Chandigarh.

Punjab Breweries Ltd., Focal Point Area, P.O. Jamalpur Awana, Ludhiana 141001.

Punjab Dairy Devpt. Corpn. Ltd., 14-A, Madhya Marg, Sector 7-C, Chandigarh 160017.

Punjab Display Devices Ltd., A-27, Phase VII, S. A. S. Nagar, Chandigarh 160051.

Functions : Manufactures display devices and systems as well as CRT and TV picture tubes.

Mg. Director : K. S. Sree Prakash.

Punjab Export Corpn. Ltd., Kothi No. 117, Sector 18-A, P.B. 20, Chandigarh 160017.

Punjab Film & News Corpn., 52, Sector 4-A, Chandigarh 160017.

Punjab Financial Corpn., 72/73, Sector 17-B, Bank Square, Chandigarh 160017.

Chairman : T. K. A. Nair ; *Mg. Director :* K. Rajendran Nair.

Punjab Footwear Ltd., Bhargava Nagar, Jullundur 144001.

Punjab Khand Udyog Ltd., S.C.O. 125-126-127, Sector 17-B, Chandigarh 160017.

Punjab Maize Products Ltd., *Factory & Office :* Uppli Rd., Post Box No. 32, Sangrur 148001. *Chandigarh Liaison Office :* 1004, 36-C, Chandigarh 160023. *Regd. Office :* S.C.O. 54-56, Sector 17-A, Chandigarh 160017.

Manufactures Maize Starch, Liquid Glucose, Dextrose Monohydrate, Modified Starches, Corn-Steep Liquor, Maize Oil, Maize Oil Cakes, Gluten, Hydrol, etc.

Punjab Poultry Corpn. Ltd., S.C.O. 2419-20, Sector 22-C, Chandigarh 160022.

Functions : Manufacture and sale of poultry, cattle and pig feeds at its feed processing centres at Chandigarh, Patiala, Ludhiana, Jullundur and Gurdaspur ; Marketing of eggs at Mullanpur (Ludhiana), Batala, TarnTaran, Patiala, Faridkot, Nawan Shahr and Chandigarh. Sale of pork and its products and dressed chickens manufactured at the pork plant at Kharar.

Punjab Saltpetre Refinery Ltd., Industrial Estate, Firozepur City 152001.

Punjab Scooters Ltd., Nabha 147201.

Promoted by the Punjab State Industrial Development Corpn. Ltd. to manufacture 24,000 'Kesri-Super' 150 cc. scooters per annum.

Punjab Semiconductor Devices Ltd., Kothi No. 14, Sector 10-A, Chandigarh 160011.

To manufacture 10 million semiconductor devices per year covering rectifiers, transistors etc. for entertainment, professional and military applications.

Punjab Spg. & Wvg. Mills Ltd., S.C.O. 54, 55 & 56, Sector 17-A, Chandigarh 160017.

Punjab State Civil Supplies Corpn. Ltd., 106-108, Sector 17-D, Chandigarh 160017.

Punjab State Electronics Devpt. & Production Corpn. Ltd., Bank of India Bldg., Sector 17-B, Bank Square, Chandigarh 160017.

Subsidiary Companies : Punjab Digital Industrial Systems Ltd., Punjab Biomedical Equipments Ltd., Punjab Recorders Ltd., Punjab Electro-optics Systems Ltd., Consumer Electronics (Punjab) Ltd.

Mg. Director : Dr. S. K. Mangal.

Punjab State Handloom & Textiles Devpt. Corpn. Ltd., S.C.O. 1128–29, Sector 22-B, Chandigarh 160022.

Mg. Dir. : H. G. Trighatia.

Punjab State Hosiery & Knitwear Devpt. Corpn. Ltd., SCO 3-A, Sector 7-C, Chandigarh.

Punjab State Industrial Devpt. Corpn. Ltd., S.C.O. 54, 55 & 56, Sector 17-A, Chandigarh 160017.

Chairman : T. K. A. Nair ; *Mg. Director :* Gokul Patnaik.

Punjab State Irons Ltd., 30, Bays Bldg., Sector 17, Chandigarh 160017.

Punjab State Small Industries Corpn. Ltd., Batra Bldg., Sector 17, P.B. 11, Chandigarh 160017.

Mg. Director : K. K. Bhatnagar, I.A.S.

Punjab State Tubewell Corpn. Ltd., S.C.O. No. 28, Sector 26, Chandigarh 160017.

Punjab Tanneries Ltd., Nakodar Rd., Jullundur 144003.

Punjab Tyres Ltd., S.C.O. 54-56, Sector 17-A, Chandigarh 160017.

Punjab Wireless Systems Ltd., SCO 54-56, Sector 17-A, Chandigarh 160017. *Works:* B-53, Phase VI, S.A.S. Nagar (Mohali), Chandigarh 160051.

Manufacturers and designers of radio communication equipment.

Chairman: Gokul Patnaik; *Mg. Director:* B. D. Kurana.

RAJASTHAN

Aravalli Svachalit Vahan Ltd., 1, Matsya Industrial Area, Alwar 301030.

Promoted by Rajasthan State Ind. Development & Investment Corpn. Ltd. to manufacture 24,000 two-wheeler scooters per annum.

Chairman: B. N. Malhan, I.A.S.; *Mg. Director:* N. K. Berwa.

Gangasagar Sugar Mills Ltd., Hi-Tech. Glass Division, Dholpur 328001.

The company manufactures Hi-Tech. brand neutral laboratory glasswares and bottles.

Rajasthan Drugs & Pharmaceuticals Ltd., Plot No. 215, Gali No. 1, Raja Park, Jaipur 302004.

Rajasthan Financial Corpn., Udyog Bhavan, Tilak Mrg., 'C' Scheme, Jaipur 302005.

Functions: To provide financial assistance to medium and small-scale industrial concerns in the State.

Rajasthan Small Industries Corpn. Ltd., Udyog Bhawan, Tilak Marg, 'C' Scheme, Jaipur 302005.

Functions: It procures and distributes raw materials to the small scale industrial units; runs handicrafts emporia at Jaipur, New Delhi, Mount Abu, Agra, Bombay, Srinagar, Udaipur and Calcutta; organises exhibitions and fairs in the country and abroad for export promotion of handicrafts; runs worsted spinning mills at Churu and Ladnun, a woollen mill at Nawalgarh, a furniture making centre and a design development and research centre for handicrafts and a Trade Centre-cum-Industrial Museum at Jaipur, a bidi factory at Tonk and Air Cargo Complex at (Sanganer Airport), Jaipur.

Mg. Director: Pawan Chopra, I.A.S.

Rajasthan State Agro Industries Corpn. Ltd., O-1, Subhash Nagar, Jhotwara Road, Jaipur 302006.

Rajasthan State Dairy Devpt. Corpn. Ltd., 15, Uniara Gardens, Jaipur 302004.

Rajasthan State Hotels Corpn. Ltd., State Hotel Premises, M. I. Rd., Jaipur 302001.

Objects: To meet the growing needs of internal and external tourist traffic and provide facilities at reasonable rates. The Corporation runs two hotels: (1) State Hotel (Khasa Kothi), Jaipur and (2) State Hotel (Anand Bhawan), Udaipur.

Rajasthan State Industrial Devpt. & Mineral Devpt. Corpn. Ltd., Udyog Bhawan, Tilak Mrg., Jaipur 302005.

Chairman: B. N. Malhan, I.A.S.; *Mg. Director:* N. K. Berwa, I.A.S.

Rajasthan State Mines & Minerals Ltd., 133, Saheli Marg, Udaipur 313001.

Chairman: G. K. Bhanot, I.A.S.

Rajasthan State Tanneries Ltd., State Enterprises Dept., P-6, Tilak Marg, C Scheme, Jaipur 302005.

SIKKIM

Sikkim Mining Corpn., Rangpo 737132. (A joint enterprise of the Govt. of Sikkim and Govt. of India).

Functions: Produces copper, lead and zinc concentrates from poly metallic ore at Bhotang mines, Rangpo.

Chairman: R. Narayanan.

TAMIL NADU

Anna Transport Corpn. Ltd., 12, Ramakrishna Rd., Salem 636007.

Cheran Transport Corpn. Ltd., 37, Mettupalayam Rd., Coimbatore 641011.

Industrial & Technical Consultancy Organisation of Tamil Nadu Ltd., 50-A, Greams Rd., Madras 600006.

Kattabomman Transport Corpn. Ltd., Nesamony Nagar, Ranithottam, Nagercoil 629001.

Madurai Pandiyan Engg. Corpn. Ltd., G.S.T. Rd., Pasumalai, Madurai 625004.

Established under the 'Half-a-Million Job Programme', for providing employment to the unemployed technicians. Undertakes bus body building, tyre retreading, automobile parts reconditioning and maintenance of buses.

Chairman: M. Raghupaty I.A.S.; *Mg. Director:* D. Mohan.

Overseas Manpower Corpn. Ltd., 117, Dr. Radhakrishna Rd., Madras 600004.

Poompuhar Shipping Corpn. Ltd., Kuralagam, Madras 600001.

At present engaged principally on coastal trade carrying coal for Tamil Nadu thermal stations; has plans for early expansion and participation in international trade.

Chairman: S. P. Srinivasan, I.A.S.; *Mg. Director:* M. B. Pranesh, I.A.S.

Poompuhar — The Tamil Nadu Handicrafts Devpt. Corpn. Ltd., 32, College Rd., Madras 600006.

Chairman: C. V. R. Panicker, I.A.S.; *Mg. Director:* Arun Ramanathan.

Southern Brick Works Ltd., 8, Mowbrays Rd., Madras 600014.

Southern Petrochemical Industries Corpn. Ltd., *Regd. Office:* 39, Armenian Street, Madras 600001. *Principal Office:* 97, Mount Rd., Madras 600032.

Factory: Spicnagar, Tuticorin 628005.

Functions: The Corpn. has set up the "Tuticorin Fertilizer Complex", one of the largest of its kind in Asia. Capacities in MTs per annum: Ammonia 352,000, Urea 512,000, Sulphuric acid 150,000, Phosphoric acid 52,800, DAP, NP or NPK Complexes 186,000.

Chairman: M. A. Chidambaram; *Vice-Chairman & President:* S. Venkitaramanan, I.A.S.

Southern Structurals Ltd., Pattabiram, Madras 600072.

Functions: Manufactures EOT cranes, gantry cranes, mining equipments like bucket wheel excavators, structural fabrications, etc.

State Industries Promotion Corpn. of Tamil Nadu Ltd., 51/52, Greams Rd., Madras 600006.

TACEL Mechanised Brick Plant, Thirumazhisai, Madras 600056.

A project by Tamil Nadu Ceramics Ltd., Madras to produce modular bricks, red clay structurals like hollow ceiling blocks, partition blocks, weather course tiles, facing bricks etc.

Tamil Nadu Agro Industries Corpn. Ltd., Ind. Estate, Guindy, Madras 600032.

Tamil Nadu Cements Corpn. Ltd., P.O. Tamilnad Cements 626127, via Rajapalayam, Ramanathapuram Dist. *Regd. Office :* 735, Anna Salai, LLA Bldgs., Madras 600002.

Manufactures 400,000 tonnes of Arasu brand Portland cement & Portland Pozzolana cement per annum.

Chairman : C. V. R. Panickar ; *Mg. Director :* A. Balraj.

Tamil Nadu Ceramics Ltd., 25, Cenotaph Rd., Teynampet, Madras 600018.

Chairman : C. Ramachandran, I.A.S. ; *Mg. Director :* Arun Ramanathan, I.A.S.

Tamil Nadu Chromates & Chemicals Ltd., Plot No. 25, Sipcot Ind. Complex, Post Box No. 2, Ranipet 632403 (N. Arcot Dist.).

Manufactures 3,300 tonnes of Basic Chromium Sulphate Tanning (BCT) powder, 4,350 tonnes of Sodium Dichromate and 3,400 tonnes of Sodium Sulphate.

Chairman : N. S. Bhat ; *Mg. Director :* U. V. Kunikullaya.

Tamil Nadu Civil Supplies Corpn. Ltd., 42, Thambusamy Rd., Kilpauk, Madras 600010.

Functions : Market intervention in and price stabilisation of all foodgrains and other essential commodities. Also undertakes wholesale and retail trade in such commodities.

Chairman : K. Diraviam, I.A.S. ; *Mg. Director :* R. Shunmugham, I.A.S.

Tamil Nadu Co.-Op. Textile Processing Mills Ltd., Erode 638005.

Tamil Nadu Dairy Devpt. Corpn. Ltd., 15, Spur Tank Rd., Chetput, Madras 600031.

Functions : The Corporation is in charge of development of dairying in Tamil Nadu. It also manufactures whole milk powder, skim milk powder, ice cream mix powder, pasteurised table butter and 'Agmark' Ghee. The Corpn. supplies milk in two major cities of Madras & Madurai and undertakes to implement "Operation Flood" schemes.

Chairman : V. Karthikeyan, I.A.S. ; *Mg. Director :* S. Parthasarathy, I.A.S.

Tamilnadu Fisheries Devpt. Corpn. Ltd., 15, Boag Rd., T. Nagar, Madras 600017.

Functions : Construction and distribution of mechanised fishing boats ; marketing of fish and fish products including fish meal & operation of processing plants at Ennore, Mandapam & Tuticorin.

Tamil Nadu Fluorine & Allied Chemicals Ltd., Visalakshinagar 625401, Madurai.

A project to be located at Manalur, in Ramanathpuram Dist., for the manufacture of Aluminium Fluoride with an annual capacity of 6,000 tonnes, it is expected to go into production by mid-1980.

Tamil Nadu Forest Plantation Corpn. Ltd., A-8, 11th Cross, Thillainagar, Tiruchirapalli 620018.

Chairman : G. Thirumal, I.A.S.; *Mg. Director :* K. P. D. Rao, I.F.S.

Tamil Nadu Handicrafts Devpt. Corpn. Ltd., (See Poompuhar in this list).

Tamil Nadu Handloom Finance & Trdg. Corpn. Ltd., 169, North Usman Rd., T. Nagar, Madras 600017.

Tamil Nadu Harijan Housing & Devpt. Corpn. Ltd., No. 5B/3, D. S. Pather St., East Shanmugapuram Colony, Villupuram 605602 (S. A. Dist.).

Construction of houses for Harijans & Sri Lanka repatriates and hostels for scheduled caste and backward class students.

Tamil Nadu Industrial Devpt. Corpn. Ltd., 735, Anna Salai, Madras 600002.

It is engaged in the promotion of medium & large-scale industries in the Public & Joint Sectors in the State of Tamilnadu. It also extends a helping hand in acquiring suitable land, arranging water & power from public supply system, securing suitable technical know-how, obtaining prescribed licences and other clearances and in getting term loans from financial institutions & commercial banks for the projects. TIDCO is presently engaged in 43 industrial ventures, in various fields like cement, fertilizer, steel, engineering, chemicals, pharmaceuticals, electronics etc. under the Public & Joint Sectors. TIDCO has so far provided employment to over 6,000 persons and has programmes to promote several projects in the Joint Sector and welcomes proposals for any new industry from entrepreneurs.

Chairman : C. V. R. Panikar, I.A.S. ; *Mg. Director :* K. Venkatesan, I.A.S.

Tamil Nadu Industrial Investment Corpn. Ltd., Arul Manai, 27, Whites Rd., Madras 600014.

Functions : Help set up industries in Tamil Nadu and Pondicherry, by providing term loans for land, building and machinery.

Tamilnadu Magnesite Ltd., Industrial Estate, Guindy, Madras 600032.

Tamil Nadu Minerals Ltd., 119, Greenways Rd., Fairlands, Salem 636004.

Producers of quality raw magnesite & magnesite products.

Tamil Nadu Mopeds Ltd., 9, Nawab Habibullah Ave., Anderson Rd., Madras 600006.

Tamil Nadu Poultry Devpt. Corpn. Ltd., 561, Anna Salai, Teynampet, Madras 600018.

Tamil Nadu Public Works Engg. Corpn. Pvt. Ltd., No. 129, 'Shivalaya', Commander-in-Chief Rd., Madras 600105.

Mg. Director : S. Shanmugasundaram.

Tamil Nadu Salt Corpn. Ltd., L.L.A. Bldg., 735, Anna Salai, Madras 600002.

Tamil Nadu Small Industries Corpn. Ltd., 4, Whites Rd., Madras 600014.

Functions : Manufacturing a variety of industrial and consumer products in the Public Sector and selling them in India and abroad.

Chairman : Miss M. S. Ramesh, I.A.S. ; *Mg. Director :* T. K. A. Dewan Mohamed, I.A.S.

Tamil Nadu State Construction Corpn. Ltd., 32, Besant Rd., Chokkikulam, Madurai 625002.

Tamil Nadu State Farm Corpn. Ltd., 6, Dr. Radhakrishna Rd., 3rd St., Mylapore, Madras 600004.

Tamil Nadu Steels, Arakkonam 631004 (Unit of TIDCO). Set up with Soviet technical assistance to produce 50,000 tonnes of steel billets per annum utilising the continuous casting technique. First mini steel plant in the public sector in India.

Gen. Manager, Ajay Bhattacharya.

Tamil Nadu Sugar Corpn. Ltd., 474, Anna Salai, Nandanam, Madras 600035.

Functions : To design, construct and run sugar factories in the state.

Tamilnadu Sugarcane Farm Corpn. Ltd., 85, Chinnapalli St., Koothanallur 614101, Thanjavur Dist.

Tamilnadu Tea Plantation Corpn. Ltd., Hill Cottage, Coonoor 643102 (Nilgiris Dist.).
Functions : To employ and resettle the repatriates from Sri Lanka in plantation schemes and to rehabilitate them in the forest areas of the State.

Tamil Nadu Theatre Corpn. Ltd., Institute of Film Technology Bldgs., Adyar, Madras 600020.

Tamil Nadu Textile Corpn. Ltd., Mohana Bhavan, 15, Huzur Rd., Madras 641018.

Tamil Nadu Tourism Devpt. Corpn. Ltd., Shivalaya Bldg., 16, Commander-in-Chief Rd., Madras 600105.
Functions : The Corpn. runs tourist bungalows at Ooty, Hogenekkal, Yercaud, Kodaikanal, Madurai, Tiruchi, Kanyakumari, Tiruchendur, Rameswaram, Mamallapuram (Mahabalipuram), Chidambaram & Thanjavur. Motels are at Ranipet & Ulundurpet. Tourist hotels at Madurai & Coimbatore are under completion. It also conducts coach tours covering Madras City, Mamallapuram, Tirupati and 7-day Tamil Nadu & S. India tour.
Chairman : S. Dorai Govindarajan ; *Mg. Director :* J. R. Ramanathan, I.A.S.

Tamilnadu Transport Devpt. Finance Corpn. Ltd., 99, Greams Rd., Madras 600006.

Tamil Nadu Warehousing Corpn., 4, D. Mudaly St., Chetput, Madras 600031.
Mg. Director : K. Lakshmikanthan Bharathi, I.A.S.

Tamil Nadu Zari Ltd., No. B-8, Mahendra Pallaven St., Mamallan Nagar, Kancheepuram 631501.

Tansi Wool Processing Centre, Vinnamangalam, Minnur 635807, N. Arcot Dist.
Processes tannery wool/hairs to meet the requirements of druggest, carpet and felt manufacturers of Australia and India. The production capacity is 800 tonnes per year.

TRIPURA

Tripura Handloom & Handicrafts Devpt. Corpn. Ltd., Jail Rd., Agartala 799001.

Tripura Ind. Devpt. Corpn. Ltd., Agartala 799001.

Tripura Jute Mills Ltd., Arundhutinagar, Agartala 799003.

Tripura Small Industries Corpn. Ltd., Agartala 799001.
Functions : To aid, advise, finance and promote the interests of small industries in Tripura. The Corporation also runs ASCU Timber Treatment and Seasoning Plant, khandsari sugar mill, one fruit canning factory and a pharmaceutical unit.

UTTAR PRADESH

Allahabad Mandal Vikas Nigam Ltd., 32/14-A, Stanley Rd., Allahabad 211002.
To set up industrial projects based on locally available raw materials, skill & also to provide agricultural inputs such as seed, fertilizer, pesticides, implements, etc. to the cultivators.

Almora Magnesite Ltd., Matela, P.O. Bilhori 263630. Almora Dist.
Dir. & Gen. Manager : R. N. Bhargava.

Auto Tractors Ltd., Pratapgarh 230001.
Functions : Manufacture of medium range agricultural tractors.
Chairman & Mg. Director : S. S. Bisen, I.A.S.

Bundelkhand Concrete Structurals Ltd., 86, Civil Lines, Jhansi 284001.

Gandak Command Area Devpt. Authority, Civil Lines. Gorakhpur 273001.

Indian Turpentine & Rosin Co., Ltd., P.O. Clutterbuckganj 243502. Bareilly Dist.
From crude resin, the company manufactures turpentine and rosin of international repute. The gum of pine trees is being obtained from the Kumaon, Garhwal and Tehri forests of U.P. It is also manufacturing Ester gum, AEA, varnishes and rubber emulsifier from rosin.

Kichha Sugar Co. Ltd., 25B, Ashok Marg, Lucknow 226001.

Kumaon Mandal Vikas Nigam Ltd., Nainital 263001. (Formerly U.P. Hill Devpt. Corpn. Ltd.).
Functions : Development of tourism, industries, construction of tourist rest houses, mining and marketing of the produce of Kumaon Division of the State.

Mohammadabad Peoples' Tannery Ltd., Kalakankar, Lucknow 226001.

Northern Electrical Equipment Ind. Ltd., Kotwara.

Pradeshiya Industrial & Investment Corpn. of U.P. Ltd., Jawahar Bhavan Annexe, Ashok Marg, Lucknow 226001.

Ramganga Command Area Devpt. Authority, 3-A/101, Azad Nagar, Kanpur 208002.

Trans Cables Ltd., Fonsica Estate, Kathgodam 263126, Nainital Dist.
Chairman : G. D. Pant.

Uttar Pradesh Chalchitra Nigam Ltd., B-2, Prem Nagar, Ashok Mrg., Lucknow 226001.
Functions : Caters to the entertainment needs of the people of the economically backward areas through the exhibition of health, educative and creative films in the State.

Uttar Pradesh Devpt. Systems Corpn. Ltd., 9, Sarojini Naidu Marg, P.B. No. 116, Lucknow 226001.

Uttar Pradesh Drugs & Pharmaceuticals Ltd., A-5, Indl. Area, Lucknow 226012.
(A joint enterprise of U.P. and Central Govts.).

U. P. Electronics Corpn. Ltd., 4, Prag Narain Rd., Lucknow 226001. *Subsidiary Company :* Hindustan Computers Ltd., 505, Siddharth, 96, Nehru Place, New Delhi 110024.

U. P. Export Corpn. Ltd., B-27, Sarvodaya Nagar, Kanpur 208005.

U. P. Financial Corpn., 14/88, Civil Lines, Kanpur 208001.

Uttar Pradesh Forest Corpn., B-932, Mahanagar, Lucknow 226006.
Mg. Director : Kuber Nath.

U. P. Hill Devpt. Corpn. Ltd., (See Kumaon Mandal Vikas Nigam Ltd. in this list).

Uttar Pradesh Industrial Consultants Ltd., Handloom Bhawan, G.T. Rd., Kanpur 208002.
A subsidiary of Industrial Development Bank of India, the Company undertakes trade, technological and management consultancy in the State.

U. P. Instruments Ltd., Aishbagh Rd., P. B. 153, Lucknow 226004.

The factory produces water meters of 15 mm, 20 mm and 25 mm sizes, microscopes and pressure gauges in various ranges, magneto and speedometers for scooters.

Uttar Pradesh Jal Nigam, 6, Ranapratap Marg, Lucknow 226001.

Functions : To plan, finance and implement programmes for providing adequate water supply and sewerage facilities in the State ; to arrange for training and research.

Chairman : P. R. Vyas Bhiman, I.A.S. ; *Mg. Director :* B. P. Varma.

U. P. Panchayati Raj Vitt Nigam Ltd., Avabai Mansion, 13, Vidhan Sabha Mrg., Lucknow 226001.

Uttar Pradesh (Pasghim) Ganna Beej Evam Vikas Nigam Ltd., 620/7-8, Rampuram, Muzaffarnagar 251001.

U. P. (Poorva) Ganna Beejevam Vikas Nigam Ltd., 4/1000, New Colony, Deoria 274001.

U. P. Poorvanchal Vikas Nigam Ltd., 33, Civil Lines, Faizabad 224001.

U. P. Rajakiya Nirman Nigam Ltd., Ashok Marg, Lucknow 226001.

Chairman : Surendra Singh ; *Mg. Director :* K. S. Sahni.

U. P. Schedule Caste Finance & Devpt. Corpn. Ltd., 12-B, Mall Avenue, Lucknow 226001.

U. P. Small Industries Corpn. Ltd., B-15, Sarvodaya Nagar, Kanpur 208005.

U. P. State Agro Industrial Corpn. Ltd., 22, Vidhan Sabha Marg, Lucknow 226001.

Activities : Distributes tractors, manufactures various types of agricultural implements and quality cattle and poultry feeds and distributes it to cultivators ; its agro-service centres are providing custom and hiring facilities to cultivators all over the State ; its subsidiary Company U.P. State Horticultural Produce Marketing and Processing Corpn. Ltd., is running 8 fruit processing factories in U.P. It has exported mango juice and other items to U.S.S.R. and other countries of Middle East and W. Europe.

U. P. State Brassware Corpn. Ltd., Sambhali Gate, P. Bag No. 16, Moradabad 244001.

Functions : Aids, finances, promotes and assists the artisans and manufacturers of brass artware/EPNS ware/domestic utensils.

Mg. Director : P. C. Pande.

U. P. State Bridge Corpn. Ltd., 16, Madan Mohan Malviya Marg, Lucknow 226001.

Functions : To construct all types of bridges, irrigation barrages and other hydraulic structures, R.C.C. Conduits, Viaducts etc. and other Civil Engg. Works.

U. P. State Cement Corpn. Ltd., Churk 231206, Mirzapur Dist.

Functions : The Corporation has two cement plants at Churk and Dalla with annual rated capacity of 480,000 tonnes and 400,000 tonnes respectively of cement. It has set up in the joint sector an asbestos sheet manufacturing factory in Lucknow district with 36,000 tonnes per annum capacity and a 140 cu. mtr./hr. oxygen gas factory at Unnao. The Corporation is making headway with its Kajarahat-Chunar Cement Project for installation of 800,000 tonnes clinker capacity at Dalla, in addition to the existing plant, and under it, 1·68 million tonnes per annum PBAS cement capacity at Chunar in Mirzapur district.

Uttar Pradesh State Food & Essential Commodities Corpn. Ltd., 17, Gokhale Marg, Lucknow 226001.

Uttar Pradesh State Handloom Corpn. Ltd., Udyog Bhavan, G. Trunk Rd., Kanpur 208001.

U. P. State Industrial Devpt. Corpn. Ltd., 117/130, Sarvodaya Nagar, Kanpur 208005.

Chairman : Ashok Chandra ; *Mg. Director :* Ravi Mathur.

U. P. State Leather Devpt. & Marktg. Corpn. Ltd., 16/7, Sadar Bhatti Crossing, Agra 282003.

U. P. State Mineral Devpt. Corpn. Ltd., B-52, Mahanagar Extension, Lucknow 226006.

U. P. State Spinning Mills Co. (No. 1) Ltd., B-2, Sarvodaya Nagar, Kanpur 208005.

U. P. State Textile Corpn. Ltd., and its Subsidiary, U. P. State Spg. Mills Co. (No. 1) Ltd. are running eight spinning mills located at Rae Bareli, Akbarpur, Maunath Bhanjan, Barabanki, Jhansi, Kashipur, Sandila and Meerut.

Chairman : Prabhat Kumar ; *Mg. Director :* Mukul Sanwal.

U. P. State Sugar Corpn. Ltd., 25-B, Ashok Marg, Lucknow 226001.

Functions : The Corpn. manages 19 sugar factories located at different places in U.P.

U. P. State Textile Corpn. Ltd., 7-B, Sarvodayanagar, Kanpur 208005.

Functions : The Corpn. has established its own spinning mills.

Chairman & Mg. Director : Prabhat Kumar.

Uttar Pradesh State Tourism Devpt. Corpn. Ltd., 21-A, Vidhan Sabha Mrg., Lucknow 226001.

U. P. Textile Printing Corpn. Ltd., Handloom Bhavan, D. I. Compound, G. T. Rd., Kanpur 208002.

U. P. Tyres & Tubes Ltd., B-17, 'J' Rd., Sector 'C', Mahanagar Extn., Lucknow 226006.

Factory : A4 & A5, Amawa Rd., Indl. Area, Rae Bareli.

Functions : Promoted by Scooters India Ltd. and the U.P. State Industrial Devpt. Corpn. Ltd. for the manufacture of 5 lakh sets of tyres and tubes for two wheelers and three wheelers. Commercial Production will start shortly.

Mg. Director : A. S. Mathur.

WEST BENGAL

Apollo Zipper Co. Pvt. Ltd., 20, British Indian St., Calcutta 700069.

Bengal Immunity Co. Ltd., 44, Gopal Lal Tagore Rd., Calcutta 700036.

Calcutta Metropolitan Devpt. Authority, 3A, Auckland Place, Calcutta 700017.

Functions : Established in 1970 for the development of Calcutta and the metropolitan area.

Durgapur Chemicals Ltd., 6, Little Russel St., Calcutta 700016.

Durgapur Projects Ltd., Regd. Office : Administrative Bldg., Durgapur 713201, Dist. Burdwan. Calcutta Office : 1, Shakespeare Sarani, Calcutta 700071.

Products : B. P. Hard Coke, Nut Coke, Benzene, Industrial Toluol, Motor Benzol, Light Solvent Naphtha, Lux Mas, Carbolic oil, Naphthalene oil, Crude Naphthalene, Anthracene oil, Timber Pickling oil, Sodium Phenolate and Road Tar (Nos. 3 & 4), Gas, Electricity, Water & Spun Pipe.

Chairman & Mg. Director : P. R. Balasubramaniam.

Electro-Medical & Allied Industries Ltd., 4/2, B. T. Rd., Calcutta 700056.

The Company manufactures various types of X-Ray & Bio-Medical equipments.

Kalyani Spinning Mills Ltd., 6A, Raja S. Mullick Square, Calcutta 700013. *Works :* Kalyani and Habras.

Range of Production : Weaving yarn in hanks and cones and sewing thread. *Installed Capacity :* 83,956 spindles.

State Fisheries Devpt. Corpn. Ltd., 43, Shakespeare Sarani, Calcutta 700017.

West Bengal Agro-Industries Corpn. Ltd., 23B, N. Subhas Rd., Calcutta 700001.

West Bengal Ceramic Devpt. Corpn. Ltd., 71, Abinash Chandra Banerjee Lane, Calcutta 700010.

West Bengal Colour Film & Sound Laboratory Corpn. Ltd., 2, Royd St., Calcutta 700016.

West Bengal Dairy & Poultry Devpt. Corpn. Ltd., 16, N. Subhas Rd., Calcutta 700001.

West Bengal Electronics Ind. Devpt. Corpn. Ltd., 225E, Acharya Jagadish Ch. Bose Rd., Calcutta 700020.

Chairman : M. M. Sen ; *Mg. Director :* Commodore P. R. Sen, I.N. (Retd.).

West Bengal Essential Commodities Supply Corpn. Ltd., 11A, Mirza Ghalib St., Calcutta 700016.

West Bengal Financial Corpn., 4, Kiron Sankar Roy Rd. (1st Fl.), Calcutta 700001.

West Bengal Forest Devpt. Corpn. Ltd., 6A, R. S. Mullick Square, Calcutta 700013.

West Bengal Handloom & Powerloom Devpt. Corpn. Ltd., 6A, Raja S. Mullick Square, Calcutta 700013.

West Bengal Industrial Devpt. Corpn. Ltd., 23A, N. Subhas Rd., Calcutta 700001.

Functions : The Corporation provides incentives to medium and large scale industries besides offering financial assistance, like term loan, participating in share capital, etc.

Chairman & Mg. Director : T. Ghosh.

West Bengal Livestock Processing Devpt. Corpn. Ltd., 6A, Raja Subodh Mullick Sqr., Calcutta 700013.

Chairman : Amritendu Mukherji ; *Mg. Director :* P. B. Kundu.

West Bengal Mineral Devpt. & Trdg. Corpn. Ltd., 13, Lindsay St., Calcutta 700016.

West Bengal Pharmaceutical and Phytochemical Devpt. Corpn. Ltd., Ilaco House, 1 & 3, Brabourne Rd., Calcutta 700001.

West Bengal Small Industries Corpn. Ltd., 6A, Raja Subodh Mullick Square (3rd Fl.), Calcutta 700013.

West Bengal State Leather Ind. Devpt. Corpn. Ltd., P-8, Hide Lane, Calcutta 700012.

West Bengal State Minor Irrigation Corpn. Ltd., 5, Mustaque Ahmed St., Calcutta 700016.

West Bengal State Textile Corpn. Ltd., Writers Bldg., Calcutta 700001.

West Bengal State Warehousing Corpn., 6A, R. S. Mullick Square, Chandra Ave., Calcutta 700013.

West Bengal Sugar Ind. Devpt. Corpn. Ltd., 13, Lindsay St., Calcutta 700016.

West Bengal Tourism Devpt. Corpn., Ltd., 3/2, B.B.D. Bag, Calcutta 700001.

Westinghouse Saxby Farmer Ltd., 17, Convent Rd., Entally, Calcutta 700014.

STATE ASSOCIATIONS

ANDHRA PRADESH

COMMERCIAL

Agricultural Machinery and Implements Mfrs. Assocn., Andhra Pradesh, 3-5-822/6, Hyderguda, Hyderabad 500001.

Animal Feeds Mfrs. Assocn., C/o Feeds and Farms, 1/E. P. Rao Nagar, Secunderabad 500025.

Banks' Assocn., Andhra Pradesh Co-op., 5-9-343, A. P. State Co-op. Union Bldg., Gunfoundry, Hyderabad 500001.

Builders' Assocn. of India, C/o Prasad Industries, 5-9-18/9, Saifabad, Hyderabad 500022.

Corrugated Box Mfrs. Assocn., Andhra Pradesh, Shankerlal Bldg., Abid Rd., Hyderabad 500001.

Dyes & Chemical Merchants' Assocn., Secunderabad, C/o Rajeshwar Trading Co., 3-4-23, Mahankali St., Secunderabad 500003.

Electronic Industries Assocn. of Andhra Pradesh, 125, Kavadiguda, Secunderabad 500003.

Estate Industries Assocn., Station Rd., Guntur 522001.

Exporters Assocn., Andhra Produce, 9-13-711, Ramgopal St., Vijayawada 520001.

Fertiliser Co-op. Ltd., Indian Farmers, 5-9-16 1/4, Chapel Rd., Hyderabad 500001.

Film Chamber of Commerce, Hyderabad State, 3464 (4-3-316), Rashtrapathi Rd., Secunderabad 500003.

Film Exhibitors Assocn., Royal Talkies Bldg., Sultan Bazar, Hyderabad 500001.

Foundries Assocn., Andhra Pradesh State, C/o Fedn. of A. P. Chambers of Commerce & Ind., 3-5-822/6, Hyderguda, Hyderabad 500001.

Foundry Engineering Workshops Assocn., Vijayawada, Cement St., Vijayawada 520001.

Gold, Silver, Jewellery & Diamond Merchants Assocn., Andhra Pradesh, Sarafa Bazar, Secunderabad 500003.

Graphite Crucible Mfrs. Assocn., All India, Rajahmundry 533103.

Handloom Weavers Central Co-op. Assocn. Ltd., Hyderabad, 3-5-770, Narayanguda, Hyderabad 500029.

Hides & Skins Merchants' Assocn., Andhra Pradesh, Tarapet, Vijayawada 520001.

Hotels Assocn., Andhra Pradesh, 93, Sarojini Devi Rd., Secunderabad 500003.

Manufacturers' Orgn., All India, Barman Bldgs., Gunfoundry, Hyderabad 500001.

Marketing Federation Ltd., Andhra Pradesh State Co-operative, 5-268, Jambagh Rd., Hyderabad 500001.

Master Printers' Assocn., Andhra Pradesh, Kakinada 533001.

Mica Assocn., Madras, Gudur 524101, Nellore Dist.

Oil & Seeds Exchange Ltd., Hyderabad, 15-2-677, Kishanganj, Hyderabad 500012.

Paper & Board Industries Co-op. Socy. Ltd., Handmade, Outside Gazi Bunda, Hyderabad 500002.

Paper Industrial Co-op. Socy. Ltd., Handmade, Mustaidpura, Hyderabad 500006.

Paper Merchants' Assocn., Andhra Pradesh, 3364, Rashtrapati Rd., Secunderabad 500003.

Pharmaceutical Assocn., Indian, 5-9/35/3, Basheer Bagh Rd., Hyderabad 500029.

Pharmaceutical & Chemical Mfrs.' Assocn., Andhra Pradesh, 3-5-1102, Narayanguda, Hyderabad 500029.

Pesticides Formulators' Assocn., Andhra Pradesh, Vijay & Co. Bldg., Main Rd., Guntur 522001.

Productivity Council, Andhra Pradesh, 10-1-200, Mahaveer Mrg., P.B. No. 21, Hyderabad 500004.

Publishers & Booksellers Assocn. of Andhra Pradesh, Vijayawada 520002.

Rig Owners Assocn., Andhra Pradesh, 1-2-333/B, Gaganmahal Rd.. Hyderabad 500029.

Roads & Transport Devpt. Assocn., Indian, C/o Premier Tyres Ltd., 5-5-489, Mukarram Jahi Rd., Hyderabad 500001.

Small Industries Assocn., Andhra Pradesh, Convent St., Vijayawada 520001.

Soap Mfrs.' Assocn., Andhra Pradesh, 15-1-269, Goshamahal Rd., Topkhana, Hyderabad 500001.

Spg. Mills Ltd., Andhra Pradesh State Fedn. of Co-op., Church of S. India Bldg., Tilak Rd., Hyderabad 500001.

Steel Re-Rollers Assocn., Andhra Pradesh, 3-5-822/6, Hyderguda, Hyderabad 500001.

Stock Exchange, Hyderabad, Shahrah-E-Osmani, Hyderabad 500001.

Sugar Factories Ltd., Andhra Pradesh State Fedn. of Co-op., 3-4-760, Barkatpura, Hyderabad 500027

Textile Assocn., Andhra Pradesh Fedn. of, 344, Ramgopalpet, Secunderabad 500003.

Tobacco Assocn., Indian, Srinivasrao Thota, G. T. Rd., Guntur 522004.

CULTURAL, SOCIAL AND PROFESSIONAL

Arogyavaram Devpt. Socy., Post Box 13, Madanapalle 517325, Chittoor Dist. A community devpt. project sponsored by E.Z.E. Bonn, West Germany.

Astronomical Socy. of India, C/o Deptt. of Astronomy, Osmania Univ., Hyderabad 500007.

Ayurveda & Homoeopathy, Boards for, 3-3-79, Kutab Guda, Hyderabad 500027.

Ball Badminton Fedn. of India, 'Maman', Saifabad, Hyderabad 500004.

Chartered Accountants of India, Instt. of, C/o FAPC I, 3-5-822/6, Hyderguda, Hyderabad 500001.

Child Welfare, Andhra Pradesh State Council for, 6-3-1247, Somajiguda, Raj Bhavan Rd., Hyderabad 500482.

Child Welfare, Indo-Dutch Project for (Stichting Nederlands Kinderhulp Plan), 6-3-885, Somajiguda, Hyderabad 500029.

Children's Aid Socy., Hyderabad, R. K. Home, 3-6-436, Himayatnagar, Hyderabad 500008.

Children's Welfare Socy., Helpless, 10-1-23, Canal Rd., Narsapur 534275, W. Godavari Dist.

Cricket in India, Board of Control for, Jaffer Ali Bagh, Somajiguda, Hyderabad 500482.

Dairy Development Co-op. Federation, Andhra Pradesh, Lalapet, Hyderabad 500789.

Dowsers, Indian Socy. of, 1-8-7/13, Sarvodaya Colony, Chikadpally, Hyderabad 500020.

Engineers (India), Insttn. of (A.P. Centre), Khairatabad, Hyderabad 500004.

Football Assocn., Andhra Pradesh, Lal Bahadur Stadium, Fateh Maidan, Hyderabad 500001.

Ford Foundation, 6-3-1109/11, Raj Bhavan Rd., Hyderabad 500004.

Geographical Socy., Deccan, 120-A, Nehru Nagar, Secunderabad 500026.

Hockey Assocn., Hyderabad, Gymkhana Grounds, Secunderabad 500003.

Indo-Arab Assocn., Ali Cottage, Mukarram Jahi Rd., Hyderabad 500001.

Indo-Soviet Philatelic Socy., 17-5-208, Osmania Masjid, Bibi Alawa, Hyderabad 500024.

Krishna Consciousness, International Socy. for, 14-3-332/16-1, Gyan Bagh Colony, Hyderabad 500012.

Management Assocn., Hyderabad, 126, Sarojini Devi Rd., Secunderabad 500003.

Materials Management, Indian Assocn. of, C/o Administrative Staff Coll. of India, Bella Vista, Hyderabad 500004.

Medical Assocn., Indian, IMA Bldg., Sultan Bazar, Hyderabad 500027.

Metropolitan Project, Hyderabad, 2-2-11/1, Bagh Amberpet, Hyderabad 500013.

Oil Technologists' Assocn. of India, Regional Research Laboratory, Hyderabad 500009.

Pen-friends League, Universal, 545/3, Dabirpura, Hyderabad 500024.

Red Cross Socy., Indian, Ramgopalpet, Secunderabad 500003.

Road Transport, Indian Instt. of (Andhra Pradesh Branch), C/o P. Jeer, C. C. of Stores, A.P. State Road Transport Corpn., Musheerabad, Hyderabad 500020.

Sahitya Akademi, Andhra Pradesh, Kala Bhavan, Saifabad, Hyderabad 500004.

Sai Prachar Sabha, World, 6-2-941/3, Khairatabad, Hyderabad 500004.

Sangeeta Nataka Akademi, Andhra Pradesh, Kala Bhavan, Saifabad, Hyderabad 500004.

Social Welfare, Indian Council of, Red Hills, Hyderabad 500004.

St. John Ambulance Assocn., Medical Service Dte. Bldg., Sultan Bazar, Hyderabad 500001.

Telugu Academy, 3-5-895, Himayatnagar, Hyderabad 500029.

Telugu Bhasha Samithi, Opp. Engg. Coll., Osmania Univ. Campus, Hyderabad 500007.

Theosophical Socy., Telugu Fedn., Chodavarma 531036.

Tuberculosis Assocn. of Andhra Pradesh, 3-4-760, Barkatpura, Hyderabad 500027.

Water Diviners Socy. (see Indian Socy. of Dowsers in this list).

ASSAM & MEGHALAYA

COMMERCIAL

Cottage Industries Assocn., Meghalaya, C/o Ramani Mohan Kar, Jail Rd., Shillong 793002.

Indl. Estate Assocn., Gauhati, Bamuni Maidan, Gauhati 781021.

Manufacturers Assocn., Assam, Gopinath Bardoloi Rd., Silpukhuri, Gauhati 781003.

Manufacturers' Organisation, All India, Udyog Nagar, Makum Rd., Tinsukia 786125.

Master Printers, North Eastern Fedn. of, Dr. J. C. Das Rd., Gauhati 781001.

Plywood Mfrs. Assocn., Assam, Parbatia Colony, Tinsukia 786125.

Productivity Council, Assam, Zoo Rd. (West), Gauhati 781001.

Publishers & Booksellers Assocn., Assam, C/o Barua Agency, Dighali Pukhuri Par, Gauhati 781001.

Road & Transport Devpt. Assocn., Indian, C/o Firestone Tyre & Rubber Co. of India Ltd., G.S. Rd., Dispur, Gauhati 781005.

Small Industries Assocn., Meghalaya, Shillong 793001.

Small Scale Industries Assocn., North East, Ind. Estate, Jorhat 785008.

Tea Chest and Plywood Mfrs. Assocn., East India, Margherita 786181.

CULTURAL, SOCIAL AND PROFESSIONAL

Engineers (India), Insttn. of, Panbazar, Overbridge East Lane, Gauhati 781001.

Medical Assocn., Indian, Assam Medical Coll., Dibrugarh 786001.

Red Cross Socy., Indian, M.C. Rd., Uzanbazar, Gauhati 781001.

Sangeet Natak Academy, Assam, Kismet, Upland Rd., Shillong 793001.

Social Welfare, Indian Council of, Raj Bhavan Rd., Shillong 793001.

BIHAR

COMMERCIAL

Agriculture Mktg. Board, Bihar State, Abhai Bhavan, Fraser Rd., Patna 800001.

Industries Assocn., Bihar, Sinha Library Rd., Patna 800001.

Leather & Leather Goods Mfrs. Assocn., Bihar, C/o B. Pandey, Bankmen Colony, Kankarbagh, Patna 800016.

Marketing Union Ltd., Bihar State Co-op., West Lawn, Patna 800001.

Mica Industries Assocn., Giridih 815301.

Mosaic Tiles Mfrs. Assocn. of Bihar, C/o Mosaic Tiles Cement Products, Rd. No. 13, Rajendra Nagar, Patna 800016.

Paper Merchants' Assocn., Bihar, Yadav Bhavan (Alam Kothi), Nayatola, Patna 800004.

Productivity Council, Patna, Fraser Rd., Patna 800001.

Soap Mfrs. Assocn., Bihar, Nawala Bahadur Rd., Patna 800003.

CULTURAL, SOCIAL AND PROFESSIONAL

Chartered Accountants of India, Instt. of, N-85/7, Telco Colony, Jamshedpur 831004.

Engineers (India), Insttn. of, Hardinge Rd., Patna 800001.

Industrial Supervisory Management, Instt. of, Tisco Staff Trg. Institute, Jamshedpur 831001.

Materials Management, Indian Assocn. of, C/o Jamshedpur Productivity Council, 39/41, TISCO Guest House Annexe, Jamshedpur 831001.

Medical Assocn., Indian, IMA Bldg., Medical Assocn. Rd., Patna 800004.

Personnel Management, Indian Instt. of, 36, Tisco Guest House Annexe, Jamshedpur 831001.

Pharmaceutical Assocn., Indian, C/o Pharmacy School, Patna 800007.

Red Cross Socy., Indian, Red Cross Bhavan, North Gandhi Maidan, Patna 800001.

Social Welfare, Indian Council of, Dr. A. Besant Rd., Patna 800004.

Theosophical Fedn., Bihar, A. Besant Rd., Patna 800004.

DELHI

COMMERCIAL

Acrylic Mfrs. Assocn., 2596, Nai Sarak, Delhi 110006.

Agricultural Machinery Assocn. of India, B-100, Defence Colony, New Delhi 110024.

Air-Conditioning & Refrigeration Assocn., All India, 9A, Connaught Place, New Delhi 110001.

Automobile Assocn. of Upper India, Nahar House, 14-F, Connaught Place, New Delhi 110001.

Automobile Spare Parts Dealers Assocns., Fedn. of All India, 3620/21, Netaji Subhas Mrg., New Delhi 110002.

Ayurvedic and Siddha Medicines, Fedn. of Mfrs. of, 1331, Chandni Chowk, Delhi 110006.

Biscuit Mfrs. of India, Fedn. of, 17, Alipur Rd., Delhi 110054.

Booksellers and Publishers Assocn., All India, 17-L, Connaught Circus, New Delhi 110001.

Brick and Tile Mfrs. Fedn., All India, 1-E/21, Jhandewalan Extn., New Delhi 110055.

Builders' Assocn. of India, Sunlight Bldg., First Flr., Asaf Ali Rd., New Delhi 110002.

Cable & Conductor Mfrs. Assocn. of India, Alliance House, C-20/B, Green Park Extn., New Delhi 110016.

Cables & Conductors Mfrs. Assocn., All India Small Scale, 61/34, New Rohtak Rd., New Delhi 110005.

Chemical Importers and Dealers Assocn., 1309, Tilak Bazar, Delhi 110006.

Consumers' Co-op. Fedn. Ltd., National, 92, Nehru Place, New Delhi 110024.

Co-operative Union Ltd., Indian, 35A D. S., N. Rajindra Nagar, New Delhi 110060.

Co-operative Union of India, National, 3, Siri Indl. Area, Panchsahila Mrg., New Delhi 110016.

Corrugated Box Mfrs. Assocn., Northern India, A-37, Phase II, Narain Indl. Area, New Delhi 110028.

Cottage Industries Assocn., Central, Janpath, New Delhi 110002.

Cottage & Small Industries, Junior Chamber of, E 49/1, Phase-II, Okhla Indl. Estate, New Delhi 110020.

Cotton Textile Mills Assocn., Northern India, Phelps Bldg., 9-A, Connaught Place, New Delhi 110001.

Dairy Assocn., Indian, IDA House, Sector IV, R. K. Puram, New Delhi 110022.

Distillers' Assocn., All India, 805, Siddharth, 96, Nehru Place, New Delhi 110024.

Electric Motors Mfrs. Assocn., C/o Ajax Electricals, 18, D.L.F. Indl. Area, New Delhi 110015.

Electrical Appliances Mfrs. Assocn., 28, Malka Ganj, Delhi 110007.

Electronic Component Inds. Assocn. (ELCINA), 408, Sahyog, 58, Nehru Place, New Delhi 110019.

Electronic Components Mfrs. Assocn., All India Small Scale, Phase III, 239, Okhla Indl. Estate, New Delhi 110020.

Employers, All India Orgn. of, Federation House, New Delhi 110001.
To promote & protect the indl. devpt. of India by studying various problems relating to trade, industry & labour and advising the Central & State Govts. suitably.

Employers' Fedn. of India (N. Region), Phelps Bldg., 9-A, Connaught Place, New Delhi 110001.

Engineering Industry, Assocn. of Indian, 172, Jorbagh, New Delhi 110003.

Exercise Book Mfrs. Assocns., All India Fedn. of, R-63, Greater Kailash I, New Delhi 110048.

Export Assocn., International, D-22, Anand Niketan, New Delhi 110021.

Export Information, Instt. of, D-10, Haus Khas, New Delhi 110016.

Export Orgns., Fedn. of Indian, Allahabad Bank Bldg., 17, Parliament St., New Delhi 110001. To serve as a common forum for exporting interests in India & to render common services in respect of the activities of its constituent members.

Fertiliser Assocn. of India, Near J. Nehru University, New Delhi 110057.

Fertiliser Co-op. Ltd., Indian Farmers, 54, Nehru Place, New Delhi 110024. A multiunit Co-op. Society.
Objects : Large scale manufacture of chemical fertilisers. Operating Plants at Kalol, Kandla in Gujarat State. Under construction : Ammonia/Urea Plant at Phulpur in U.P. and expansion of Kandla Plant. Also Malathion Plant at Kalol. Presently in advance planning is Ammonia/Urea Plant at Surat based on Bassein Gas.

Fishery Industries, Assocn. of Indian, Punjab, Haryana & Delhi Chamber of Commerce & Industry, 9-A, Connaught Place, New Delhi 110001.

Food Preservers' Assocn., All India, 2254, Rajguru Rd., New Delhi 110055.

Foodgrain Dealers' Assocns., Fedn. of All India, 3979, Naya Bazar, Delhi 110006.

Galvanizers Assocn., Indian Hot Dip, 7, Shopping Centre, B-6, Safdarjung Enclave, New Delhi 110016.

Garments Exporters Assocn., 609, Ashoka Estate, 24, Barakhamba Rd., New Delhi 110001.

Glass Mfrs.' Fedn., All India, 812, New Delhi House, Barakhamba Rd., New Delhi 110001.

Handicrafts Exporters' Assocn., 32, Park Area, Karol Bagh, New Delhi 110005.

Hotel and Restaurant Assocns. of India, Fedn. of, 503/56, Nehru Place, New Delhi 110024.

Industrial Co-ops., National Fedn. of, 903, Vikram Tower, Rajindra Place, Pusa Rd., New Delhi 110008.
Exports & inland mktg. of co-optve. products. Import of raw materials.

Instrument Mfrs. and Dealers Assocn., All India, 26, Asaf Ali Rd., New Delhi 110002.

Iron Trunks Mfrs. Assocn., Delhi, 2604, Mohla Nyarian, G. B. Rd., Delhi 110006.

Krishak Bharati Co-operative Ltd. (KRIBHCO), Red Rose House, 49-50, Nehru Place, New Delhi 110019. A multi unit co-op. society established for setting up of a giant fertiliser complex at Hazira (Surat) to produce 1·45 million tonnes of urea per year.

Lead/Zinc Information Centre, Indian, 7, Shopping Centre, Block B-6, Safdarjung Enclave, New Delhi 110016.

Lime Mfrs. Assocn. of India, 10, Alipur Rd., Delhi 110054.

Machinery Merchants' Assocn., General, 76, Shraddhananda Mrg., Delhi 110006.

Manufacturers, Fedn. of Indian, 6516, Qutab Rd., New Delhi 110055.

Manufacturers Orgn., All India, Arya Bhavan, Jorbagh, New Delhi 110003.

Master Printers, All India Fedn. of, E-14, Third Flr., South Extn., Part II, New Delhi 110049.

Metal Forging Assocn., All India, 2-E/14, Jhandewalan Extn., New Delhi 110055.

Mineral Industries, Fedn. of Indian, 301, Bakshi House, 40-41, Nehru Place, New Delhi 110019.

Motor Unions Congress, All India, 16-A, Asaf Ali Rd., New Delhi 110002.

Musical Instruments Mfg. Co-op. Industrial Socy. Ltd., Modern, 342, Dariba Kalan, Delhi 110006.

Nylon Hosiery Mfrs. Assocn., Delhi State, 5509, Basti Harphool Singh, Sadar Thana Rd., Delhi 110006.

Oil Assocn. of India, Essential, 565, Pahar Ganj, New Delhi 110055.

Packing Box Mfrs. Assocn., C/o B. S. Sanghri, 8C/1, New Rohtak Rd., New Delhi 110005.

Paint Merchants' Assocn., Delhi, C/o Lalit & Co., Fatehpuri, Delhi 110006.

Pest Control Assocn. of India, National, 1620, Bahadurgarh Rd., Delhi 110006.

Pesticides Assocn. of India, 20, Ring Road, Lajpatnagar IV, New Delhi 110024.

Pharmaceutical Assocn., Indian, 16, Marina Arcade, Connaught Circus, New Delhi 110001.

Plastic Inds. Assocn., Northern India, 111, Ramnagar Mkt., Qutab Rd., New Delhi 110055.

Plastics and Rubber Instt. — Indian Section (Plastics), C/o J. N. Singh, J. Patel & Co. (Engg.) Private Ltd., 207, Surya Kiran Bldg., 19, Kasturba Gandhi Mrg., New Delhi 110001.

Polythene Film Mfrs. Assocn., C/o Balkishan & Co., 18, Najafgarh Rd., New Delhi 110015.

Ports Assocn., Indian, 19, Lodi Rd., Institutional Area, New Delhi 110003.

Productivity Council, Delhi, 1E/2, Jhandewalan Rd., New Delhi 110055.

Productivity Council, National, Productivity House, Lodi Rd., New Delhi 110003. NPC has nine Regnl. Directorates at Ahmedabad, Chandigarh, Bangalore, Bombay, Calcutta, Kanpur, Delhi, Gauhati & Madras and two Sub-Regnl. Offices at Bhopal & Patna.

Publishers, Federation of Indian, M-138, Conn. Circus, New Delhi 110001.

Publishers & Booksellers Assocns. in India, Fedn. of, 4833/24, Govind Lane, Ansari Rd., New Delhi 110002.

Radio & Electronics Assocn., All India, 21, Ansari Rd., Daryaganj, New Delhi 110002.

Radio & Sound Equipment Mfrs.' Assocn., Small Scale, Radio Spares, Bhagirath Palace, Chandni Chowk, Delhi 110006.

Rang Rasayan Vyapar Sangh, Katra Tobacco, Tilak Bazar, Khari Baoli, Delhi 110006.

Refrigeration Trades Assocn., C/o National Refrigeration Works, 3, Netaji Subhash Mrg., New Delhi 110002.

Risk Capital Foundation, 70, Janpath, New Delhi 110002. To provide soft loans to new entrepreneurs, particularly technologists & professionals towards part of promoters' contribution by way of equity capital for promoting medium sized industrial projects.

Road Transport Undertakings, Assocn. of State, Ashoka Estate, 24, Barakhamba Rd., New Delhi 110001.

Roads Congress, Indian, Jamnagar House, Mansingh Rd., New Delhi 110011.

Roads & Transport Devpt. Assocn., Indian (N. Region), Phelps Bldg., 9-A, Conn. Place, New Delhi 110001.

Roller Flour Millers' Fedn. of India, 604/605, Deep Shikha, Rajindra Place, New Delhi 110008.

Rolling Stock Export Assocn., Chander Lok Bldg., Janpath, New Delhi 110002.

Science Apparatus Dealers' Assocn., C/o Sindsagar Industries, Inside Sultansingh Bldg., K. Gate, Delhi 110006.

Scientific Equipment Trade Assocn., C/o CZ Instruments (India) P. Ltd., 4/2B, Jawala Mansion, Asaf Ali Rd., New Delhi 110002.

Sheep Casing Exporters' Assocn., 7231, Basti Chitanki, Qassab Pura, Sadar Bazar, Delhi 110006.

Shippers Council, All India, Federation House, New Delhi 110001.

Silicate Mfrs. Assocn., Delhi, Chemical House, 3113, Ranjit Nagar, New Delhi 110008.

Small Industries of India, Fedn. of Assocns. of, 23 B2, New Rohtak Rd., New Delhi 110005.

Steel Furnace Assocn. of India, 3/D, Vandana, 11, Tolstoy Marg, New Delhi 110001.

Steel Re-rollers Assocn., All India, 16/783, D. B. Gupta Rd., New Delhi 110055.

Steel Re-rolling Mills Assocn., C-50, Anand Niketan, New Delhi 110023

Stock Exchange Assocn. Ltd., Delhi, 3 & 4/4B, Asaf Ali Road, New Delhi 110002

Sugar Factories Ltd., National Fedn. of Co-op., Vaikunth, 82-83, Nehru Place, New Delhi 110019.

Sugar Mills Assocn., Indian, Sugar House, 39, Nehru Place, New Delhi 110024.

Tractor Earthmoving & Construction Equipment Distributors' Assocn. Ltd., 172, Jor Bagh, New Delhi 110003.

Vegetable Oil Traders Assocn., Delhi, 73, Memwali Gali, Katra Baryan, Delhi 110006.

Wax Candle Mfrs. Assocn., Delhi, 4361/1, Gali Bhuji, Pahari Dhiraj, Delhi 110006.

Zinc Alloy Die Casting Socy., 7, Shopping Centre, Block B-6, Safdarjung Enclave, New Delhi 110016.

CULTURAL, SOCIAL AND SPORTS

Age-Care (Regd.), A-99, Defence Colony, New Delhi 110024. An all-India body set up with the sole aim of delivering comprehensive welfare services to the lonely, infirm and aged people.

Anglo-Indian Assocn., All India, Bombay Life Bldg., Connaught Circus, New Delhi 110001.

Badminton Assocn., Delhi State, 208/5, D. B. Gupta Rd., New Delhi 110055.

Bahai's of India, National Spiritual Assembly of, 6, Canning Rd., New Delhi 110001.

Bal Bhavan Socy., Kotla Rd., New Delhi 110001.

Better Life, International Orgn. for, U-19, Green Park Extn., New Delhi 110016.

Blood Bank Orgn., 4, Pusa Rd., New Delhi 110005.

Boy Scouts Assocn., All India, 7, Jangpura B Extn., Mathura Rd., New Delhi 110014.

Cattle Welfare Socy., All India, Cement Kuti, 58, Rangpura, New Delhi 110005.

Child Welfare, Indian Council for, 4, Rouse Avenue, New Delhi 110002.

Children, Socy. for Advancement of, 17, DDA Colony, Ramjinagar, Delhi 110008.

Children's Film Socy. — India, Sapru House, New Delhi 110001.

Christian Council of India, National, N21, Greater Kailash, New Delhi 110048.

Consumer Council of India, (an All India Orgn.), 27, Safdarjang Rd., New Delhi 110011. To promote, organise & assist in measures for consumer protection ; to study consumer problems and evolve remedies.

Correctional Services, Central Bureau of, Block-1, Wing 7, Ramakrishnapuram, New Delhi 110022.

Cruelty to Animals, Socy. for the Prevention of, Qudesia Rd., Delhi 110006.

Cultural Exchange Orgn. (India), International, M-138, Aggarwal Bldg., Con. Circus, New Delhi 110001.

Cultural Forum, International, 2653, Roshanpura Amirchand Mrg., Delhi 110006.

Cultural Orgn., National, A-20/1, Lodi Rd., New Delhi 110003. An all India cultural body to promote the advancement of our language, literature and art.

Cultural Relations, Indian Council for, Azad Bhavan, Indraprastha Estate, New Delhi 110002. Regnl. offices in Bombay, Bangalore, Calcutta, Madras, Varanasi and Chandigarh and cultural centres in Suva (Fiji), Georgetown (Guyana) and Paramaribo (Surinam). *Periodicals : Indian Horizons* (English quarterly), *Cultural News from India* (Illustrated quarterly digest of cultural events in the country), *Thaqafatul-Hind* (Arabic quarterly), *Papeles de la*

India (Spanish quarterly); *Rencontre Avec l' Inde* (French quarterly); *ICCR Newsletter* (English quarterly for foreign students); *Africa Quarterly* and *Gaganaanchal* (Hindi quarterly). The Council administers the Jawaharlal Nehru Award for the promotion of peace and intnl. understanding.

Cultural Relations, World Council for, 4517, Daiwara A. Chand Mrg., Delhi 110006.

Cultural Socy., International, 4, Rajdoot Marg, Chanakyapuri, **New Delhi 110021.**

Culture, International Academy of Indian, J-22, Hauzkhas Enclave, New Delhi 110016.

Culture Centre, International, M-1, Kanjan Junga Bldg., Barakhamba Rd., New Delhi 110001.

Depressed Classes Fedn. of India, 6548, Qutab Rd., New Delhi 110055.

Drama and Asian Theatre Instt., National School of, Rabindra Bhavan, Ferozeshah Rd., **New Delhi 110001.**

Economic & Cultural Understanding, Asian Fedn. for, 151E, Kamal Nagar, New Delhi 110007.

Family Planning Assocn., New Delhi, F/44, N.D.S.E. Part I, New Delhi 110049.

Family Planning Foundation, 198, Golf Links, New Delhi 110003.

Feroze Gandhi Memorial Socy., All India, House 19, Village Sultanpur, New Delhi 110030.

Film Societies of India, Fedn. of, Room No. 3, Northern Complex, Ramkrishna Ashram Marg, **New Delhi 110001.**

Fine Arts & Crafts Socy., All India, Old Mill Rd., Rafi Marg, New Delhi 110001.

Gandhi Smarak Nidhi, Rajghat, New Delhi 110002.

Harijan Sevak Sangh, All India, Kingsway, Delhi 110009.

Helpage India, Room No. T1, Mercantile Bank Ltd., 28, Kasturba Gandhi Marg, New Delhi 110001. A society to help old people.

Heritage Society, Indian, F-12, Connaught Place, New Delhi 110001. To support the efforts for protecting & improving the environment in general, and preserve historic & cultural monuments and their environs.

Hockey Assocn., Delhi, Gate 7, Shivaji Stadium, New Delhi 110001.

Indo-Arab Socy., 4-A, Telegraph Lane, New Delhi 110001.

Indo-German Societies in India, Fedn. of, 1/84, Shanti Niketan, New Delhi 110021.

Indo-Iran Socy., 18, Tilak Marg, New Delhi 110001.

Indo-Palestine Solidarity Socy., 4162, Urdu Bazar, Delhi 110006.

Indo-Soviet Cultural Socy., Jamna Bhavan, Asaf Ali Rd., New Delhi 110002.

International Centre, India, 40, Lodi Estate, New Delhi 110003.

International Devpt., United States of America Agency for. (AID), American Embassy, Chanakyapuri, New Delhi 110021.

Japan Information Centre, 10, K. Gandhi Marg, New Delhi 110001.

Jnanpith, Bharatiya, B-45, Con. Place, New Delhi 110001.

Kathak Kendra (Instt. of Kathak), Bahawalpur House, Bhagwan Dass Rd., New Delhi 110001.

Krishak Samaj, Bharat, A1, Nizamuddin West, New Delhi 110013

Library Assocn., Indian, C/o Delhi Public Library, S. P. Mukherji Marg, Delhi 110006

Mahabodhi Socy. of India, Buddha Vihara, Mandir Mrg., New Delhi 110001.

Mahila Sangh, Bharatiya Grameen (National Assocn. for Rural Women), 9/104, Jamnagar Hutments, Block II, Mansingh Rd., New Delhi 110011. (1) Intensive rural trg. programmes for women in Leadership, Family Plng., Agri., Nutrition & Child Health and Adult Edn.; (2) Regular rural welfare programme for women and children to assist in the betterment of their standard of living; (3) Important ednl. and motivational programmes with the Govt. Deptts. as partners in order to give the rural women equal participation in the national devpt. and reconstruction. Under our different welfare programmes, so far we have trained more than 66,000 rural women and have covered 7,000 villages.

Max Mueller Bhavan, Indo-German Cultural Centre, **3, K. Gandhi Mrg., New Delhi 110001.**

Mountaineering Foundation, Indian, 18, Q Block, New Delhi 110011.

Music, Dance & Dramatics, Delhi Instt. of, V-13, **Rajouri Garden, New Delhi 110015.**

Natya Sangh, Bharatiya, 34, New Central Mkt., Connaught Circus, New Delhi 110001.

Nomadic Tribes, All India Assocn. of Servants of, Rajendra Ashram, Patpar Ganj, New Delhi 110031.

Peace Council, All India, 6, Jamuna Bhavan, Asaf Ali Rd., New Delhi 110002.

Peace & Solidarity Orgn., All India, 201, New Delhi House, 27, **Barakhamba Rd., New Delhi 110001.**

Penfriends, Nation's League of, 9E, Theatre Communication Bldg., Con. Circus, New Delhi 110001.

Prayer Fellowship, All India, Q3, Green Park, New Delhi 110016.

Ramakrishna Mission, Ramkrishna Ashram Mrg., New Delhi 110001.

Ramayana Socy., International, C/o Dr. Kelkar, Secy., Sahitya Akademi, Rabindra Bhavan, Ferozeshah Road, New Delhi 110001.

Red Cross Socy., Indian, 1, **Red Cross Rd., New Delhi 110001.**

Religions, World Fellowship of, 12, S. Bhagat Singh **Mrg., New Delhi** 110001.

Rifle Assocn. of India, National, 82, **Theatre Communication Bldg.,** Connaught Circus, **New Delhi 110001.**

Safety Assocn., National, M-89, Greater Kailash, New **Delhi 110048.**

Sahitya Akademi (National Academy of Letters), Rabindra Bhavan, 35, Ferozeshah Rd., New Delhi 110001. The Akademi awards prizes for outstanding literary works in 22 Indian languages, including English. Journals: (1) Bi-monthly *Indian Literature* (English), (2) Annual *Samskrita Pratibha* (Sanskrit), (3) Quarterly *Samakalin Bharatiya Sahitya* (Hindi).

Saint Paul, Socy. of, A/449, Defence Colony, New Delhi 110024.

Sangeet Natak Akademi, Rabindra Bhavan, 35, Ferozeshah Rd., New Delhi 110001. An autonomous body at the national level, fully financed by the Govt. of India, is primarily concerned with preservation and promotion of various forms of tribal, folk and classical performing arts. It has a comprehensive programme of documentation of various art forms, particularly those lesser-known forms which are seriously threatened with extinction. It also gives grants to voluntary organisations, promotes research, aids and runs trg. instns., organises seminars, festivals, and publishes as well as subsidizes publications on music, dance and drama.

Sant Nirankari Mandal, Sant Nirankari Colony, Delhi 110009. To promote the feelings of Universal Brotherhood & equality amongst all human beings without caste, creed and colour through realisation of God & to develop equal respect for all the prophets and their holy scriptures.

Scheduled Castes, Scheduled Tribes and Other Backward Classes, All India Fedn. of, 118, Than Singh Nagar, New Delhi 110005.

Scouts Assocn., All India Boy, 7, Jangpura B Extn., Mathura Rd., New Delhi 110014.

Scouts and Guides, Bharat, 16, M. Gandhi Rd., Indraprastha Estate, New Delhi 110002.

Scouts & Guides, Bharat (Delhi State), 113A, Daryaganj, New Delhi 110002.

Servants of the God, Socy. of, Yeshwant Place, Satya Mrg., Chanakyapuri, New Delhi 110021.

Servants of the People Socy., Lajpat Bhavan, Lajpat Nagar, New Delhi 110024.

Sevak Samaj, Bharat, 22, Sardar Patel Rd., Chanakyapuri, New Delhi 110021. Its activities are preprimary schools, schools for mentally retarded children, charitable dispensaries, night shelters, women craft centres, Gandhi krishi seva ashrams, leper preventoria, relief reconstruction programme, youth work camps, literacy drive, family plng., prohibition, anti-adulteration wherever necessary. Also member of Co-ordinating Cttee. for Intnl. Voluntary Service (UNESCO), Paris.

Sikhs' Fedn., All India, 13-F, Ansari Mkt., New Delhi 110002.

Social & Economic Welfare Socy. of India, K1/49, Model Town, Delhi 110009.

Social Guidance, Instt. for, 2-F, Lajpat Nagar, New Delhi 110024.

Social Health in India, Assocn. for, 4, D. D. Upadhyaya Mrg., New Delhi 110002. To eradicate prostitution & other evils in relation thereto. To establish, maintain & assist Protective Homes, Health Clinics for diagnosis, treatment and mass edn. for venereal diseases control, Family Life Instts. and Student Counselling Centres. To promote understanding and edn. in respect of sex relations to raise the standard of character and encourage healthy family relations.

Social Welfare, Indian Council of, 6, Lytton Lane, New Delhi 110001.

Sports, All India Council of, C/o Ministry of Education, Shastri Bhavan, New Delhi 110001.

Sports, National Instt. of, National Stadium, New Delhi 110011.

St. John Ambulance Assocn. and St. John Ambulance Brigade, 1, Red Cross Rd., New Delhi 110001. *Objects:* Imparts trg. in First Aid, Home Nursing, Hygiene & Sanitation, Mothercraft & Child Welfare.

Activities: To render first aid to persons in cases of accidents or emergencies. Gives direct support to health services and offers relief to suffering, sick & injured people in peace & war.

Students' Fedn., All India, 4/7, Asaf Ali Rd., New Delhi 110002.

Students Union of India, National, 7, Jantar Mantar Rd., New Delhi 110001.

Swami Sivananda Cultural Assocn., Sivananda Bhavan, Amar Colony, Lajpat Nagar IV, New Delhi 110024.

Table Tennis Fedn. of India, National Stadium, New Delhi 110001.

Temperance Socy. of India, National, 11, Hailey Rd., New Delhi 110001.

Tennis Assocn., All India Lawn, 7/3, Asaf Ali Rd., New Delhi 110002.

Theosophical Fedn., B-605, Curzon Rd. Hostel, New Delhi 110001.

United Nations Assocns, Indian Fedn. of, 12, Janpath Barracks 'A', New Delhi 110002.

University Students of India, National Council of, F13, NDSE., Part II, New Delhi 110049.

Waddar Samaj Sangh (Regd.), Akhil Bharat, 128, North Ave., New Delhi 110001.

Wild Life, Indian Board for, Deptt. of Agriculture, Krishi Bhavan, New Delhi 110001.

Women Food Council, All India, Janpath, New Delhi 110002.

Women, National Fedn. of Indian, 1002, Ansal Bhavan, 16, K. Gandhi Mrg., New Delhi 110001.

Women's Conference, All India, Sarojini House, 6, Bhagwandass Rd., New Delhi 110001. To work actively for the general progress & welfare of women & children and to help women appreciate & enjoy fundamental rights conferred on them by the Constitution of the Indian Union, etc., etc.

World Affairs, Indian Council of, Sapru House, Barakhamba Rd., New Delhi 110001.

YMCA's of India, National Council of, Massey Hill, Jai Singh Rd., New Delhi 110001.

Youth, United Nations Council of, 10, Sunder Nagar, New Delhi 110003.

Youth Centre, International, (Vishwa Yuvak Kendra), Circular Rd., Chanakyapuri, New Delhi 110021.

Youth Fedn., All India, 4/7, Asaf Ali Rd., New Delhi 110002.

Youth Welfare Socy., 11, J. H. Bldg., Chandni Chowk, Delhi 110006.

PROFESSIONAL AND MEDICAL

Accountants & Auditors of India, Socy. of Incorporated, Daryaganj, New Delhi 110002.

Aeronautical Socy. of India, 13-B, Indraprastha Estate, New Delhi 110001.

Agricultural Assocn. of India, C/o Indian Council of Agricultural Research, Krishi Bhavan, New Delhi 110001.

Agricultural Engineers, Indian Socy. of, National Agro House, 2, Tansen Marg, New Delhi 110001.

Agricultural Statistics, Indian Socy. of, C/o Instt. of Agricultural Research Statistics, Library Ave., New Delhi 110012.

Agriculture & Biology, Indian Socy. for Nuclear Techniques in, Indian Agricultural Research Instt., New Delhi 110012.

Agronomy, Indian Socy. of, Indian Agricultural Research Institute, New Delhi 110012.

Arbitration, Indian Council of, Federation House, New Delhi 110001.

Architects, Instt. of Incorporated, 3, Court Lane, Court Rd., Delhi 110006.

Astronomical Assocn., Indian, 704, Military Rd., Anand Parbat, New Delhi 110005.

Author's Guild of India, C-44, Gulmohar Park, New Delhi 110049.

Ayurvedic Congress, All India, Dhanwantri Bhavan, Rd. No. 66, Punjabi Bagh, New Delhi 110026.

Bar Assocn., Supreme Court, 1, Tilak Mrg., New Delhi 110001.

Bar Assocn. of India, Chamber No. 93, Supreme Court Bldg., New Delhi 110001.

Bar Council of Delhi, High Court Bldg., New Delhi 110001.

Bar Council of India, AB-21, Mathura Rd., New Delhi 110001.

Chartered Accountants of India, Instt. of, Post Box 7100, Indraprastha Marg, New Delhi 110002.

Chartered Engineers, Insttn. of, Anand Parbat, New Delhi 110005.

Civil Liberties, People's Union for, A/31, West End, New Delhi 110023.

Company Secretaries of India, Instt. of, A-1/111, Safdarjang Enclave, New Delhi 110029. The only body sponsored by the Deptt. of Company Affairs for the promotion and development of the profession of Company Secretaries in India.

Consulting Engineers (India), Assocn. of, 14, Asaf Ali Rd., New Delhi 110002.

Consulting Engineers, National Assocn. of, C/o Secy., Assocn. of Indian Engg. Industry, 172, Jor Bagh, New Delhi 110003.

Dental Council, Delhi, 2, Battery Lane, Delhi 110006.

Dermatologists & Venereologists, Indian Assocn. of, All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016.

Engineers (India), Insttn. of, Bahadur Shah Zaffar Mrg., Near Tilak Bridge, New Delhi 110002.

Entomological Socy. of India, Indian Agricultural Research Institute, New Delhi 110012.

Entrepreneurs, National Alliance of Young, 27, Nehru Place, New Delhi 110019.

Epilepsy Assocn., Indian, Ansari Rd., Daryaganj, New Delhi 110002.

Ford Foundation, The, 55, Lodi Estate, New Delhi 110003. Grants to institutions in India, Nepal & Sri Lanka for research, devpt. & action programmes in agricultural & rural devpt.; environment & resources; women's role in social & economic devpt.; intnl. economic relations; public & intnl. affairs & culture; population, health & nutrition.

Gastro-Enterologists, Assocn. of, All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016.

Genetics & Plant Breeding, Indian Socy. of, Indian Agricultural Research Institute, New Delhi 110012.

Health Assocn. of India, Voluntary, C-14, Comm. Centre, SDA, New Delhi 110016.

Heart Foundation, All India, 4874, Ansari Rd., 24, Daryaganj, New Delhi 110002.

Hematology, Indian Socy. of, Dept. of Pathology, All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016.

Horticultural Socy. of India, Krishi Bhavan, New Delhi 110001.

Industrial Tribology, Indian Socy. for, C/o J. P. Sharma, Mechanical Engg. Deptt., Indian Instt. of Technology, Haus Khas, New Delhi 110016.

International Law, Indian Socy. of, 7, Scindia House, New Delhi 110001.

Interpreters' Assocn., Indian Conference of, B-7/58/1, Safdarjung Enclave, New Delhi 110016.

Lalit Kala Akademi, National Academy of Art, Rabindra Bhavan, New Delhi 110001. To promote painting, sculpture, architecture & applied arts.

Landscape Architects, Indian Instt. of, 3, Court Lane, Court Rd., Delhi 110006.

Law Assocn., International, Indian Law Institute, Bhagwandas Rd., New Delhi 110001.

Law Instt., Indian, Bhagwandas Rd., New Delhi 110001.

Malaria & Other Communicable Diseases, Indian Socy. of, 22, Alipur Rd., Delhi 110006.

Management Assocn., All India, Management House, 14, Institutional Area, Lodi Rd., New Delhi 110003.

Management Assocn., Delhi, 1/21, Asaf Ali Rd., New Delhi 110002.

Marketing and Management, Instt. of, 62F, S. S. Park, New Delhi 110003. Membership over 3,300 with Chapters at Bangalore, Vadodara, Bhopal, Bombay, Chandigarh, Dehra Dun, Faridabad, Hyderabad, Jullundur, Madras, Patna, Pune, Srinagar, Varanasi & Kanpur; besides a Research & Consultancy Divn. at Delhi; non-profit, public, national membership body of mktg. personnel & orgns. affiliated to the Intnl. Mktg. Fedn. & the U.K. Instt. of Mktg. Provides services to its members in the fields of research & consultancy, in-company trg., mgmt. consultancy and publications. *Branch Offices:* 1C-7, Bungalow Plot, Sector 1, Opp. Bata Club, Faridabad 121001; 1144/21B, Chandigarh 160022. More offices under franchise arrangements are being opened under the expansion scheme.

Materials Management, Indian Assocn. of, C/o Engineering India Ltd., K-21, NDSE Part II, New Delhi 110049

Materials-Management of India, Instt. of, D-409, Defence Colony, New Delhi 110024.

Medical Assocn., Indian, I.M.A. House, Indraprastha Marg, New Delhi 110001.

Meteorological Socy., Indian, C/o Observatory, Lodi Rd., New Delhi 110003.

Neurological Socy. of India, Dept. of Neurosurgery, All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016.

Newspaper Editors' Conference, All India, Room 36, North End Complex, R. K. Ashram Marg, Panch Kuin Marg, New Delhi 110001.

Newspaper Employees' Fedn., All India, 29, New Central Mkt., Connaught Place, New Delhi 110001.

Newspaper Socy., Indian and Eastern, I.E.N.S. Bldg., Rafi Marg, New Delhi 110001.

Nurses' Assocn. of India, Trained, L-16, Green Park, New Delhi 110016.

Oil Technologists Assocn. of India, DCM Chemical Works, Najafgarh Rd., New Delhi 110015.

Operational Research Socy. of India, C/o C.S.I.R., Rafi Marg, New Delhi 110001.

Orthopaedic Assocn., Indian, All India Institute of Medical Sciences, Ansari Nagar, New Delhi 110016.

Otolaryngologists of India, Assocn. of, All India Instt. of Medical Sciences, Ansari Nagar, New Delhi 110016.

Pathology, Indian Registry of, Deptt. of Pathology, Safdarjung Hospital, New Delhi 110003.

Phytopathological Socy., Indian, Indian Agricultural Research Institute, New Delhi 110012.

Plant Biochemical Socy., Nuclear Research Laboratory, Indian Agricultural Research Instt., New Delhi 110012.

Plant Morphologists, International Socy. of, Dept. of Botany, Univ. of Delhi, Delhi 110007.

Plant Physiology, Indian Socy. of, Botany Dn., Indian Agricultural Research Institute, New Delhi 110012.

Psycho-Physical Therapy, Yoga Instt. of, F2, Lajpatnagar, New Delhi 110024.

Rheumatic Diseases, M.M.L. Centre for, 17, Pusa Rd., New Delhi 110005.

Road Transport, Indian Instt. of (Delhi Branch), 516, Transport Bhavan, Parliament St., New Delhi 110001.

Science Academy, Indian National, Bahadur Shah Zaffar Marg, New Delhi 110002. Promotion of scientific knowledge, co-ordination between various scientific bodies, safeguarding of the interests of scientists in India, representing internationally the scientific work of India; acting as the National Research Council of India for undertaking national & intnl. scientific work. *Pres.*, Dr. V. Ramalingaswami; *Exec. Secy.*, Dr. J. N. Nanda.

Scientific & Technical Literature, Indian Council for the Promotion of, 98, Mohan Singh Place, Kharak Singh Mrg., New Delhi 110001.

Secretaries of India, Socy. of Incorporated, Commercial University Ltd., Daryaganj, New Delhi 110002.

Social Development (India), Indian Society for Individual &, E5/7, Vasant Vihar, New Delhi 110057.

Soil Mechanics & Foundation Engineers, Indian National Socy. of, Curzon Road Barracks, New Delhi 110001.

Soil Science, Indian Socy. of, Indian Agricultural Research Institute, New Delhi 110012.

Surveyors, Instt. of, C/o Chief Engr., Delhi Zone, Delhi Cantt., New Delhi 110010.

Surveyors, National Instt. of, 24/66, W. Patel Nagar, New Delhi 110008.

Teachers' Fedn., All India Secondary, K-30, Green Park, New Delhi 110016.

Technical Education, Indian Socy. for, IIT Campus, Hauz Khas, New Delhi 110016.

Telecommunication Engineers, Institution of, 148, Flat 2, Instt. Area, Lodi Rd., New Delhi 110003.

Town Planners (India), Instt. of, Indraprastha Estate, M. Gandhi Mrg., New Delhi 110002.

Training & Devpt., Indian Socy. for, N17A, Green Park Extn., New Delhi 110016.

Tuberculosis Assocn. of India, 3, Red Cross Rd., New Delhi 110001. Twenty-three State Tuberculosis Assns. are affiliated to it. It runs the New Delhi TB Centre, New Delhi and Lala Ram Sarup TB Hospital, Mehrauli (Delhi) and carries out propaganda and other activities calculated to facilitate the implementation of the Government's TB Control Programme.

Valuers, Instt. of, Anand Parbat, New Delhi 110005.

Working Journalists, Indian Fedn. of, 29, New Central Market, Connaught Circus, New Delhi 110001.

GOA

COMMERCIAL

Chemists & Druggists Assocn., Goa, C/o Drogaria Central, Rua Diago Couto Rd., Panaji 403001.

Mineral Ore Exporters Assocn., Goa, Vagle Bldg., Rua Conde de Tones Novas, Panaji 403001.

Mining Assocn., Goa, Panaji 403001.

Small Industries Assocn., Goa, C/o P.B. No. 80, Margao 403601.

Stevedores' Assocn., Mormugao, Neogi Mansion, Rua Francisco Luis Gomes, Vasco-da-Gama 403802.

CULTURAL, SOCIAL AND PROFESSIONAL

Cancer Socy., Goa, Gov. Pestona Rd., Panaji 403001.

Chartered Accountants of India, Instt. of, 313, 'Govinda', 4, Albuquerque Rd., Panaji 403001.

Engineers, Assocn. of, C/o J. S. Pinto, P.W.D., Altinho, Panaji 403001.

Medical Assocn., Indian, Sneha Sadan, E/298, Dr. Shirgaonkar Rd., Panaji 403001.

Red Cross Socy., Indian, Panaji 403001.

Social Welfare, Indian Council of, Gurunath Bldg., Rua De Ourem, Panaji 403001.

TB Assocn. of Goa, Daman and Diu, Heroes de Dadra Rd., Panaji 403001.

GUJARAT

COMMERCIAL

Art Silk Cloth Mfrs. Assocn., Surat, Resham Bhavan, Lal Darwaja, Surat 395003.

Art Silk Mfrs. Exporters Co-op. Socy. Ltd., Surat (SASME), Taj Manzil, Tower Rd., Surat 395001. (*Branch Office:* Chikhal House, 453, Kalbadevi Rd., Bombay 400002.)

Bobbin Mfg. Assocn., Gujarat State, C/o Ashok Textile Inds., Rd. No. 3, Saraspur, Ahmedabad 380018.

Booksellers Assocn., Gujarat State English Language, C/o New Order Book Co., Ellis Bridge, Ahmedabad 380006.

Booksellers & Publishers Assocn., Ahmedabad, 47, Gandhi Rd., Ahmedabad 380001.

Builders' Assocn., Ahmedabad, Gujarat Instt. of Civil Engrs. & Architects, Law College Rd., Ahmedabad 380006.

Button Mfrs. Assocn., All India, Juri Jail Compound, Jamnagar 361001.

Chemical Assocn., Gujarat, Reid Rd., Ahmedabad 380002.

Chemical Merchants' and Mfrs. Assocn., Gujarat, 466/4, Reid Rd., Ahmedabad 380002.

Chemical Pottery and Silk Mfrs. Assocn., Ahmedabad, C/o Anil Starch Products Ltd., Anil Rd., Ahmedabad 380002.

Corrugated Box Mfrs. Assocn., Gujarat, Indira Nivas, Near Brahman Sabha Hall, Dandia Bazar, Vadodara 390001.

Cotton Assocn. Ltd., West India, Cotton Hall, Manek Chowk, Ahmedabad 380001.

Cotton Waste Merchants' Assocn., Ahmedabad, Cotton Waste Bldg., Relief Rd., Ahmedabad 380001.

Cutlery Merchants' Assocn., Ahmedabad, C/o P. Liladhar & Co., Khadia Char Rasta, Ahmedabad 380001.

Cycle Dealers Assocn., Gujarat State, Inside Panch Kuva, Ahmedabad 380001.

Dyestuffs Mfrs. Assocn., Gujarat, Prajapati Bldg., Khadianagar Rasta, Ahmedabad 380001.

Engineering Mfrs. Assocn., Ahmedabad, Amrit Indl. Estate, Opp. Water Tank, Dudheshwar, Ahmedabad 380001.

Fertiliser Co-op. Ltd., Indian Farmers, P.O. Kasturinagar 382423. Gandhinagar Dist.

Ginning and Pressing Factories Assocn., Saurashtra, C/o Dhrangadhra House, Surendranagar 363001.

Hair Oil & Perfumery Traders Assocn., Gujarat, C/o J. B. Shah & Co., Pankaj Society, Ahmedabad 380007.

Hosiery Factory Owners' Assocn., Ahmedabad & Gujarat, C/o Mahboob Knitting Works, 33, Joting Shah Pir's Pole, Kalupur, Ahmedabad 380001.

Hosiery Merchants & Mfrs. Assocn., Gujarat, 1, Chambers, Sabarkunj, Ashram Rd., Ahmedabad 380009.

Industries Assocn., Kandla Free Trade Zone, Free Trade Zone, Gandhidham 370201. Kutch Dist.

Isabgol Mfrs. & Exporters Assocn., Bindu Sarowar Rd., Sidhpur 384151.

Jari Mfrs. Assocn. Ltd., Surat, Salabatpura, Momanwad, Surat 395003.

Jari Mfrs. & Merchants Assocn., Surat, Safe Deposit Chambers, Bhagatalao, Surat 395001.

Manufacturers' Organisation, All India, Bholanath Sarabhai Literacy Instt. Bldg., Sardar V. Patel Rd., Near Khamasa Gate, Ahmedabad 380009.

Marketing Fedn. Ltd., Gujarat State Co-op., Relief Rd., Ahmedabad 380001.

Metal Exchange, Ahmedabad, C/o Kaniyalal Navnitlal Parikh, Kansara Dehla, Railwaypura, Ahmedabad 380002.

Metal Merchants' Assocn., Ahmedabad, Metal House, Jethabhai Pole, Ahmedabad 380001.

Mill and Gin Stores Merchants' Assocn., Ahmedabad, Reid Rd., Railwaypura, Ahmedabad 380002.

Millboard Mfrs. Assocn., Gujarat, (Sundry Process), Indira Nivas, Near Brahman Sabha Hall, Dandia Bazar, Vadodara 390001.

Millowners Assocn., Ahmedabad, Ranchhodlal Marg, Navrangpura, Ahmedabad 380009.

Millowners' Assocn., Saurashtra, Dhrangadhra House, Surendranagar 363001.

Mills and Industries, Fedn. of Gujarat, Rameshchandra Dutt Rd., Vadodara 390005.

Mineral Industry Assocn., Gujarat, 438, Spectrum Comml. Centre No. 1, Salapose Rd., Ahmedabad 380001.

Mosaic Tiles Mfg. Assocn., Morvi, C/o Navyug Tiles Works, Lati Rd. No. 3, Morvi 363641.

Oilseeds Growers' Fedn. Ltd., Gujarat Co-op., Bunder Rd., Bhavnagar 364001.

Optical Mfrs. Assocn. Fedn., Gujarat, Nagar Chashmaghar, Relief Rd., Ghee Tanka Crossing, Ahmedabad 380001.

Paints & Allied Industries Assocn., Gujarat, C/o Vellian Paints P. Ltd., Madhubhai Mill Compound, Ahmedabad 380018.

Paper Merchants' Assocn., Ahmedabad, Kalyan Paper Mart, Nava Darwaja Rd., Khadia, Ahmedabad 380001.

Pest Control Assocn. of India, Ajanta Commercial Centre, Ashram Rd., Ahmedabad 380014.

Pharmaceutical Assocn., Indian, L.M. College of Pharmacy, Ahmedabad 380009.

Parmaceutical Mfg. Assocn., 11/6, Nima Bldg., Gopal Chowk, Bhairavnath Rd., Maninagar, Ahmedabad 380009.

Picker & Textile Leather Mfg. Assocn., All India, P. Box 156, Ahmedabad 380001.

Pipe Traders' Assocn., Gujarat, Lokhand Mahajan Bldg., Nava Darwaja Rd., Ahmedabad 380001.

Plastic Mfrs. Assocn., Gujarat State, 62, Embassy Market, Behind Income-tax Office, Ahmedabad 380009.

Precious Stone Exporters' Assocn., Vasda Vad, Jawahar Rd., Cambay 388620.

Printing Press Assocn., Ahmedabad, New City Printing Press, Dhalgarwad, Ahmedabad 380001.

Productivity Council, Ahmedabad, 74/11, Jagabhai Park, Ahmedabad 380002.

Productivity Council, Baroda, Productivity House, Productivity Rd., Vadodara 390005.

Productivity Council, National, No. 3, Brahmin Mitra Mandal Society, Sheth Mangaldas Rd., Ellis Bridge, Ahmedabad 380006.

Re-Rolling Mills Assocn., Gujarat, B, Ajanta Commercial Centre, Ashram Rd., Ahmedabad 380009.

Roads & Transport Devpt. Assocn., Indian, Hindustan Petroleum Corpn. Ltd., Karaka Bldg., Navrangpura, Ahmedabad 380009.

Salt Mfrs. Assocn., Dhrangadhra, Post Office Rd., Dhrangadhra 363310.

Salt Mfrs. Assocn., Kutch Saurashtra, D-10/11, Manmohan Mkt., Jamnagar 361001.

Sanitaryware Merchants' Assocn., Ahmedabad, Prajapati Bldg., Khadia Char Rasta, Ahmedabad 380001.

Scientific, Surgical & Chemical Assocn., Gujarat, Noor Estate, Biscuit Gali, Pankore Naka, Ahmedabad 380001.

Silicate Mfrs.' Assocn., Gujarat, 13, Pratima Society, Opp. Pharmacy Coll., Navrangpura, Ahmedabad 380002.

Small Industries Fedn., Gujarat State, Near Gun House, Khanpur, Ahmedabad 380001.

Small Scale Industries, Fedn. of, Dadasaheb Haveli Mandvi, Vadodara 390006.

Soap Makers' Assocn., Gujarat, C/o Shree Krishna Industries, Pratapnagar Rd., Vadodara 390004.

Spun Pipe Mfrs.' Assocn., Gujarat, C/o Vikas Spun Pipe Udyog, Munshi's Khancho, Raipur, Ahmedabad 380001.

Steel Re-rollers Assocn., Indian, Kumbharwada, Bhavnagar 364001.

Sugar Factories Ltd., Gujarat State Fedn. of Co-op., Sardarbag, Bardoli 394602. Surat Dist.

Synthetic Stones Jewellers' Assocn., Cambay, C/o Raj Jewels, Rajkusum, Pirajpur, Khambhat 388620, Kaira Dist.

Textile Assocn. (India), Dinesh Hall Compound, Navrangpura, Ahmedabad 380009.

Textile Processors' Assocn., Gujarat, Rupam Cinema, Relief Rd., Ahmedabad 380001.

Textile Rings Mfrs. Assocn., Gujarat, C/o Oriental Tin Factory, Kalidas Mill Compound, Gomtipur Rd., Ahmedabad 380021.

Tiles Mfrs. Assocn., Ahmedabad, C/o Shree Tiles & Marble Co., Khadia Char Rasta, Ahmedabad 380001.

Trimming & Lace Factories Assocn., Ahmedabad, 164, Swaminarayan Godown, Outside Dariapur Gate, Ahmedabad 380001.

Vepari Mahamandal, Gujarat, Ranchodlal Marg, P.B. No. 162, Ahmedabad 380009.

Weaving Assocn., Surat, Limda Chowk, Lokhandwala Bldg., Mahatma Gandhi Rd., Surat 395001.

Wool Merchants Assocn., Gujarat, Post Box No. 122, Jamnagar 361001.

CULTURAL, SOCIAL AND PROFESSIONAL

Anaesthetists, Indian Socy. of, Anaesthesiology Deptt., MPS Hospital, Asarwa, Ahmedabad 380016.

Architects, Gujarat Instt. of Civil Engineers &, Law College Rd., Ahmedabad 380006.

Bharat Scouts & Guides, Gujarat State, Lal Darwaja, Ahmedabad 380001.

Chartered Accountants of India, Instt. of, Opp. Sarav Restaurant, Lal Darwaja, Ahmedabad 380001.

Civil Engineers and Architects, Gujarat Instt. of, Law College Rd., Ahmedabad 380006.

Darpana Academy, 'Chidambaram', Usmanpura, Ahmedabad 380013.

Engineers (India), Insttn. of, Law College Rd., Ahmedabad 380005.

Fisheries Central Co-op. Assocn. Ltd., Gujarat, Motor Sales & Service Bldg., Ashram Rd., Ahmedabad 380009.

Glaucoma Eye Relief Society (Regd.), Hyderi Manzil, Relief Rd., Ahmedabad 380001.

Indo-American Socy., Khamasa Gate, Ahmedabad 380001.

Indo-German Cultural Centre, 8, Ghosha Socy., Ahmedabad 380009.

Indo-Soviet Cultural Socy., Mehboobbaug, Ahmedabad 380004.

Jeevan Bharati, Greenlands, Nanpura, Surat 395001.

Management Assocn., Ahmedabad, Bank of India Bldg., Bhadra, Ahmedabad 380001.

Materials Management, Indian Assocn. of, C/o SLM-Maneklal Ind. Ltd., Ahmedabad 382415.

Medical Assocn., Indian, Near Natraj Cinema, Ashram Rd., Ahmedabad 380009.

Medical Council, Gujarat, A-2, New Civil Hospital, Ahmedabad 380016.

Medical Socy., Ahmedabad, Opp. H. K. Arts Coll., Ashram Rd., Ahmedabad 380009.

Moral & Social Hygiene, Assocn. for, J. P. Bldg., Bhadra, Ahmedabad 380001.

Nursing Council, Gujarat, New Civil Hospital, Ahmedabad 380016.

Pharmacy Council, Gujarat State, 15, Shrimali Socy., Ahmedabad 380009.

Plastics and Rubber Instt. — Indian Section (Plastics), C/o H. C. Broker, Hemant Brothers, Super Mkt., Ashram Rd., Ahmedabad 380009.

Red Cross Socy., Indian, Himavan Samaj Kalyan Kendra, Pritamrai Marg, Paldi, Ahmedabad 380002.

Rifle Assocn. of India, National, Khanpur, Ahmedabad 380001.

Sadhu Samaj, Bharat, Jagdish Mandir, Ahmedabad 380022.

Sharada Peeth, Dwarka 361335. Pontifical seat established for spiritual and cultural guidance & uplift in W. India, by the first Jagadguru Shankaracharya.

Social Welfare, Indian Council of, Municipal Bal Bhavan, Near Paldi Bus Stand, Ahmedabad 380007.

Textile Labour Assocn., P. B. No. 110, Bhadra, Ahmedabad 380001.

Theosophical Fedn., Gujarat, C/o Miss Vira Dastur, Parsi Sanatorium, Navrangpura, Ahmedabad 380009.

HARYANA

COMMERCIAL

Agro Industries Assocn., C/o Hari Industries, Plot No. 40, Sector IV, Faridabad 121001.

Metal Mfrs. Assocn., Haryana, 77, Srinagar Colony, Jagadhri 135003.

Potteries Mfrs. Assocn., C/o Deepak Industries, Daulatabad Rd., Gurgaon 122001.

Printers, Fedn. of, Jugal Printing Press, Ambala City 134003.

Printers' Assocn., Haryana, C/o M. L. Manchanda & Co., 58-A, Industrial Area, Faridabad 121001.

Productivity Council, Faridabad, 32-C, Nehru Ground, N.I.T., Faridabad 121002.

Publishers & Booksellers Assocn., Haryana, Pokhar Das Bldg., Ambala Cantt. 133001.

Scientific Instruments Mfrs. and Dealers' Assocn., Hargolal Rd., Ambala Cantt. 133001.

Textile Mfrs. Assocn., Haryana, 13-T, Industrial Area, Panipat 132103.

CULTURAL, SOCIAL AND PROFESSIONAL

Family Planning Assocn. of India, (Haryana Branch), Kothi No. 650, Sector 16/D, Chandigarh 160017.

Medical Assocn., Indian, Haryana Nursing Home, 218-L, Model Town, Karnal 132001.

Red Cross Socy., Indian, Haryana State Branch, Sector 16-A, Chandigarh 160017.

Social Welfare, Indian Council of, 45, Model Town, Hissar 125001.

HIMACHAL PRADESH

COMMERCIAL

Packing Industries Assocn., Himachal Pradesh, Chambaghat, Solan 173212.

Publishers & Booksellers Assocn., Himachal, Chatrath Niwas, Palampur 176061.

CULTURAL, SOCIAL AND PROFESSIONAL

Medical Assocn., Indian, Health Dept., Municipal Corpn., Simla 171001.

Red Cross Socy., Indian, Himachal Pradesh Sectt., Ilerslie, Simla 171002.

Social Welfare, Indian Council of, Daulat Niwas, Rajgarh Rd., Solan 173212.

JAMMU & KASHMIR

COMMERCIAL

Industries Assocn., Jammu, C/o Thimpor P. Ltd., Jammu Tawi 180001.

Productivity Council, J. & K., C/o J. & K. Minerals Ltd., The Bund, Srinagar 190001.

Small Scale Conductor Mfrs. Assocn., J. & K., 42, Industrial Estate, Jammu 180003.

Govt. Trade Offices

Trade Agent, Manekji Wadia Bldg., 129, M. Gandhi Rd., Bombay 400023 & World Trade Centre, Cuffe Parade, Colaba, Bombay 400005. *Resident Commission*, 5, Prithviraj Rd., New Delhi 110011.

CULTURAL, SOCIAL AND PROFESSIONAL

Engineers (India), Insttn. of, Near Amarsingh Club, Sonwarbagh, Srinagar 190001.

Red Cross Socy., Indian, Exchange Rd., Srinagar 190001.

KARNATAKA

COMMERCIAL

Agarbathi Mfrs. Co-op. Socy. Ltd., Mysore State, Chamber of Commerce Bldg., Kempegowda Rd., Bangalore 560009.

Agriculture, Indian Chamber of, 517, Rajamahal Vilas Extn., Palace Upper Orchards, Bangalore 560006.

Automobile Dealers' Assocn., Mysore State, Sundaram Motors Bldg., 2-2A, Kasturba Rd., Bangalore 560001.

Automobile Parts and Allied Merchants' Assocn., Mysore, 17, Ramakrishna Bldg., Narasimharaja Rd., Bangalore 560002.

Beedi Industry Assocn., Karnatak, C/o P. V. S. Beedies (P.) Ltd., Kudmul Ranga Rao Rd., Kodialbail, Mangalore 575003.

Builders' Assocn. of India, 168, South Cross Rd., Basavangudi, Bangalore 560004.

Cashew Mfrs. Assocn., Mangalore, Port Rd., Mangalore 575001.

Coffee Curers Assocn., All India, Planters Coffee Curing Works (P.) Ltd., Chickmagalur 577101.

Dairymen's Assocn., Mysore, 14, Hospital Rd., Bangalore 560002.

Employers' Assocn., Mysore State, 135, Upstairs, Surveyor's St., Basavangudi, Bangalore 560004.

Engineering Industry, Assocn. of, No. 4, L Block, Unity Bldgs., N R. Square, Bangalore 560002.

Fertiliser Co-op. Ltd., Indian Farmers, 73, 5th Block, Jayanagar, Bangalore 560011.

Flat Tape Mfrs. Assocn., All India, C/o Arkon Pvt. Ltd., Block 3, M. S. Ramaiah Indl. Estate, HMT Main Rd., P. O. Mathikere, Bangalore 560054.

Garments Mfrs. Assocn., Mysore State, C/o Lalitha Dress Mfg. Co., 64, S. J. Park Rd., Bangalore 560002.

Gold Thread Merchants' Assocn., Bangalore, 39, Jumma Masjid Rd., Bangalore 560002.

Handloom Cloth Merchants' Assocn., 688, Benna Govindappa Lane, Chickpet, Bangalore 560002.

Hides & Skins Merchants & Tanners' Assocn., Mysore State, 74, Commercial St., Bangalore 560001.

Hotels' Assocn., Bangalore, Shivaji Bldg., 264, Mysore Rd., Bangalore 560018.

Manufacturers' Orgn., All India, Visvesvaraya Health Museum Bldg., Kasturba Rd., Bangalore 560001.

Marketing Fedn. Ltd., Karnataka State Co-op., 8, Cunningham Rd., Bangalore 560056.

Match Splints & Veneers Mfrs. Assocn., Mysore, 1535/1, Opp. Vanivilas Mkt., Mysore 570004.

Mine Owners' Assocn., Mysore State, 5, Railway Station Rd., Vasanthanagar East, Bangalore 560052.

Mineral Producers' Co-op. Union Ltd., Mysore State, 2nd Cross, Gandhinagar, Bangalore 560009.

Oil Industry Assocn., All India Non-Edible, Doorvaninagar, Bangalore 560016.

Oodabathi Mfrs.' Assocn., Mysore, Karnataka Chamber Bldg., Kempegowda Rd., Bangalore 560009.

Paper Merchants & Stationers Assocn., Karnataka, 7, Uttradhi Mutt Lane, Chickpet, Bangalore 560053.

Pharmaceutical Assocn., Indian, 55, S.S.I. Area, 5th Block, Rajajinagar, Bangalore 560010.

Plastic Mfrs. Assocn., Karnataka, C/o Dr. T. Sanghi, 400, N 1st Block, Rajajinagar, Bangalore 560010.

Planters' Assocn., Karnataka State, Post Box 18, Chikmagalur 577101.

Printers' Assocn., Karnataka, Avenue Rd., Bangalore 560002.

Productivity Council, Mysore State, 10, Race Course Rd., Bangalore 560001.

Productivity Council, National, 16, Rest House Crescent, Bangalore 560001.

Publishers & Booksellers' Assocn., Karnataka, 504, Avenue Rd., Bangalore 560002.

Roads & Transport Devpt. Assocn., Indian, Karnataka State Sub-Regnl. Office, C/o Dunlop India Ltd., 17, Raj Bhavan Rd., Bangalore 560001.

Road Transport Assocn., Mysore State, B. G. S. Rajas Mansions, II Main Rd., Kalasipalayam New Extn., Bangalore 560002.

Silk Marketing Co-op. Socy. Ltd., Karnataka State, 103, Avenue Rd., Bangalore 560002.

Silk Handloom Weavers Central Co-op. Socy. Ltd., Karnataka State, Shantinagar, Bangalore 560027.

Silk Mfrs. (Powerlooms) Assocn., Mysore, 39, J. Masjid Rd., Bangalore 560002

Silk Merchants' Assocn., Mysore Raw, Resham Mahal, Kempegowda Rd., Bangalore 560009.

Small Scale Industries Assocn., Karnataka, 11-A, Jayachamarajendra Rd., Bangalore 560002.

Soap Mfrs. Assocn., Mysore State, Shankarmutt Compound, Bangalore 560004.

Stock Exchange Ltd., Bangalore, Kempegowda Rd., Bangalore 560009.

Sugar Factories Fedn. Ltd., Karnataka State Co-op., 37, Nehru Circle, Bangalore 560020.

Sugar Mills Assocn., S. Indian, Mysugar Bldgs., Sri Jayachamaraja Wadiyar Rd., Bangalore 560002.

Textile Assocn. (India) (Regd.), Karnataka Branch, C/o G. S. K. S. J. Technological Instt., K. R. Circles. Bangalore 560001.

Textile Mills Assocn., Karnataka, Post Box 201, Davangere 577002.

Tile Mfrs.' Assocn., W. India, Maidan West Rd., Mangalore 575001.

Village Industries Assocn., S. Kanara, Car St., Mangalore 575001.

CULTURAL, SOCIAL AND PROFESSIONAL

Anatomical Socy. of India, Dept. of Anatomy, St. John's Medical College, Sarjapur Rd., Bangalore 560034.

Animals, Bangalore Socy. for the Prevention of Cruelty to, Kasturba Rd., Bangalore 560001.

Ayurvedic & Unani Practitioners Board, Karnataka, Govt. Central Pharmacy Bldg., 1st Block, J. Nagar, Bangalore 560011.

Bar Assocn., Bangalore, High Court Bldg., Bangalore 560001.

Bible Society of India, 20, M. Gandhi Rd., Bangalore 560001.

Billiards Assocn., Karnataka State, 5-D, Brigade Rd., Bangalore 560025.

Birdwatchers Club of India, P.O. Dodda Gubbi, Via Vidyanagar, Bangalore 562134.

Bodybuilders Assocn., Karnataka Amateur, 27, 2nd Block, Rajajinagar, Bangalore 560010.

Chartered Accountants of India, Instt. of, 1B, First Block, Rajajinagar, Bangalore 560010.

Child Welfare, Karnataka State Council for, 135, 3rd Cross, Nandidurga Rd., Bangalore 560006.

Corporate Secretaries, Instt. of, 29, 1st Main, Fifth Block, Kumara Park West, Bangalore 560020. Professional orgn. of company secretaries & allied personnel.

Cricket Assocn., Karnataka State, Cricket Stadium, M. Gandhi Rd., Bangalore 560001.

Deaf Aid Society, 25/2, Lavelle Rd., Bangalore 560001.

Dental Assocn., Indian, 45, Linden St., Austin Town, Bangalore 560007.

Electrical Engineers, Insttn. of, 7, Nandidurga Rd., Bangalore 560006.

Electrochemical Socy. of India, Indian Instt. of Science, Bangalore 560012.

Electronic Engineers, Socy. of, P.O. Box 5108, High Grounds, Bangalore 560001.

Electronics & Radio Engineers, Instn. of, 54, Nandidurga Rd., Bangalore 560006.

Engineers (India), Insttn. of., 3, Vidhana Veedhi, Bangalore 560001.

Evangelical Missionary Socy., Basel Mission, Mangalore 575002.

Family Planning Assocn. of India, 50, New Mission Rd., Bangalore 560027.

Film Chamber of Commerce, Karnataka, 25, Seshadri Rd., Bangalore 560009.

Film Guild, Kannada, 517, Rajamahal Vilas Extn., Sadasivanagar, Bangalore 560006.

Fine Arts, Sri Varalakshmi Academies of, Ram Vilas, Kashipathy Agraharam, Chamaraja Rd., Mysore 570004.

Free Enterprise, Forum of, 91, Dr. D. V. Gundappa Rd., Basavangudi, Bangalore 560004.

Geological Socy. of India, 102, Bull Temple Rd., Bangalore 560019.

Holy Childhood Pontifical Socy., Palmgrove Rd., Bangalore 560007.

Horticultural Socy., Mysore, Lalbagh, Bangalore 560004.

Indo-German Cultural Socy., Max Muller Bhavan, 12, Museum Rd., Bangalore 560001.

Indo-Soviet Cultural Socy. 28, 1st Main V Block, Kumara Park W. Extn., Bangalore 560020.

Internal Auditors, Instt. of, S.S.P. Mutt Trust Bldg., 2nd Flr., Tank Bund Rd., Bangalore 560009.

Lalithakala Academy, Mysore State, Ravindra Kalakshetra, Bangalore 560002.

Materials Management, Indian Assocn. of, C/o International Instruments Pvt. Ltd., 140, Hosur Rd., Bangalore 560034.

Medical Assocn., Indian, I.M.A. House, Alur Venkat Rao Rd., Bangalore 560018.

Meditation Centre, Sri Shankara, 14, Cambridge Rd., Someshwarapuram, Ulsoor, Bangalore 560008.

Mineralogical Socy. of India, Mansa Gangotri, Mysore 570006.

Mythic Socy., Daly Memorial Hall, Nrupathunga Rd., Bangalore 560001.

Naturopathy & Yogic Sciences, Instt. of, 16th K. M. Tumkur Rd., Bangalore 560073.

Olympic Assocn., Karnataka State, E-1, Staff Qrs., St. John Medical College Campus, John Nagar, Bangalore 560034.

Photography, Fedn. of Indian, 50, Sri Ram Mandir Rd., Bangalore 560004.

Production Engrs., Indian Council of the Insttn. of, No. 16, Park St., Bangalore 560051.

Public Utility Service Assocn., All India, HAL Police Qtrs., Marathahalli, Bangalore 560017.

Red Cross Socy., Indian, 51, III Cross Rd., Basavangudi, Bangalore 560004.

Sahitya Academy, Mysore State, Ravindrakala Kshetra, Bangalore 560002.

Sai Spiritual Centre, Sri, Saibaba Mandir Rd., Bangalore 560028.

Salesian Assocn., S. Indian, Sannathammanahalli, Bangalore 560016.

Sangeetha Nataka Academy, Mysore State, Ravindra Kalakshetra, Bangalore 560002.

Sciences, Indian Academy of, P.O. Hebbal, Bangalore 560006.

Seventh Day Adventists, South India Union of, 8, Spencer Rd., Bangalore 560005.

Skill for Progress (SKIP) — (All India Assocn. of Private Technical & Vocation Instts.), 72, Brigade Rd., Bangalore 560025.

Social Welfare, Indian Council of, 22/3, Rest House Rd., Bangalore 560001.

Sports Council, Karnataka State, Sri Kanteerva Stadium, Bangalore 560001.

Telecommunication Engineers, Instt. of, 36, 2nd Main Vyalikaval, Bangalore 560003.

Theosophical Socy., Krishnarajendra Rd., Bangalore 560004.

United Nations Assocn., Karnataka, 10, Sirur Park, 'B' St., Seshadripuram, Bangalore 560020.

Waddar Samaj Sangh (Regd.), Akhil Bharat, 62, Fort B. St., Bangalore 560002.

Youth for Christ, Bangalore, 102, Infantry Rd., Bangalore 560001.

KERALA

COMMERCIAL

Books and Publications Society, Kerala, Thrikkakara, Cochin 682030.

Builders' Assocn. of India, C/o P. K. Ramachandra, Damodar Sons & Co., M. G. Rd., Ernakulam, Cochin 682016.

Cardamom Planters' Assocn., Kerala State, Munnar 685612 (Kottayam Dist.).

Cashew Exporters Assocn., India, Mundakkal West, Quilon 691001.

Coir Mats and Matting Mfrs. Assocn., Travancore, Alleppey 688001.

Coir Producers' and Dealers' Assocn., Kerala, Alleppey 688001.

Coir Yarn Merchants' Assocn., Travancore-Cochin, Rajagopala Mandiram, Mullakkal, Alleppey 688001.

Employers' Fedn., West Coast, Bristow Rd., Cochin 682003.

Handloom Assocn., Kerala, Fort Rd., Cannanore 670001.

Handloom Weavers Co-op. Socy. Ltd., Kerala State, 24/534, Mankav, Calicut 673007.

Hosiery Mfrs. Assocn., Kerala State, P.O. Palaparamba (Cannanore Dist.).

Industrialists' Assocn., West Coast, Empress Hotel Rd., Calicut 673001.

Lemongrass Oil Exporters' Assocn., Indian, P. Box 12, Alwaye 683101.

Manufacturers' Organisation, All India, Narayan Nivas, Krishnaswamy Iyer Rd. Jn., Ernakulam, Cochin 682011.

Marketing Fedn. Ltd., Kerala State Co-op., Post Box 2301, Cochin 682016.

Master Printers' Assocn., Kerala, Post Box No. 1161, Ernakulam, Cochin 682011.

Oil Millers' Assocn. (Regd.), Kerala State, 2, Marar Lane, Chittur Rd., Ernakulam, Cochin 682011.

Pepper and Spice Trade Assocn., India, XI/72, Jew Town, Cochin 682002.

Pharmaceutical Assocn., Indian, P.B. No. 13, Cochin 682002.

Planters of Kerala, Assocn. of, Kaloor, Cochin 682017.

Plywood Mfrs. Assocn., South Indian, 8/205C, Empress Bldg., Calicut 673001.

Printers, Publishers & Lithographers, All Kerala Assocn. of, Padmagiri, Stn. Rd., Pettah, Trivandrum 695024.

Productivity Council, Kerala State, Productivity House, Kalamassery, Alwaye 683104.

Publishers Assocn., All Kerala, Mangalodhyam Bldg., Trichur 680001.

Publishers & Booksellers Assocn., Kerala, Paico Bldg., Jew St., Cochin 682011.

Roads & Transport Devpt. Assocn., Indian, Kerala Sub-Regnl. Office, C/o Ceat Tyres of India Ltd., M. G. Rd., Ernakulam, Cochin 682016.

Rubber Marketing Fedn. Ltd., Kerala State Co-op., Carmel Centre, Banerji Rd., Cochin 682018.

Sardine Exports Socy., C/o Marine Products Export Development Authority, Post Box 1708, M. G. Rd., Cochin 682016.

Saw Mills' Assocn., Malabar, Kallai, Calicut 673003.

Seafood Canners and Freezers Assocn. of India, XIX/5, Kochangadi, Cochin 682002.

Seafood Exporters Assocn. of India, VII/389, Kochangadi, Cochin 682002.

Small Industries Assocn., Kerala State, Opp. Hantex Bldg., Ootukuzi Jn., Trivandrum 695001.

Soap Makers' Assocn., South India, Oyitty Rd., Calicut 673001.

Stevedores' Assocn. of Cochin (P) Ltd., United, River Rd., Cochin 682001.

Tea Trade Assocn. of Cochin, Sebrof House, Willingdon Island, Cochin 682003.

Tile Mfrs. Assocn., Central Kerala, Trichur 680001.

CULTURAL, SOCIAL AND PROFESSIONAL

Ayyappa Seva Sangam, All Kerala, Kottayam 686001.

Chartered Accountants of India, Instt. of, Ulsavamadom Bldg., North of Padmanabhaswamy Temple, Fort, Trivandrum 695023.

Child Welfare, Kerala State Council for, 15/167, Bhakthivilas Rd., Trivandrum 695014.

Engineers (India), Instn. of, 12/33B, Observatory Hill, Trivandrum 695001.

Family Planning Assocn. of India, Red Cross Rd., Trivandrum 695001.

Farmers Assocn., Indian, 887, Xanadu, Kalamassery 683104, Ernakulam Dist.

Fine Arts Socy., Kerala, Foreshore Rd., Cochin 682016.

Foot Ball Assocn., Kerala, Cantt., Quilon 691001.

Law Instt., Indian (Kerala Unit), High Court Bldgs., Ernakulam, Cochin 682011.

Materials Management, Indian Assocn. of, C/o Indian Transformers Ltd., HMT Colony, Ernakulam 683503.

Medical Assocn., Indian, Krishna Nursing Home. M. Gandhi Rd., Cochin 682011.

Red Cross Socy., Indian, Red Cross Rd., Trivandrum 695001.

Sahithya Akademi, Kerala, Town Hall Rd., Trichur 680001.

Sahithya Pravarthaka Co-op. Socy., Kottayam 686001. A co-operative organisation of the authors of Kerala with branches in Trivandrum, Ernakulam & Trichur.

Sangeetha Nataka Akademi, Kerala, Model Regional Theatre, Trichur 680001.

Social Welfare, Indian Council of, C/o Instt. of Social Work, Rajagiri, Kalamassery, Alwaye 683104.

Soviet Culture, House of, Gorki Bhavanam, Vanross Jn., Trivandrum 695001.

Texation, Indian Instt. of, Convent Rd., Trivandrum 695001.

MADHYA PRADESH

COMMERCIAL

Commercial Exchange Ltd., Central Indian, More Bazar, Gwalior 474001.

Industries, Assocn. of M. P., 25/36, Ind. Estate, Polo Ground, Indore 452003.

Manufacturers' Organisation, All India, M. P. Indl. Foundation Bldg., Ind. Estate, Pologround, Indore 452003.

Marketing Fedn. Ltd., M. P. State Co-operative, Maheshwari Bldg., P.O. Jehangirabad, Bhopal 462003.

Paints & Chemical Industries Assocn., M. P. 2, Ind. Estate, Bhopal 462001.

Productivity Council, Indore, C/o Rituraj Inds., 16, Laxmibai Nagar, Indore 452006.

Sugar Mills' Assocn., Madhya Pradesh. 134, Devi Ahilya Mrg., Indore 452003.

Textile Assocn. of India (Regd.), C/o Hukamchand Mills Ltd., Indore 452003.

Textile Mills Assocn., Madhya Pradesh, 8, South Tukoganj, St. No. 1, Indore 452001.

CULTURAL, SOCIAL AND PROFESSIONAL

Acharya Kul, All India, 68, Sindhi Colony, Gwalior 474009. A national orgn. of teachers, writers & scholars, who are free from party affiliation, to promote self-discipline in society and encourage edнl. reforms on Gandhian lines.

Anatomical Socy. of India, Dept. of Anatomy, Gandhi Medical College, Bhopal 462001.

Botanical Socy., Indian, Dept. of Botany, Vikram Univ., Ujjain 456001.

Buddhist Socy. of India, Bhilai Nagar 490001.

Chartered Accountants of India, Instt. of, 2, Prince Yeshwant Rd., Indore 452002.

Engineers (India), Insttn. of, Hostel No. 2, Piplani, Bhopal 462021

Engineers (India), Insttn. of, 17, Park Rd., Indore 452003.

Local Authorities, Fedn. of All India, Chandralok, Lalta Chowk, Satna 485001.

Pharmaceutical Assocn., Indian, Deptt. of Pharmaceutical Sciences, Saugor Univ., Sagar 470001.

Plant Industry, Instt. of, Old Residency Area, Indore 452001.

Red Cross Socy., Indian, Shivaji Nagar, Link Rd., No. 2, Bhopal 462006.

Social Welfare, Indian Council of, C/o Indore School of Social Work, 13-14, Old Sehore Rd., Indore 452001.

MAHARASHTRA

GREATER BOMBAY

COMMERCIAL

Acrylic Sheets Mfrs. Assocn., All India, C/o Fasto Labs., Nanabhoy Mansion, Sir P.M. Rd., Bombay 400001.

Advertisers Ltd., Indian Socy. of, 148, M. Gandhi Rd., Bombay 400023. Estd. 1952. Non-profit service orgn. representing advertisers in the public and private sectors. It provides a professional forum for dialogue on important issues relating to communication by print media, radio and TV etc. *Chmn.*, Harish Mahindra ; *Vice-Chmn.*, J. C. Chopra.

Advertising Agencies Assocn. of India, 111A, M. Gandh Rd., Bombay 400023.

Advertising Agents' Assocn. of India, Railways, 1107, Prasad Chambers, Opera House, Bombay 400004.

Advertising Council of India, Army Navy Bldg., M. Gandhi Rd., Bombay 400023.

Aerated Water Mfrs.' Assocn., Bombay, 69, Tardeo Rd., Bombay 400034.

Agarwoods Exporters' Assocn., 204, Nagdevi St., Bombay 400003.

Agricultural Co-op. Mktg. Fedn. Ltd., National, 84, Nariman Rd., Bombay 400020.

Alkali Mfrs. Assocn. of India, Bansilal Mansion, 11, Homi Mody St., Bombay 400023.

Aluminium Small Scale Mfrs. Assocn., Maharashtra, C/o Aluminium Rolling & Spg. Mills Pvt. Ltd., Nagardas Rd., Mogra West, Andheri (East), Bombay 400069.

Arms Dealers' Assocn., Bombay, 246, Abdul Rehman St., Bombay 400003.

Art Silk Doubling Mills Assocn. Ltd., Bharat, Shahni Mansion, 29, Nakhoda St., Bombay 400003.

Art Silk Fabric Mfrs. Assocn., 78, Veer Nariman Rd., Bombay 400020.

Audit Bureau of Circulations Ltd., Wakefield House, B. Estate, Bombay 400038. The Bureau engages itself in the certification of circulation figures of publications enrolled with it, and disseminates information so collected to all its members. *Chmn.*, V. Adya ; *Dy. Chmn.*, P. K. Roy ; *Secy.*, S. R. Ayer ; *Treasurer*, N. M. Angar.

Automobile and Ancillary Industries Assocn., All India, 80, Dr. A. Besant Rd., Bombay 400018.

Automobile Assocn., Western India, 76, Veer Nariman Rd., Bombay 400020. *Branch Offices :* The Cellar, Khanpur Rd., Ahmedabad, 380001 ; 7, Moledina Rd., Pune 411004 ; Cathedral Business Blocks, Residency Rd., Nagpur 440001 ; Rajendra Bhavan, F/74, Subhas Mrg., C-Scheme, Jaipur 302002 ; Tourist Hostel, Panaji 403001, Goa.

Automobile Assocn., Fedn. of Indian, 76, Veer Nariman Rd., Bombay 400020.

Automobile Dealers' Assocns., Fedn. of, 534, Sardar V. P. Rd., Bombay 400007.

Automobile Mfrs., Assocn. of Indian, Army and Navy Bldg., M. Gandhi Rd., Bombay 400023.

Bakers' Assocn., Bombay, Court House, Lokmanya Tilak Marg, Bombay 400002.

Ball Bearing Merchants' Assocn., All India, 105, Abdul Rehman St., Bombay 400003.

Bangles Mfrs. Assocn., All India Plastic, Shanti Nagar, Mukta Baug, Near Malad Sub-way, Malad West, Bombay 400064.

Banks Assocn., Indian, Stadium House, Veer Nariman Rd., Bombay 400020.

Banks' Fedn., All India State Co-operative, Garment House, Dr. A. Besant Rd., Worli, Bombay 400018.

Bidi Industry Fedn., All India, 12, Rampart Row, Bombay 400023.

Bobbin Mfrs. Assocn., All India, 1007, Prasad Chambers, Opera House, Bombay 400004.

Bolts Nuts Merchants' Assocn., Bombay, 81, Nagdevi Cross Lane, Bombay 400003.

Book Mfrs. Assocn., 183, Abdul Rehman St., Bombay 400003.

Booksellers & Publishers Assocn., Bombay, 3/625, Dr. Bhadkamker Mrg., Bombay 400008.

Bright Steel Mfrs. Assocn. of India, Sealord, Cuffe Parade, Bombay 400005.

Builders' Assocn. of India, G-1/G-20, Commerce Centre, J. Dadajee Rd., Tardeo, Bombay 400034.

Bullion Assocn. Ltd., Bombay, 185, Sheikh Memon St., Bombay 400002.

Camphor Tablets Mfrs. Assocn., Bombay, 218, Samuel St., Bombay 400003.

Canvas & Tarpaulin Merchants' Assocn., Bombay, 257/59, Masjid Bunder Rd., Bombay 400003.

Cement Mfrs. Assocn., Express Bldg., Opp. Churchgate Rly. Stn., Bombay 400020.

Cement Tiles Mfrs. Assocn., 8/10, Green St., Bombay 400023.

Chemical and Alkali Merchants' Assocn., Himalaya House, Paltan Rd., Bombay 400001.

Chemical Auxiliaries Mfrs. Assocn., Indian, C/o Assocn. of Merchants & Mfrs. of Textile Stores & Machinery (India), 18/20, Rampart Row, Bombay 400023.

Chemical Importers & Dealers Assocn., All India Fine, Bharat Mahal, Subhas Rd., Bombay 400002.

Chemical Industry, Technical Information Centre for, 16, Apollo St., Bombay 400023.

Chemical Mfrs. Assocn., Indian, 16, Bombay Samachar Mrg.., Bombay 400023.

Chemical Plant & Machinery Assocn. of India, C/o Bombay Chamber of Commerce & Ind., Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Chemists' and Druggists' Assocn., 48, S. Gandhi Mrg., Bombay 400002.

Cholorobenzenes Mfrs. Assocn., All India Small Scale, 14, Garibdas St., Vadgadi, Bombay 400003.

Cloth Dealers' Assocn., Fedn. of Bombay Retail, 24/30, 1st Marine St., Bombay 400002.

Clothing Mfrs. Assocn. of India, Mahalaxmi Chambers, 902/22, Bhulabhai Desai Rd., Bombay 400026.

Clove Merchantss Assocn., Bombay, 177, Samuel St., Bombay 400009.

Coal & Coke Merchants' Assocn. Ltd., Bombay, Rewa Chambers, V. Thackersey Marg, Bombay 400020.

Company Secretaries' Assocn., C/o Ulka Advertising, Nirmal, Nariman Point, Bombay 400021.

Copperware Mfg. Assocn., Small-Scale, 39, Bhajipala St., Bombay 400003.

Cork Mfrs. Assocn., All India Small Scale, 64, Old Custom House Rd., Bombay 400023.

Corrugated Box Mfrs. of India, Fedn. of, 214, Mittal Estate No. 3, M. Vasanji Rd., Andheri East, Bombay 400059.

Cotton Assocn., Ltd., East India, Cotton Exchange, Marwari Bazar, Bombay 400002.

Cotton Buyers' Assocn., Eucharistic Congress Bldg., 4th Floor, 5, Convent St., Bombay 400039.

Cotton Mills' Fedn., Indian, 34 P. D'Mello Rd., Wadi Bunder, Bombay 400009.

Cotton Waste Exporters Assocn., All India, Sapt Bldg., Graham Rd., B. Estate, Bombay 400038.

Cottonseed Crushers' Assocn., All India, 198, Jamshedji Tata Rd., Bombay 400020.

Crimpers Assocn., All India, Silk House, Silk Bazar, Bombay 400002.

Custom House Agents' Assocns. in India, Fedn. of, Kaikhushroo Bldg., 237, P. D'Mello Rd., Bombay 400001.

Cutlery, Toys, Glass Beads and Sundry Merchants' Assocn., Bombay, 106, Bhusari Mohalla, Bombay 400003.

Diamond Merchants' Assocn., Bombay, 3, Dhanji St., Bombay 400003.

Diesel Engine Mfrs. Assocn., Indian, 105, Kakad Chambers, 132, Dr. A. Besant Rd., Bombay 400018.

Documentary Producers' Assocn., Indian, National House, Tulloch Rd., Apollo Bunder, Bombay 400039.

Drop Forging and Stamping Industries., Assocn. of Indian, 80, Dr. A. Besant Rd., Bombay 400018.

Drug Mfrs. Assocn., Indian, B. Poonam Chambers, Worli, Bombay 400018.

Dyestuff Mfrs. Assocn. of India, Room Nos. 46-47, 296, Samuel St., Bombay 400003.

Economic Devpt. Council, Maharashtra, 106, N. Master Rd., Bombay 400023. Organisation of all the prominent Chambers of Commerce, Industries and Trade Assocns. of Maharashtra.

Electric Merchants' Assocn., Shreeji Bhavan, Lohar Chawl, Bombay 400002.

Electric Motor Mfrs.' Assocn., All India, Hague Bldg., 4th Flr., Sprott Rd., B. Estate, Bombay 400038.

Electrical Cable Devpt., Assocn., 503, Arun Chambers, Tardeo Rd., Bombay 400034.

Electrical Contractors Assocn. of Maharashtra, Stock Exchange Tower, 9th Flr., Room No. 904, Dalal St., Bombay 400023

Electrical Mfrs. Assocn., Indian, Kakad Chambers, Dr. A. Besant Rd., Bombay 400018.

Electricity Undertakings of India, Fedn. of, Transport House, S. Bhagat Singh Rd., Bombay 400039.

Electronic Component Industries Assocn., Handloom House, Dr. D. Naoroji Rd., Bombay 400001.

Electronic Industries Assocn., Small Scale, 1203, Prasad Chambers, Tata Rd., Bombay 400004.

Embroidered Textile Mfrs. Assocn., All India, Bombay Cotton Mills Estate, Dattaram Lad Path, Kalachowki Rd., Bombay 400033.

Employers' Fedn. of India, Army & Navy Bldg., 148, M. Gandhi Rd., Bombay 400023.

Engineering Industry, Assocn. of Indian, (W. Regn.), 105, Kakad Chambers, Dr. A. Besant Rd., Bombay 400018.

Exercise Books Mfrs. Assocn., All India Fedn. of, 299, Abdul Rehman St., Bombay 400003.

Fair Trade Practices Assocn., Great Western Bldg., 130/132, Apollo St., Bombay 400023.

Ferro Alloy Producers' Assocn., Indian, 14, M. Karve Rd., Bombay 400020.

Ferrous & Non-Ferrous Mfrs. Assocn., Bombay, 201/13, 12, Panjarapole, 3rd Lane, Bombay 400004.

Fertiliser Assocn. of India, W. Regnl. Branch, 305, Neelkanth, 98, Marine Drive, Bombay 400002.

Fertiliser Co-operative Ltd., Indian Farmers, Brady's Flats, S. Bharucha Rd., Bombay 400005.

Flour Mills Owners' Assocn., Bombay, Parekh Wadi, V. P. Rd., Bombay 400004.

Food Processing Industry Assocn., Indian, C/o P. S. Purohit, 3, Sadashiv St., Bombay 400004.

Footwear Mfrs.' Assocn., All India, 'Nirmal', 3rd Floor, Nariman Point, Bombay 400021.

Foreign Exchange Dealers Assocn. of India, C/o Syndicate Bank, Oberoi Sheraton Hotel, Nariman Pt., Bombay 400021.

Foreign Trade, Indian Council of, 5, New Marine Lines, Bombay 400020.

'**Foundry Owners' Assocn., Bombay Type,** B-196, Gaiwadi, Girgaum, Bombay 400004.

Fountain Pen Mfrs. & Traders Assocn., Bombay, Post Box No. 7471, Jogeshwari (East), Bombay 400060.

Freight Brokers' Assocn., Bombay Overseas, C/o H. Toolsidass, 5, Graham Rd., B. Estate, Bombay 400038.

Gem & Jewellery Exporters Assocn., 29, Gurukul Chambers, 187-189, Mumbadevi Rd., Bombay 400002.

Goods Transport Assocn., Bombay, Mehta Chambers, Kalyan St., Bombay 400009.

Grain, Rice & Oilseeds Merchants' Assocn., 72-80, Yusuf Meheralli Rd., Bombay 400003.

Graphic Machinery Importers Assocn., Sambava Chambers, 20, Sir P. M. Rd., Bombay 400001.

Groundnut Extractions Export Devpt. Assocn., Tanna House, 11-A, Nathalal D. Parikh Mrg., Bombay 400039.

Gunny Bags Merchants' Assocn., Bombay, 67, Bhandari St., Bombay 400003.

Handicrafts Devpt. Assocn., Indian, Abbas Bldg., Room No. 6, 2nd Flr., Mereweather Rd., Bombay 400039.

Handloom Co-operative Fedn. Ltd., Maharashtra, Washani Chambers, 47, Sir V. Thackersey Mrg., Bombay 400020.

Handloom Fabrics Marketing Co-op. Socy. Ltd., All India, Mittal Chmrs., Nariman Pt., Bombay 400021.

Handloom & Powerloom Exporters Assocn., Bombay, Mustafa Bldg., Sir P. M. Rd., Bombay 400001.

Hardware Merchants' Assocn., Bombay, 57, Sarang St., Bombay 400003.

Hessian & Gunny Merchants Assocn., Bombay, 395, Narsi Natha St., Bombay 400009.

Hosiery Mfrs.' Assocn. of India, Fedn. of, 70/72, Sheriff Devji St., Bombay 400003.

Hotel and Restaurant Assocn. (W. India), Taj Mahal Hotel, Mezzanine Flr., Apollo Bunder, Bombay 400039.

Hotels' Assocn., Bombay, 243, Masjid Bunder Rd., Bombay 400003.

Hotels Fedn., Bombay City & Suburban, Dossa House, Gunbow St., Bombay 400001.

Importers' Assocn., All India, 32, Nariman Rd., Bombay 400001.

Industrial Diamond Assocn. of India, C/o Bombay Chamber of Commerce & Ind., Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Industrial Estate Ltd., Bombay Co-op., Sahakar Bhavan, Kurla Industrial Estate, Bombay 400086.

Industries, All India Assocn. of, Wakefield House, 11, Sprott Rd., Ballard Estate, Bombay 400038.

Instrument Assocn. of India, 83, Mahendra Chambers, 134/36, Dr. D. Naoroji Rd., Bombay 400001.

Instrument Mfrs.' and Dealers' Assocn., All India, A-32, Navyug Nivas, Dr. D. Bhadkamkar Mrg., Bombay 400007.

Instruments Export Organisation, A-32, Navyug Nivas, 167, Dr. D. Bhadkamkar Rd., Bombay 400007.

Insurance Assocn. of India, Bombay Regnl. Council, Radia House, 6, Rampart Row, Bombay 400023.

Iron Merchants' Assocn., Bombay, 501, Steel Centre, Sant Tukaram Rd., Bombay 400009.

Iron & Steel Exporters Assocn., All India, Loha Bhavan, P. D'Mello Rd., Bombay 400009.

Iron & Steel Scrap Assocn. of India, 301/2, 3rd Flr., **Giriraj, 73, Sant Tukaram Rd., Bombay 400009.**

Leather Goods Mrfs. and Dealers' Assocn., 157/161, Princess St., Bombay 400002.

Livestock Feeds Mfrs. Assocn. of India, Compound, 111, Mittal Chambers, Nariman Pt., Bombay 400021.

Lorry Operators' Syndicate, Bombay, 575, Sheriff Devji St., Bombay 400003.

Loss Prevention Assocn. of India Ltd., Warden House, Sir P. Mehta Rd., Bombay 400001.

Machine Tool Mfrs. Assocn., Indian, 82, Jolly Maker Chambers No. 2, 225, Nariman Point, Bombay 400021.

Man-made Fibre Industry, Assocn. of, 78, Veer Nariman Rd., Bombay 400020.

Man-made Fibre Spinners' Assocn., Jolly Maker Chambers No. 2, Nariman Pt., Bombay 400021.

Man-made Textiles, Devpt. Council for, C/o Office of the Textile Commr., New C.G.O. Bldg., New Marine Lines, Bombay 400020.

Manufacturers' Organisation, All India, Jeevan Sahakar, Sir P. Mehta Rd., Bombay 400001.

Marble & Tile Merchants' Assocn., Bombay, C/o C. Bhogilal & Co., Mint Rd., Bombay 400001.

Master Printers' Assocn., Bombay, 216, Neelam, 108, Worli Seaface Rd., Bombay 400018.

Mercury Traders' Assocn. Ltd., Bombay, 220, Samuel St., Bombay 400003.

Metal Exchange Ltd., Bombay, Gogate Mansion, Kika St., Bombay 400002.

Metal Finishers Assocn., Parijat, Block 24, 95, Marine Drive, Bombay 400002.

Mill Gin Store Merchants' Assocn., 88/92, Nagdevi Cross Lane, Bombay 400003.

Millowners' Assocn., Elphinstone Bldg., Veer Nariman Rd., Bombay 400023.

Mineral Merchants' & Mfrs.' Assocn., Bombay, 129, Kazi Syed St., Bombay 400003.

Motor Merchants' Assocn. Ltd., Bombay, Sukh-Sagar, Sandhurst Bridge, Bombay 400007.

Motor Parts Dealers' Assocn., Maharashtra, 34, Mathew Rd., Bombay 400004.

Motor Transport Assocns., Fedn. of, 26, P. D'Mello Rd., Bombay 400009.

Mudrak Sangh, Mumbai, C/o General Printers & Publishers, 263/F, Raja Ram Mohan Roy Rd., Bombay 400004.

Newspapers' Assocn., Indian Language, Janmabhoomi Bhavan, Ghogha St., Bombay 400001.

Non-Ferrous Metal Industries Assocn., All India, C/o eewanlal (1929) Ltd., Liberty Bldg., Marine Lines, Bombay 400020.

Oil Industry Assocn., All India Non-Edible, Royal Insurance Bldg., J. Tata Rd., Bombay 400020.

Oil Industry and Trade, Central Orgn. for, Anna Bhavan, 87/C, Broach St., Bombay 400009.

Oil Millers' Assocn. Ltd., Bombay Local, 363, Katha Bazar, Bombay 400009.

Oil and Produce Exporters' Assocn., Indian, Bajaj Bhavan, Nariman Pt., Bombay 400021.

Oilseeds and Oils Exchange Ltd., Bombay, Jenabai Bldg., Yusuf Meherally Rd., Bombay 400003.

Packaging Mfrs. Forum, All India Flexible, 904-B, Surya Apartments, 53, Warden Rd., Bombay 400026.

Paint and Allied Industries Assocn., All India Small Scale, 310, Arun Chambers, Tardeo Rd., Bombay 400034.

Paint Assocn., Indian, C/o Bombay Chamber of Commerce & Ind., Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Paper & Allied Products Mfrs. Assocn., All India, Vaswani Mansion, 120, D. Vachha Rd., Bombay 400020.

Paper Traders' Assocn., 54, Sutar Chawl, Bombay 400002.

Paper Traders' Assocn. of India, Fedn. of, Commerce House, 140, N. Master Rd., Bombay 400023.

Pearl Dealers' Assocn., Genuine, 82/86, Abdul Rehman St., Bombay 400003.

Pepper and Ginger Merchants' Assocn. Ltd., 332-34, Narsi Natha St., Bombay 400009.

Pest Control Assocn., Indian, Puribai Smruti Bldg., 47/49, Mint Rd., Bombay 400001.

Pesticides, Assocn. of Basic Manufacturers of, Express Towers, 19th Flr., N. Point, Bombay 400021.

Pesticides Assocn. of India, Ralli House, Ravelin St., Bombay 400001.

Petroleum Products Importers Assocn., All India, C/o H. J. Leach & Co., Asian Bldg., Nicol Rd., Ballard Estate, Bombay 400038.

Pharmaceutical and Allied Mfrs.' and Distributors' Assocn. Ltd., Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Pharmaceutical Assocn., Indian, Kalina, Santa Cruz (East), Bombay 400029.

Pharmaceutical Products of India, Organisation of, Cook's Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Photographic and Allied Trades Assocn. Ltd., Western India, Mangrol Mansion, 6, Gunbow St., Bombay 400001.

Pipes and Fittings Merchants' Assocn., Bombay, 84, Nagdevi St., Bombay 400003.

Plastic Machinery Mfrs. Assocn., All India Small Scale, C/o Foranco, National House, 6, Tulloch Rd., Bombay 400039.

Plastic Pipes and Fitting Mfrs. Assocn., Small Scale, National House, 6, Tulloch Rd., Bombay 400039.

Plastics Mfrs. Assocn., All India, Jehangir Bldg., M. Gandhi Rd., Bombay 400023.

Polyester Staple Fibre Mfrs., Assocn. of, Mittal Chambers, 228, Nariman Pt., Bombay 400021.

Polymers Mfg. Industries Assocn., 5, Jyoothika Mukrand Socy., Cadell Rd., Bombay 400016.

Polythene Layflat Tubing Mfrs. Assocn., All India Small Scale, 116, Sarang St., Bombay 400003.

Powerloom Industries Assocn., 12, Rampart Row, Bombay 400023.

Press Owners' Assocn., Bombay, 196B, Gaiwadi, Bombay 400004.

Printers, All India Fedn. of Master, C/o Bombay Samachar Ltd., Horniman Circle, Bombay 400023

Printing Materials & Ink Dealers Assocn., C/o Gandhi Stationery Mart, 178, Bazar Gate St., Bombay 400001.

Produce Exporters' Assocn., Indian, 76, Sheriff Devji St., Bombay 400003.

Productivity Council, National, Novelty Chambers, Grant Rd., Bombay 400007.

Publications Assocn., Specialised, 235, Dr. D. Naoroji Rd., Bombay 400001.

Publishers' and Booksellers' Assocns. in India, Fedn. of, C/o India Book House, Rusi Mansion, 29, Nathalal D. Parikh Mrg., Bombay 400039.

Pump Mfrs.' Assocn., Indian, 105, Kakad Chambers, 132, Dr. A. Besant Rd., Bombay 400018.

Radio Advertisers & Producers Assocn. of India, 305, Neelam, Worli, Bombay 400018.

Radio Electronic and Television Mfrs.' Assocn., Wavell House, B. Estate, Bombay 400038.

Radio & Electronics Assocn., All India, Sukh Sagar, N. S. Patkar Mrg., Bombay 400007

Refrigeration and Air Conditioning Trades Assocn. Limited., C/o Bombay Cycle & Motor Agency Ltd., 534, Sardar V. Patel Rd., Bombay 400007.

Roads and Transport Devpt. Assocn. Ltd., Indian, 27, Bastion Rd., Bombay 400001.

Roller Flour Millers Assocn., Maharashtra, C/o Maharashtra Chamber of Commerce, 12, Rampart Row, Bombay 400023.

Rubber Industries Assocn., All India, Navjivan Socy. Bldg., Lamington Rd., Bombay 400008.

Safety Appliances Mfrs. Assocn., 11/43, Tamarind St., Bombay 400023.

Salt Mfrs.' Assocn., Indian, Tanna House Annexe, 11-A, Nathalal D. Parikh Marg, Bombay 400039.

Sanitaryware Assocn., Bombay, 8/10, Green St., Bombay 400023.

Screen Printers & Processors Assocn., Bombay, Neelam, Plot No. 108, Worli Sea Face, Bombay 400018.

Sheet Rollers' Assocn., Western India, 32, R. Kamani Marg, Ballard Estate, Bombay 400038.

Shipowners' Assocn., Indian National, Scindia House, Ballard Estate, Bombay 400038.

Shippers Assocn., Western India, Indian Merchants' Chamber, 76, Veer Nariman Rd., Bombay 400020.

Shoddy Mills Assocn., Indian, C/o Simplex Woollen Mills, Sadhana Rayon House, Dr. D. Naoroji Rd., Bombay 400001.

Shroffs' Assocn. Ltd., Bombay, 233, **Shroff** Bazar, Bombay 400002.

Shuttle Mfrs.' Assocn., C/o Acme Bobbins & Shuttles Pvt. Ltd., 315, S. Veer Savarkar Mrg., Bombay 400028.

Silk Merchants' Assocn., Dahanukar Bldg., Kalbadevi Rd., Bombay 400002.

Small Scale Industries Corpn. of India, Assocn. of, Bombay Life Bldg., 45, Veer Nariman Rd., Bombay 400023.

Soap Mfrs.' Assocn., Non-Power, Sabun Bhavan, 187, Sheriff Devji St., Bombay 400003.

Solvent Extractors' Assocn. of India, Jolly Maker Chambers No. 2, Nariman Pt., Bombay 400021.

Spg. Mills Ltd., All India Fedn. of Co-op., 14, Marzban Rd., Bombay 400001.

Spring Mfrs.' Assocn. of India, All India, C/o Bombay Chamber of Commerce & Ind., Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Stainless Steel Industries Assocn., All India, Arun Chambers, Tardeo Main Rd., Bombay 400034.

Statinless Steel Merchants' Assocn., 29C, Sarvodaya Nagar, Panjrapole, Bombay 400004.

Stainless Steel Re-rollers Assocn., 418, Loha Bhavan, P. D'Mello Rd., Bombay 400009.

Starch Mfrs.' Assocn. (Pvt.) Ltd., All India, 159, Colaba Rd., Bombay 400005.

Stationers Assocn., Bombay, 237, Abdul Rehman St., Bombay 400003.

Stevedores, Fedn. of Assocns. of, Janmabhoomi Chambers, Fort St., Bombay 400001.

Stock Exchange, Dalal St., Bombay 400023.

Sugar Factories' Assocn., Deccan, Stadium House, Block No. 2, Veer Nariman Rd., Bombay 400020.

Sugar Merchants' Assocn. Ltd., Bombay, Ahmedabad St., Bombay 400009.

Sugar Mills Assocn., Indian, 5, Convent St., Bombay 400039.

Synthetic Fibre Industry, Assocn. of, Raj Mahal, 84, Veer Nariman Rd., Bombay 400020.

Tank Lorry Owners' Assocn., G. R. Master Bldg., Sewree Cross Rd., Bombay 400015.

Tarpaulin Merchants' Assocn., Bombay, 297, Narsi Natha St., Bombay 400009.

Technical Entrepreneurs Assocn., All India, National House, 6, Tulloch Rd., Bombay 400039.

Textile Assocn. (India), 72A, Shivaji Park Corner Rd., Bombay 400028.

Textile and Engineering Assocn., Bombay, 343, Sattar Bldg., Grant Rd., Bombay 400007.

Textile Machinery Mfrs.' Assocn., 53, Mittal Chambers, Nariman Point, Bombay 400021.

Textile Processors' Assocn., (India), 414, Senapati Bapat Marg, Bombay 400013.

Textile Stores and Machinery, India, Assocn. of Merchants and Mfrs. of, Bhogilal Hargovindas Bldg., 18/20, Rampart Row, Bombay 400023.

Timber Merchants' Assocn. Ltd., Bombay, 67, Victoria Rd., Mustafa Bazar, Bombay 400010.

Tin Plate Fabricators Assocn., Zenith Bldg., Clerk Rd., Bombay 400034.

Tobacco Merchants' Assocn. Ltd., Indian, 184, Clive St. Bombay 400009.

Toy Mfrs.' Assocn., All India, 4, Meher Bldg., Chowpatty, Bombay 400007.

Tractor, Earthmoving and Construction Equipment Distributors' Assocn. Ltd., Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Trade Fairs & Exhibitions, Indian Council of, Jhansi Castle, Cooperage Rd., Bombay 400039.

Trade and Industry, Assocn. of Indian, Bombay Mutual Chambers, Hamam St., Bombay 400023.

Trade Mark Owners Assocn. of India, Army & Navy Bldg., M. Gandhi Rd., Bombay 400023.

Trade & Technical Publications Assocn., 12, Fort Chambers, Hamam St., Bombay 400023.

Travel Agents Assocn. of India Ltd., 35, Anjali, Behind Radio Club, Arthur Bunder Rd., Bombay 400005.

Tyre Dealers' Assocn., Bombay, Nav Sanket Apartments, Navroji Hill Rd., Bombay 400009.

Vanaspati Mfrs.' Assocn. of India, Harilela House, Mint Rd., Bombay 400001.

Vegetable Oil Assocn. of India, Anna Bhavan, 87-C, D. Rattansey Marg, Bombay 400009.

Village Industries Assocn., Bombay Suburban, 286, Dr. D. Naoroji Rd., Bombay 400001.

Watch Dealers' Syndicate, Bombay, 78, Abdul Rehman St., Bombay 400003.

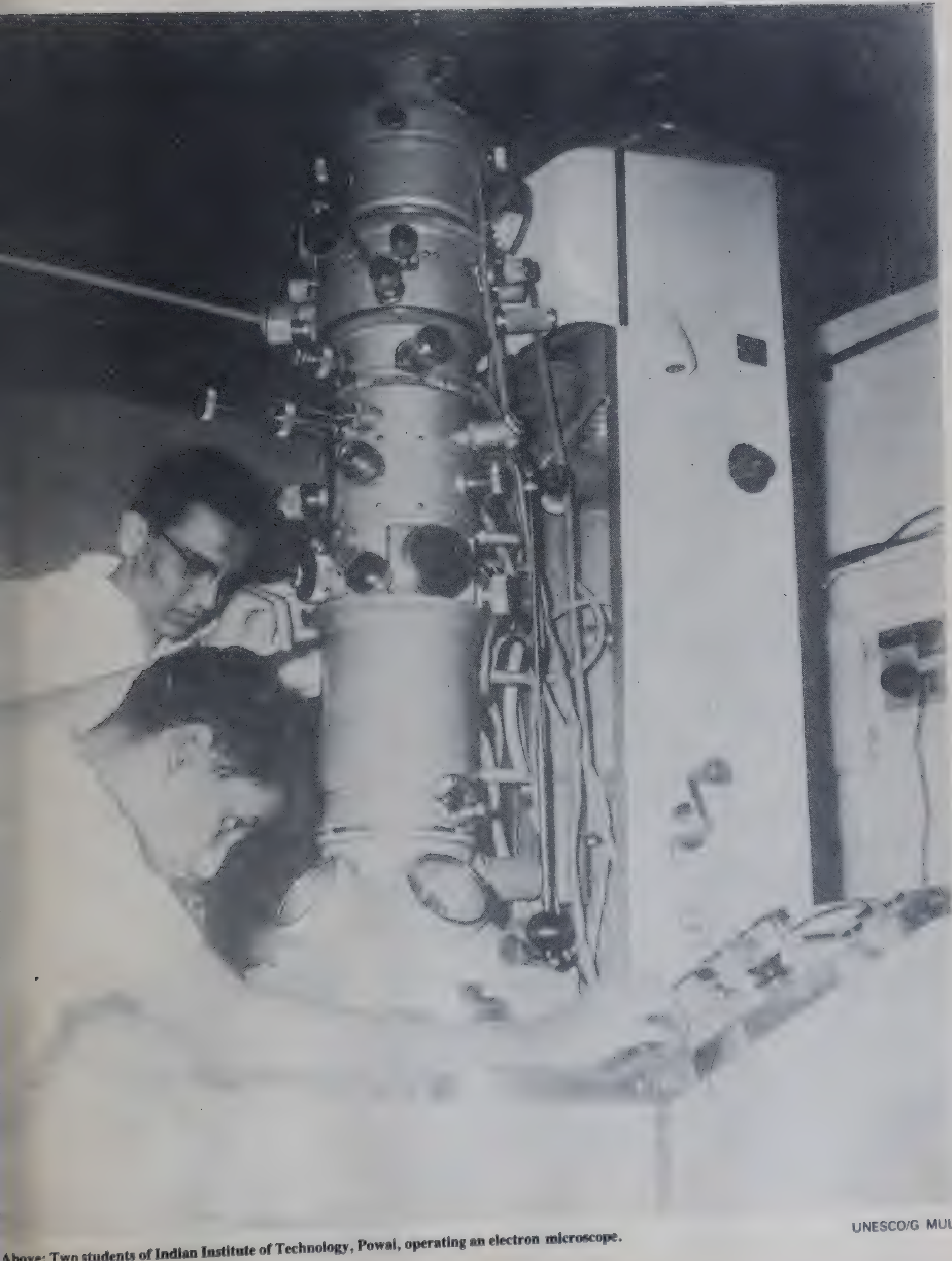
Watch Importers Assocn., C/o Express Watch Co., 78, Abdul Rehman St., Bombay 400003.

Watch Straps Mfrs.' Assocn., All India, Empire Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Watch Trade Fedn., Court Chambers, 35, New Marine Lines, Bombay 400020.

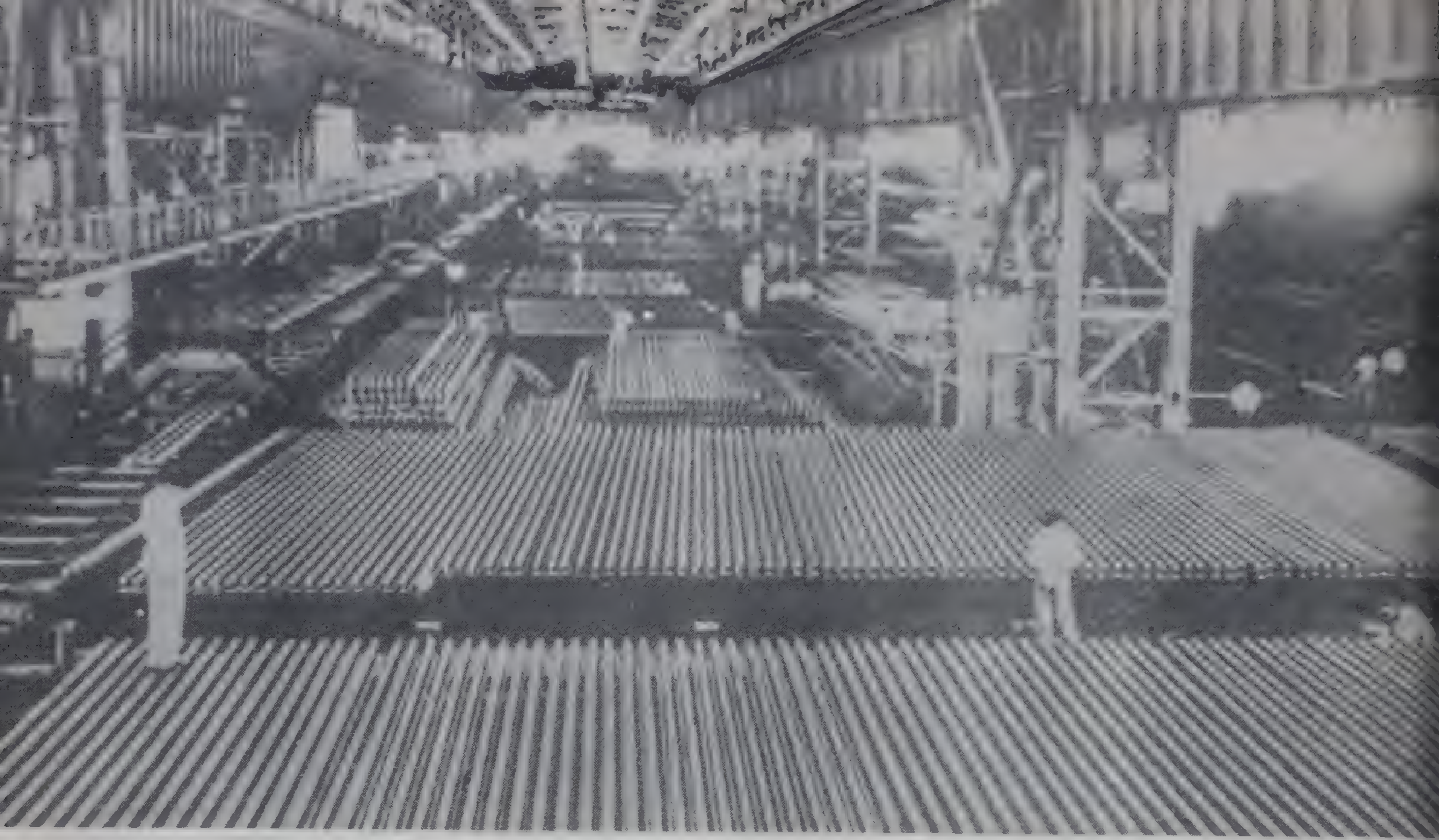
Wires Mfrs. Assocn. of India, Winding, B-1/3, Sea Lord, Cuffe Parade, Bombay 400005.

Woollen Mills Fedn., Indian, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.



UNESCO/G MULL

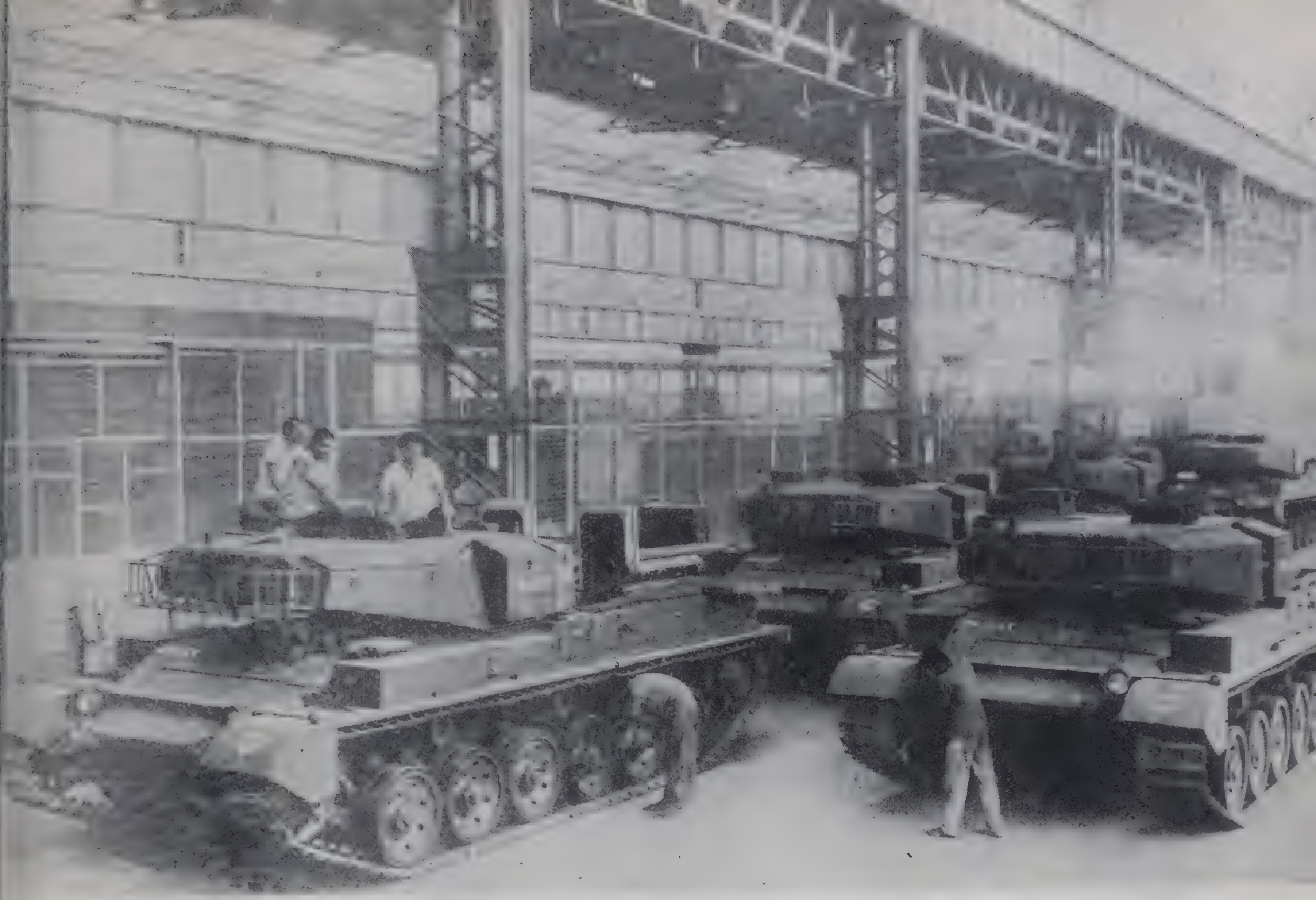
Above: Two students of Indian Institute of Technology, Powai, operating an electron microscope.



Above: Rail assembly line at Bhilai Steel Plant.

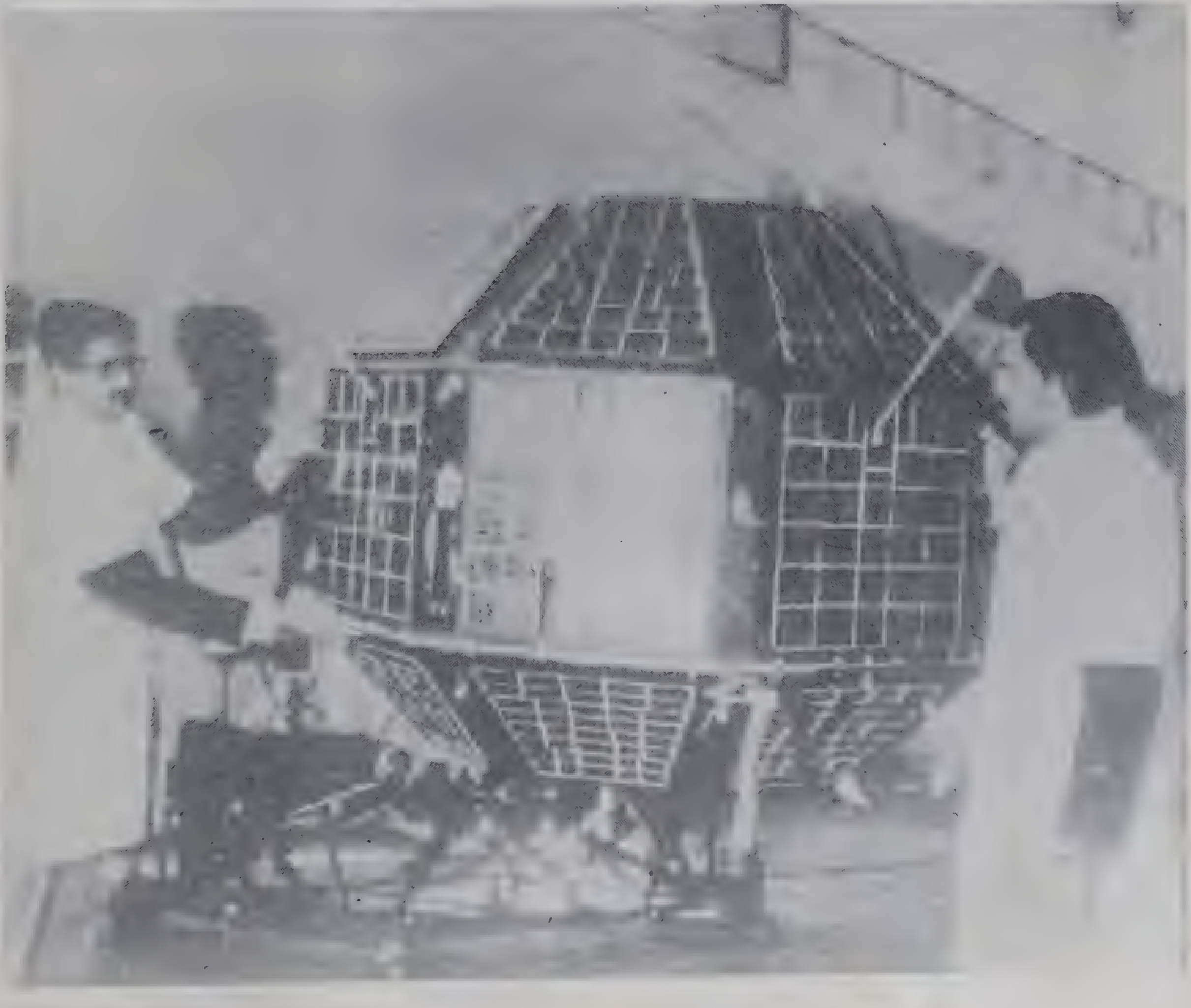
Below right: An oil well platform being installed at Bombay High.

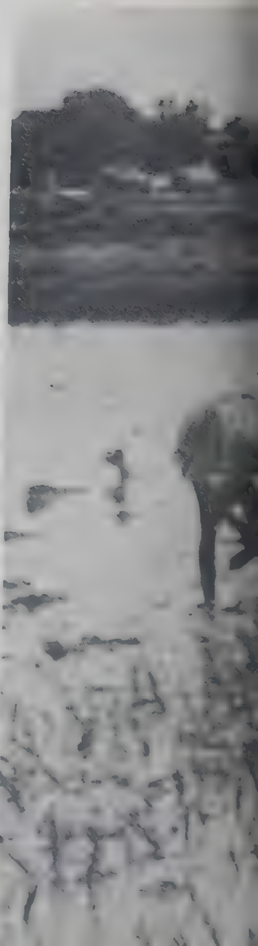
Below left: Prospecting for minerals.



Above: *Vijayanta* **tank assembly in progress.**

Below: *Aryabhat*—**a prototype of the Indian satelite.**



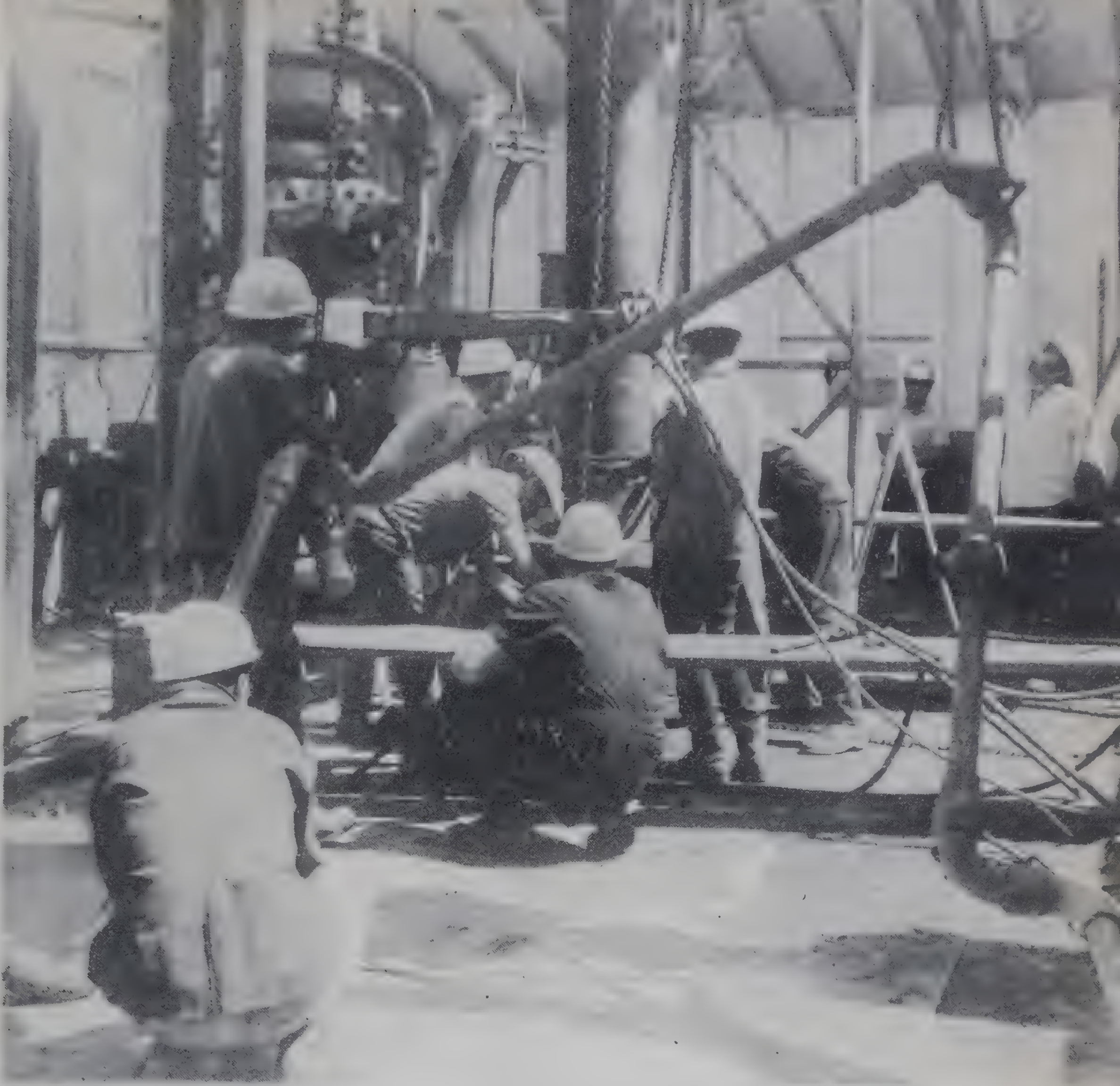


Above left: Vehicle assembly line in TELCO, Pune.

Below left: An attractive export show room of an engineering firm.

Above right: Oil drilling on board an offshore oil rig.

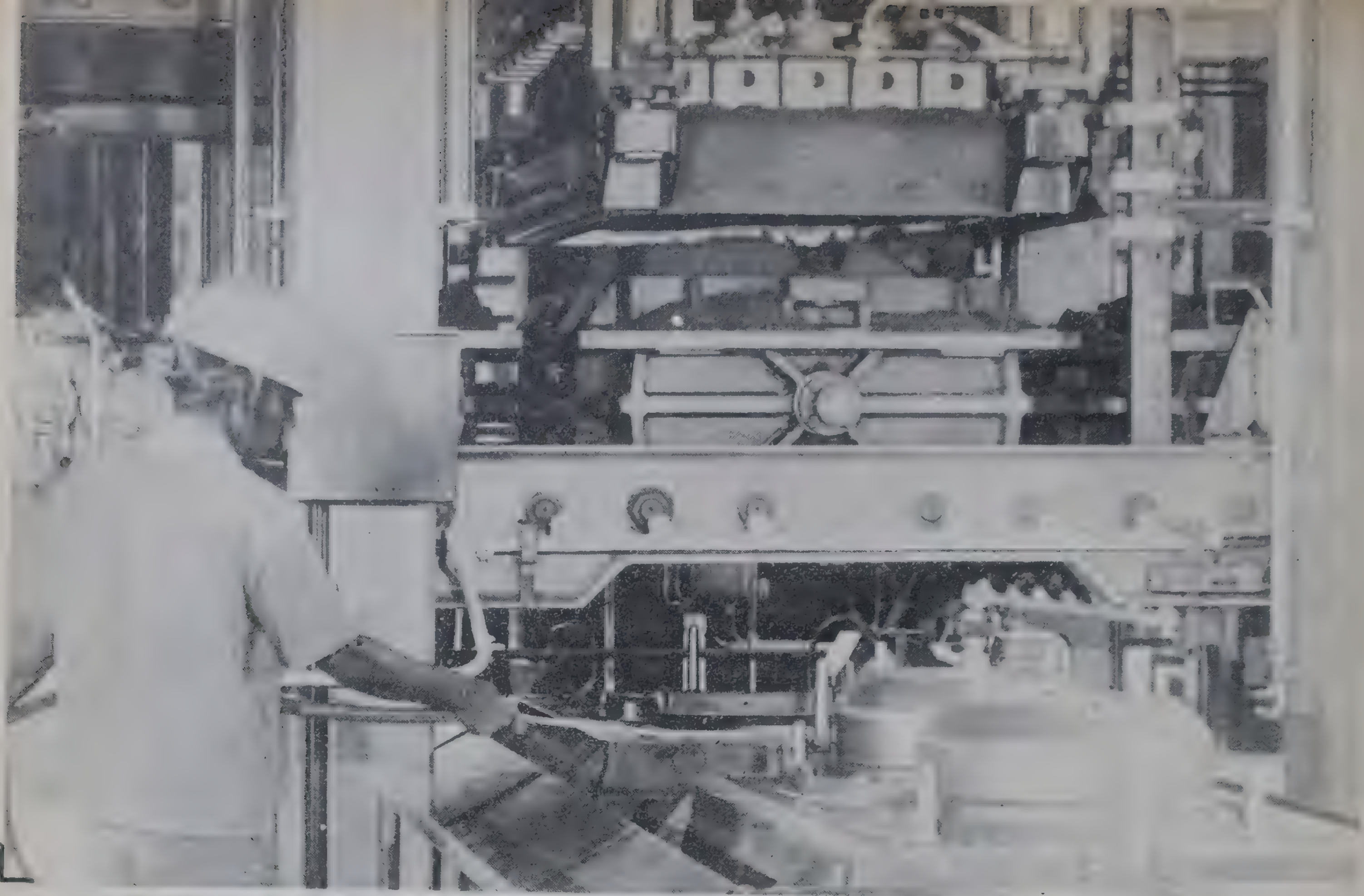
Below right: Transplantation in progress in an Uttar Pradesh village.



Far right: A group of farmers in Punjab being explained the use of high yielding varieties.

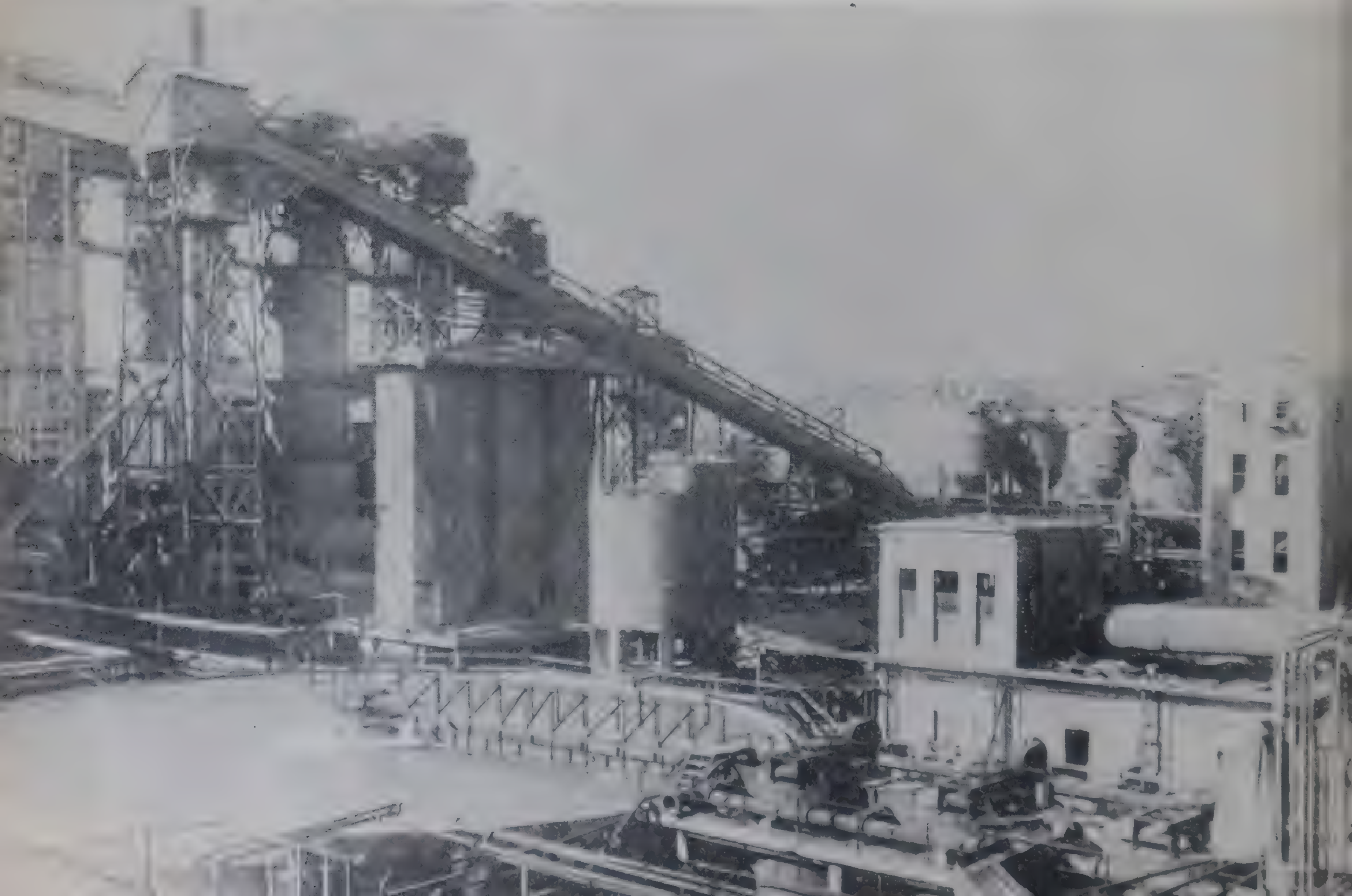
Above left: A power tiller—that does plowing, harrowing and weeding simultaneously—being used by a progressive farmer.

Below left: In a modern textile mill.



Above: High pressure moulding line of TELCO Foundry.

Below: Soda ash brine thickener, Tata Chemicals, Mithapur.



Yarn Merchants' Assocn. and Exchange Ltd., Bombay, Bombay Yarn House, Nakhoda St., Bombay 400003.

X-ray & Electro-Medical Traders' Assocn., All India, Fazalbhoy Bldg., 45, M. Gandhi Rd., Bombay 400023.

CULTURAL, RELIGIOUS AND SOCIAL

Adoption, Indian Assocn. for Promotion of, Mathuradas Bldg., II Flr., 43/45, Shahid Bhagat Singh Rd., Colaba Causeway, Bombay 400039.

Adivasi Seva Mandal, Maharashtra Pradesh, Marthanda Bldg., A. Besant Rd., Bombay 400018.

Aga Khan's Khoja Shia Imami Ismaili Council, H. H., Khoja Jamat Khana, Khadak, Bombay 400009.

Ahmadiyya Muslim Mission, 'Alhaq', 17, YMCA Rd., Bombay 400008.

Ambulance Assocn., Popular, J. Dadajee Rd., Bombay 400007.

Ambulance Assocn., St. John, 141, Bhagat Singh Rd., Bombay 400023.

Ambulance Corps, Bombay City, 21, New Marine Lines, Bombay 400020.

Ambulance Socy., Muslim, 154, Kambekar St., Bombay 400003.

American Cultural Centre, 4, New Marine Lines, Bombay 400020.

Andhra Mahasabha (Regd.), Bombay, Opp. King George High School, Lakhamsi Nappoo Rd., Bombay 400019.

Animal Welfare Assocn., All India, 394A, Bhaudaji Rd., Bombay 400019.

Animals, Socy. for the Prevention of Cruelty to, Hospital Rd., Bombay 400012.

Arab Cause, Indian Committee for, 1st Lady Jamshedji Cross Rd., Bombay 400016.

Arya Samaj, Kakadwadi, V. Patel Rd., Bombay 400004.

Asiatic Socy. of Bombay, Town Hall, Bombay 400023.

Assistance, Rehabilitation, Relief & Aid, Maharashtra (Sarram), Socy. for, C/o Hindustan Standard, United Bank of India Bldg., Sir P. Mehta Rd., Bombay 400001.

Astrological Research Centre, 3, Benny's Cot, Bhaudaji Rd., Matunga, Bombay 400019.

Ayappa Seva Sangam Bombay (Regd.), P.O. Box No. 7504, 185, Bangur Nagar, Goregaon, Bombay 400062.

Balkan-Ji-Bari & All India Youth Assocn., "Gulistan", 12th Rd., Khar, Bombay 400052.

Bapnu Ghar, 12A, A. Besant Rd., Bombay 400018.

Bhagini Samaj, 225, N. Desai Rd., Bombay 400004.

Bhagvad Gita Pathashala, Shrimad, Madhav Baug, Bombay 400004.

Bharat-Mauritius Friendship Socy., 7/98, Azad Nagar, J.P. Rd., Bombay 400058.

Bharatiya Samaj, Shri Brihad, N. K. M. International House, 178, Backbay Reclamation, Bombay 400020.

Bible Socy. of India and Ceylon, India House, Opp. G.P.O., Fort St., Bombay 400001.

Billawar Assocn., 64/75, Modi St., Bombay 400001.

Brahmin Assocn., Bombay South Kanara, 273, Sion Matunga Estate, Bombay 400022.

Braj Mandal, 1107, Prasad Chambers, Near Roxy Cinema, Bombay 400004.

British High Commission — British Council Division French Bank Bldg., Homji St., Bombay 400001. *Library*: N. K. Mehta International House, 178, Backbay Reclamation, Bombay 400020.

Cactus and Succulent Socy., 11/168, "Padmalaya", Matunga Rd., Wadala, Bombay 400031.

Cancer Patients Aid Assocn., 5, India House, Opp. G.P.O., Bombay 400001.

Carmel Socy., Bombay, 271, Carter Rd., Bombay 400050.

Cheshire Home, Bombay, Bethlehem House, Mahakali Caves Rd., Bombay 400058. The Cheshire Homes are for the incurably sick and homeless.

Child Welfare, Maharashtra State Council for, 'Shivneri' Annexe, A. G. Bell Marg, Bombay 400006.

Children Socy., Friends of, Advent, 31, Gen. Bhonsle Mrg., Bombay 400021.

Children's Aid Socy., 83, Lady Hardinge Rd., Mahim, Bombay 400016.

Children's Film Socy. (India), Hingorani House, Dr. A. Besant Rd., Worli, Bombay 400018.

Children's National Foundation, Kamani Chambers, R. Kamani Mrg., Ballard Estate, Bombay 400038.

Chinmaya Mission, Sandeepany Sadhanalaya, Vihar Rd., Bombay 400076.

Community Aid & Sponsorship Programme (CASP), 175, Dr. D. Naoroji Rd., Bombay 400001. A national voluntary social welfare agency catering services to the needy handicapped school going children & also to the distressed communities.

Crafts Council of Western India, 59, L. Jagmohandas Mrg., Bombay 400006. An assocn. of craftsmen & designers dedicated to the protection and advancement of the creative aspects of crafts in W. India.

Cultural Freedom, Indian Assocn. for, 148, M. Gandhi Rd., Bombay 400023.

Cultural Organisations of Bombay, Fedn. of, Akash Ganga, 89, Bhulabhai Desai Rd., Bombay 400036.

Cultural Relations, Indian Council for, Hem-Prabha, Subhas Rd., Bombay 400020.

Depressed Classes Mission Socy. of India, 112, Nagindas Master Rd., Bombay 400023.

Destitutes and Orphans, Bene-Israel Home for, 9A, Wylie Rd., Bombay 400011.

Devadiga Sudharaka Sangha, 108, Bora Bazar St., Top Floor, Bomay 400001.

Dharma Socy., Rashtra, Ganga Nivas, 234, Walkeshwar Rd., Bombay 400006.

Diocesan Council, Bombay, 19, Waudby Rd., Bombay 400001.

Diocesan Trust Assocn. Ltd., 111, Gibbs Rd., Bombay 400006.

Divine Life Society, Nagindas Chambers, 2nd Flr., 167. P. D'Mello Rd., Bombay 400038.

Dock Labour Board, Bombay, Krupanidhi, 9, W. H. Mrg., B. Estate, Bombay 400038.

Family Planning Assocn. of India, Bajaj Bhawan, Nariman Pt., Bombay 400021. Has 41 branches plus 9 rural projects. Activities include edn. & service for family plng., trg. of medical & field personnel; research & programmes in population, sex & family life edn. Affiliated to the Intnl. Planned Parenthood Fedn. *Pres.*. Smt. Avabai B. Wadia.

Film Societies of India, Fedn. of, 421, Hind Rajasthan Centre, D. S. Phalke Rd., Bombay 400014.

Folk Arts Foundation, Indian, Cooper Bldg., 1st Flr., Corner of Grant Rd., Bombay 400007.

Free Enterprise, Forum of, Piramal Mansion, 235, Dr. D. Naoroji Rd., Bombay 400001.

"Gate of Mercy" Synagogue, 254, Samuel St., Bombay 400003.

"Giants International" (Voluntary Service Orgn.), Orient Club, Chowpatty Sea Face, Bombay 400007.

Gowrakshak Mandali, Bombay, Fanaswadi, 8. Podar Rd., Bombay 400002.

Guruvayurappan Bhakta Samaj, Bombay (Regd.), Shree, 1, Swastik Bldg., 151, Wadala, Bombay 400031.

Hariharaputra Bhajan Samaj (Regd.), Shree, 6, 'Brindavan', 3rd Rd., Chembur, Bombay 400071.

Hospitality Committee, Bombay, 2-B, Mistry Court, 208, Dinshaw Wachha Rd., Bombay 400020. To bring about closer contacts amongst various nationalities of Bombay; to foster friendship & cordial understanding between the people of Maharashtra & adjoining States; to work for national unity, solidarity, internal amity, peace and national integration.

Hospitality Orgn., Maharashtra Intnl., Kamani Chambers, Nicol Rd., B. Estate, Bombay 400038.

Housing Finance Society Ltd., Maharashtra Co-op., 7, New Marine Lines, Bombay 400020.

Humanitarian League, Bombay, 123, Mumbadevi Rd., Bombay 400003.

India-South-East Asia Friendship Socy., Dadysett House, 44, Cawasji Patel St., Bombay 400001.

Indian Culture, Academy of, 2, 'Orion', Omer Park, B. Desai Rd., Bombay 400026.

Indo-American Socy., Kitab Mahal, 5, Raveline St., Bombay 400001.

Indo-Arab Socy., 12, Nagin Mahal, Veer Nariman Rd., Bombay 400020.

Indo-Australian Socy., 2-B, Mistry Court, 208, Dinshaw Wachha Rd., Bombay 400020.

Indo-Canadian Friendship Socy., 2-B, Mistry Court, 208, Dinshaw Wachha Rd., Bombay 400020.

Indo-Fiji Cultural Assocn., 12, Colaba Chambers, Wodehouse Rd., Bombay 400005.

Indo-GDR Friendship Assocn., C/o Purshottam Mathradas & Co. P. Ltd., 23, Sir P. M. Rd., Bombay 400001.

Indo-German Cultural Centre, Max Mueller Bhavan; Prince of Wales Museum Annexe, Bombay 400039.

Indo-German Cultural Socy., Lansdowne House, Lansdowne Rd., Bombay 400039.

Indo-Japanese Assocn., 12, Rampart Row, Bombay 400023.

Indo-Malaysia Friendship Assocn., Dadyset House, 44, Cawasji Patel St., Bombay 400001.

Indo-Mauritius Socy., Ionic A2, Near Telephone Bhavan, Bombay 400005.

Indo-Scandinavian Assocn., 1st Lady Jamshedji Cross Rd., Bombay 400016.

Indo-Soviet Cultural Socy., Syndicate Bank Bldg., Sir P. Mehta Rd., Bombay 400001.

Indo-Swiss Socy., Cama Instt. Bldg., 136, Apollo St., Bombay 400023.

International Co-op., Indian Council of, 12, Colaba Chambers, Wodehouse Rd., Bombay 400005.

Iran League, Navsari Bldg., 240, Dr. D. Naoroji Rd., Bombay 400001.

Ismailia Assocn. for India., Karimabad, Imamwada Rd., Bombay 400009.

Ismailia Helping Socy., 65, J. B. Shah Marg, Bombay 400009.

Jain Assocn. of India, C/o Mahavira Jain Vidyalaya, August Kranti Marg, Bombay 400036.

Jeejeebhoy Parsee Charitable Instn., Byramjee, 33, Karve Marg, Bombay 400004.

Kannada Sangha (Regd.), Bombay, 2, Venkatesh Nivas, Bhaudaji Rd., Matunga, Bombay 400019.

Keraleeya Samaj, Bombay, "Kerala Bhavanam", K. A. Subramanian Rd., Matunga, Bombay 400019.

Krishna Consciousness, Intnl. Socy. for, Hare Krishna Land, Juhu, Bombay 400049.

Kusht Nivaran Sangh, Hind, Red Cross Office, 141, Bhagat Singh Rd., Bombay 400023.

Labour Bureau, Bombay, Krishna Niketan, Sonawala Rd., Bombay 400063.

Labour Welfare Board, Maharashtra, Jambori Maidan, Worli, Bombay 400018.

Lady Ratan Tata Memorial Trust, Bombay House, Homi Mody St., Bombay 400023.

Legal Aid Socy., Free, Hamam House, Hamam St., Bombay 400001.

Mahila Arthik Vikas Mandal Ltd., Near Yogakshema, Cama Rd., Bombay 400032.

Mahilashram, Shradhanand, King's Circle, Matunga, Bombay 400019.

Mai Adherents' Instt., Mai Niwas, Saraswati Rd., Santa Cruz West, Bombay 400054. An instt. of brothers & sisters for the propitiation of God as Universal Mother, through Universal love & service.

Marwadi Sammelan, 111-B, Jayakar Marg, Bombay 400002.

Moral And Social Hygiene, Assocn. for, Barrack No. 4, Dinshah Wachha Rd., Bombay 400020.

Mothers and Children Welfare Socy., Bombay, No. 10, B.D.D. Chawl, M. N. Joshi Mrg., Bombay 400011.

Mothers' Lineage, Socy. for the Cause of, Plot No. B-2, R-105, Theosophical Colony, Juhu, Bombay 400054.

Music and Arts Socy., Bharatiya, Plot H, Bhaudaji Rd. Extn., Bombay 400022.

Mysore Assocn., 393, Bhaudaji Rd., Matunga, Bombay 400019.

Nagpada Neighbourhood House, Sophia Zuber Rd., Byculla, Bombay 400008. *Activities:* Medical & Family Plng. Clinics, Children's Welfare Centre, Emp. Bureau, Working Men's & Women's Hostels, Library, Creche, Child Guidance Clinic, Craft Sales Centre, Guest House, Home Science Classes, Youth Club, Urdu, Music, Typing & Dancing classes; Boxing and Karate classes; Table Tennis, Gymnasium, Carrom and Basket Ball. *Dir.*, P. Barnabas.

Nehru Centre, Dr. A. Besant Rd., Worli, Bombay 400018.

Objects: To inculcate & promote new social values, secularism, national integration and spread a humane, self-reliant and national outlook on life. The complex has started functioning with Nehru Planetarium. The next phase, Discovery of India Hall, will be a museum of science, history, culture & arts of India.

Nepal Friendship Socy., Bharat, Nepal Traders Agency, 95, Bhandari St., Bombay 400003.

Noise Abatement League, C/o Dr. V. V. Gupte, 19, Sir P. Mehta Rd., Bombay 400001.

North India Assocn., Behind King's Circle Rly. Stn., Off Sion Rd., Bombay 400022.

Panjrapole, Bombay, Bhuleshwar, Bombay 400004.

Passengers' and Traffic Relief Assocn., Anand Bhavan, 346, Dr. D. Naoroji Rd., Bombay 400001.

Peace & Solidarity Organisation, All India, 55, R. L. Trust Hostel, Opera House, Bombay 400004.

Prarthana Samaj, Girgaum, Bombay 400004.

Probation & Aftercare Assocn., Maharashtra State, 15, BIT Block, King's Circle, Bombay 400019.

Property Owners' Assocn., Bansilal Mansion, 11, Homi Mody St., Bombay 400023.

Punjab Assocn., 418, Loha Bhavan, P. D'Mello Rd., Bombay 400009.

Raghavendra Swami Ashram, Shri Guru, 'Guru Ashram', Raghavendra Nagar, Oshiwara, Jogeshwari West, Bombay 400102.

Railway Passengers Conference Assocn., Indian, 23, Bell Building, Sir P. Mehta Rd., Bombay 400001. Assistance to railway passengers in their dealings with the Railways with regard to their obligations to each other; restoration of run-away boys to their parents; elimination of crimes on railways against the person and property of railway passengers; education among railway servants and railway police personnel to discourage corrupt practices. Publishers of '*Rail News*', English fortnightly. *Pres.*, C. B. L. Bhatnagar.

Ramakrishna Mission Ashram, Khar, Bombay 400052.

Ranjan Sandhya International Organisation, 32, Nicol Rd., Kamani Chambers, B. Estate, Bombay 400038. Devoted to social, cultural activities and peace & friendship through intnl. relations.

Ratan Tata Instt., Sir, 35, S. Patkar Rd., Bombay 400007. The Institute helps to partially solve the problem of poverty and distress among Parsee families from the lower income groups, by encouraging women to earn a living through suitable employment.

Red Cross Socy., Indian, (Maharashtra State Branch), 141, Bhagat Singh Rd., Bombay 400023.

Relief Association, Bombay, Cook's Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Religious Amity Centre, Mistry Court, 208, D. Vachha Rd., Bombay 400020.

Religious of Mary Immaculate, Regina Pacis, Seth Motishah Lane, Victoria Gardens, Bombay 400027. 1. Club & Emp. Bureau for Houseworkers. 2. Home for destitute children. 3. Hostel for working girls & students. 4. Day & Night school till SSC for girls of the 'Home' & others too.

Retarded, Socy. for the Vociational Rehabilitation of the, 298, S. Gandhi Mrg., Bombay 400002.

Retired Persons, Indian Assocn. of., Gohil House, L. J. Rd., Mahim, Bombay 400016.

Sadhu Sangam, Akhil Bharata, 1, Swastik Bldg., 1/151, Rd. No. 9, Wadala, Bombay 400031.

Safety Council, National, Central Labour Instt. Bldg., Sion, Bombay 400022.

Safety First Assocn. of India, Stadium House, Veer Nariman Rd., Bombay 400020.

Sai Baba Sansthan Shirdi, Shri, Sai Niketan, Ambedkar Rd., Bombay 400014.

Sai Samasthan, Sri Bhagawati, RB11-92/4, Central Rly. Colony, Kurla East, Bombay 400024.

Salesian Socy., Bombay, Don Bosco, Matunga, Bombay 400019.

Sankara Mattham, Sri, Telang Rd., Matunga, Bombay 400019.

Sanshodhan Mandal, Marathi, Mumbai Marathi Grantha Sangrahalaya, 172, Naigaum Cross Rd., Bombay 400014.

Saraswat Assocn., Kanara, 13, Talmakiwadi, Tardeo Rd., Bombay 400007.

Satya Sai Samiti, Shri, Dharmashetra, Mahakali Caves Rd., Andheri (East), Bombay 400069.

Scholarship Socy., Taheri, Taheri Manzil, Nesbit Rd., Bombay 400010.

Scottish Orphanage Socy., Bombay, Savarkar Mrg., Bombay 400016.

Scouts and Guides, Bharat, Scout Guide Bhavan, Marine Lines, Bombay 400020.

Sea Cadet Corps, T. S. "Jawahar", Pilot Bunder Rd., Bombay 400005. A Voluntary Youth Orgn. recognised by an Act of the Parliament giving the Corps the privilege of using the BLUE ENSIGN has been rendering yeoman service to the nation for trg. the youth for 41 years now. Its National Hqrs. Trg. Ship JAWAHAR, Pilot Bunder Road, Colaba, Bombay 400005, is now to be supplemented by ocean going SAIL TRAINING SHIP. The Sail Trg. Ship is to be built by Mazagon Dock Ltd. and is expected to be ready in another year. The objects of the Corps are to give boys & girls aged 12 to 18 Sea Trg. and such other Trg. as will develop in them qualities of good citizenship and to help boys wishing to make their career at sea achieve their ambition. Has Units at Calcutta, Visakhapatnam, Madras and Cochin.

Servants of God, Socy. of, Mayfair, 34, Little Gibbs Rd., Bombay 400006.

Servants of India Socy., Sardar V. Patel Rd., Bombay 400004.

Seva Sadan, Gamdevi, Bombay 400007.

Sevak Samaj, Bharat, Narandas Bldg., Sprott Rd., B. Estate, Bombay 400038.

Seventh-Day Adventists, Central India Union of, 16, Club Rd., Bombay 400008.

Shanmukhananda Fine Arts and Sangeetha Sabha, Shri, 292, Flank Rd., Bombay 400022.

Shareholders' Assocn., Bombay, 56, Dalal St., Bombay 400023.

Sindhi Panchayats Fedn., All India, Khorshed Bldg., 1st Flr., Sir P. Mehta Rd., Bombay 400001.

Social Hygiene Council, Bombay, 10, Indian Mercantile Mansion, Opp. Regal Cinema, Bombay 400039.

Social Welfare, Indian Council of, *Central Office:* **175, D. Naoroji Rd., Bombay 400001.**

Social Welfare, International Council of, Regnl. Office for Asia & W. Pacific Regn.: 175, Dr. D. Naoroji Rd., Bombay 400001.

Social Welfare Socy., Khorshed Bldg., Sir P. Mehta Rd., Bombay 400001.

Soviet Culture, House of, 31-D, Deshmukh Mrg., Bombay 400026.

Sur-Singar Samsad, Arun, Narayan Dabholkar Rd., Bombay 400006.

Swastik League, 324-A, Vithalbhai Patel Rd., Bombay 400004.

Tamil Sangham, Sion Rd., Bombay 400022.

Taxpayers' Assocn. of India, Fort Chambers A, Dean Lane, Bombay 400001.

Telephone Subscribers' Assocn., All India, Bell Bldg., Sir P. Mehta Rd., Bombay 400001.

Tenants Assocn., Bombay, 143, Kannamwar Nagar, Bombay 400078.

Theosophical Socy., Blavatsky Lodge, French Bridge, Bombay 400007.

Theosophists, United Lodge of, 40, New Marine Lines, Bombay 400020.

Trees, Friends of the, 148, M. Gandhi Rd., Bombay 400023.

United Kingdom Citizens' Association, Cook's Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Vanita Samaj, Bharatiya, Nair Mahal, Tulsi Pipe Rd., Bombay 400016.

Vanita Vishram, Sardar V. Patel Rd., Bombay 400004.

Vigilance Assocn., Bombay, 126, Dadasaheb Phalke Rd., Bombay 400014. *Objects :* (*a*) To render assistance to the abandoned, destitute, neglected and victimised girls & women ; (*b*) to rescue girls and women in moral danger ; (*c*) to prevent cruelty to girls and women. It also maintains a shelter for neglected and destitute girls between 5 & 12 years of all communities.

Visva Yoga Bharati, Vallabhnagar, Borivli, Bombay 400092.

Waddar Samaj Sangh (Regd.), Akhil Bharat, 16, Everest Housing Socy., Sahakar Nagar, Chembur, Bombay 400071. To protect and promote the interests of the unorganised, ignorant & backward minority and weaker sections of several communities in general and Waddar community in particular. Has State Units in A.P., Karnataka, Kerala, Maharashtra, T. Nadu & Goa.

World Affairs, Indian Council of (Bombay Branch), C/o Godrej Bhavan, Home St., Bombay 400001.

World Future Socy., Urban Systems Centre, NITIE, Bombay 400087.

Women's Council, Maharashtra State, Town Hall, Bombay 400023.

Yoga Institute, Santa Cruz, Bombay 400055.

Yoga Socy., Friends of, Sunbeam, S. V. Rd., Jogeshwari, Bombay 400060.

Yogic Self-Culture Socy., 5, Vallabhnagar, Borivli, Bombay 400092.

Young Men's Christian Assocn., YMCA International House, Club Back Rd., Bombay 400008.

Young Men's Hindu Assocn., 141, V. Patel Rd., Bombay 400004.

Young Women's Christian Assocn., 18, Cama Rd., Bombay 400020.

Zoroastrian Assocn., 16, Horniman Circle, Bombay 400023.

PROFESSIONAL, MEDICAL AND SPORTS

Acupuncture Assocn., Indian Medical, 231, M. Azad Rd., Bombay 400008.

Adi Dravida Mahajana Sangh, Bombay S. Indian, 10, Agasawadi, Bombay 400017.

Advocates' Assocn., Bombay, Small Causes Court, Dhobi Talao, Bombay 400002.

Aeronautical Socy. of India, C/o Air India, Technical Bldg., Old Airport, Bombay 400029.

Agricultural Economics, Indian Socy. of, Esplanade Mansions, M. Gandhi Rd., Bombay 400023.

Agricultural Engineers, Indian Socy. of, 7, Neel Tarang, 208, Savarkar Mrg., Bombay 400016.

Agri-Horticultural Socy., Bharatiya Vidya Bhavan, 4th flr., K. M. Munshi Mrg., Bombay 400007.

Andrology, Bombay Socy. for, C/o Dean, K.E.M. Hospital, Parel, Bombay 400012.

Angling Assocn., Maharashtra State, Club House, Powai Lake, Bombay 400070.

Anthropological Socy. of Bombay, C/o K. R. Kama Oriental Library, 136, Apollo St., Bombay 400023.

Architects, Indian Instt. of, Prospect Chambers Annexe, Dr. D. Naoroji Rd., Bombay 400001.

Architects & Surveyors (London), Incorporated Assocn. of, (India Branch), 24-26, Dalal St., Bombay 400023.

Art Socy., Bombay, Jehangir Art Gallery, Bombay 400039.

Ayurved Prachar Sanstha, Ayurved Coll. Bldg., Subhas Rd., Bombay 400002. Promoting public health and relieving ailments by ayurvedic & other systems of medicine.

Ayurvedic and Unani Systems of Medicine, Maharashtra Board of, 144, M. Gandhi Rd., Bombay 400023.

Badminton Assocn., Maharashtra State, Brabourne Stadium (North Stand), Bombay 400020.

Ball Badminton Assocn., Maharashtra State, 12/289 (East), J. Yagnik Marg, Sion East, Bombay 400022.

Bank Depositors' Assocn., All India, C/o Forum of Free Enterprises, 235, Dr. D. Naoroji Rd., Bombay 400001.

Bankers, Indian Instt. of, State Bank Bldg., Apollo St., Bombay 400023.

Bar Council of Maharashtra, High Court Extn., Bombay 400032.

Basketball Assocn., Maharashtra State, 10/200, Kailas Kunj, Wadala, Bombay 400031.

Billiards Assocn., Maharashtra State, C/o Islam Gymkhana, Subhas Rd., Bombay 400002.

Bioscientific Assocn., Indian, Instt. of Science, Madame Cama Rd., Bombay 400032.

Bridge Assocn., Bombay Contract, — Bridge Association, Maharashtra, C/o Sectt. of Bombay Sporting Assns., Brabourne Stadium (North Stand), Bombay 400020.

Bridge Fedn. of India, Brabourne Stadium (North Stand), Bombay 400020.

Cancer Socy., Indian, Dr. E. Borges Mrg., Parel, Bombay 400012. Scientific investigation of the cause, prevention & control, public and professional edn. in latest methods of detection, diagnosis & treatment of Cancer ; sponsoring of research ; establishment of detection centres throughout India, establishing intnl. co-opn. in research, encouraging visiting professorships, awarding scholarships & fellowships in Cancer Cytology, Chemotherapy & Rehabilitation; giving relief & rehabilitation to inidigent Cancer patients; establishing population-based Cancer Registries; undertaking public edn. in the facts about Cancer by various means including Cancer Exhibitions, films & T.V. shorts, etc. Publication : The Indian Journal of Cancer — Quarterly.

Cardiological Socy. of India, C/o Dr. B. K. Goyal, Lotus Chambers, New Marine Lines, Bombay 400020.

Carrom Assocn., Maharashtra State, Brabourne Stadium (North Stand), Bombay 400020.

Chartered Accountants of India, Instt. of, (W. Regnl. Council), 27, Cuffe Parade, Bombay 400005.

Chartered Accountants Socy., Bombay, 69-71, Ghogha St., Bombay 400001.

Chemical Socy., Indian, (Bombay Branch), Institute of Science, Cama Rd., Bombay 400032.

Clean Environment, Socy. for, Garden Resort, 606, Sion-Trombay Rd., Chembur, Bombay 400071.

Commercial Artists' Guild, India House, 4th Flr., Fort St., Bombay 400001.

Company Secretaries of India, Instt. of, Jolly Maker Chambers No. 2, Nariman Pt., Bombay 400021.

Computer Socy. of India, C/o Insttn. of Engineers Bldg., 15, Haji Ali Park, K. Khadye Mrg., Bombay 400034.

Consumer Guidance Socy. of India, Hutment J. Mahapalika Marg, Bombay 400001.

Consumers Co-op. Fedn. Ltd., Maharashtra, Raj Chambers, 3rd Flr., 87-A, Broach St., Bombay 400009.

Consumers Fedn. Limited, National Co-op., Suresh Bhavan, Chowpatty, Bombay 400007.

Co-op. Union, Maharashtra State, 1, Bank St., Bombay 400023.

Costs and Works Accountants of India, Instt. of, Rohit Chambers, Ghogha St., Bombay 400001.

Cricket Assocn., Bombay, Wankhede Stadium, Bombay 400020.

Dental Council, Maharashtra State, Swadeshi Mills Estate, M. Parmanand Marg, Bombay 400004.

Diabetic Assocn. of India, Maneckji Wadia Bldg., 127, M. Gandhi Rd., Bombay 400023.

Electrocardiology, Indian Socy. of, C/o Dr. P. N. Kelkar, Deptt. of Cardiology, L.T.M.G. Hospital, Bombay 400022.

Electronics & Telecommunication Engrs., Insttn. of, (Bombay Centre), City Telephone Exchange Bldg., H. Somani Marg, Bombay 400001.

Engineering and Commerce, Indian Socy. of, Commonwealth Bldg., Oak Lane, Bombay 400001.

Engineers, Architects & Townplanners' Assocn., Practising, C/o G. L. Raheja & Associates, Rampart House, Rampart Row, Bombay 400023.

Engineers, Bombay Socy. of Model, 23/24, Noble Chambers, Parsi Bazar St., Bombay 400001.

Engineers (India), Insttn. of, 15, Haji Ali Park, Clerk Rd., Bombay 400034.

Engineers (India), Insttn. of Mechanical, 29, Walchand Hirachand Marg, Bombay 400039.

Estate Agents' Assocn. of India, Sheel Chambers, Cawasji Patel St., **Bombay 400001.**

Film Directors' Assocn., Indian, 501, "Navin Asha", D. Phalke Rd., Bombay 400014.

Film Exporters Assocn., Indian, 4-E, Naaz Bldg., Dr. D. Bhadkamkar Marg, Bombay 400004.

Film Fedn. of India, 91, Walkeshwar Rd., Bombay 400006.

Film Producers' Council, All India, 'Shantshree' Dr. S. S. Rao Rd., Bombay 400012.

Football Assocn., Western India, Cooperage Football Ground, Bombay 400020.

Football Fedn., All India, 92, Dr. D. Naoroji Rd., Bombay 400001.

Heart Disease & Rehabilitation, Socy. for the Prevention of, India House, No. 2, Kemp's Corner, Bombay 400036.

Hockey Association, Bombay, D Rd., Bombay 400020.

Homoeopathic Association, Bombay, 311, Tardeo Rd., Nana Chowk, Bombay 400007.

Homoeopathic Medical Assocn., Maharashtra State, Vijayanagar, Dadar, Bombay 400028.

Homoeopathic Physicians (Regd.), Association of, Ashwin House, K. A. Subramaniam Rd., Bombay 400019.

Income-tax Consultants, Chamber of, Sunbeam Chambers, 7, Marine Lines, Bombay 400020.

Industrial Engineering, Indian Insttn. of, Nitie Campus, Vihar Lake Road, Bombay 400087. Founded in 1957. A non-profit making national body for the profession of Indl. Engg. consisting of over 5,000 members drawn from industry, Govt., utilities, business, higher edn., etc., with the national hqrs. at Bombay & 15 Chapters located in the industrial cities. Conducts a professional examination known as Graduateship Examination which is recognised by the Central Govt. on par with a Bachelor's Degree in Indl. Engg.

Insurance Surveyors & Adjusters, Instt. of, Lakshmi Bldg., Sir P. Mehta Rd., Bombay 400001.

Journalists, Bombay Union of, Prospect Chambers Annexe, Dr. D. Naoroji Rd., Bombay 400001.

Kidney Foundation (India), National, C/o Warden Road Polyclinic, Ben Nevis, B. Desai Marg, Bombay 400026.

Law Instt., Indian (Maharashtra State Unit), C/o Little & Co., Central Bank Bldg., M. Gandhi Rd., Bombay 400023.

Law Socy., Bombay Incorporated, High Court New Bldg., Bombay 400032.

Management Assocn., Bombay, Army & Navy Bldg., Mahatma Gandhi Rd., Bombay 400023.

Management Consultants, Council of, Krishna Kunj, S. Bapat Mrg., Bombay 400016.

Management Consultants' Assocn. of India, Mahindra Spicer Bldg., 15, J. N. Heredia Mrg., Bombay 400038.

Marine Engineers, Instt. of, Nirmal, Nariman Point, Bombay 400021.

Marine Technologists, Instt. of, C/o Ericson & Richards, 32, Nicol Rd., B. Estate, Bombay 400038.

Maritime Board, National, Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Maritime Union of India, 204, Dr. D. Naoroji Rd., Bombay 400001.

Master Mariners of India, Company of, C/o Ericson & Richards, 32, Nicol Rd., B. Estate, Bombay 400038.

Materials Management, Indian Assocn. of, (Hqrs.), Mehta Chambers, 2nd flr., Mathew Rd., Opera House, Bombay 400004.

Mathematical Socy., Indian, C/o Deptt. of Mathematics, I.I.T., Powai, Bombay 400076.

Medical Assocn., Indian, (Bombay Branch), Keshavrao Khadye Marg, Bombay 400034.

Medical Council, Maharashtra, Swadeshi Mills Estate, M. Parmanand Marg, Bombay 400004.

Medical Union, Bombay, Blavatsky Lodge Bldg., French Bridge, Chowpatty, Bombay 400007.

Medical Women in India, Assocn. of, IMA Bldg., Keshavrao Khadye Mrg., Bombay 400034.

Mental Hygiene, Indian Council for, and India Instt. of Mental Health & Human Relations, Cambatta Chambers, 42, Maharshi Karve Rd., Bombay 400020.

Mentally Ill, Assocn. for the Friends of the, Opp. Chawl No. 5, Next to Police Stn., Delisle Rd., Bombay 400011.

Natural History Socy., Bombay, Prince of Wales Museum Compound, Bombay 400039.

Nursing Council, Maharashtra, Gresham Assurance Bldg., Sir P. Mehta Rd., Bombay 400001.

Obstetric & Gynaecological Societies of India, Purandare Griha, 31/C, Dr. N. A. Purandare Mrg., Bombay 400007.

Offshore Engg. & Underwater Technology of India, Socy. for, 91/92, Bajaj Bhavan, Nariman Pt., Bombay 400021.

Oil Technologists' Assocn. of India, Deptt. of Chemical Technology, Matunga Rd., Bombay 400019.

Olympic Assocn., Maharashtra State, Brabourne Stadium (North Stand), Bombay 400020.

Ophthalmological Socy., All India, Sarojini Sadan, Congress House, Bombay 400004.

Oral & General Health, Indian Socy. for the Propagation of, C/o Dr. Fali S. Mehta, India House, Cumballa Hill, Bombay 400036.

Organisation & Methods Assocn. of India, C/o Larsen & Toubro Ltd., Powai Works, Bombay 400072.

Patrakar Sangha, Mumbai Marathi, Patrakar Bhavan, Mahapalika Mrg., Bombay 400001.

P.E.N. All India Centre, Theosophy Hall, 40, New Marine Lines, Bombay 400020. Indian Branch of the Intnl. P.E.N. Club of leading poets, playrights, editors, essayists, novelists.

Personnel Management, National Instt. of, M. G. Textile Technical School Premises, Parel, Bombay 400012.

Pharmacy Council, Maharashtra State, 5, Military Square Lane Corner, Medows St., Bombay 400023.

Philatelic Socy. of India, K. D. Dinshah, Dharwar Bldg., Zorastrian Estate, Tardeo Rd., Bombay 400007.

Physicians of India, Assocn. of, 21, Karve Mrg., Bombay 400004.

Physicians & Surgeons of Bombay, College of, Dr. E. Borges Mrg., Parel, Bombay 400012.

Plant Engineers, Indian Insttn. of, A/1, Jeevan Bahar, 3rd Rd., Chembur, Bombay 400071.

Plastics & Rubber Instt. — Indian Section (Plastics), C/o Dr. S. K. Datta, Nocil T. S. Laboratory, Mafatlal Centre, Nariman Point, Bombay 400020.

Press Assocn. of India, 196B, Gaiwadi, Girgaum, Bombay 400004.

Press Guild of India, Majestic Hotel, Bombay 400039.

Production Engineers, Insttn. of, Churchgate House, 32, V. Nariman Rd., Bombay 400001.

Public Relations Socy. of India, Army & Navy Bldg., Rear Mezzanine Flr., Hope St., Bombay 400023. The Society has eight regional chapters in Bombay, Delhi, Ahmedabad, Calcutta, Madras, Hyderabad, Bangalore and Cochin and a National Council as the All India body. The present membership exceeds 800.

Radiologists Assocn., Indian, 534, Sardar Patel Rd., Bombay 400007.

Rheumatism Assocn., Indian, Commerce Centre, J. Dadajee Rd., Bombay 400034.

Rifle Assocn., Maharashtra State, Municipal Rifle Range, Worli Sea Face, Bombay 400025.

Sales Tax Practitioners' Assocn., Mohatta Mkt. Bldg., Paltan Rd., Bombay 400001.

Seafarers' Fedn., United, Podar Chambers, Donde Marg, Bombay 400012.

Seafarers of India, National Union of, 4, Goa St., Bombay 400001.

Seamen's Socy., Royal Bombay, Nicol Rd., B. Estate, Bombay 400038.

Secretaries, Instt. of, Lentin Chambers, Dalal St., Bombay 400023.

Sex Educators, Counsellors & Therapists, Indian Assocn. of, C/o Dr. Prakash Kothari, 203-A, Sukhsagar, Hughes Rd. Corner, Opera House, Bombay 400007.

Surgery, Rehabilitation & Research, Socy. for Reconstructive, C/o Tata Deptt. of Plastic Surgery, J. J. Group of Hospitals, Bombay 400008.

Table Tennis Assocn., Maharashtra State, Brabourne Stadium, Bombay 400020.

Tax Consultants' Assocn. of India, 103, Sharda Chambers, New Marine Lines, Bombay 400020.

Taximen's Union, Bombay, Navjivan Co-op. Housing Socy., D. Bhadkamkar Mrg., Bombay 400008.

Tennis Assocn., Maharashtra State Lawn, Cooperage, Bombay 400020.

Theatre Owners Assocn., Everest Premises, C H S Ltd., Tardeo, Bombay 400034.

Tourism Council, International, Darya Bldg., 375, Dr. D. Naoroji Rd., Bombay 400001.

Tuberculosis Assocn., Maharashtra State Anti-, T. B. Hospital Compound, J. Wadia Rd., Sewree, Bombay 400015.

Vacuum Socy., Indian (Regd.), Technical Physics Divn., Bhabha Atomic Research Centre, Trombay, Bombay 400085.

To promote, foster and encourage the growth of vacuum sciences, techniques and applications in the country by conducting regular courses, workshops, seminars, symposia, exhibitions and publication of bulletin, journal, manuals, etc. Help ISI in drafting Standards and establish test centres for vacuum equipment and to render technical advice.

Welding, Indian Instt. of, C/o Indian Oxygen Ltd., L. B. Shastri Mrg., Bombay 400086.

Wildlife Fund—India, World, Great Western Bldg., S. B. Singh Rd., Bombay 400023.

Associations in Maharashtra Districts

COMMERCIAL

Acrylic Sheets Mfrs. Assocn., S. B. Plastic Ind. Compd., Netivali Village, Poona Link Rd., Kalyan 421301.

Aluminium Industries, Assocn. of Small Scale, 1243/80, Shivaji Udyamnagar, Kolhapur 416002.

Automobile Assocn., Western India, 7, Moledina Rd., Pune 411001.

Bee Keeper Assocn., All India, 817, Sadashiv Peth, Datar Wada, Pune 411030.

Book Publishers Assocn., Maharashtra School, 2040, Sadashiv Peth, Tilak Rd., Pune 411030.

Booksellers Assocn., Pune, C/o Hindustan Sahitya, 309, Shaniwar Peth, Pune 411030.

Brass and Copper Merchants Assocn. Ltd., New 246, Raviwar Peth, Old 167 Guruwar Peth, Pune 411002.

Cotton Merchants Assocn., Vidarbha, Cotton Mkt., Akola 444001.

Engineering Assocn., Kolhapur, Shivaji Udyam Nagar, Kolhapur 416001.

Engineering Society Ltd., Maharashtra Co-op., Indl. Estate, Poona-Bangalore Rd., Shiroli, Kolhapur 416122.

Fabricators Assocn., (S.S.I.), ICEM Compound, Wagle Estate, Thane 400604.

Grape Growers Assocn. (Maharashtra Rajya Draksha Bagaitdar Sangh), 17/1, Shivajinagar, Pune 411005.

Hosiery Mfrs. Assocn., Poona, 264, Shanwar Peth, Pune 411002.

Industries Assocn., Vidarbha, Bank of Maharashtra Bldg., Sitabuldi, Nagpur 440012.

Manufacturers' Assocn., Deccan, "Rose Cottage", Madhavnagar Rd., Sangli 416416.

Manufacturers' Assocn., Kalyan Ambarnath, New Municipal Bldg., Kalyan 421301.

Manufacturers' Assocn., Thane, T.M.A. House, P-6, Main Rd., Wagle Indl. Estate, Thane 400604.

Mills Assocn., Maharashtra Mofussil, C/o Empress Mills, No. 5, Nagpur 440008.

Mineral Industry Assocn., 'Mineral House', Nagpur 440001

Mining Assocn., M. P. & Vidarbha, Post Box No. 8, Nagpur 440001.

Oil Industry Assocn., All India Non-Edible, 'Taru Sneha', 1153, Ganeshkhind Rd., Pune 411016.

Papers Traders Assocn., C/o Mahesh Paper Mart, New Itwari Rd., Nagpur 440002.

Paper Traders' Assocn., Poona, 495, Shanwar Peth, Pune 411030.

Pharmaceutical Assocn., Indian, Deptt. of Pharmaceutical Sciences, Nagpur Univ., Nagpur 440001.

Pharmaceutical Assocn., Indian, Sai Krupa, 122 Bhawani Peth, Pune 411002.

Powerloom Weavers' Co-op. Assocn. Ltd., Ichalkaranji, Ward No. 9, H. No. 513, Ichalkaranji 416115.

Press Owners' Assocn. Ltd., Poona, 'Mudrak Bhavan', 1078, Sadashiv Peth, Pune 411030.

Rubber Ind. Assocn., Poona, Auto Steel Ind., C-2-1, Technician Block, Bhosari Indl. Estate, Pune 411026.

Small Scale Industries Assocn., Thane, Khambete Wadi, Charai, Thane 400601.

Spices and Oilseeds Exchange Ltd., Wakhar Bagh P. No. 162, Sangli 416416. The only Exchange in India recognised for control & regulation of forward trading in turmeric.

Spun Pipe Mfrs., Assocn. of India, 'Shradha', Opp. Octroi Naka, Satara Rd., Pune 411009.

CULTURAL, SOCIAL AND PROFESSIONAL

Altrusa Club (Assn. of Women in Profession & Business), C/o Dr. (Miss) S. Iyengar, L. A. D. Coll. for Women, Seminary Hills, Nagpur 440006.

Architects, Engineers, Surveyors Assocn., 'Indraprastha', 1134/1, Shivaji Nagar, Pune 411005.

Balkan-ji-Bari, Bapu Gaon (Via Dahanu Rd.) 401602, Thane Dist.

Beauty Without Cruelty (India Branch), 4, Prince of Wales Drive, Wanowrie, Pune 411001.

Chartered Accountants of India, Instt. of, C/o C. R. Sagdeo & Co., Jail Rd., Nagpur 440012.

Chartered Accountants of India, Instt. of, C/o M/s. Bhide, Palnitkar & Shah, 1025, Sadashiv Peth, Pune 411030.

Dietetics Service, All India Assocn. of, C/o Miss Y. V. Mishra, Women's Polytechnic & Research Centre, Seminary Hills, Nagpur 440006.

Engineers (India) Instn. of, North Ambazari Rd., Nagpur 440001.

Engineers (India) Insttn. of, 1332, Shivajinagar, Jangli Maharaj Rd., Pune 411005.

France, Assocn. of the Friends of, 1015/3, Janawadi Rd., Pune 411016.

Free Enterprise, Forum of, 69, Kasbapeth, Pune 411011.

Horticultural Devpt. Assocn., Maharashtra State, Horticultural Secn., Coll. of Agriculture, Pune 411005.

India Foundation, 595, Budhwar Peth, Pune 411002. Grants of scholarship & financial aid, gifts or loans, to students of outstanding merit for edn. in India & abroad, irrespective of caste, creed, religion or language.

Industrial Museum — Mahatma Phule Vastu Sangrahalaya, Ghole Rd., Pune 411004.

Leprosy Relief Assocn., Ahmadnagar Dist., Ahmadnagar 414001.

Linguistic Socy. of India, Deccan College Postgraduate & Research Instt., Pune 411006.

Literature and Culture, Maharashtra State Board for, Viswakosha Unit Office, C/o Prajna Pathshala, Wai 412803.

Management Assocn., Nagpur, C/o Nag-Vidarbha Chamber of Commerce, Temple Rd., Nagpur 440001.

Management Assocn., Poona, 1332, Shivajinagar, Pune 411005.

Management Consultants, Assocn. of, 189, Sadashiv Peth, Natu Baug, Pune 411030.

Max Mueller Bhavan, 14/3-B, Boat Club Rd., Pune 411001.

Medical Assocn., Ahmadnagar, Wadia Park Ground, Ahmadnagar 414001.

Medical Assocn., Indian, 992, Shukrawar Peth, Tilak Rd., Pune 411002.

Medical Assocn. of India, Christian, Christian Council Lodge, Nagpur 440001.

Medical Centre, Miraj, Wanless Hospital, Miraj 416410.

Pathologists, Indian Assocn. of, Deptt. of Pathology, Miraj Medical College, Miraj 416410.

Philosophical Assocn., Indian, P.O. Vidarbha Mahavidyalaya, Amravati 444601.

Productivity Council, Pune Divisional, Maharatta Chamber Bhavan, Tilak Rd., Pune 411002.

Sciences, Maharashtra Academy of, C/o Dept. of Geology, Univ. of Poona, Ganeshkhind, Pune 411007.

Science, Maharashtra Assocn. for the Cultivation of, Law College Rd., Pune 411004.

Secular Socy., Indian, 'Aboli', 850/8A, Shivajinagar, Pune 411004.

Servants of India Socy., Pune 411004. The Society is primarily political but it does tribal & backward classes welfare work in the Mirzapur, Allahabad & Nainital Dists. (U.P.), Tamil Nadu, A.P., Orissa & Kerala on a considerable scale. Also engaged in rural devpt. & distress relief.

Seva Sadan Socy., Poona, 613-614, Sadashiv Peth, Pune 411002.

Sharada Udyog Mandir, Near Jaystambha, Amravati 444601. A charitable & indl. institution to help widows & poor women by teaching handicrafts, tailoring, embroidery, etc.

Women in India, National Council of, 'Lakaki', Model Colony, Pune 411016.

Youth Hostels' Assocn. of India, 87, West Park Rd., Dhantoli, Nagpur 440001.

MANIPUR

CULTURAL, SOCIAL AND PROFESSIONAL

Family Planning Assocn. of India, Keishamthong Bazar, Imphal 795001.

Juvenile Learners' Club, Kongba Kshetri Leikal, Imphal 795001.

Red Cross Socy., Indian, 114/D, M. Gandhi Avenue, Imphal 795001.

TB Control Centre, Lamphelpat, Imphal 795004.

MIZORAM

COMMERCIAL

Small Scale Industries Assocn., Mizoram, Cantonment Rd., Aizawl 796001.

ORISSA

COMMERCIAL

Exercise Books, All Orissa Assocn. of Mfrs. of, Basulishi, Buxi Bazar, Cuttack 753001.

Glass Mfrs. Assocn., Orissa, C/o Shree Durga Glass Works, Barang 754005 (Cuttack Dist.).

Marketing Socy. Ltd., Orissa State Co-op., Station Rd., Bhubaneswar 751001.

Millowners Assocn., Orissa, College Square, Cuttack 753003.

Paper Dealers Assocn., Orissa, C/o Rameswarilal Muralidhar, Banka Bazar, Cuttack 753002.

Pharmaceutical Assocn., Indian, Berhampur 760001, Ganjam Dist.

Salf Mfrs. Assocn., Orissa, Nayasarak, Cuttack 753002.

Small Scale Industries Assocn., Orissa, Ind. Estate, Cuttack 753010.

Textile Merchants Assocn., Junaliapatti, Cuttack 753009.

Tyre & Accessories Dealers Assocn., Fedn. of Orissa, Cantonment Rd., Cuttack 753001.

CULTURAL, SOCIAL AND PROFESSIONAL

Engineers (India), Insttn. of, Sachivalaya Mrg., Unit IV, Bhubaneswar 751001.

Medical Assocn., Indian, S.C.B. Medical Coll., Cuttack 753007.

Productivity Council, Cuttack, Industrial Estate, Cuttack 753010.

Red Cross Socy., Indian, Red Cross Bhavan, Bhubaneswar 751007.

Sahitya Akademi, P.O. Box 56, Bhubaneswar 751001.

Theosophical Fedn., Talatelenga Bazar, Cuttack 753001.

PONDICHERRY

CULTURAL, SOCIAL & PROFESSIONAL

World Union, Sri Aurobindo Ashram, Pondicherry 605002.

PUNJAB

COMMERCIAL

Auto Spares & Accessories Mfrs. Assocn., 983, Preet Nagar, Jullundur City 144001.

Banian Mfrs. Assocn., Chawal Bazar, Ludhiana 141001.

Bolts & Nuts Mfrs. Assocn., Ind. Area, Sodal Rd., Jullundur 144004.

Booksellers Assocn., Chandigarh, SCO No. 3, Sector 17E, Chandigarh 160017.

Builders' Assocn. of India, 154, Sector 9B, Chandigarh 160017.

Business Management Assocn., Punjab, Tanda Rd., Jullundur City 144001.

Co-operative Supply and Marketing Fedn. Ltd., P. Box No. 67, Chandigarh 160017.

Cottage Industries Assocn., Harban Lal Bldg., Bazar Jallianwalla Bagh, Amritsar 143001.

Cotton Cloth Mfrs. Assocn., Punjab, 19, Model Town, Amritsar 143001.

Cycle Parts Mfrs. Assocn., East Punjab, 12-R, Ind. Area B, Ludhiana 141003.

Cycle & Parts Mfrs. Assocn., United, Miller Ganj, Gill Rd., Ludhiana 141003.

Engineering Assocn., Fedn. of, Tanda Rd., Jullundur City 144001.

Engineering Assocn. of Northern India, G. T. Rd., Batala 143505, Gurdaspur Dist.

Engineering Industries Assocn., C/o Bharat Printing Machine Mfg. Co., G. T. Rd., Mall Mandi, Amritsar 143001.

Engineering Industry, Assocn. of Indian (Punjab Regnl. Office), Tanda Rd., Jullundur 144001.

Foundry Assocn. of Punjab, Tanda Rd., Jullundur City 144001.

Hand Tool Mfrs. Assocn., WG-246. Islamabad, Jullundur 144004.

Handloom Assocn., Fedn. of, Katra Ahluwalia. Amritsar 143001.

Hosiery Industry Fedn. (Regd.), Sat Sang Ghar Rd., Civil Lines, Ludhiana 141003.

Hosiery Machine Mfrs.' Assocn., 461/62, Industrial Area B, Miller Ganj, Ludhiana 141003.

Hosiery Mfrs. Assocn., Beri Rd., Civil Lines, Ludhiana 141001.

Hosiery Mfrs. Assocn., United, Arya Samaj Mandir, Dal Bazar, Ludhiana 141001.

Hosiery Mfrs. Export Organisation, Mai Harkishan Kaur Sarai, Civil Lines, Ludhiana 141003.

Industrial & Commercial Employers, Chamber of, Civil Lines, Ludhiana 141003.

Industry and Commerce, Punjab Fedn. of, Inside Hall Gate, Amritsar 143001.

Interlock & Skinner Cloth Mfrs. Assocn., New, 8, Khud Mohalla, Ludhiana 141001.

Machine Tools Makers Guild, Ludhiana, 510, Deep Rd., Ind. Area B, Ludhiana 141003.

Manufacturers' Organisation, All India, C/o Pearl Hosiery Mills, Sukhram Nagar, Ludhiana 141003.

Master Printers' Assocn., Tej Press Bldgs., Katra Sher Singh, Hall Bazar, Amritsar 143001.

Motor Parts Mfrs. Assocn., Ludhiana, 21, Roshan Mkt., Millerganj, Ludhiana 141003.

Motor Parts Traders Assocn., Punjab, Nehru Garden Rd., Jullundur 144001.

Newspapers Assocn., All India Small, 3028, Sector 19-D, Chandigarh 160019.

Nut Bolt Mfrs. Assocn., Ludhiana, B-XXI-663, Pratap Nagar, Basant Rd., Ludhiana 141003.

Oil Expeller Mfrs. Assocn., G.T. Rd., Millerganj, Ludhiana 141003.

Pharmaceutical Assocn., Indian, Deptt. of Pharmaceutical Sciences, Punjab Univ., Chandigarh 160014.

Productivity Council, National, 1037, Sector 27-B, Chandigarh 160019.

Radio Trade Fedn., Punjab, Railway Rd., Jullundur 144001.

Re-rollers Council of India, Guru Nanak Bldg., Mandi Gobindgarh 147301.

Sewing Machine Industries Assocn., Punjab, C/o Gobind Ram & Sons, 502, Industrial Area B, Ludhiana 141003.

Small Inds. Assocn., Chandigarh, 245, Industrial Area, Chandigarh 160017.

Textile Mfrs.' Assocn., 4, Diwan C. Mehra Rd., Amritsar 143001.

Warp Knitting Industry Assocn., Punjab, Opp. Kashmir House, 1-C, Court Rd., Amritsar 143001.

Water Fittings Mfrs.' Assocn., All India Non-Ferrous Tanda Rd., Jullundur City 144001.

Woollen Mfrs. Assocn. Ltd., Amritsar Small Scale. Shastri Mkt., Bazar Sabunia, Amritsar 143001.

CULTURAL, SOCIAL AND PROFESSIONAL

Chartered Accountants of India, Instt. of, Kothi No 8, Sector 18A, Chandigarh 160017.

Chartered Accountants of India, Instt. of, C/o S. Bhushan & Co., Punjab National Bank Bldg., Civil Lines, Ludhiana 141003.

Engineers (India), Insttn. of, Madhya Mrg., Sector 19-A, Chandigarh 160019.

Family Planning Assocn. (Punjab Branch), Red Cross Bhavan, Madhya Marg, Sector 16/A, Chandigarh 160017.

Medical Assocn., Indian, 3343, Sector 23-D, Chandigarh 160017.

Red Cross Socy., Indian (Punjab State Branch), Red Cross Bldg., Sector 16-A, Chandigarh 160017.

Sahitya Akademi, Punjabi, Punjabi Bhavan, Ludhiana 141003.

Shiromani Gurudwara Parbandak Committee, Teja Singh Samudri Hall, Amritsar 143001.

Surgeons of India, Assocn. of, C/o Dr. B. C. Bapna, Deptt. of Urology, Post Graduate Instt. for Medical Research & Edn., Chandigarh 160017.

RAJASTHAN

COMMERCIAL

Builders' Assocn. of India, 25, Bhagwandas Rd., Jaipur 302001.

Chemical Mfrs. Assocn., Udaipur, 50, Ashok Nagar, Udaipur 313001.

Conductor Mfrs. Assocn., Rajasthan, 4, Malviya C Scheme, Jaipur 302001.

Cycle Mfrs.' Assocn., Rajasthan, Behind Atish, Gangori Bazar, Jaipur 302001.

Employers Assocn. of Rajasthan, Podarpuri, Jaipur 302006.

Hosiery Mfrs. Assocn., Rajasthan, 8, Bichunka Bagh, Sansarchandra Rd., Jaipur 302001.

Iron Ore Mine Owners & Exporters Assocn., Rajasthan, Johari Bazar, Jaipur 302003.

Iron & Steel Rerollers' Assocn., Rajasthan, 1155-57, Rasta Singhiji, S.M.S. Highway, Jaipur 302005.

Marble Industries Assocn., Makrana, Indl. Estate, Makrana 341505.

Paper Traders Assocn., Rajasthan, Rampura Bazar, Kota 324001.

Plastic Industries Assocn., Nimaj House, Jodhpur 342001.

Productivity Council, Rajasthan State, E-29, Lajpat Marg, 'C' Scheme, Bhagwandas Rd., Jaipur 302001.

Pushtak Vyavasayee Sangh, Rajasthan, Chaura Rasta, Jaipur 302003.

Salt Distributors, Chamber of Genuine, Gaushala Bhawan, Dhan Mandi, Sambhar Lake 303604.

Small Industries of Rajasthan, Fedn. of Assocns. of, Rajasthan Chamber Bhawan, M.I. Rd., Jaipur 302003.

Small Tool Mfrs. Assocn., C/o Khandewala Udyog, Behari Marg, Beni Park, Jaipur 302001.

Steel Furniture Mfrs. Assocn., Rajasthan, Atish Mkt., Jaipur 302001.

Textile Mills Assocn., Rajasthan, Durlabh Bhawan, Mirza Ismail Rd., Jaipur 302001.

CULTURAL, SOCIAL AND PROFESSIONAL

Chartered Accountants of India, Instt. of, Khetan Bhawan, M.I. Rd., Jaipur 302001.

Engineers (India), Instt. of, Near Children's Park, Gandhinagar, Tonk Rd., Jaipur 302001.

Family Planning Assocn. of India, Mundri Mohalla, Ajmer 305001.

Lalit Kala Akademi, Rajasthan, Ravindra Manch, Ramnivas Garden, Jaipur 302004.

Medical Assocn., Indian, J-2/152, Vivekananda Mrg., Ashok Nagar, Jaipur 302001.

Pharmaceutical Assocn., Indian, Dept. of Pharmacy, Public Health Training Instt., Jaipur 302004.

Sangeet Natak Academy, Rajasthan, Paota, A-1 Rd., Jodhpur 342001.

Social Welfare, Indian Council of, Naib-ji-ka-Bagh, Moti Dongri Rd., Jaipur 302004.

TB Assocn., Rajasthan State, Office of the Directorate of Medical & Health Services, Jaipur 302001.

Zoological Socy., Deptt. of Zoology, Birla Instt. of Technology & Science, Pilani 333031.

TAMIL NADU

COMMERCIAL

Aluminium Merchants' and Mfrs.' Assocn., Madras, 10/11, Peddu Naicken St., Madras 600003.

Aluminium Semis & Extrusions Assocn., 7, Ekambareswara Agraharam, Madras 600003.

Art Silk Handloom Cloth Mfrs. & Exporters' Assocn., 30, B. East Colony, Komarapalayam 638183, Salem Dist.

Art Silk Yarn Producers' Assocn., Madurai Twisted, 67, Ramnad Rd., Madurai 625009.

Automobile Assocn. of Southern India, 38-A, Mount Rd., Madras 600006.

Blockmakers Assocn., South India, 26, Cathedral Rd., Madras 600086.

Booksellers' and Publishers' Assocn. of South India, C/o Higginbothams Ltd., 165, Mount Rd., Madras 600002.

Brick and Tile Mfrs. Assocn., 9, Jayammal St., Shenoy Nagar, Madras 600030.

Builders' Assocn. of India (South Centre), 3/3A, College Rd., Madras 600006.

Cable & Conductor Mfrs. Assocn., Tamil Nadu, 5, Smith Rd., Madras 600002.

Carbon-dioxide Mfrs. Assocn. of South India, Dare House, North Beach, Madras 600001.

Cardamom Traders Chamber, Main Rd., Bodinayakanur 626513, Madurai Dist.

Cement Mfrs. Assocn., 72, East Veli St., Madurai 625001.

Ceramic Mfrs. Assocn., B-1, Industrial Estate, Vridhachalam 606001.

Chemical Mfrs. Assocn., 15/1, C.B.K. Lane, Kamaraja Rd., Madurai 625009.

Chemists & Druggists Fedn., All India, 1, Memorial Hall St., Madras 600003.

Clothing Mfrs.' Assocn. of India (S. Regn. Office), Indian Chamber Bldgs., Esplanade, Madras 600001.

Coffee Merchants' Assocn., All India, 55, Rangai Gowder St., Coimbatore 641001.

Corrugated Box Mfrs. Assocn., South India, 84, Sydenham's Rd., Madras 600007.

Cotton Assocn., South India, 14-C/14-D, Travellers Bungalow Rd., Coimbatore 641018.

Cotton Waste Merchants & Exporters Assocn., Southern India, 26, Syrian Church Rd., Coimbatore 641001.

Dyes and Chemicals Merchants' Assocn., Tamil Nadu, 209, Govindappa Naick St., Madras 600001.

Electric Traders Assocn., Madras, 26, Tholasingham St., Madras 600001.

Employers' Combine, All India, 367, East Masi St., Madurai 625001.

Employers' Fedn. of Southern India, Dare House Annexe, 3/4, Moore St., Madras 600001.

Engineering Industry, Assocn. of Indian, Dare House Annexe, 3/4, Moore St., Madras 600001.

Engineering Mfrs. Assocn., Southern India, Kalaikathir Bldg., Avanashi Rd., Coimbatore 641018.

Fertiliser Assocn. of India (S. Regnl. Branch), Andhra Chamber Bldg., 272/3, Angappa Naicken St., Madras 600001.

Film Chamber of Commerce, South Indian, T. R. Sundaram Ave., 123, Mount Rd., Cathedral P.O., Madras 600006.

Film Directors Assocn., South India, 11A, Gopalakrishna Iyer Rd., T. Nagar, Madras 600017.

Film Distributors Council, Tamil Nadu (Regd.), 6-A, Woods Rd., Madras 600002.

Film Producers Guild of South India, 41, Bazlullah Rd., Madras 600017.

Fireworks Mfrs. Assocn., Small Scale Cottage, Door No. 7-3/5, Seeni Moopnagar St., Sivakasi 626163.

Glass Mfrs. Assocn., South India, C/o S. India Glass & Enamel Works Ltd., 172, Cherry Rd., Salem 636007.

Goods Transport Assocn., Madras, 278, Linghi Chetty St., Madras 600001.

Gunny Merchants' Assocn., Madras, 35-A, Audiappa Naicker St., Madras 600001.

Handicraft Mfrs. Assocn., Tamil Nadu State Industries, 78/12, Kumaran Rd., Tirupur 638501.

Handicrafts Co-operative Marketing Socy. Ltd., Madras State, 329, Thambu Chetty St., Madras 600001.

Handkerchiefs Exporters Assocn. (Regd.), Real Madras 7, Md. Abdullah Sahib St., Chepauk, Madras 600005.

Handloom Cloth Mfrs. Assocn., Salem Gugai, 407, Trichy Main Rd., Salem 636006.

Handloom Cloth Producers' Assocn. Ltd., Madurai, 44, Lakshmipuram 2nd St., Madurai 625001.

Handloom Fabrics Marketing Co-op. Socy. Ltd., All India, 16, Sunkurama Chetty St., Madras 600001.

Handloom Inds. Assocn., Southern India, No 3, Somasundaradevar 6th St., Aynavaram, Madras 600023.

Handloom Industry and Trade Assocn., Tamil Nadu, 72, Thambu Chetty St., Madras 600001.

Handloom Towels and Bedsheets Mfrs. Assocn., Tamil Nadu Fedn. of, Erode 638001.

Handloom Weavers' Co-op. Socy. Ltd., Tamil Nadu, 34/1A, Pantheon Rd., Madras 600008.

Hosiery Mfrs. Assocn., South India, 78/12, Kumaran Rd., Tirupur 638601.

Hotels and Restaurants Assocn., South India, Spencer's Bldg., 153, Mount Rd., Madras 600002.

Industrial Estate Assocn., Tamil Nadu, Developed Plot No. 48, A. Industrial Estate, Madras 600048.

Industrial Estate Mfrs. Assocn., Ind. Estate, Guindy, Madras 600032.

Industries Assocn., Madras, 114, Mowbray's Rd., Madras 600018.

Instruments & Electronics Industrial Estate Mfrs. Assocn., 1-6, Instronics Campus, Madras 600020.

Iron Safe Mfrs. Assocn., Madras, 58, Broadway, Madras 600001.

Iron & Steel Fabricators' Assocn., Madurai Dist., 66-A, South Avanimoola St., Madurai 625001.

Jewellers' and Diamond Merchants' Assocn., Madras, 11 & 12, Car St., Madras 600001.

Lungi Mfrs. Assocn., Cotton, C/o Nagor Mercantile, 41, Sembudoss St., Madras 600001.

Machine Tools Merchants' Assocn., Tamilnadu, 52, Linghi Chetty St., Madras 600001.

Manufacturers' Organisation, All India (Tamil Nadu Board), 150-B, Mount Rd., Madras 600002.

Marketing Fedn. Ltd., Tamil Nadu Co-op., 40-A, St. Mary Rd., Raja Annamalaipuram, Madras 600018.

Marketing Fedn. Ltd., Tamil Nadu, 63, D.B. Rd., Coimbatore 641002.

Match Industries, Chamber of, Gudiyattam 632602, N. Arcot Dist.

Match Industries, Sivakasi Chamber of, 110, Kamaraj Rd., Sivakasi 626123.

Match Service Indl. Co-op. Socy. Ltd., Kovilpatti Small, Ind. 715, P.O. Box No. 6, Kovilpatti 627701.

Metalware Mfrs. & Merchants Assocn., Tamil Nadu, 36, Raghunayakulu St., Madras 600003.

Milk Producers' Fedn. Ltd., Tamil Nadu Co-op., 15, Spur Tank Rd., Chetput, Madras 600031.

Millowners' Assocn., Southern India, Race Course, Post Box 3783, Coimbatore 641018.

Millowners' Assocn., Tamilnadu, Meenakshi Nilayam, T. P. K. Rd., Madurai 625003.

Motor Vehicles and Allied Industries Assocn., 22, Edward Elliot's Rd., Madras 600004.

Non-ferrous Metal Rolling Mills Assocn., Tamil Nadu, 19, Venkatachala Mudali St., Madras 600003.

Oil & Allied Products Co-op. Fedn. Ltd., Tamil Nadu, Kuralagam, Madras 600001.

Onion Traders' Assocn., 2/41, Malayaperumal St., Madras 600001.

Opticians Assocn., Madras, 24, Broadway, Madras 600001.

Palmgur & Fibre Marketing Co-op. Fedn. Ltd., Tamilnadu State, 52, Gengu Reddy Rd., Egmore, Madras 600008.

Paper Bag Mfrs.' Assocn., South India, 4, Bunder St., Madras 600001.

Paper & Board Convertors' Assocn., Madras, 275, N.S.C. Bose Rd., Madras 600001.

Pencil Mfrs.' Assocn., Indian, C/o Standard Pencil Factory, Super A-5 & 6, Ind. Estate, Madras 600032.

Pharmaceutical Assocn., Indian, C/o Rallis India Ltd., TCF Div., Arcot Rd., Madras 600092.

Pharmaceutical Trade, Joint Council of Indian, 1, Memorial Hall St., Madras 600003.

Photographic and Allied Trades Assocn. Ltd., South Indian, 1/129, Mount Rd., Madras 600006.

Planters' Assocn. of Southern India, United, P.O. Box No. 11, "Glenview", Coonoor 643101, Nilgiris.

Planters' Assocn. of Tamil Nadu, Canowie, Kotagiri Rd., Coonoor 643101.

Plastic Mfrs. Assocn., Tamil Nadu, 176, Walltax Rd., Madras 600001.

Printers' Assocn., Sivakasi Master, 87, Kamaraj Rd., Sivakasi 626123.

Printers' Assocn., Tamilnad, 18, East Hanumantharayan Koil St., Madurai 625001.

Printers' & Lithographers' Assocn., Madras, 31/2A, Pantheon Rd., Egmore, Madras 600008.

Productivity Council, National, 6, Montieth Rd., Egmore, Madras 600008.

Productivity Council, Madras, 17, G. N. Chetty Rd., T. Nagar, Madras 600017.

Publishers' Assocn. of South India, 1[illegible], Sunkurama Chetty St., Madras 600001.

Pyrotechnists' Assocn., Indian, Valapalakudai St., Sivakasi 626123.

Radio & Electronics Assocn., All India, 22, General Patters Rd., Madras 600002.

Refrigeration and Air Conditioning Trades Assocn., 23/24, Second Line Beach, Madras 600001.

Roads & Transport Devpt. Assocn., Indian, 123, Nungambakkam High Rd., Madras 600034.

Salt Mfrs. and Merchants' Assocn., 159, Victoria St., Tuticorin 628001.

Salt Producers' & Exporters' Chamber, Tuticorin 628001.

Saltpetre Mfrs. Assocn., Tamil Nadu, 7/62-63, Coimbatore Palghat Main Rd., Kuniyamuthur Post, Coimbatore 641008.

Sanitary Dealers' Assocn., South India, 306, Thambu Chetty St., Madras 600001.

Sea Food Industrial Co-op. Socy. Ltd., Madras, No. 10, West Mada Church St., Royapuram, Madras 600013.

Skin and Hides Merchants' Assocn., All India, 53, Sydenham's Rd., Periamet, Madras 600003.

Small Industries of India, Fedn. of Assocns. of, 10, G.S.T. Rd., Madras 600032.

Small Scale Inds. Assocn., Tamil Nadu, 10, G. T. S. Rd., Guindy, Madras 600032.

Snuff & Tobacco Merchants Assocn., Madras State, 56, Varada Muthiappan St., Madras 600001.

Soap Mfrs. Assocn., Tamilnad Southern Regional Handmade, 38-39, Amman Sannathi St., Madurai 625001.

Soap Mfrs. Assocn., Tamil Nadu Non-Power, 383-A, T. H. Rd., Madras 600081.

Steamer Agents' Assocn., Madras, 1/21, North Beach Rd., Madras 600001.

Steamer Agents' Assocn., Tuticorin, 90, South Raja St., Tuticorin 628001.

Steel Merchants' Syndicate, 87, East Masi St., Madurai 625001.

Steel Rolling Mills Assocn., Tamilnadu, Indian Chamber Bldg., Esplanade, Madras 600001.

Stevedores' Assocn., Madras, 41, Linghi Chetty St., Madras 600001.

Stevedores' Assocn., Tuticorin, 50, Beach Rd., Tuticorin 628001.

Stock Exchange Ltd., Madras, 16/17, Second Line Beach, Madras 600001.

Sugar Factories Ltd., Madras State Fedn. of Co-op., 2, Maharaja Suryarao Rd., Madras 600018.

Sugar Mills Assocn., South Indian, Indian Chamber Bldgs., Esplanade, Madras 600001.

Synthetic Stones Mfrs. & Dealers' Assocn., Southern India, Big Bazar, Tiruchirapalli 620008.

Tanners and Dealers Assocn., South India, Ranipet 632401, North Arcot Dist.

Textile Assocn. (India), S. I. Branch, Near Kasturba Hospital, Cotton Mills Rd., Coimbatore 641015.

Textiles Assocn., Tamil Nadu, 2, First Gandhipuram, Erode 638003.

Textiles Mfrs. and Exporters' Socy., Handloom, Salem Main Rd., Komarapalayam 638183, Salem Dist.

Yarn Trade Fedn., South India, 38, Mint St., Madras 600003

CULTURAL, SOCIAL, AND PROFESSIONAL

Agri-Horticultural Socy., 18, Cathedral Rd., Madras 600006.

Animals, Socy. for Prevention of Cruelty to, Vepery High Rd., Vepery, Madras 600007.

Animal Welfare Board, 1, First Main Rd., Gandhinagar, Madras 600020.

Asthika Samajam (Regd.), Venus Colony, Madras 600018.

Automobile Engineers (India), Insttn. of, 85, Mount Rd., Madras 600018.

Automotive Engineers, Insttn. of, 47, Third St., East Abhiramapuram, Mylapore, Madras 600004.

Bar Assocn., High Court, Madras 600001.

Business Management (India), Instt. of, 9, Bishop Wallers Ave., Madras 600004.

Business Management, Insttn. of, 47, Third St., East Abhiramapuram, Mylapore, Madras 600004.

Carrom Fedn., All India (Also Carrom Assn., T. Nadu), Room 9, Nehru Stadium, P. T., Madras 600003.

C. P. Ramaswamy Aiyar Foundation, The Grove, Teynampet, Madras 600018.

Catholic Centre, Armenian St., Madras 600001.

Chartered Accountants of India, Instt. of, Sri Ram Bldg., 138, Jail Rd., Coimbatore 641018.

Chartered Accountants of India, Instt. of, 231, Nungambakkam High Rd., Madras 600034.

Child Welfare, Indian Council for, 1, Prakasa Mudaliar Rd., Madras 600017.

Children, Madras Socy. for the Protection of, 465, T.H. Rd., Washermanpet, Madras 600021.

Chinmaya Mission, 10, Harrington Rd., Madras 600031.

Company Secretaries of India, Instt. of (Southern India Regnl. Council), New College Shopping Centre, 49, Peters Rd., Madras 600014.

Consumer Council of India, 8, A.C. Rd., Madras 600084.

Cricket Assocn., Tamil Nadu, M.A.C. Stadium, Victoria Hostel Rd., Chepauk, Madras 600005.

Cultural Relations, Indian Council for, 3/C-1, Eldams Rd., Madras 600018.

Dental Council, Madras, Block Central Office Bldgs., Madras 600006.

Economic Assocn., Indian, Deptt. of Economics, Univ. of Madras, Madras 600005.

Economics, Indian Socy. of Industrial & Fiscal, Univ. of Madras, Madras 600005.

Electrochemical Sciences & Technology, Socy. for the Advancement of, Central Electrochemical Research Instt., Cecrinagar, Karaikudi 623006.

Engineers (India), Insttn. of, 19, Adam's Rd., Chepauk, Madras 600005.

Family Planning Assocn. of India, No. 10, 2nd Main Rd., C.I.T. Colony, Madras 600004.

Film Societies of India, Fedn. of, 35/1, K. M. Naicken St., Madras 600028.

Football Assocn., Tamilnadu, Nehru Stadium, Madras 600003.

Free Enterprise, Forum of, 35, Mount Rd., Madras 600002.

Friend-in-Need Socy., Finsbree Garden, 19/20, Poonamallee High Rd., Madras 600003.

Geographical Socy., Indian, Univ. Centenary Bldgs., Chepauk, Madras 600005.

Hockey Fedn., Indian, Corporation Stadium, Madras 600003.

Homoeopathic Assocn. of India, 10, Shafee Mohamed Rd., Madras 600006.

Homoeopathy Council, Tamil Nadu, 36, Parthasarathy Naidu St., Madras 600005.

Homoeopaths, Indian Instt. of, 30, Bakthapuri St., Kumbakonam 612001; 78, West Tower St., Madurai 625001; 3/186, 2nd Flr., Mount Rd., Madras 600002.

Horticultural Association, South Indian, Lawley Rd., Coimbatore 641003.

Indo-Canada Assocn., TNK House, 11-A/3, Mount Rd., Madras 600002.

Indo-Gambia Friendship Assocn., 3, Goomes St., Madras 600001.

Insurance Surveyors & Loss Assessors (S. India), Assocn. of, 11/12, 2nd Line Beach, Madras 600001.

International Art Centre, Kalakshetra, Tiruvanniyur, Madras 600041. Centre for education in classical music, dancing, theatrical art, painting & handicrafts.

Law Instt. (T. Nadu Unit), Indian, 8, High Court Chambers, Madras 600001.

Library Assocn., Madras, C/o Maraimalai Adigal Library, 105, Linghi Chetty St., Madras 600001.

Lift Irrigation Co-op. Fedn., Tamil Nadu, 32, Lux Church Rd., Madras 600004.

Literary Socy., Madras, Auxiliary of the Royal Asiatic Socy., College Rd., D.P.I. Compound, Madras 600006.

Management Assocn. of Southern India, 1/4, Devajee Mansion, Melur Rd., Madurai 625001.

Marketing & Management, Instt. of, 21, Poes Rd., Second St., Teynampet, Madras 600018.

Materials Management, Indian Assocn. of, C/o, Audco India Ltd., Mount-Poonamallee Rd., Manapakkam, Madras 600089.

Mathematical Socy., Indian, Ramanujan Instt., Univ. of Madras, Madras 600005.

Max Mueller Bhavan, Express Estates, Mount Rd., Madras 600002.

Medical Assocn., Indian, B-20, Swaminatha Sastri Rd., N.E. Extension, Thillianagar, Tiruchirapalli 620018.

Medical Council, Tamil Nadu, Block 1, Central Office Bldg., Mount Rd., Cathedral Post, Madras 600006.

Missionary Socy. of India, National, 102, Peters Rd., Madras 600014.

Muslim Assocn., Malabar, 7, Kennet Lane, Egmore, Madras 600008.

Nair Samajam, Madras, 7, Shenoy Rd., Nungambakkam, Madras 600034.

Painters, South Indian Socy. of, No. 13, 3rd Trust, Cross St., Madras 600028.

Personnel Management, National Instt. of, C/o L. G. Balakrishna & Bros., Trichy Rd., Coimbatore 641018.

Plant Engineers, Indian Insttn. of, 15A, Sivaganga Rd., Madras 600034.

Plastics & Rubber Instt., Indian Section (Plastics), (Madras Centre), C/o T. S. Biddapa, Nocil, 20, Nungambakkam High Rd., Madras 600034.

Public Affairs, Council of, 491, P. H. Rd., Madras 600007.

Quality Assurance, National Instt. of, B-5/214, BHEL Township, Tiruchirapalli 620014.

Ramakrishna Math, Sri, 11, Sri Ramakrishna Math Rd., Mylapore, Madras 600004.

Ramakrishna Paramahamsa-Swami Vivekananda Instt., Sri, 86, Walltax Rd., Madras 600003.

Rasika Ranjani Sabha, Sundareswar St., Mylapore, Madras 600004.

Red Cross Socy., Indian, T. Nadu Branch, Red Cross Bldg., Montieth Rd., Egmore, Madras 600008.

Sangita Nataka Sangam, Madras State, 'Brodie Castle', Greenways Rd., Madras 600028.

Sarvodaya Sangh, Madras, 39, Linghi Chetty St., Madras 600001.

Scouts & Guides, Bharat, 'Wenlock Park', Kamarajar Salai, Triplicane, P.B. No. 424, Madras 600005.

Servants of India Socy., 8, Westcott Rd., Royapettah, Madras 600014.

Seva Sadan, Madras, 5, Harrington Rd., Chetput, Madras 600031.

Sports Council, Tamil Nadu State, Nungambakkam Recreation Centre, Madras 600034.

Statistical Institute, Indian, 417, Mettupalayam Rd., Coimbatore 641002.

Statistical Institute, Indian, 31, N. High Rd., Madras 600034.

St. John Ambulance Assocn., 1, Spur Tank (E.) Rd., Madras 600031.

Surgeons of India, Assocn. of, Adams Rd., Madras 600005.

Tamil Sangam, Madurai, 54, Tamil Sangam Rd., Madurai 625001.

Technical Education, Indian Socy. for, IIT Campus, Madras 600036.

Theosophical Socy., (Intnl. Hqrs.), Adyar, Madras 600020.

Veterinary Assocn., Indian, 10, Avenue Rd., Madras 600034.

Village Uplift Fedn., Tamil Nadu, 6, New St., Kottur, Madras 600085.

Vivekananda Kendra, Kanyakumari 629702.

Volleyball Assocn., Tamil Nadu State, Nehru Stadium, Madras 600003.

Weight Lifting Assocn., Madras State, 6, Ayyavu Naidu East St., Madras 600030.

Y.M.C.A., Esplanade, Madras 600001.

Y.W.C.A., Poonamallee High Rd., Madras 600084.

TRIPURA

COMMERCIAL

Industries Assocn., Tripura, Netaji Subhas Rd., Agartala 799001.

Soap Factory Owners Assocn, Tripura, Netaji Subhas Rd., Agartala 799001.

CULTURAL, SOCIAL AND PROFESSIONAL

Medical Assocn., Indian, G.B. Hospital, P. O. Kunjaban, Agartala 799006.

Red Cross Socy., Indian, Manikay Club, Agartala 799001.

TB Assocn. of Tripura, Office of the V.M. Hospital, Agartala 799001.

UTTAR PRADESH

COMMERCIAL

Automobile Assocn., U.P., 32-A, M. Gandhi Mrg., Allahabad 211001.

Barbed Wire Mfrs.' Assocn., U.P., 58/4, Birhana Rd., Kanpur 208001.

Biscuit Mfrs. Assocn., U.P., 84/67, G.T. Rd., Kanpur 208001.

Booksellers' Assocn., Rajpur Rd., Dehra Dun 248001.

Brass Merchants & Mfrs., Assocn., Banaras, Vyapar Bhawan, Thatheri Bazar, Varanasi 221001.

Carpet Mfrs'. Assocn., All India, Post Box No. 63, Kaleen Bhawan, Maryadpatti, Bhadohi 221401.

Carpet Mfrs. Co-op. Assocn. Ltd., Quality Marked Woollen, Gopal Das Rd., Mirzapur 231001.

Christian Tract & Book Socy., North India, 18, Clive Rd., Allahabad 211001.

Concrete Pipe Mfrs.' Assocn., U.P., 239-A, National Highway, New Agra, Agra 282001.

Conductor Mfrs. Assocn., U.P., Kautilya Kendra Mrg., Varanasi Cantt. 221002.

Cottage Industries Devpt. Instt., 57/97, Tilpurwa, Hussainganj, Lucknow 226001.

Diesel Engine Mfrs.' Assocn., U.P., 88, North Vijay Nagar Colony, Agra 282001.

Employers' Assocn. of Northern India, 14-69, Civil Lines, Kanpur 208001.

Engineering Assocn. of Northern India, 79/7, Latouche Rd., Kanpur 208001.

Engineering Chamber of Uttar Pradesh, 92, Fazalganj, Kanpur 208912.

Glass Factories Assocn., Sadar Bazar, Firozabad 283203, Agra Dist.

Glass Mfrs.' Syndicate, U.P., C/o Paliwal Glass Works, Shikohabad 205141.

Hosiery Assocn., Kanpur, 118/265, Kaushalpuri, Kanpur 208012.

Hosiery Knitters Assocn., Kanpur, 119/31, Nasimabad, Kanpur 208012.

Industrial Estate Mfrs. Assocn., U.P., 5, Ind. Estate, Kanpur 208001.

Iron Founders' Assocn., Agra, 88, North Vijay Nagar Colony, Agra 282004.

Light & Small Industries Assocn., U.P., Achal Tank East, Achal, Aligarh 202001.

Lock Mfrs.' and Traders' Assocn., Aligarh, Tala Bhawan, 5/9, Jaiganj Rd., Aligarh 202001.

Manufacturers' Organisation, All India, J. Nehru Marg, P. Box 45, Navyug Mkt., Ghaziabad 201001.

Metallic Yarn Mfrs. Assocn., 37/120, Jagannath Puri, Rathyatra, Varanasi 221001.

Motor Industries Assocn., U.P., Allied Motors P. Ltd.,Hazratganj, Lucknow 226001.

Non-Ferrous Mfrs. Assocn., Mirzapur, Durgadevi, Mirzapur 231001.

Newspapers Fedn., All India Small & Medium, 104A/198, Rambagh, Kanpur 208012.

Oil Millers' Assocn., U. P., 52-10, Collectorganj, Kanpur 208001.

Pharmaceutical Assocn., Indian, Deptt. of Pharmaceuticals, Banaras Hindu Univ., Varanasi 221005.

Plastic Mfrs. Assocn., Varanasi Small, Santiniketan, Varanasi 221005.

Printers Assocn., Lucknow, 50, Gautam Buddha Mrg., Lucknow 226001.

Productivity Council, Eastern U.P., Shahi Bldg., Cinema Rd., Golgha, Gorakhpur 273001.

Productivity Council, National, 7/155, Swarup Nagar, Kanpur 208002.

Productivity Council, Western U.P., 46/16, Kalyani, Civil Lines, Meerut 250001.

Publishers' Assocn., Uttar Pradesh, 119, Swami Vivekanand Mrg., Allahabad 211003.

Rubber Goods Mfrs. Assocn., 101-A, Ajmer Rd., Agra Cantt. 282001.

Scientific Dealers' and Makers Assocn., U.P., C/o Superior Scientific Stores, 109/221, Jawahar Nagar, Kanpur 208012.

Scissors Assocn., C/o Rafi Scissors Works, Sabungran, Pairamal Ka Bazar, Meerut City 250002.

Shoe Factories Fedn., Agra, Shoe Centre Bldg., Hing-ki-Mandi, Agra 282001.

Shoe Mfrs.' Assocn., Agra, 4/102-103, Bidyut Nagar, Dayal Bagh, Agra 282001.

Small Cottage Inds. Assocn. of U.P., Fedn. of, D-16, Vivekanandpuri, Lucknow 226007.

Soap Industry Assocn., U.P. Small Scale, Nihal Singh Mkt., Ashok Nagar, G.T. Rd., Kanpur 208012.

Steel Wire Mfrs. Assocn. of Northern India, 117/491, Pandu Nagar, Kanpur 208001.

Sugar Exchange Limited, Upper India, 51/58, Collectorganj, Kanpur 208001.

Sugar Factories Fedn. Ltd., U.P., Co-op., 1A, LA Place, Shahnajaf Rd., Lucknow 226001.

Sugar Mills Assocn., U.P., 47/2, Kabir Mrg., Lucknow 226001.

Tanners' Fedn. of India, 14/69, Civil Lines, Kanpur 208001.

Textile Assocn., India, (U.P. Branch), 14/1, Civil Lines, Kanpur 208001.

Traders & Exporters Assocn., Foreign Tourists', 18, Mall Rd., Agra 282001.

Utensils Mfrs. Assocn., Bell Metal, Mirzapur 231001.

CULTURAL, SOCIAL AND PROFESSIONAL

Ambulance Assocn., St. John, Red Cross Bldg., Raja Nawab Ali Rd., Lucknow 226001.

Ceramic Socy., Indian, Banaras Hindu Univ., Varanasi 221005.

Chartered Accountants of India, Instt. of, 16/77, Civil Lines, Katchehri Rd., Kanpur 208001.

Cheshire Homes India, 16, Pritam Rd., Dehra Dun 248001.

Homes: Bangalore, Vadodara, Bombay, Burnpur, Calcutta. Cochin, Lucknow, Nagercoil, Coimbatore, Delhi, Dehra Dun, Jamshedpur, Katpadi, Madras, Mangalore, Pune, Ranchi & Madurai.

Crime Prevention Socy., All India, Behari Niwas. Kanpur and Balaganj, Lucknow 226001.

Dharma Peetha, Board of Kashi, D35/87, Jangombari, Varanasi 221001.

Divine Life Society, P.O. Sivanandanagar, Tehri-Garhwal Dist. 249192.

Earthquake Technology, Indian Socy. of, Roorkee 247667.

Educational Assocns., All India Fedn. of, Jha-Seshadri-Khattry Bhawan, Kanpur 208001.

Engineers (India), Insttn. of, Teliarganj, Allahabad 211004.

Ethnographic & Folk Culture Socy., C-861, Sector 'C', Mahanagar, P. Box 209, Lucknow 226006.

Family Planning Asscon. of India, 27, Dr. B. N. Verma Rd., Lucknow 226001.

Foresters, Socy. of Indian, P.O. New Forest, Dehra Dun 248006.

Geographical Socy. of India, National, Banaras Hindu Univ., Varanasi 221005.

Geohydrologists, Indian Association of, Geological Survey of India, 1, Gokhale Mrg., Lucknow 226001.

Graphical Workers, Indian Federation of, Rose Bldg., Subhash Rd., Aligarh 202001.

Indo-American Friendship Assocn., Rose Bldg., Subhash Rd., Aligarh 202001.

Mahila Ashram, (Home for Women in distress run by Municipal Corpn.), Motinagar, Lucknow 226001.

Materials Management, Indian Assocn. of, C/o J.K. Cotton Spg. & Wvg. Mills Co. Ltd., L. Kamlapat Rd., Kanpur 208012.

Medical Assocn., Indian, 24/66, Birhana Rd., Kanpur 208001.

Meditation, International Foundation of, 44, Kailash. Post Box No. 31, Kanpur 208001.

Nature Cure Assocn., All India, 52, Gwynne Rd., Lucknow 226001

Numismatic Socy. of India, Banaras Hindu Univ., Varanasi 221005.

Oil Assocn. of India, Essential, H. B. Technological Instt., Kanpur 208002.

Oil Technologists' Assocn. of India, Ganesh Flour Mills Co. Ltd., Kalpi Rd., Kanpur 208001.

Palaeontological Socy. of India, 98, M. Gandhi Rd., Lucknow 226001.

Pharmaceutical Assocn., Indian, 22-B, Church Lane, Allahabad 211002.

Productivity & Management, Instt. of, 46/16, Kalyani, Civil Lines, Meerut 250001.

Pulp & Paper Technical Assocn., Indian, Instt. of Paper Technology Campus, Saharanpur 247001.

Ramakrishna Mission Sevashram, Vivekananda Puri, Lucknow 226007.

Red Cross Socy., Indian, Red Cross Bldg., Raja Nawab Ali Rd., Lucknow 226001.

Scouts and Guides, Bharat, 109/1, Katra Rd., Allahabad 211001.

Seva Samiti, All India, Seva Samiti Bldgs., Seva Samiti Rd., Ram Bagh, Allahabad 211003.

Social Welfare, Indian Council of, C/o Gandhian Instt. of Studies, P.B. No. 116, Rajghat, Varanasi 221001.

Social Workers' Assocn. of India, Young, 83/21, Acharyanagar, Kanpur 208003.

Sugar Technologists' Assocn. of India, P.O. N.S.I., Kalyanpur, Kanpur 208017.

Theosophical Socy., U.P. Fedn. of, 12, Huntley House, Mahatma Gandhi Rd., Agra 282002.

Vedic Sadhan Ashram, P.O. Tapovan, Dehra Dun 248001.

Wild Life Preservation Socy. of India, 7, Astley Hall, Dehra Dun 248001.

Zoology, Academy of, Khandari Rd., Agra 282002.

Zootomical Socy. of India, Banaras Hindu Univ., Varanasi 221005.

WEST BENGAL

COMMERCIAL

Acid & Chemical Mfrs. Assocn. Ltd., 78B, Manicktala St., Calcutta 700006.

Air-Conditioning & Refrigeration Assocn., Eastern India, C/o Century Components Co. P. Ltd., A/2C, Kyd St., Calcutta 700016.

Aluminium Rollers' and Fabricators' Assocn., Eastern, 23A, Netaji Subhas Rd., Calcutta 700001.

Animal Feed Mfrs. Assocn. of Eastern India, 8, Old Court House St., Calcutta 700001.

Arts & Crafts Exporters' Assocn., Indian, 9B, Chowringhee Place, Calcutta 700013.

Automobile Assocn. of Eastern India, 13, Ballygunge Circular Rd., Calcutta 700019.

Automotive Mfrs.' Assocn. of India, India Exchange, India Exchange Place, Calcutta 700001.

Ball and Roller Bearing Mfrs.' Assocn. of India, 3A, Shakespeare Sarani, Calcutta 700071.

Banks Assocn., Indian, Hong Kong House, B. B. Dinesh Bagh, Calcutta 700001.

Battery Mfrs.' Assocn., Indian, 23, R. N. Mookerjee Rd., Calcutta 700001.

Battery Mfrs.' Assocn., Indian Small Scale Storage, P-31, C.I.T. Rd., Entally, Calcutta 700014.

Belting Industries Assocn., Indigenous, 23, R. N. Mookerjee Rd., Calcutta 700001.

Bolt and Nut Dealers' Assocn., East Indian, P6, Kalakar St., Calcutta 700007.

Bucket Mfrs.' Assocn. of India, 6, N. Subhas Rd., 2nd Floor, Calcutta 700001.

Builders' Assocn. of India (Eastern Centre), 76, Ashutosh Mukherjee Rd., Calcutta 700025.

Builders' Hardware Industries Assocn. of India, India Exchange, 7th Floor, Calcutta 700001.

Cabinet Makers' and Furnishers' Assocn., Calcutta, 66, B.B. Ganguly St., Calcutta 700012.

Cable and Conductor Mfrs.' Assocn. of India, 2A, Shakespeare Sarani, Calcutta 700016.

Calendar Mfg. Assocn., 8, Ramkumar Rakshit Lane, Calcutta 700007.

Candle Mfrs. Assocn., West Bengal Small Scale, 3/2B, Gupta Lane, Calcutta 700006.

Carpet Mfrs. Assocn., Indian, 9B, Chowringhee Place, Calcutta 700013.

Ceramic Development Assocn., Indian, India Exchange. Calcutta 700001.

Chain Assocn., All India, 29-B, Bentinck St., Calcutta 700001.

Chemical Mfrs. Assocn., Indian, India Exchange, India Exchange Place, Calcutta 700001.

Clearing Agents' Assocn., Calcutta, 23, R. N. Mookerjee Rd., Calcutta 700001.

Coir Mktg. Socy. Ltd., Cochin Central Co-op., 5, Amratolla Lane, Calcutta 700001.

Cold Storage Assocn., West Bengal, 8, Old Court House St., Calcutta 700001.

Comb Mfg. Assocn., West Bengal Celluloid, 16, Rabindra Sarani, Calcutta 700001.

Copper Information Centre, Indian, 27B, Camac St., Calcutta 700016.

Corrugated Box Mfrs.' Assocn., Eastern India, 41, Chowringhee Rd., Calcutta 700071.

Cycle Traders' Assocn., Indian, 67, Bentinck St., Calcutta 700001.

Cycle Tyre & Component Mfrs. Assocn., C/o Balaji Udyog, 3, Bentinck St., Calcutta 700001.

Earthmoving Equipment Parts Assocn. of Eastern India, 10/1, Prinsep St., Calcutta 700013.

Electrical Contractors' Assocn. of Eastern India, P-11, Mission Row Extn., Calcutta 700001.

Electrical Transmission Line Mfrs. Assocn. 30, Ganesh Ch. Ave., Calcutta 700013.

Electronic Industries Assocn., Small Scale, 5, Madan St., Calcutta 700001.

Employers' Assocn., Calcutta, India Exchange, India Exchange Place, Calcutta 700001.

Enamellers Assocn., Vitreous, C/o Sur Enamel & Stamping Works P. Ltd., 24, Dr. L. M. Bhattacharjee Rd., Calcutta 700014.

Engine Mfrs. Assocn., West Bengal, 14, Ganesh Ch. Ave., Calcutta 700013.

Engineering Industry, Assocn. of Indian, 6, Netaji Subhas Rd., Calcutta 700001.

Export & Import Trade Assocn., Calcutta, 6, Netaji Subhas Rd., Calcutta 700001.

Exporters' Assocn., West Bengal, 8, Old Court House St., Calcutta 700001.

Fan Makers' Assocn. of India, India Exchange, India Exchange Place, Calcutta 700001.

Fasteners Assocn. of India, Industrial, India Exchange, 2nd Floor, Calcutta 700001.

Fertiliser Assocn. of India (Eastern Regnl. Branch), 10A, Ho Chi Minh Sarani, Calcutta 700071.

Foundry Assocn., Indian, India Exchange, 7th Floor, India Exchange Place, Calcutta 700001.

Freight Brokers' Assocn., Calcutta, Royal Exchange, 6, Netaji Subhas Rd., Calcutta 700001.

Galvanised Sheet Merchants Assocn., 20, Strand Rd., Calcutta 700001.

Garment Mfrs.' & Dealers' Assocn., West Bengal, 8, Old Court House St., Calcutta 700001.

Garments Mfrs. Assocn., West Bengal Small Scale, 167/M, Rashbehari Ave., Calcutta 700019.

Glass Bottle and Cork Merchants' Assocn., Calcutta, 6, Ezra St., Calcutta 700001.

Glass Mfrs.' Assocn., Bengal, 23, R. N. Mookerjee Rd., Calcutta 700001.

Goods Transport Assocn., Calcutta, 43, Zakaria St., Calcutta 700073.

Gunny Trades Assocn., 5, Clive Row, P.O. Box 573, Calcutta 700001.

Handicraft Inds. Assocn., West Bengal, 18, Ballygunge Stn. Rd., Calcutta 700019.

Handloom Weavers Co-op. Society Ltd., West Bengal, 15, B. A. Chandra St., Calcutta 700072.

Hides and Skin Shippers' Assocn., Calcutta, 6, Netaji Subhas Rd., Calcutta 700001.

Home Industries Assocn., Bengal, 57, Chowringhee, Calcutta 700016.

Hosiery Assocn., West Bengal, 8, Old Court House St., Calcutta 700001.

Hosiery Mfrs.' Assocn., Bengal, 219, Bepin Behari Ganguli St., Calcutta 700012.

Hotel and Restaurant Assocn. of Calcutta Region, Spences Hotel, 4, Wellesley Place, Calcutta 700001.

Hydraulic Press Assocn., Calcutta, 6, Netaji Subhas Rd., Calcutta 700001.

Import & Export Trade Assocn., Calcutta, 6, N. Subhas Rd., Royal Exchange, Calcutta 700001.

Iron and Steel Scrap Dealers' Assocn., W. Bengal, 66, Bentinck St., Calcutta 700001.

Jute & Hessian Exchange Ltd., East India, 43, Netaji Subhas Rd., Calcutta 700001.

Jute Mfrs.' Devpt. Council, 25, Camac St., 6th Flr., Calcutta 700016.

Jute Mills Assocn., Indian, Royal Exchange, 9, N. Subhas Rd., Calcutta 700001.

Kapok Mills Assocn., Indian, 16, Satyanarain Temple Rd., Salkia, Howrah 711106.

Lac Exporters' Assocn., Indian, 6, Netaji Subhas Rd., Calcutta 700001.

Lamp Factories Assocn., Indian, 23, R. N. Mookerjee Rd., Calcutta 700001.

Lantern Mfrs. Assocn., India Exchange, 7th Floor, Calcutta 700001.

Lead/Zinc Information Centre, Indian, 2, S. N. Pandit St., Calcutta 700020.

Leather Goods Mfrs. Assocn., Eastern, 4, Tollee Lane, Calcutta 700016.

Leather & Leather Goods Mfrs. Assocn., Calcutta, 102, Raja Basanta Roy Rd., Calcutta 700029.

Machinery Dealers' Assocn., Calcutta, 3/1/2, Armenian St., Calcutta 700001.

Magnet Wires and Cables Mfrs. Assocn., C/o Electrical Industries Corpn., 49/1, Gariahat Rd., Calcutta 700019.

Manufacturers' Organisation, All India (West Bengal State Board), Ilaco House, 1 & 3, Brabourne Rd., Calcutta 700001.

Marine Service Contractors' Assocn., P-11, Mission Row Extn., Calcutta 700001.

Master Printers' Assocn., Ltd., W. Bengal, 32/1A, Creek Lane, Calcutta 700014.

Metal Merchants' Assocn., East India, 8, Old Court House St., Calcutta 700001.

Metals Mfrs. Assocn., Indian Non-Ferrous, India Exchange, 4, India Exchange Place, Calcutta 700001.

Millowners' Assocn., Bengal, 2, Church Lane, Calcutta 700001.

Mining Assocn., Indian, 6, Netaji Subhas Rd., Calcutta 700001.

Monograph Assocn. of India, 3, British Indian St., Calcutta 700001.

Motion Pictures Assocn., Eastern India, 98E, Chowringhee Square, Calcutta 700013.

Motor Industries Assocn., 6, Netaji Subhas Rd., Calcutta 700001.

Non-Ferrous Industries Assocn., Small Scale, 23, R. N. Mookerjee Rd., Calcutta 700001.

Oil Millers' Assocn., East India, 8, Old Court House St., Calcutta 700001.

Paint Assocn., Indian, India Exchange, India Exchange Place, Calcutta 700001.

Paper Machinery Mfrs. Assocn., 6, Netaji Subhas Rd., Calcutta 700001.

Paper Makers' Assocn., Indian, 6, Netaji Subhas Rd., Calcutta 700001.

Paper Mills Assocn., Indian, India Exchange, India Exchange Place, Calcutta 700001.

Petroleum Traders, Fedn. of All India, 1/1, Vansittart Row, Calcutta 700001.

Pharmaceutical Assocn., Indian, 84, Chowringhee Rd., Calcutta 700020.

Photographic Traders' Assocn., East India, 3/1/2, Armenian St., Calcutta 700001.

Pipe & Fittings Mfrs. Assocn., Indian, 21B, Canning St., Calcutta 700001.

Pipe Mfrs.' Assocn., Cast Iron Spun, 6, N. Subhas Rd., Calcutta 700001.

Plastic Mfrs. Assocn., Small Scale, 2, Ganesh Ch. Ave., Calcutta 700013.

Plastics Fedn., Indian, 13/A, Govt. Place East, Calcutta 700069.

Plywood Mfrs.' Assocn. of India, 23, R. N. Mookerjee Rd., Calcutta 700001.

Plywood Mfrs.' Assocn. of West Bengal, 22, Strand Rd., Calcutta 700001.

Porcelain Enamellers Assocn., 28/8, Gariahat Rd., Calcutta 700029.

Pottery Mfrs.' Assocn., All India, C/o A.I.M.O., Ilaco House, 1 & 3, Brabourne Rd., Calcutta 700001.

Poultry Industry, Eastern India Assocn. of, 57-B, Townsend Rd., Calcutta 700025.

Powerloom Co-op. Socy. Assocn., West Bengal State, P/21/B, Old Ballygunj Lo., Calcutta 700019.

Powerloom Owners' Assocn., 8, Old Court House St., Calcutta 700001.

Printers Assocn., All Bengal, 66, Grey St., Calcutta 700006.

Printers' Assocn., Bengal, 32, Acharya Prafulla Chandra Rd., Calcutta 700009.

Productivity Council, Calcutta (National), 9, Syed Amir Ali Ave., Calcutta 700019.

Publishers' & Booksellers' Assocn. of Bengal, 93, Mahatma Gandhi Rd., Calcutta 700007.

Publishers & Booksellers Guild, 5A, Bhawani Dutt Lane, Calcutta 700073.

Radio & Electronics Assocn., All India, 3/B, Madan St., Calcutta 700013.

Refractory Makers' Assocn., Indian, 6, Netaji Subhas Rd., Calcutta 700001.

Refrigeration Traders' Assocn., C/o Air Conditioning Corpn. Ltd., 17, Taratolla Rd., Calcutta 700053.

Rehabilitation Industries & Mktg. Fedn., P-31, C.I.T. Rd., Calcutta 700014.

River Transport Assocn., Calcutta, 6, Netaji Subhas Rd., Calcutta 700001.

River Transport Assocn. Ltd., 9/12, Lall Bazar St., Calcutta 700001.

Roads & Transport Devpt. Assocn., Indian, 1, Chowringhee Terrace, Calcutta 700020.

Rolling Mills Assocn., West Bengal, 3/1/2, Armenian St., Calcutta 700001.

Rope Mfrs. Assocn., Indian, India Exchange, India Exchange Place, Calcutta 700001.

Rubber Industries Assocn., All India, 7, Waterloo St., Calcutta 700069.

Rubber Inds. Assocn. of India, Small Scale, 5, Prafulla Sarkar St., Calcutta 700013.

Salt Assocn., Ltd., Calcutta, 11, Chittaranjan Ave., Calcutta 700001.

Saw Mills' Assocn. of Eastern India, 23, R. N. Mookerjee Rd., Calcutta 700001.

Screw Mfrs. Assocn., Precision, 3A, Balaram Dey St., Calcutta 700006.

Sea Shell Industries Assocn., 113, Keshab Sen St., Calcutta 700009.

Share & Stock Exchange Assocn., Ltd., Bengal, 21B, B. R. B. Basu Rd., Calcutta 700001.

Ship Contractors' Assocn., Calcutta Master, 23, R. N. Mookerjee Rd., Calcutta 700001.

Shipowners Assocn., Indian Small, 23, R. N. Mookerjee Rd., Calcutta 700001.

Shippers' Assocn., Eastern India, 6, Netaji Subhas Rd., Calcutta 700001.

Silicate Mfrs. Assocn., All India, 1A, S. N. Banerjee Rd., Calcutta 700013.

Silk Assocn. of India, 8, Old Court House St., Calcutta 700001.

Skins & Leather Assocn., Indian, 6, Netaji Subhas Rd., Calcutta 700001.

Small Industries, (Eastern Region), Fedn. of Assocns. of, P31, CIT Rd., Calcutta 700014.

Small and Medium Industries Fedn., West Bengal, P-11, Mission Row Extn., Calcutta 700001.

Soap Makers' Assocn., Eastern Small Scale, 19, Chandni Chowk St., Calcutta 700013.

Soap and Toiletries Makers' Assocn., Indian, 23, R. N. Mookerjee Rd., Calcutta 700001.

Stationery and Office Equipment Assocn. of India, 23, R. N. Mookerjee Rd., Calcutta 700001.

Steel Exporters' Assocn., 10, Camac St., Calcutta 700017.

Steel Fabricators & Distributors, Assocn. of, 46C, Chowringhee Rd., Calcutta 700012.

Steel Furnace Assocn. of India, 1-A, Mona Lisa, 17, Camac St., Calcutta 700017.

Steel Importers' Assocn. of India, India Exchange, India Exchange Place, Calcutta 700001.

Steel Merchants' Assocn. of India, India Exchange, 8th Flr., 4, I. E. Place, Calcutta 700001.

Steel Re-Rollers' Assocn., All India, 3/1/2, Armenian St., Calcutta 700001.

Steel Wire Mfrs.' Assocn. of India, 6, N. Subhas Rd., 2nd Flr., Calcutta 700001.

Stevedores' Assocn., Master, 6, Netaji Subhas Rd., Calcutta 700001.

Stock Exchange Assocn. Ltd., Calcutta, 7, Lyons Range, Calcutta 700001.

Strawboard Mfrs.' Assocn., Indian, 8, Old Court House St., Calcutta 700001.

Sugar Mills Assocn., Indian, India Exchange, Calcutta 700001.

Tea Assocn., Indian, Royal Exchange, 6, Netaji Subhas Rd., Calcutta 700001.

Tea Assocn. of India, 4, India Exchange, India Exchange Place, Calcutta 700001.

Tea Exporters Assocn., 23, R. N. Mookerjee Rd., Calcutta 700001.

Textile Assocn. (India), 1/1A, Dr. Amal Roychowdhury Lane, Calcutta 700009.

Tool Mfrs. Assocn., Small, 5, Clive Row (Room No. 41), Calcutta 700001.

Toy Industries Assocn., Small Scale, 8/36, Fern Rd., Calcutta 700019.

Welding Dealers' Assocn., Indian, 3/1/2, Armenian St., Calcutta 700001.

Wire Industries Assocn., Indian, 222, Rabindra Sarani, Calcutta 700007.

Wire Rope Mfrs.' Assocn., Indian, 6, N. Subhas Rd., Calcutta 700001.

Yarn Merchants' Assocn., Calcutta, 89, Cross St., Calcutta 700007.

Zinc Oxide Mfrs.' Assocn., Indian, India Exchange, India Exchange Place, Calcutta 700001.

CULTURAL, SOCIAL AND PROFESSIONAL

Agri-Horticultural Socy. of India, 1, Alipore Rd., Calcutta 700027.

Agricultural Socy. of India, 35, Ballygunge Circular Rd., Calcutta 700019.

Animals Socy., All Lovers of, 30, Chowringhee Mansions, Kyd St., Calcutta 700016.

Anthropological Socy., Indian, C/o Anthropological Survey of India, 27, J. L. Nehru Mrg., Calcutta 700013.

Arya Samiti, Arya Samiti Rd., Behala, Calcutta 700034.

Astrological Assocn. of India, 45A, S. P. Mukherjee Rd., Calcutta 700026.

Astrological and Astronomical Socy., All India, 88/2A, R. A. Kidwai Rd., Calcutta 700013.

Bible Socy. of India and Ceylon, 23, J. L. Nehru Rd., Calcutta 700013.

Billiards Assocn. and Control Council of India, C/o Great Eastern Hotel, Old Court House St., Calcutta 700001.

Biological Science, Indian Assocn. of, Life Science Centre, Calcutta Univ., 35, Ballygunge Circular Rd., Calcutta 700019.

Biophysical Socy., Indian (IBS), Saha Instt. of Nuclear Physics, 92, A. Prafulla Chandra Rd., Calcutta 700009.

Blood Bank, Calcutta, 186, Rash Behari Ave., Calcutta 700029.

Bohurupee, 7, Lower Ring, Calcutta 700017.

Botanical Socy. of Bengal, 35, Ballygunge Circular Rd., Calcutta 700019.

Buddhist Assocn., Bengal, 1, Buddhist Temple St., Calcutta 700001.

Buddhist Socy. of India and Buddhist Mission of India, 31/1, Baghbazar St., Calcutta 700003.

Cardiological Socy. of India, 3, Creek Row, Calcutta 700014.

Ceramic Socy., Indian, Central Glass & Ceramic Research Institute, Calcutta 700032.

Ceramics, Indian Instt. of, C/o Central Glass & Ceramic Instt., Calcutta 700032.

Chartered Accountants of India, Instt. of, 7, Russel St., Calcutta 700071.

Chemical Engineers, Indian Instt. of, Dr. H. L. Roy Bldg., Raja S. C. Mullick Rd., Calcutta 700032.

Chemical Socy., Indian, 92, Acharya Prafulla Chandra Rd., Calcutta 700009.

Chemists (India), Insttn. of, Chemical Dept., Medical College, Calcutta 700012.

Child Health & Community Welfare, Socy. for, 13D, Beadon St., Calcutta 700006.

Children in India, Socy. for the Protection of, 2B, Camac St., Calcutta 700016.

Company Secretaries of India, Instt. of (Eastern India Regnl. Council), Everest House, 46C, Chowringhee Rd., Calcutta 700071.

Consulting Engineers, Instt. of, 9, Hastings St., Calcutta 700001.

Consumers' Assocn., 64/1, Tollygunge Circular Rd., Calcutta 700053.

Cost and Works Accountants of India, Instt. of, 12, Sudder St., Calcutta 700016.

Dakshinee, 'Dakshinee Bhavan', 1, Deshapriya Park West, Calcutta 700026.

Depressed Classes League, Bengal Provincial, 12, Arpuli Lane, Calcutta 700012.

Economic Affairs, Indian Council of, 1 & 2, Hare St., Calcutta 700001.

Electron Microscope Socy. of India (EMSI), Biophysics Laboratory, 37, Belgachia Rd., Calcutta 700037.

Engineers, Assocn. of, 24, Netaji Subhas Rd., Calcutta 700001.

Engineers, Indian Socy. of, 16, India Exchange Place, Calcutta 700001.

Engineers (India), Insttn. of, 8, Gokhale Rd., Calcutta 700020.

Eye Bank, International, 6, Prafulla Sarkar St., Calcutta 700001.

Family Planning Assocn. of India, 108, Park St., Calcutta 700016.

Film Societies of India, Fedn. of, C7, 3, Chittaranjan Avenue, Calcutta 700072.

Film Socy., Calcutta, B/5, Bharat Bhawan, 3. Chittaranjan Ave., Calcutta 700072.

Folklore Socy., Indian, 3, British Indian St., Calcutta 700001.

Football Assocn., Indian, 11/1, Sooterkin St., Calcutta 700013.

Foundrymen, Instt. of Indian, 4/2, Middleton St., Calcutta 700071.

Free Enterprise, Forum of, 38/2, Nirmal Chandra St., Calcutta 700013.

Fuel, Indian Instt. of, 2E, Raishree, 6, Hastings Rd., Calcutta 700027.

Gaudiya Mission, Sri Gaudiya Math, 16A, Kali Prasad Chakravarthy St., Calcutta 700003.

Geographical Socy. of India, 35, Ballygunge Circular Rd., Calcutta 700019.

Geohydrologists, Indian Assocn. of, C/o Central Ground Water Board, 24, Park St., Calcutta 700016.

Geological, Mining and Metallurgical Socy. of India, Geology Dept., Calcutta Univ., Calcutta 700019.

Hindu Satkar Samity, 93, Mahatma Gandhi Rd., Calcutta 700007. A Society for cremating dead bodies of poor and friendless Hindus.

Homoeopathic Medical Assocn. of India, 77, B. B. Ganguli St., Calcutta 700012.

Horsemastership, Indian Socy. of Equitation &, Ballygunge Military Camp, Ballygunge Circular Rd., Calcutta 700019.

Indo-GDR Friendship Socy., 27G, College St., Calcutta 700073.

Indo-Soviet Cultural Socy., 77, Lenin Sarani, Calcutta 700013.

Industrial Engineers (India), Insttn. of, Calcutta Technical School, 110, S. N. Banerjee Rd., Calcutta 700013.

Industrial Welfare Instt., Indian, 19, Gariahat Rd., Calcutta 700019.

Instrumentation Scientists & Technologists (India), Insttn. of, Deptt. of Electl. Engg., Jadavpur Univ., Calcutta 700032.

Insurance Instt., Indian, 8, Madan St., Calcutta 700013.

Iran Socy., 12, Dr. M. Ishaque St., Calcutta 700016.

Journalists' Assocn., Indian, 249-B, B. B. Ganguly St., Calcutta 700012.

Labour Welfare Board, West Bengal, 6, Church Lane, Calcutta 700001.

Law Instt. (W. Bengal Unit), Indian, 2 & 3, K. S. Roy Rd., Calcutta 700001.

Leather Technologists' Assocn., Indian, Mercantile Bldgs., Lall Bazar, Calcutta 700001.

Legal Aid Socy., Indian, 2, Canal St., Calcutta 700014.

Library Assocn., Bengal, P/134, CIT Scheme, 52, Calcutta 700014.

Maha Bodhi Socy. of India, 4-A, Bankim Chatterji St., Calcutta 700073. *Centres :* Sarnath, Buddha Gaya, New Delhi, Madras, Lucknow, Nowgong, Ajmer, Sanchi, Bangalore, Bhubaneswar. *Pres.*, H. H. Palden Thondup Namgyal, Chogyal of Sikkim ; *Gen. Secy.*, Ven. Dr. N. Jinaratana Nayaka Maha Thera. Monthly Journal : *The Maha Bodhi*

Mahila Seva Samity, 8, Government Place (N), Calcutta 700001.

Management Assocn., Calcutta, 1, Shakespeare Sarani, Calcutta 700016.

Manimela Mahakendra, Rabindra Sarobar Stadium Block 11, Room V, Calcutta 700029. A child welfare agency

Marwari Fedn., All India, 152-B, M. Gandhi Rd., Calcutta 700007.

Materials Management, Indian Assocn. of, C/o Dunlop India Ltd., 62A, Mirza Ghalib St., Calcutta 700016

Mathematical Assocn., Deptt. of Mathematics, Jadavpur Univ., Calcutta 700032.

Mathematical Socy., Calcutta, 92, Acharya P. Chandra Rd., Calcutta 700009.

Medical Assocn., Indian, W. Bengal State Branch, 67, Lenin Sarani, Calcutta 700013.

Medical Council, West Bengal, 8, Lyons Range, Calcutta 700001.

Metals, Indian Instt. of, 2, Sambhunath Pandit St., Calcutta 700020.

Mining, Geological and Metallurgical Instt. of India, 29, Chowringhee Rd., Calcutta 700016.

Moral & Social Hygiene, Assocn. for, 402/1A, N.S.C. Bose Rd., Calcutta 700047.

Mountaineering — Parvat Abhiyatri Sangh (Himalayan Climber's Club), Anand Bazar Patrika House, 6, P. Sarkar St., Calcutta 700001.

Music & Cultural Socy., W. Bengal, P1, CIT Scheme, LXXII, Gariahat Rd., Calcutta 700029.

Nursing Council, West Bengal, 8, Lyons Range, Calcutta 700001.

O & M Work Study Practitioners, Instt. of, C/o Management Development Centre, 1, Shakespeare Sarani, Calcutta 700071.

Operational Research Socy. of India, 9/3, Mandeville Gardens, Calcutta 700019.

P. E. N. All India Writers' Assocn. (W. Bengal Branch), 72, Hindustan Park, Calcutta 700029.

Personnel Management, National Instt. of, Apeejay House, Block-B, Park St., Calcutta 700016.

Philosophical Congress, Indian, Visva Bharati University, Santiniketan 731235.

Pharmacy Council, West Bengal, 8, Lyons Range, Calcutta 700001.

Photobiology Group (IPB), Indian, Deptt. of Chemistry, Jadavpur Univ., Calcutta 700032.

Photography, Indian Instt. of, 32, A. M. Rd., Calcutta 700020.

Physical Culture Assocn., All Bengal, 5, Krishna Bihari Sen St., Calcutta 700007.

Physical Education & Recreation, National Assocn. of, 24C, Amherst Row, Calcutta 700073.

Pinjrapole Socy., Calcutta, 34, Armenian St., Calcutta 700001.

Psycho-Analytical Socy., 14, Parsibagan Lane, Calcutta 700002.

Psychotherapeutical Socy., Indian, Sch. 49, P-23, CIT Rd., Calcutta 700014.

Public Health Assocn., Indian, 110, Chittaranjan Ave., Calcutta 700012.

Quality Control, Indian Socy. for, India Exchange, 7th Floor, Calcutta 700001.

Ramakrishna Math and Mission, P. O. Belur Math 711202, Howrah Dist.

Red Cross Socy., Indian (W. Bengal State Branch), 5 & 6, Govt. Place North, Calcutta 700001.

Relief Socy., Bengal, 36, M.G. Rd., Calcutta 700007.

Road Transport, Indian Instt. of, 1/2, Lord Sinha Rd., Calcutta 700016.

Safety First Assocn. of India (Bengal Provincial Branch), 77A, Park St., Calcutta 700016.

Salvation Army, 37, Lenin Saranee, Calcutta 700013.

Science, Indian Assocn. for the Cultivation of, 2A & 2B, R.S.C. Mullick Rd., Jadavpur, Calcutta 700032.

Science Congress Assocn., Indian, 64, 14, Dr. B. Guha St., Calcutta 700017.

Science Museums, National Council of, 19A, Gurusaday Rd., Calcutta 700019.

Scouts and Guides, Bharat, 5, Govt. Place North, Calcutta 700001.

Seamen of India, National Union of, 10/2, Kabitirtha Sarani, Calcutta 700023.

Secretaries, Instt. of Chartered (India Association), C/o Wellman Incandescent India Ltd., 8, Harrington St., Calcutta 700016.

Sevak Samaj, Bharat, 33, B. K. Paul Ave., Calcutta 700005.

Shishu Niketan, 32/10 A, Beadon St., Calcutta 700006.

Social Welfare, Indian Council of, C/o Viharilal Coll. of Home & Social Science, Alipore, Calcutta 700027.

Special Libraries & Information Centres (IASLIC), Indian Association of, P-291, CIT Scheme 6M, Kankurgachi, Calcutta 700054.

Sports, West Bengal State Council of, 8, Lyons Range, Calcutta 700001.

St. John's Ambulance Brigade, 5, Govt. Place North, Calcutta 700001.

Statistical Assocn., Calcutta, 35, Ballygunge Circular Rd., Calcutta 700019.

Swimming Assocn., National, Pavilion, Azad Hind Bagh, Calcutta 700006.

Table Tennis Assocn., Bengal, 34/1, Lala Lajpatrai Sarani, Calcutta 700020.

Tamil Sangham, Bharathi, 93-A, Rashbehari Ave., Calcutta 700026.

Teachers' Assocn., All Bengal, 15, Bankim Chatterjee St., Calcutta 700073.

Teachers' Organisation, All India Fedn. of University & College, 89, M. Gandhi Rd., Calcutta 700007.

Theoretical & Applied Mechanics, Indian Socy. of, Indian Institute of Technology, Kharagpur 721301.

Theosophical Fedn., Bengal, 4/3A, Bankim Chatterjee St., Calcutta 700073.

Theosophical Socy., 161, Acharya J. Bose Rd., Calcutta 700014.

Tuberculosis Relief Assocn., 73, Dharamtolla St., Calcutta 700013.

United Kingdom Citizens' Assocn., 51, Chowringhee Rd., Calcutta 700016.

Vivekananda Mission, 10, Ramakrishna Lane, Baghbazar, Calcutta 700003.

Vivekananda Socy., 151, Vivekananda Rd., Calcutta 700006.

Women's Conference, All India, C.I.T. Scheme IV, Belliaghata Main Rd., Calcutta 700010.

Women's Union, All Bengal, 89, Elliot Rd., Calcutta 700016.

Writers' Guild, 5, Dwarakanath Tagore Lane, Calcutta 700007.

Y.M.C.A., 25, Chowringhee Rd., Calcutta 700013.

Youth Forum, National, 4, Synagogue St., Calcutta 700001.

Y.W.C.A., 134, S. N. Banerjee Rd., Calcutta 700013.

Zoological Socy. of India, 34, Chittaranjan Ave., Calcutta 700012.

CHAMBERS OF COMMERCE

ANDHRA PRADESH

Amalapuram Chamber of Commerce and Industry, Amalapuram 533201. (East Godavari Dist.).

Andhra Chamber of Commerce, 68-B, Rashtrapati Rd., Secunderabad 500003.

Andhra Film Chamber of Commerce, Andhraratna Rd., Gandhinagaram, Vijayawada 520003.

Bhimavaram Chamber of Commerce, Bhimavaram 534201.

Chamber of Commerce, Tadepalligudem 534101.

Chamber of Commerce, Main Rd., Vizianagaram 531201.

Cocanada Chamber of Commerce, Commercial Rd., Kakinada 533001.

Dist. Chamber of Commerce, Chittoor 517001.

Federation of Andhra Pradesh Chambers of Commerce & Industry, 11-6-841, Red Hills, Post Box No. 14, Hyderabad 500004. *Pres.:* O. Swaminatha Reddy; *Secy.:* M. Venkata Rao.

Godavari Chamber of Commerce, Vallabhbhai St., Kakinada 533001.

Gouthami Chamber of Commerce, Main Rd., Rajahmundry 533101.

Indian Chamber of Commerce, P. Box 67, Guntur 522001.

Krishna District Chamber of Commerce, Fort Rd., Machilipatnam 521001.

Kurnool District Chamber of Commerce, No. 1/8, Main Bazar, Peta, Kurnool 518001.

Mica Chamber of Commerce, Gudur 524104 (Nellore Dist.).

Nellore Chamber of Commerce, Tobacco Field, Nellore 524001.

Palakol Chamber of Commerce, Palakol 534260 (W. Godavari Dist.).

Rajahmundry Chamber of Commerce Ltd., Khaidakotla St., Rajahmundry 533101.

Vijayawada Chamber of Commerce & Industry, 42, Kaleswararao Mkt., Vijayawada 520001.

Vizagapatam Chamber of Commerce, 25/8/170, Main Rd., Visakhapatnam 530001.

Warangal Chamber of Commerce, 29/67, Grain Mkt. Area, Warangal 506002.

West Godavari Fedn. of Chambers of Commerce & Industry, Plantains Bazar, Main Rd., Eluru 534001.

ASSAM & MEGHALAYA

Assam Chamber of Commerce, Bara Bazar Rd., Shillong 793002.

Assam Chamber of Commerce & Industry, Morello Bldg., Shillong 793001.

Assam National Chamber of Commerce, C/o Orient (India) Ltd., Ulubari, Gauhati 781007.

Frontier Chamber of Commerce, Barabazar Rd., Shillong 793002.

Kamrup Chamber of Commerce, Kamrup Chamber Rd., Gauhati 781001.

National Chamber of Commerce, B. L. Khemka Rd., Tinsukia 786125.

Nowgong Chamber of Commerce, Haibargaon, Nowgong 782001.

Upper Assam Chamber of Commerce, Jorhat 785001.

BIHAR

Bhagalpur Chamber of Commerce, Bhagalpur 812002.

Bihar Chamber of Commerce, Judges' Court Rd., P.O. Box No. 71, Patna 800001. *Pres.:* Sitaram Rungta; *Secy. Genl.:* K. P. Jhunjhunwala.

Central Bihar Chamber of Commerce, Marwari Panchayat, Dharamshala Rd., Gaya 823001.

Chas Bokaro Chamber of Commerce & Industries, Chas 827013. (Dhanbad Dist.).

Chotanagpur Chamber of Commerce & Industries, Main Rd., Ranchi 834001.

Darbhanga Divisional Chamber of Commerce, Darbhanga 846004.

Eastern Bihar Divisional Chamber of Commerce & Industries, Bhagalpur 812002.

Jamshedpur Chamber of Commerce, 35, Laxmi Mansion, Jamshedpur 831001.

Koshi Divisional Chamber of Commerce & Industry, Saharsa 852201.

Monghyr Chamber of Commerce, Bekapur Rd., Monghyr 811201.

North Bihar Chamber of Commerce & Industry, Muzaffarpur 842001.

North Eastern Bihar Chamber of Commerce & Industries, Katihar 854105.

Patna Divisional Chamber of Commerce & Industry, S. P. Varma Rd., Patna 800001.

Shahbad Chamber of Commerce & Industry, Jail Rd., Arrah 802301.

South Bihar Chamber of Commerce, Baidyanath-Deoghar 814112.

Textile Merchants Chamber of Commerce, Bhagalpur 812002.

DELHI

Associated Chamber of Commerce & Industry of India, Allahabad Bank Bldg., 17, Parliament St., New Delhi 110001. *Pres.:* M. H. Mody ; *Alternate Pres.:* A. Sivasailam; *Secy. :* C. Balakrishnan.

Delhi Chamber of Commerce, Dilbar Bldg., Paharganj, New Delhi 110055.

Delhi Junior Chamber, 12, Arya Niwas, Gole Market, New Delhi 110001.

Federation of Indian Chambers of Commerce & Industry, Federation House, Tansen Marg, New Delhi 110001. *Pres. :* Arvind N. Lalbhai ; *Vice-Pres. :* G. K. Devarajulu ; *Secy.-Genl. :* P. Chentsal Rao.

Indo-American Chamber of Commerce (N. Indian Council), Phelps Bldg., 9-A, Connaught Place, New Delhi 110001.

Indo-German Chamber of Commerce, 8-FG, Himalaya House, 2, Kasturba Gandhi Mrg., New Delhi 110001.

Indo-Polish Chamber of Commerce, Phelps Bldg., Connaught Place, New Delhi 110001.

International Chamber of Commerce, Indian National Cttee., Federation House, New Delhi 110001.

Pres. : J. N. Guzdar; *Vice-Pres. :* L. M. Thapar ; *Secy.-Genl. :* P. Chentsal Rao.

Punjab, Haryana and Delhi Chamber of Commerce & Industry, PHD House, 4/2, Siri Fort Insttnl. Area, Behind Hauz Khas, New Delhi 110017. *City Centre :* Phelps Bldg., 9A, Connaught Place, New Delhi 110001. *Pres. :* Mohinder Puri ; *Vice-Pres. :* V. P. Punj ; *Secy.-Genl. :* M. L. Nandrajog.

Punjab Merchants' Chamber, 45, Khurshid Mkt., Sadar Bazar, Delhi 110006.

United Chamber of Trade Associations, A. Chand Mrg., Katra Rathi, Delhi 110006.

GOA

Goa Chamber of Commerce & Industry, P. Box No. 59, Panaji 403001.

GUJARAT

All India Sindhi Chamber of Commerce & Industry, 6, Parasram Chambers Bldg., Mirghawad, Revdi Bazar, Ahmedabad 380001.

Broach Chamber of Commerce & Industry, Lallubhai Chakla, Bharuch 392001.

Central Gujarat Chamber of Commerce, Federation Bldg., Race Course Rd., Vadodara 390009.

Gandhidham Chamber of Commerce & Industry, BBZ-N-41, Gandhidham 370201.

Gujarat Chamber of Commerce & Industry, Gujarat Chamber Bldg., Ranchhodlal Mrg., Ahmedabad 380009. *Pres. :* Bhikhoobhai N. Shah ; *Vice-Pres. :* Manubhai P. Shah ; *Hon. Secy. :* Deepak Navnitlal.

Jetpur Chamber of Commerce, Mahatma Gandhi Rd.. Jetpur 360370.

Junagadh Chamber of Commerce, Mahalaxmi St., Junagadh 362001.

Morvi Chamber of Commerce & Industries, P. Box No. 5, Morvi 363641.

Nawanagar Chamber of Commerce, Digvijaysingh Chamber Bldg., Grain Mkt., Jamnagar 361001.

Panchmahal Chamber of Commerce, Station Rd., Godhra 389001.

Porbandar Chamber of Commerce, Manek Chowk, Porbandar 365075.

Saurashtra Chamber of Commerce, Old Darbargadh, Bhavnagar 364001.

Savarkundla Chamber of Commerce, Savarkundla 364515.

Shri Zalawad Chamber of Commerce & Industries, MainRd., Surendranagar 363001.

Sorath Chamber of Commerce, Vakharia Bazar, Veraval 362265.

Southern Gujarat Chamber of Commerce & Industry, Samruddhi, Nanpura, Surat 395001.

Surat Junior Chamber, Vasundhara, Navapura, Parsi Sheri, Surat 395001.

HARYANA

Haryana Chamber of Commerce, Mandi Dabwali 125104 (Hissar Dist.).

Ludhiana Chamber of Commerce & Industry, E-23, Industrial Area, Yamunanagar 135001.

Northern India Chamber of Commerce, Desi Beopar Mandal, Ambala Cantt. 133001.

JAMMU & KASHMIR

Chamber of Commerce, Jammu 180001.

Kashmir Chamber of Commerce & Industry, Residency Rd., Srinagar 190001.

KARNATAKA

Asian Chamber of Commerce, " Dhammapada ", 1st Main V Block, Kumara Park West, Bangalore 560020.

Bangalore Chamber of Commerce, 112, Gandhi Bazar, Bangalore 560004.

Bangarpet Chamber of Commerce, Bangarpet 563114.

Belgaum Chamber of Commerce & Industries, 673, Raviwar Peth, Belgaum 590002.

Bellary District Chamber of Commerce, Bangalore Rd., Bellary 583101.

Chamber of Commerce & Industry, Prabha Pictures House Bldg., Hanumantha Rao St., Mysore 570001.

Chitradurga Merchants' Chamber, Chitradurga 577501.

Dharwar Chamber of Commerce, Dharwar 580001.

Federation of Karnataka Chambers of Commerce & Industry, Kempegowda Rd., Bangalore 560009. *Pres. :* B. C. S. Narayan ; *Vice-Pres. :* J. A. K. Murthy ; *Secy. :* Prof. B. N. Narayan.

Hospet Chamber of Commerce, Near Town Reading Room, Hospet 583201.

Hyderabad Karnatak Chamber of Commerce & Industry, No. 7-671, Nehru Ganj Rd., Gulbarga 585104.

Kanara Chamber of Commerce, P. Box No. 116, Bunder, Mangalore 575001. *Pres. :* M. Ganesh Pai ; *Hon. Secs. :* H. Kamalaksha Shenoy, U. Sundar Kini.

Karnatak Chamber of Commerce & Industry, Jayachamaraj Nagar, Hubli 580020.

Pres. : L. V. Muddanna ; *Vice-Press.* : V. M. Mirji, S. I. Shettar, M. V. Shanbhag Burdekar ; *Hon. Secy.* : K. B. Desai.

Mahalingpur Chamber of Commerce & Industries, Mahalingpur 587312. (Bijapur Dt.).

Udipi Chamber of Commerce, Ind. & Agriculture, Mukund Nivas, Udipi 576101.

KERALA

Calicut Chamber of Commerce & Industry, 4th Gate Rd., Calicut 673001.

Chamber of Commerce, Arecal Bldgs., M. C. Rd., Kottayam 686001.

Chamber of Commerce, Kunnamkulam 680503. Trichur Dist.

Chamber of Commerce, Trichur 680001.

Chamber of Commerce, Chalai, Trivandrum 695001.

Cochin Chamber of Commerce & Industry, Bristow Rd., Willingdon Island, Cochin 682003. *Pres.* : B. S. Desai ; *Secy.* : P. Sethuram.

Ernakulam Chamber of Commerce, Chamber Bldg., Shanmukham Rd., Ernakulam 682011.

Indian Chamber of Commerce, Kottukulam Rd., P.O. Box No. 236, Cochin 682002. *Pres.* : C. C. Joseph ; *Secy.* : K. M. Devarajan.

Irinjalakuda Chamber of Commerce, Irinjalakuda 680121.

Malabar Chamber of Commerce, Calicut 673001. *Pres.* : K. V. Kunhammed ; *Vice-Press.* : V. Hassan Koya, P. V. Chandran ; *Hon. Secy.* : R. Rangaswamy.

North Malabar Chamber of Commerce, Fort Rd., Cannanore 670001.

North Travancore Chamber of Commerce, Bank of Alwaye Bldgs., Alwaye 683101.

Palghat Chamber of Commerce, XXVIII/153, Chamber Bldgs., Melamuri, Palghat 678014.

Pres. : A. Achutha Bhaskar ; *Hony. Secs.* : R. S. P. Swaminathan, U. P. Ramakrishnan.

Regional Chamber of Commerce, Big Bazar, Palghat 678001.

Travancore Chamber of Commerce, Alleppey 688001.

MADHYA PRADESH

Adiwasi Chamber of Commerce, Alirajpur 457887.

Akaltara Chamber of Commerce, Akaltara 495552. (Raipur Dist.).

Bhilai Chamber of Commerce & Industries, Near Nehru Cultural Hall, Bhilai 490001.

Bhopal Chamber of Commerce & Industry, Bhopal 462001.

Central India Chamber of Commerce & Industry, Bambakhana, Ujjain 456001.

Chamber of Commerce, Ratlam 457001.

Federation of M. P. Chambers of Commerce & Industry, 33, Malaviyanagar, Bhopal 462003.

Junior Chamber of Commerce, Chameli Chowk. Sagar 470001.

Madhya Pradesh Chamber of Commerce & Industry, Chamber Bhavan, Lashkar, Gwalior 474009. *Pres.* : D. P. Mandelia ; *Jt. Pres.* : G. G. Bansal ; *Vice-Pres.* : K. C. Kapoor ; *Hon. Secy.* : R. K. Garg.

Mahakoshal Chamber of Commerce, Jawaharganj, Jabalpur 482002.

Malwa Chamber of Commerce, Cloth Mkt., 77, Sitlamata Bazar, Indore 452002.

Raipur Chamber of Commerce & Industry, Sadar Bazar, Raipur 492001.

MAHARASHTRA

Bombay

All India Exporters' Chamber, Janmabhoomi Chambers, Fort St., Bombay 400001.

Belgo-Indian Chamber of Commerce & Industry, Taj Bldg., 210, Dr. D. Naoroji Rd., Bombay 400001.

Bharat Merchants' Chamber, Bharat Chamber Bhavan, Kalbadevi Rd., Bombay 400002.

Bombay Chamber of Commerce & Industry, Mackinnon Mackenzie Bldg., B. Estate, Bombay 400038.

Pres. : N. C. Chaudhuri ; *Vice-Pres.* : G. Mathrani ; *Secy.*: B. P. Gunaji.

East India Chamber of Commerce Ltd., Patwa Chawl, Sheikh Memon St., Bombay 400002.

Federation of Indian Chamber of Commerce & Industry, 76, Veer Nariman Rd., Bombay 400020.

Handicraft Exports Chamber, Ganesh Bhuvan, 89A, Dadyseth Agiary St., Bombay 400002.

Hindustan Chamber of Commerce, 342, Kalbadevi Rd., Bombay 400002.

Indian Merchants' Chamber, 76, Veer Nariman Rd., Bombay 400020. *Pres.* : K. R. Podar ; *Vice-Pres.* : Dr. S. K. Somaiya ; *Secy.-Genl.* : Ramu Pandit.

Indo-American Chamber of Commerce, Vulcan Insurance Building, Veer Nariman Rd., Bombay 400020.

Pres. : N. S. Gilani ; *Secy.-Genl.* : Arun C. Vakil.

Indo-French Chamber of Commerce & Industry, Bakhtawar, 2nd Flr., Nariman Point, Bombay 400021.

Pres. : Harish Mahindra ; *Vice-Pres.* : Andre Kettler ; *Vice-Pres. (France)* : Michel Boulat ; *Secy.-Genl.* : Minoo P. Vazifdar.

Indo-German Chamber of Commerce, Maker Tower E, 1st flr., Opp. World Trade Centre, Cuffe Parade, Bombay 400005. *Pres.* : Akbar Hydari ; *Vice-Pres.* : Dr. G. Wurzbacher, *Exec. Dir.* : Dr. G. Krueger.

Iron, Steel & Hardware Merchants' & Manufacturers' Chamber of India, Loha Bhavan, P. D'Mello Rd., Bombay 400009.

Italian Chamber of Commerce for India, Vaswani Mansions, D. Vachha Rd., Bombay 400020.

Maharashtra Chamber of Commerce, 12, K. Dubash Mrg., Bombay 400023. *Pres.* : A. S. Kasliwal ; *Vice-Press.* : S. S. Kirloskar, P. Dhamdhere, S. Dempo.

Memon Chamber of Commerce, Patharia Palace, Mohamedali Rd., Bombay 400003.

Sindhi Chamber of Commerce & Industry, Garib CHS Ltd., 5th North South Rd., Bombay 400058.

Western India Chamber of Commerce Ltd., 232-234. Kalbadevi Rd., Bombay 400002.

Districts

Chamber of Commerce, Mkt. Yard, Sangli 416416.

Mahavidarbha Chamber of Commerce & Industry, Vohuman Lodge, Byramji Town, Nagpur 440013.

Mahratta Chamber of Commerce & Industries, Tilak Rd., Pune 411002; *Pres.:* C. S. Kirloskar; *Hon. Secs.:* V. M. Deval, M. G. Sathe.

Nagpur Chamber of Commerce Ltd., Cotton Mkt., Nagpur 440002.

Nag-Vidarbha Chamber of Commerce, Temple Rd., Civil Lines, Nagpur 440001.

Nasik District Chamber of Commerce, 986, Raviwar Peth, Nasik 422001.

Pune Merchants' Chamber, 180, Bhavani Peth, Pune 411002.

Solapur Chamber of Commerce, Siddeshwar Mkt., W. Mangalwar Peth, Solapur 413002.

Steel & Hardware Chamber of Vidarbha. Bhogilal Doshi Bldg., Near Amardeep Talkies, Paithankar Rd., Nagpur 440002.

Vidarbha Chamber of Commerce & Industry, Mangaldas Mkt., Akola 444001.

ORISSA

Berhampur Chamber of Commerce, Berhampur 760001. (Ganjam Dist.).

Cuttack Chamber of Commerce, Malgodown, Cuttack 753003.

Ganjam Chamber of Commerce, Berhampur 760001.

Orissa Chamber of Commerce & Industry, Barbati Stadium, Cuttack 753001.

Puri Chamber of Commerce, Ground Rd., Puri 752001.

Rourkela Chamber of Commerce, Kacheri Rd., Rourkela 769001.

Utkal Chamber of Commerce & Industry, Cantonment Rd., Cuttack 753001.

PONDICHERRY

Chamber de Commerce, No. 1, Rue Suffren, P. Box No. 39, Pondicherry 605001.

Chamber of Commerce, Post Box No. 26, Karikal 609602.

PUNJAB

Northern India Chamber of Commerce & Industry, 1014, Sector 21B, Chandigarh 160017.

Punjab Federation of Industry & Commerce, Inside Hall Gate, Amritsar 143001.

RAJASTHAN

Bharatpur Chamber of Commerce & Industry, Nai Mandi, Bharatpur 321001.

Bikaner Divisional Chamber of Commerce, Woollen Press Bldg., Ind. Area, Bikaner 334001.

Chamber of Commerce, Sadar Bazar, Bundi 323001.

Chamber of Commerce, Bara Bazar, Udaipur 313001.

Chamber of Commerce & Industry, Bharatpur 321001.

Divisional Chamber of Commerce & Industry, Rampura Bazar, Kota 324006.

Jaipur Chamber of Commerce & Industry, Johari Bazar, Jaipur 302003.

Marwar Chamber of Commerce, 5, Haider Bldgs., Sojati Gate, Jodhpur 342001.

Mewar Chamber of Commerce & Industry, Mansingka House, Opp. Rly. Goods Shed, Bhilwara 311001.

Rajasthan Chamber of Commerce & Industry, Rajasthan Chamber Bhavan, M. I. Rd., Jaipur 302003.

Pres.: S. K. Mansinghka; *Sr. V. Pres.:* H. M. Choudhary; *Hon. Secy.:* K. L. Jain.

TAMIL NADU

Andhra Chamber of Commerce, 272/73, Angappa Naick St., Madras 600001.

Chamber of Commerce, Madurai Rd., Theni 626531. (Madurai Dist.).

Chamber of Commerce & Industry, 13, Kadiresan Koil St., Kovilpatti 627701. (Tirunelveli Dist.).

Chamber of Commerce & Industries, 31, Maharnonbu Agraharam, Karaikudi 623001.

Coimbatore Chamber of Commerce, C/o T. Stanes & Co. Ltd., Race Course Rd., Coimbatore 641018.

Erode Chamber of Commerce, 189, Sathi Rd., Erode 638001.

Hindustan Chamber of Commerce, Hindustan Chamber Bldg., 8, Kondi Chetty St., Madras 600001.

Indian Chamber of Commerce, 6/83, Avanashi Rd., Coimbatore 641018. *Pres.:* K. Sundaram; *Hon. Secs.:* C. R. Bhaskaran, S. Jagadesan.

Indian Chamber of Commerce, 84-B, South Raja St., Tuticorin 628001.

Indian Chamber of Commerce & Industry, 23, First Line Beach, Nagapattinam 611001.

Indo-American Chamber of Commerce, C/o Cheseborough-Pond's Inc., 19, Commander-in-Chief Rd., Madras 600008.

Indo-German Chamber of Commerce, 19, Cathedral Rd., Madras 600006.

Madras Chamber of Commerce & Industry, Dare House Annexe, 44, Moore St., Madras 600001. *Chmn.:* A. Sivasailam; *Vice-Chmn.:* M. K. Kumar; *Secy.:* C. S. Krishnaswami.

Madura Ramnad Chamber of Commerce, 90-92, East Avanimoola St., Madurai 625001. *Pres.:* M. Dhanasekhara Pandian; *Hon. Secs.:* V. V. S. Yogan, B. R. K. Ravindran.

National Chamber of Commerce, 169, Broadway, Madras 600001.

Potato Chamber of Commerce, Cutchery St., Mettupalayam 641301. (Coimbatore Dist.).

Pudukottai Division Chamber of Commerce, Silver Hall, Old Palace Square, Pudukottai 622001.

Rajapalayam Chamber of Commerce, Hospital Rd., Rajapalayam 626117. (Ramnad Dist.).

Salem District Chamber of Commerce, Venkata Rao Rd., Salem 636001.

Sattur Chamber of Commerce, Railway Feeder Rd., Sattur 626203. (Ramnad Dist.).

Sivakasi Chamber of Commerce, 5, South Car St., Sivakasi 626123.

South Travancore Chamber of Commerce, N. M. C. 10/377, Kumar Medical Centre Bldg., Tower Jn., Nagercoil 629001.

Southern India Chamber of Commerce & Industry, Indian Chamber Bldg., Esplanade, Madras 600001.

Tamil Chamber of Commerce, 310-311, Linghi Chetty St., Madras 600001.

Tiruchirapalli District Chamber of Commerce, 77, Madura Rd., Tiruchirapalli 620008.

Tuticorin Chamber of Commerce & Industry, 24-B, Beach Rd., Tuticorin 628001.

Tuticorin-Ceylon Current Exporters & Importers' Chamber, 24, South Raja St., Tuticorin 628001.

Usilampatti Chamber of Commerce, Usilampatti 626532. (Madurai Dist.).

Vellore Chamber of Commerce, 147/1, Chunnambukara St., Vellore 632001.

Vijaya Bharatha Chamber of Commerce Ltd., Virudhunagar 626004.

Virudhunagar Chamber of Commerce & Industry, P. Box 47, Virudhunagar 626001.

UTTAR PRADESH

Agra Merchants' Chamber Ltd., Bari Kothi, Belanganj, Agra 282004.

Banaras Chamber of Commerce Ltd., Biseshwarganj, Varanasi 221001.

Chamber of Commerce, Chandausi 202412,

Chamber of Commerce, Hapur 245101. (Meerut Dist.).

Doon Chamber of Commerce & Industry, 4, Nashvilla Rd., Dehra Dun 248001.

Eastern U. P. Chamber of Commerce & Industry, 5, Prayag St., Allahabad 211001.

Firozabad Chamber of Commerce & Industry, Kotta Rd., Firozabad 283203 (Agra Dist.).

Glass Bangles Merchants' Chamber, Firozabad 283203.

Merchants' Chamber of U. P., 14/38, Civil Lines, Kanpur 208001.

Muzaffarnagar Chamber of Commerce, Muzaffarnagar 251001.

National Chamber of Industries and Commerce, P.O. G. G. Industries, Agra 282004.

North India Chamber of Commerce & Industry, 9, Gandhi Rd., Dehra Dun 248001.

Shahjahanpur Merchants' Chamber, Crew Gunj, Shahjahanpur 242001.

Silk Merchants' Chamber of Commerce, Varanasi 221001.

Terai Merchants Chamber, Rudrapur 263153. (Nainital Dist.).

Traders Chamber of Uttar Pradesh, Meston Rd., Kanpur 208001.

U. P. Chamber of Commerce, 15-197, Civil Lines, Kanpur 208001.

U. P. Chamber of Commerce & Industry, 194, Delhi Rd., Meerut 250001.

Upper India Chamber of Commerce, 14/69, Civil Lines, Kanpur 208001. *Pres. :* H. K. Srivastava ; *Sr. Vice-Pres. :* Devendra Swarup ; *Jr. Vice-Pres. :* A. P. Guta ; *Ag. Secy. :* R. K. Mehra.

Vijai Beopar Chamber Ltd., New Mandi, Muzaffarnagar 251001.

Western U. P. Chamber of Commerce, Bombay Bazar, Meerut Cantt. 250001.

WEST BENGAL

Asansol Chamber of Commerce, 361, G.T. Rd. East, Asansol 713301.

Bengal Chamber of Commerce & Industry, Royal Exchange, Calcutta 700001. *Pres. :* H. D. Wahi ; *Secy. :* M. Ghose.

Bengal National Chamber of Commerce & Industry, 23, R. N. Mookerjee Rd., Calcutta 700001. *Pres. :* H. N. Dutt Gupta ; *Secy. :* A. R. Dutta Gupta.

Bharat Chamber of Commerce, 8, Old Court House St., Calcutta 700001.

Burdwan Chamber of Commerce, Sir Rash Behary Ghosh Rd., Burdwan 713101.

Eastern Chamber of Commerce, 9/21, Bijoy Garh, Calcutta 700032.

Indian Chamber of Commerce, India Exchange, India Exchange Place, Calcutta 700001. *Pres. :* Kalyan Sen ; *Sr. Vice-Pres. :* P. K. Kanoria ; *Vice-Pres. :* B. D. Bangur ; *Secy.-Genl. :* C. S. Pande.

Indo-American Chamber of Commerce, C/o Aeicorp (P) Ltd., 10, Lall Bazar St., Calcutta 700001.

Indo-German Chamber of Commerce, Ilaco House, 30 A/B, J. Nehru Rd., Calcutta 700016.

Kalimpong Chamber of Commerce, Kalimpong 734301. (Darjeeling Dist.).

Merchants' Chamber of Commerce, 3/1/2, Armenian St., Calcutta 700001. *Pres. :* H. L. Somany ; *Vice-Press. :* N. K. Jhunjhunwala, B. K. Jhajharia ; *Addl. Secy. :* H. R. Bose.

North Bengal Chamber of Commerce, Jalpaiguri 735101.

Oriental Chamber of Commerce, 6, Clive Row, Calcutta 700001.

Raniganj Chamber of Commerce, Raniganj 735101.

COMMERCIAL FIRMS (MANUFACTURERS)

ABRASIVES & GRINDING WHEELS

Delhi

Micro Abrasives India Ltd., 65, Jor Bagh, New Delhi 110003.

Shevaraj Pvt. Ltd., C-204, Defence Colony, New Delhi 110003.

Gujarat

Emery India Pvt. Ltd., P.B. 135, Jamnagar 361001.

Everest Asbestos Mfg. Co., Opp. C. N. Vidyalaya, Dr. V. Sarabhai Rd., Ambavadi, Ahmedabad 380006.

Orient Abrasives Ltd., GIDC Ind. Area, Porbandar 360575.

Western Abrasive Inds., B-1, Super Mkt., Jamnagar 361001.

Haryana

Indian Abrasives, 5, Ind. Area, Faridabad 121001.

Karnataka

Peenya Products Pvt. Ltd., A-189, Indl. Est., Peenya, Bangalore 560022.

Maharashtra

Abrasive Products of India, Ismail Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Associated Abrasives Pvt. Ltd., Off Western Exp. Highway, Goregaon (E), Bombay 400063.

Carborundum Universal Ltd., United India Bldg., Sir P. Mehta Rd., Bombay 400001.

Flexoplast Abrasives India Ltd., Plot No. 10, Off Dr. E. Moses Rd., Worli, Bombay 400018.

General Abrasive Co. Pvt. Ltd., I. B. Patel Rd., Goregaon (E), Bombay 400063.

Grindwell Norton Ltd., Army Navy Bldg., 148, M. Gandhi Rd., Bombay 400023.

Ind. Abrasive Co-op. Society Ltd., 163, P. D'Mello Rd., Bombay 400001.

Rajshree Abrasives Pvt. Ltd., Mora-Uran, P.O. Uran 400702. Kulaba Dist.

Tamil Nadu

Carborundum Universal Ltd., 11, North Beach Rd., Madras 600001.

Cutfast Abrasive Tools Pvt. Ltd., Palli Karnai, Madras 600045.

Uttar Pradesh

John Oakey & Mohan Ltd., Mohan Nagar, Ghaziabad 201007.

Micro Optical & Allied Abrasives, 23, Tilak Rd., Dehra Dun 248001.

West Bengal

East India Abrasives & Tools Co., 21, Kenderdine Lane, Calcutta 700012.

Howrah Mounted Pointed Suppliers Co., 5, Kuchil Sarkar Lane, Howrah 711101.

Krishnalal Thirani & Co. Ltd., 1, Brabourne Rd., Calcutta 700001.

ACIDS

Acid India, 30, Govindappa Naick St., Madras 600001.

Alvin Mechem Pvt. Ltd., 945, Tilak St., Kashmere Gate, Delhi 110006.

Bengal Acid & Chemical Mfg. Co., 27-A, Acharya P. C. Rd., Calcutta 700009.

Bharat Chemical Works (India), 17, Mal Rd., Calcutta 700080.

Bombay Acid & Chemical Co., Vadhani Indl. Est., Shastri Marg, Bombay 400086.

Bombay Oil Inds. Pvt. Ltd., Kanmoor House, 281/287, N. Natha St., Bombay 400009.

Gujchem Distillers India Ltd., 5/2, GIDC Indl. Estate, Ankleshwar 393001. (Gujarat State).

Hindustan Zinc Ltd., Chatterjee International Centre, 33A, Chowringhee Rd., Calcutta 700071.

Kerala Acids & Chemicals Ltd., VI/297, Parur Rd., Alwaye 683102. (Kerala State).

National Chemical Corpn., B. No. 9, Devkaran Mansion, Princess St., Bombay 400002.

Navsari Oil Products Pvt. Ltd., 4, Rajan House, Opp. Century Bazar, Bombay 400025.

Nukem Corpn., Sagar Mandir, Shivaji Park, 5th Rd., Bombay 400016.

Polypharm Pvt. Ltd., Calcot House, 8, Tamarind St., Bombay 400023.

Precise Impex Pvt. Ltd., 11/3575, Netaji Subhas Mrg., New Delhi 110002.

Punjab Sulphur Products Ltd., 526, Sector 16, Chandigarh 160017.

SG Chemicals & Pharmaceuticals Ltd., Express Bldg., 14 'E' Rd., Churchgate, Bombay 400020.

Shroff Chemicals Pvt. Ltd., 19A, Palace Court, 1, Kyd St., Calcutta 700016.

Southern Hydrocarbons Ltd., Thondamanallur 622502. Pudukottai Dist. (T. Nadu).

Star Chemicals (Bombay) Pvt. Ltd., 21-A, Noble Chambers, P. Bazar St., Bombay 400001.

Tarapur Acid & Alkali Pvt. Ltd., 15, A. K. Nayak Mrg., Bombay 400001.

Tejal Chemicals, Opp. Vayda Pole, Chokhandi, Vadodara 390001.

Thana Acid & Chemical Co., 409, Sharda Chambers, Keshavji Naik Rd., Bombay 400009.

Union Acid & Chemical Co., 88, Bapu Khote St., Bombay 400003.

Union Petrochem, 14, Delux Society, Nizampura, Chhani Rd., Vadodara 390002.

Upar Chem Ltd., C-26, Sarvodayanagar, Kanpur 208005.

ADDING & CALCULATING MACHINES

(See under Office Equipment).

ADDRESSING MACHINES

(See under Office Equipment).

ADHESIVE TAPES

Aggarwal Commercial Corpn., 54, Mohamedali Rd., Bombay 400003.

Amartara Pvt. Ltd., Saki Vihar Rd., Bombay 400072.

BDM Industries, Gama House, Gandhi Rd., Bhandup, Bombay 400078.

Bhavnani & Sons Pvt. Ltd., Waco House, Masrani Lane, Kurla, Bombay 400070.

Million Tape Mfg. Co. India (Regd.). 2640, Hamilton Rd., K. Gate, Delhi 110006.

What are your
major requirements in abrasives?

Consistent good quality?
Service and economy?
Short delivery dates?
Positive duplication?

Associated Abrasives deliver all four

The size of a company is not everything. Nor is age. The criteria to judge are quality, performance and functional suitability of our grinding wheels.

Our customer list includes some of the most prestigious steel plants, foundries and structural engineers. Their regular orders testify to the excellent grinding ratios of our products—a mark of our quality, economy and technical competence.

Our positive duplication and short delivery dates prevent production snarl-ups and ease your stocking position.

Highly trained service staff enable you to select the right abrasives for your requirements and develop correct in-use procedures, to maximise efficiency.

Associated Abrasives are indeed proud of the confidence and co-operation of their customers and will continue to strive to live up to a growing reputation

Specialists in Resin bonded products

ASSOCIATED
ABRASIVES (PVT.) LTD.
Bombay 400 069. Tel: 561432

60.1.80

If acid is your problem why not leave it to

PATEL ENTERPRISES

who can be relied upon for your requirements in TANKER LOADS of

- **SULPHURIC ACID, 70% & 98%**
- **NITRIC ACID, 57%, 70% & 98%**
- **HYDROCHLORIC ACID, 30-32%**
- **PHOSPHORIC ACID**
- **OLEUM ACID, 20%**
- **AMMONIA LIQUOR (Sp. Gr. 0.880 to 0.910)**
- **ACETIC ACID (Textile Grade & Glacial)**

A REPUTED HOUSE FOR QUALITY, RELIABILITY AND QUICK SERVICE. SUPPLIERS OF ACIDS IN TANKER LOADS TO ANY PART OF INDIA AS DESIRED.

Enquiries to

PATEL ENTERPRISES
78/84, R. No. 25, 3rd Floor, Bapu Khote Street,
Bombay 400 003.
Tel. : 332201 & 332302 ; Res. 561493 & 571780.
Grams : "PATELACID".

A familiar name for Acids in the Western Suburbs of Bombay

GOREGAON ACID SUPPLYING CO.

5-A, Menon Industrial Estate,
S. V. Road, Oshiwara Bridge, Goregaon,
Bombay 400 062.
Phones : 687297, 692761 Res. : 561493, 571780.

CITY OFFICE :
78/84, 3rd Floor, R. No. 25, Bapu Khote Street,
Bombay 400 003.
Phones: 332201, 332302.

Solicits your enquiry for

NITRIC ACID, 57%, 70% & 98%
HYDROCHLORIC ACID, 30-32%
SULPHURIC ACID, 70% & 98%
PHOSPHORIC ACID, ACETIC ACID
(GLACIAL & TEXTILE GRADE)
AMMONIA LIQUOR (Sp. Gr. 0.880-0.910)

Serving leading Industries and Textile Mills of Bombay — a trusted name for quality, integrity and quick service to one and all.

SERVICE IS OUR MOTTO

A reliable house for

NITRIC ACID, 57%, 70% & 98%
SULPHURIC ACID, 70% & 98%
HYDROCHLORIC ACID, 30-32%
PHOSPHORIC ACID, ACETIC ACID
(GLACIAL & TEXTILE GRADE), LIQUOR
AMMONIA (Sp. Gr. 0·880 to 0·910)

Contact :

BOMBAY ACID & CHEMICAL COMPANY

Vadhani Industrial Estate, L. B. S. Marg, Ghatkopar,
Bombay 400 086.

Phones : 584454, 585933 ; Resi. : 561493, 571780.

City Office : 78/84, R. No. 25, 3rd Floor, Bapu Khote Street, Bombay 400 003.

Phones : 332302, 332201.

We supply the above acids in HDP carboys securely packed in wooden case to any part of India by rail for the convenience of outstation clients.

Natraj Paper Industries, 38–44, Nagdevi St., Bombay 400003.
P. Kesavan & Co., T. D. Rd., Cochin 682011.
Picon Pvt. Ltd., 50, Nesbit Rd., Mazgaon, Bombay 400010.
Pidilite Ind. Pvt. Ltd., Mafatlal House, Backbay Reclamation, Bombay 400020.
Sahyadri Sales & Service, 36, Poona Bombay Rd., Preet Chambers, Pune 411003.
Tapex Corpn., Belgaum 590001.
Vidyut Udyog, 5, Fancy Lane, Calcutta 700001.

ADHESIVES

Delhi

Bharat Glue Manufg Co., 6469, Katra Baryan, Fatehpuri, Delhi 110006.
Delhi Glue & Paint Ind., Katra Baryan, Fatehpuri, Delhi 110006.
Dinesh Jain & Bros., 6-A, Indl. Area, Tilak Nagar, New Delhi 110018.
Jain & Jayna Sales Corpn., 14-B/7007, Dev Nagar, Narol Bagh, New Delhi 110005.
Liddles, Jindal House, 1/9-B, Asaf Ali Rd., New Delhi 110002.

Gujarat

Industrial Commercial Corpn., 572/3, Reid Rd., Ahmedabad 380002.
Neo Enterprise, 533, Padshaha's Pole, Relief Rd., Ahmedabad 380001.
Raymon Glues & Chemicals, " Kaustubh ", 46-B, Gautam Nagar, Race Course Circle, Vadodara 390007.

CHEMICAL, SUGAR, OIL, PETRO-CHEMICAL INDUSTRIES ITEM ALL UNDER ONE ROOF

HOLDTITE - Liquid Jointing
RUSTOLENE - Rust Remover
FLUXITE - Soldering Paste
THRESEAL - Fixture Vibrating Proof
M-SEAL - Adhesive General Purpose For all Metal
DUROFLEX - General Adhesive
CHECK SLIP - Prevents V. Belt-Slipping
INDIAN HEAD - Gasket Shellac
HOLDTITE - Pipe Jointing Comp
PLUS-GAS - Rust Protective
3 IN ONE OIL - Light Lubricant
SPREDASIL - Silicone Spray
ARALDITE ADHESIVE
BOILER - Composition & Tube Brush
CIRCULAR - Wire & Welding Brush
SILICONE - Paste, Lubricants & Emulsion
EMERY - Paste Graphite Powder & Flakes

INDUSTRIAL COMMERCIAL CORP
572/3 Reid Road, P.B. No. 1054 Opp. State Bank of India,
Ahmedabad-380002 Estd 1961 Resi-443396 Office-380457.

Karnataka

Sahyadri Starch & Chemicals Pvt. Ltd., 60–61, III Phase, Peenya Indl. Area, Bangalore 560058.

Maharashtra

Arteo Products, 55, Sidhpura Indl. Est., Bombay 400062.
Calico Chemicals, Plastics & Fibres Divn., Anik-Chembur, Bombay 400074.
Chemisol Ind., Devkaran Mansion, 41, Princess St., Bombay 400002.
Corn Products (I) Ltd., Shrinivas House, Waudby Rd., Bombay 400001.
Diamond Enterprises, 443, Dr. Bhadkamkar Mrg., Bombay 400004.
Fortuna Chemicals, Jay-Gandha, Ram Maruti Cross Rd. No. 4, Naupada, Thane 400602.
Hazarat & Co., Warden House, Sir P. Mehta Rd., Bombay 400001.
Hardcastle Waud Manufg. Co. Pvt. Ltd., 87, V. Nariman Rd., Bombay 400020.
Industrial Chemicals & Adhesives, Saki-Vihar Rd., Powai, Bombay 400072.
Mahindra Electro-Chemical Products Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.
Mercury Paints & Varnishes Ltd., Adhesives Dn., 28. Bombay Samachar Mrg., Bombay 400023.
Mosil Lubricants, Post Box 16791, 143 B/8, Sion West, Bombay 400022.
Nataraj Paper Industries, 38-34, Nagdevi St., Bombay 400003.
Nevichem Synthetic Inds., 2-B, Parekh Nagar Ind. Estate, S. V. Rd., Kandivli West, Bombay 400087.
Parekh Marketing Pvt. Ltd., Mafatlal House, 2nd Flr., Backbay Reclamation, Bombay 400020.
Pidilite Ind. Pvt. Ltd., Mafatlal House, Backbay Reclm., Bombay 400020.
Rainbow Ink & Varnish Mfg. Co. Pvt. Ltd., 133-C, Vakola Pipe Lane, Bombay 400055.
Rajni Chemical Inds. Pvt. Ltd., Borivli, Bombay 400092.
Sealochem Inds., Post Box 207, Thane 400602.
Themis Agencies, 43, M. Karve Rd., Bombay 400002.

West Bengal

Adhesives & Allied Products, 12, N. Subhas Rd., Calcutta 700001.
Adhesives & Chemical Inds., 590, N. Alipore, Calcutta 700053.
Bells Plastics & Chemicals, P-36, India Exchange Place, Calcutta 700001.
Chandra's Chemical Enterprises Pvt. Ltd., P-35, C.I.T. Rd., Scheme 52, Calcutta 700014.
Dinils Adhesives Pvt. Ltd., 8/1B, J. Mohan Ave., Calcutta 700006.
Gripex (I) Ltd., C-6, 8, N. Subhas Rd., Calcutta 700001.
Indian Eyelets Ind., 33, N. Subhas Rd., Calcutta 700001.
Metroark Pvt. Ltd., 12, Lenin Sarani, Calcutta 700013.
Peoples Enterprise Pvt. Ltd., 16/1, G. C. Avenue, Calcutta 700013.
Sulekha Works Ltd., Sulekha Park, Calcutta 700032.

ADVERTISING NOVELTIES

Adgifts India, 3/23, Kamal Mansion, Arthur Bunder Rd., Bombay 400005.
Apex Traders, 2/315, Sunder Market, Subzi Mandi, Delhi 110007.
Asian Pen & Plastic Inds., 424-A, Raut Ind. Estate, S. B. Mrg., Mahim, Bombay 400016.

Baja Leathers Pvt. Ltd., 63, Jolly Maker Chambers No. 1, Nariman Point, Bombay 400021.

Bhambri Plastics, D-1, R. Pratap Bagh, Delhi 110007.

Bombay Burma Plastics, Green House, Green St., Bombay 400023.

Bright Bros. Pvt. Ltd., 156-A, J. Dadajee Rd., Bombay 400034.

Fidvi Printing Press, 179, A. Rehman St., Bombay 400003.

Jai Hind Leather Products, 60, Broadway, Madras 600001.

Janata Book Manufg. Co., 219, A. Rehman St., Bombay 400003.

Jhaveri Bros. & Co. Pvt. Ltd., 348, A. Rehman St., Bombay 400003.

Metal Box Co. of India Ltd., Barlow House, 59, Chowringhee, Calcutta 700020.

Pahlaj Bajaj & Co. (Novelties) Pvt. Ltd., 63, Jolly Maker Chambers No. 1, Nariman Point, Bombay 400021.

Promotional Aids & Presentation Articles, Causeway House, Colaba Causeway, Bombay 400039.

Shanti Plastic Works, Prasad Chambers, Bombay 400004.

Sharat Inds., Swastik Ind. Estate, C.S.T. Rd., Kalina, Bombay 400029.

Skil Products, 84/94, Central Studio House, Near Air-conditioned Mkt., Tardeo, Bombay 400034.

Speed-O-Speak (India), 7, New Queen's Rd., Bombay 400004.

T. Alimahomed & Co., 144-46, Sarang St., Bombay 400003.

Tasco Inds., Saiman House, 1st Khed Lane, Behind Crown Mills, Prabhadevi, Bombay 400025.

Vinyl Processors, Ratnavali, 1st Gouthan Lane, Bombay 400054.

AERATED WATER

Bangalore Soft Drinks Pvt. Ltd., 7th Mile, Mysore Rd., Bangalore 560039.

Duke & Sons, Sunderbaug Est., Wadala-Borla Rd., Bombay 400071.

Parle Exports Pvt. Ltd., Western Express Highway, Chakala, Andheri East, Bombay 400093.

Pure Drinks Pvt. Ltd., Worli Naka, Bombay 400018.

Southern Bottlers Pvt. Ltd., Guindy, Madras 600032.

AERATING MACHINES

Esoofaly Mohamedaly & Co., 102/4, Sarang St., Bombay 400003.

Rajaram Bhiku & Sons, New Prabhadevi Rd., Bombay 400025.

T. Alimahomed & Co., 144-46, Sarang St., Bombay 400003.

AERIAL ROPEWAY

Dass Hitachi Pvt. Ltd., 21-A, Janpath, New Delhi 110002.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

AGARBATTIS

(See under Perfumes and Agarbattis.)

AGRICULTURAL IMPLEMENTS, ETC.

Andhra Pradesh

Balaji Ind. & Agricultural Castings, 4-3-74, Hill St., Ghasmandi, Secunderabad 500003.

Hyderabad Iron & Steel Works, Ind. Area, Hyderabad 500018.

Jyothi Ind., C-31, Ind. Estate, Sanatnagar, Hyderabad 500018.

Krishi Engines Ltd., A-7 Unit, Sanatnagar, Hyderabad 500018.

South India Motor Manufg. Co. Pvt. Ltd., Nacharam Ind. Estate, Hyderabad 500039.

Swastik Manufrs. Ltd., 128, M. Gandhi Rd., Secunderabad 500003.

Bihar

Arthur Butler & Co. Ltd., Muzaffarpur 842001.

K. N. Roy & Sons (Pvt.) Ltd., Main Rd., Ranchi 834001.

Saran Engg. Co. Ltd., Marhowrah, 841418, Saran Dist.

Tata Iron & Steel Co. Ltd., Jamshedpur 831001.

Delhi

Bali & Co. Pvt. Ltd., Najafgarh Rd., New Delhi 110015.

Central Tractor Org., Pusa Rd., New Delhi 110012.

Escorts Ltd., 11, Scindia House, Connaught Circus, New Delhi 110001.

Espi (New Delhi) Trdg. Co., Vandhana, 11, Tolstoy Mrg., New Delhi 110001.

Ghaziabad Engg. Co. Pvt. Ltd., 42, Janpath, New Delhi 110002.

Gupta Iron and Brass Works Pvt. Ltd., 29, Najafgarh Rd., New Delhi 110015.

Janata Steel & Metal Co-op. Ind. Soc. Ltd., 5948, Ballimaran, Delhi 110006.

Kapoor Engg. Works, B-41 & B-56, Rewari Line Ind. Area, New Delhi 110027.

Laldee Pvt. Ltd., Vijay Press Bldg., Naya Bazar, Delhi 110006.

Modern Farm Aids, 4-E/8, Jhandewalan Extn., New Delhi 110055.

Raj Engg. Works Pvt. Ltd., Ajmeri Gate, Delhi 110006.

Shree Bharat Ind., B-70, Rewari Lines, Phase I, New Delhi 110027.

Gujarat

Abdul Samad Abdul Kadar & Sons, 1839, Panchpatti, Kalupur, Ahmedabad 380001.

Agro Precision Imp. Ltd., Near I.T.I., Naroda, Ahmedabad 380002.

Bharat Techno Mechanical Ind. Ltd., Maneklal Rd., Navsari 396445.

Charotar Gramodhar Sahakar Mandali Ltd., Vallabh Vidyanagar 388120.

Indequip Engg. Ltd., Near Indl. Trg. Instt., Naroda, Ahmedabad 382325.

Jyoti Ltd., Ind. Area, P.O. Chemical Ind., Vadodara 390003.

Sayaji Iron & Engg. Co. Ltd., Chhani Rd., Vadodara 390001.

Haryana

Eicher Tractors (I) Ltd., New Indl. Town, Faridabad 121001.

Laldee Pvt. Ltd., 11, Ind. Area, Faridabad 121001.

Oriental Engg. Works Pvt. Ltd., 1, Yamuna Nagar 135001.

Karnataka

Indo-German Plantation Machinery Co., Ltd., 27, Indl. Suburb North, Bangalore 560022.

Mysore Imp. Factory, Hassan 573201.

St. Joseph's Asylum Ind. Workshop, Jeppoo, Mangalore 575001.

Vijaykumar Ind. Works, 39, Kemmungundi Rd., Bangalore 560002.

Kerala

Brunton & Co., Engineers Ltd., Ballard Rd., Cochin 682001.

Calicut Metal Craft Pvt. Ltd., 5, Ind. Estate, Calicut 673001.

Metal Ind. Ltd., Metindnagar, Shoranur 679121.

South India Corpn. Pvt. Ltd., Cochin 682002.

Madhya Pradesh

Bhandari Iron & Steel Co., Silnath Camp, Indore 452001.

Central India Iron & Steel Co., 5117, Shilnath Camp, Indore 452001.

Electro Agro Ind., Arora Colony, Bhopal 462001.

Simplex Engg. & Foundry Works, Nagpur Rd., Jabalpur 482001.

Maharashtra

Agricultural Discs (India) Ltd., United Bank of India Bldg., Sir P. Mehta Rd., Bombay 400001.

Agro Machinex Engg. Pvt. Ltd., 3-G/2, Court Chambers, New Marine Lines, Bombay 400020.

Ajanta Farm Mach. Co., Plot A-49, 'H' Block, M.I.D.C., Pimpri, Pune 411018.

Apeejay Pvt. Ltd., 24, Baroda St., Bombay 400009.

Arics Agro-Vet Inds. Pvt. Ltd., Post Box 9417, Bombay 400093.

Automobile & Agricultural Inds. Corpn., Roop Raj, Sardar V. P. Rd., Bombay 400004.

Bajaj Steel Ind. Pvt. Ltd., 20, Sir P. Mehta Rd., Bombay 400001.

Cooper Engg. Ltd., Chinchwad 411033, Pune Dist.

Dattatray Ind. Pvt. Ltd., 691/A, Poona-Satara Rd., Pune 411009.

K. T. Steel Ind. Pvt. Ltd., Broach St., Bombay 400009.

Kirloskar Bros. Ltd., Kirloskarwadi 416308.

Larsen & Toubro Ltd., L. & T. House, N. Morarjee Mrg., Bombay 400038.

Maharashtra Co-op. Engg. Society Ltd., Indl. Area, Pune-Bangalore Rd., Shiroli, Kolhapur 416122.

Maharashtra Iron Works, 4412, Panchavati Karanja, Nasik 422003.

Marshall Sons & Co. (India) Ltd., Marshall Bldg., S. Vallabhdas Marg, Bombay 400038.

Martin Burn Ltd., Esplanade House, Waudby Rd., Bombay 400001.

Palekar & Co., Sitaram Building, Near Crawford Market, Bombay 400001.

Prefit Ind., 198, Carnac Rd., Bombay 400002.

Saurashtra Engg. Corpn. Pvt. Ltd., 106, Bazarwad, Kurla, Bombay 400070.

Shivaji Works Ltd., Tikekarwadi 413225.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

Orissa

Orissa Agricultural Co. Ltd., Indl. Estate, Cuttack 753001.

Punjab

Batala Iron & Steel Works, Batala 143505.

Central Foundry and Workshop, Grand Trunk Rd., Batala 143505.

Dharma Engg. Co., Grand Trunk Rd., Batala 143505.

Hero Engg. Works, Grand Trunk Rd., Batala 143505.

Swastik Iron & Steel Works, G. T. Rd., Kartarpur 144801, Jullundur Dist.

Watkins Mayer Co., Kadowali Rd., Jullundur 144001.

Rajasthan

Rajasthan Implements, 1788, Ajmer Rd., Jaipur 302001.

Vishwakarma Engg., Opp. Sindhi Camp, Jaipur 302006.

Tamil Nadu

Addison & Co. Ltd., 158, Mount Rd., Madras 600002.

Aditya Agro Ind. Pvt. Ltd., 11-A/3, Mount Rd., Madras 600002.

Anamallais Agencies, 4/1, Mettupalayam Rd., Coimbatore 641011.

Elpem Industrials, Mettupalayam Rd., Coimbatore 641002.

Engg. Accessories Pvt. Ltd., F/14, Ind. Estate, Madras 600058.

Ind. and Agri. Engg. Co. (Madras) Pvt. Ltd., 2-17, Mount Rd., Madras 600002.

Larsen & Toubro Ltd., 4-5, Club House Rd., Madras 600002.

Masseys, Nr. Rly. Terminus Rd., Madras 600013.

Marshall Sons & Co. Manufg. Pvt. Ltd., A/4, Ind. Est., Madras 600058.

Ramsar Farm Mach. Pvt. Ltd., 209, Mettupalayam Rd., Coimbatore 641002.

SHI Engrs., 46, Sidco Indl. Estate, Coimbatore 641021.

Simpson & Co. Ltd., 202, Mount Rd., Madras 600002.

St. Joseph's Ind. School & Press, Coimbatore 641001.

Uttar Pradesh

Cossul & Co. Pvt. Ltd., 123/367, Fazalganj, Kanpur 208001.

Delhi Iron & Steel Co. Ltd., Grand Trunk Rd., Ghaziabad 201001.

Ghaziabad Engg. Co. Pvt. Ltd., G. T. Rd., Ghaziabad 201001.

Hind Trading Manufg. Pvt. Ltd., Sharma Sadan, P. Rd., Kanpur 208001.

Hindustan Foundry & Engg. Corpn., 81, Indl. Est., Nunhai, Agra 282001.

J. K. Satoh Agri. Mach. Ltd., Kamla Tower, Kanpur 208001.

Kajeco Inds., 26/250, Sultanganj, Agra 282001.

Rohilkhand Ind. Ltd., Bareilly 243001.

West Bengal

A. T. Mohsin & Co., 71-A, N. Subhas Rd., Calcutta 700001.

Agri. Mach. Manufg. Corpn. Ltd., 38/1, Bosepara Lane, Calcutta 700001.

Anand Metal & Steel Works, 23, Brabourne Rd., Calcutta 700001.

Bharat Shovel Works Pvt. Ltd., 169, S. P. Banerji Rd., Calcutta 700035.

C. Comens & Sons Pvt. Ltd., 103/3, Diamond Harbour Rd., Calcutta 700001.

Dabros Indl. Co. Pvt. Ltd., 108, Biren Roy Rd. X, Calcutta 700061.

East Zone Supply Corpn., 1, Acharya J. Bose Rd., Calcutta 700020.

Marshall Sons & Co. (India) Ltd., 33/1, N. Subhas Rd., Calcutta 700001.

Marcandy Prasad Radha Krishna Prasad (Pvt.) Ltd., 65, G. T. Rd., Salkia 711106.

Mungpa Tractor Engg. Co. Pvt. Ltd., 61, Grand Trunk Rd., Liluah, Howrah 711204.

Shaw Wallace & Co. Ltd., 4, Bankshall St., Calcutta 700001.

Tractors & Mach. Pvt. Ltd., 25, G. Chandra Ave., Calcutta 700018.

AIR CIRCULATOR & AIR CONTROL EQUIPMENT, ETC.

Gujarat

Alchemie Pvt. Ltd., Opp. Potalia Talao, Saraspur, Ahmedabad 380018.

Industrial Machinery Manufrs. Pvt. Ltd., Near New Cotton Mills, Off Amraiwadi Rd., Ahmedabad 380008.

Haryana

Snowtemp Eng. Co. Ltd., 14th Mile Stone, Mathura Rd., Faridabad 121001.

Karnataka

Dust Control & Ventilation Ltd., A-175-176, Peenya Indl. Suburb, Bangalore 560022.

Enviro Control Systems Pvt. Ltd., 18, Primrose Rd., Bangalore 560025.

Maharashtra

Airmil Sales & Agencies Pvt. Ltd., G.P.O. Box 119, Bombay 400001.

Bharat Electric & Engg. Corpn., 21, Dalal St., Bombay 400023.

Hafi Elektra, Jeevan Sahakar, Sir P. M. Rd., Bombay 400001.

Indabrator Ltd., N. S. E. Estate, Goregaon East, Bombay 400063.

Laxmi Air Control, B1, Tejpal Indl. Estate, Kurla-Andheri Rd., Saki Naka, Bombay 400072.

Thermax (India) Pvt. Ltd., Chinchwad, Pune 411019.

Vortex Industrial Engrs., A/6, Piramal Indl. Estate, Goregaon West, Bombay 400062.

Tamil Nadu

Axial & Radial Fans Pvt. Ltd., Plot 62, Sidco Estate, Ambattur, Madras 600098.

West Bengal

Air Products Corpn., Calcutta 700033.

AIR PILLOWS & AIR MATTRESSES

Bengal Waterproof Works (1940) Ltd., 41, Shakespeare Sarani, Calcutta 700017.

AIRCONDITIONERS — CAR

A.P.V. Engg. Co. Pvt. Ltd., 2, Jessore Rd., Calcutta 700028.

Air Control & Chemical Engg. Co. Ltd., Patel Society, Panchvati, Ahmedabad 380006.

American Refrigerator Co. Ltd., 20A, Shivaji Marg, Calcutta 700015.

Auto Dynamics, 'D', Shivsagar Estate, Worli, Bombay 400018.

Automotive Refrigeration Co., 100, Nagindas Master Rd., Bombay 400023.

Indian Refrigeration Ind., 51, Najafgarh Rd., New Delhi 110015.

Industrial Refrigeration, 4, Apeejay House, 130, Bombay Samachar Mrg., Bombay 400001.

Ion Exchange (India) Ltd., Tiecicon House, Haines Rd., Bombay 400011.

Keeta & Co., 135, Dr. A. Besant Rd., Bombay 400018.

AIRCONDITIONERS, REFRIGERATORS & RECTIFIERS

Andhra Pradesh

Frizair Corpn., Sanatnagar, Hyderabad 500018.

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

Shriram Refrigeration Ind. Ltd., P.O. Balanagar Township, Hyderabad 500037.

Delhi

Air Frige Ind., 10/65, Kirti Nagar Ind. Area, New Delhi 110015.

Bombay Ammonia Pvt. Ltd., 1/24, Asaf Ali Rd., New Delhi 110002.

Delhi Refrigeration Corpn., 'Sahdeva House', 3819/20, David St., Darya Ganj, New Delhi 110002.

Electronics Ltd., 12-A, Connaught Place, New Delhi 110001.

Fedders-Lloyd Corpn. Pvt. Ltd., 10-1, Kalkaji Extn., New Delhi 110019.

Freeze King Ind. Pvt. Ltd., 7/17, Kirti Nagar, New Delhi 110015.

Frick (India) Ltd., Jeevan Vihar Bldg., Parliament St., New Delhi 110001.

General Equipment Merchants Ltd., 2/90, Connaught Place, New Delhi 110001.

Himalaya Manufg. & Sales Co., Park Mansion, N. Subhas Marg, Delhi 110006.

Indian Refrigeration Ind., 7/15, Kirti Nagar, New Delhi 110015.

Industrial Refrigeration Corpn., B-35, South Ext., Part I, New Delhi 110049.

Industrial Refrigeration Ind. Pvt. Ltd., 10/65, Kirti Nagar Indl. Area, New Delhi 110015.

Kelvinator of India Ltd., Atma Ram House, Tolstoy Marg, New Delhi 110001.

卐
FOR CARAIRCONDITIONING
KEETA & CO
BOMBAY 400 018
PHONE 395034 · 371820
卐

Koolaire Pvt. Ltd., 44, Janpath, New Delhi 110002.

Lloyd Electric & Engg. Co., Punj House, M-13, Connaught Circus, New Delhi 110001.

Nath Traders (India), HS/14, Kailash Colony, New Delhi 110048.

National Refrigeration Works, 3, Subash Marg, Darya Ganj, New Delhi 110002.

Utility Engrs. (India) Pvt. Ltd., 16, Shopping Centre, Panchsheel Park, New Delhi 110017.

Virmani Refrigeration & Cold Storage Pvt. Ltd., E 2, Jhandewalan Ext., New Delhi 110055.

Gujarat

American Refrigerator Co. Ltd., Jan Saheb St., Lal Darwaja, Ahmedabad 380001.

Wintair Mfg. Pvt. Ltd., Opp. Sarangpur Gate, Iron Mkt., Ahmedabad 380002.

Haryana

Kelvinator of India Ltd., 28, New Ind. Town, Faridabad 121001.

Snowtemp Engg. Corpn., Delhi Mathura Rd., Faridabad 121003.

Usha Rectifier Corpn. (I) Ltd., 12/1, Mathura Rd., Faridabad 121003.

York India Ltd., 14th Milestone, Mathura Rd., Faridabad 121003.

Karnataka

Olympus Refrigeration & Engg. Corpn., Ind. Estate, Yeyyadi, Mangalore 575001.

Steel India Pvt. Ltd., C-12, Ind. Estate, Bangalore 560044.

Maharashtra

Advanson Engg. Co., A 78, Wagle Ind. Estate, Thane 400604.

Arvind Mechanical & Electrical Engrs. Pvt. Ltd., New Sun Mill Comp., Lower Parel, Bombay 400013.

Batliboi & Co. Pvt. Ltd., Bharat House, Apollo St., Bombay 400023.

Blue Star Ltd., Kasturi Bldg., J. Tata Rd., Bombay 400020.

Bombay Refrigerator Ind. Pvt. Ltd., 119, Bhavani Shankar Rd., Bombay 400028.

C. Doctor & Co. Pvt. Ltd., 11, Homi Mody St., Bombay 400023.

Dadajee Dhackji & Co. Pvt. Ltd., Sandhurst Bridge, Bombay 400007.

Danfoss India Ltd., Mani Mahal, Mathew Rd., Bombay 400004.

General Equipment Merchants Ltd., Khorshed Bldg., Sir P. M. Rd., Bombay 400001.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Lalbaug, Bombay 400012.

Hind Rectifiers Ltd., Lake Rd., Bhandup, Bombay 400078.

I. B. Engg. Co., Shree Vijay Bhavan, S. K. Barodawala Mrg., Bombay 400026.

Industrial Refrigeration, 4, Apeejay House, 130, Bombay Samachar Mrg., Bombay 400001.

Jafkay Engg. Corpn., A 12, Marol MIDC Ind. Estate, Bombay 400059.

Khandelwal Herrmann Electronics Pvt. Ltd., Khandelwal Estate, Bhandup Village Rd., Bombay 400078.

Kirloskar Pneumatic Co. Ltd., Hadapsar Ind. Estate, Pune 411013.

Doctaire

HUMIDIFICATION, VENTILATION & AIRCONDITIONING ENGINEERS

C. DOCTOR & CO. PRIVATE LTD.

11, Homi Mody Street, Bombay 400 023.
Phones : 274538/274474/274498. Telex : 011-2218.
Grams : "QUALITY", Bombay.

Also at :

AHMEDABAD : Bank of Baroda Building, Gandhi Road, Grams : "DOCTORCO". Telex : 012-533. Phones : 384942/384943.

CALCUTTA : 5-A, 3rd Floor, Lord Sinha Road, Grams : "DOCTORCO" (C). Telex : 021-2014. Phones : 431844/431930.

COIMBATORE : 1st Floor, 47, Sir Shanmugam Road, R. S. Puram. Grams : "DOCTORCO". Telex : 0855-392. Phone : 32961.

NEW DELHI : Nav Durga Bhavan, 3/10, Jhandewalan Extn. Swami Ram Tirth Nagar. Grams : "SIZING". Telex : 031-3928. Phone : 528370.

Specialists in : Airconditioning, Humidifying, Ventilating, Cooling, Heating, Filtering, Dehumidifying.

Sole Distributors for : Industrial Machinery Mfrs. (P) Ltd., Ahmedabad.

Larsen & Toubro Ltd., L. & T. House, N. Morarji Marg, Ballard Estate, Bombay 400038.

Marshal Airconditioning & Refrigeration Engrs., 206, Auto Commerce House, Kennedy Bridge, Bombay 400007.

National India Development Co. Ltd., A. Kranti Maidan, Forjett St., Bombay 400026.

Premier Automobiles Ltd., Agra Rd., Kurla, Bombay 400070.

Refrigeration Industries, Plot No. 76, Rd. No. 14, MIDC, Andheri East, Bombay 400093.

Sahyadri Enterprises, Haji Moosa Ind. Estate, 20, Dr. E. Moses Rd., Bombay 400011.

Spencer & Co. Ltd., Spencer House, Forjett Rd., Bombay 400026.

Steam Radiators Corpn., Amin Ind. Estate, Sonawala Cross Rd., Bombay 400063.

Tropical Refrigeration Industries, Kangra Bhavan No. 2, Dr. A. Besant Rd., Bombay 400025.

V. Krishna & Co., Moti Baug, Opp. R. K. Studio, Chembur, Bombay 400071.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

Zarin Refrigeration Industries, 212, Ajay Indl. Estate, B. Anjirwadi, Mazagon, Bombay 400010.

Orissa

Kalinga Svenska Ltd., P. O. Chowdwar 754025, Cuttack Dist.

Punjab

Beegee Corpn. Pvt. Ltd., 25, Factory Area, Patiala 147002

Yes, we are different things to different people, because our activities are so diversified. We, however chose to restrict ourselves only to high-technology product lines, and to manufacturers, Indian and foreign, who are acknowledged leaders in their own fields.

Each product line calls for specialised skills on our part. That's why each af our nine Divisions are manned by some of the finest talents in their respective fields, further developed through training and experience.

So to all of you, no matter which of our activities you may be exposed to, we strive to be just one thing: the high-technology company which offers products of only the highest quality, and backs them with a team of highly specialised experts.

That's us. Full face.

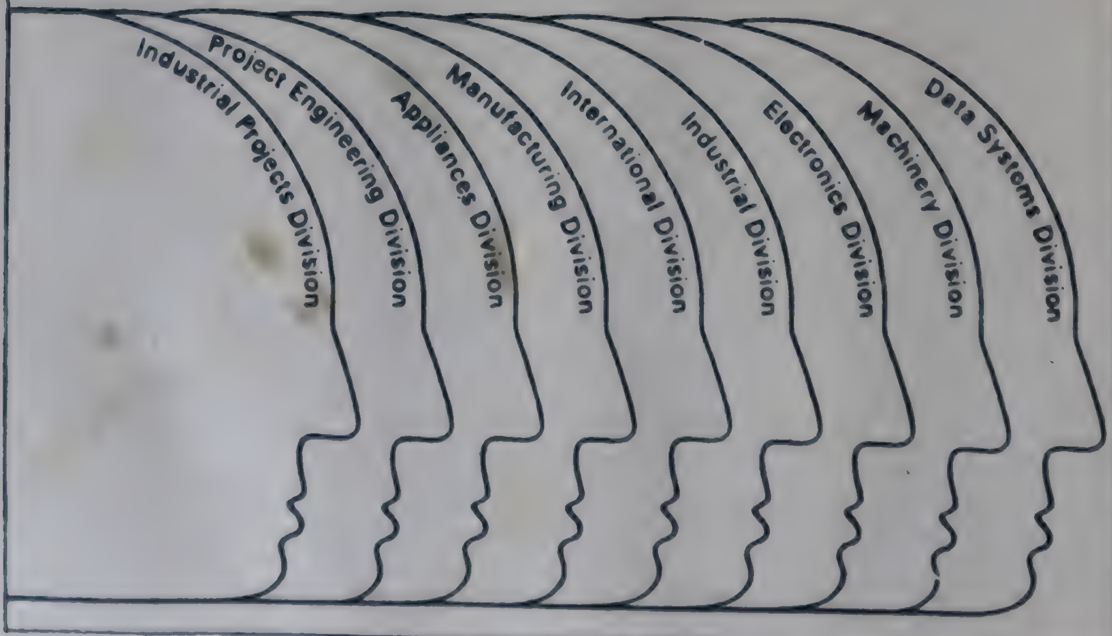
Blue Star.

No matter which of our profiles you may be exposed to they all add up to this:

BLUE STAR ©

the high-technology company

Bombay • Calcutta • New Delhi • Madras • Pune • Ahmedabad • Vadodara
Indore • Jamshedpur • Gauhati • Chandigarh • Bangalore • Cochin
Trivandrum • Secunderabad • Visakhapatnam • Vijayawada

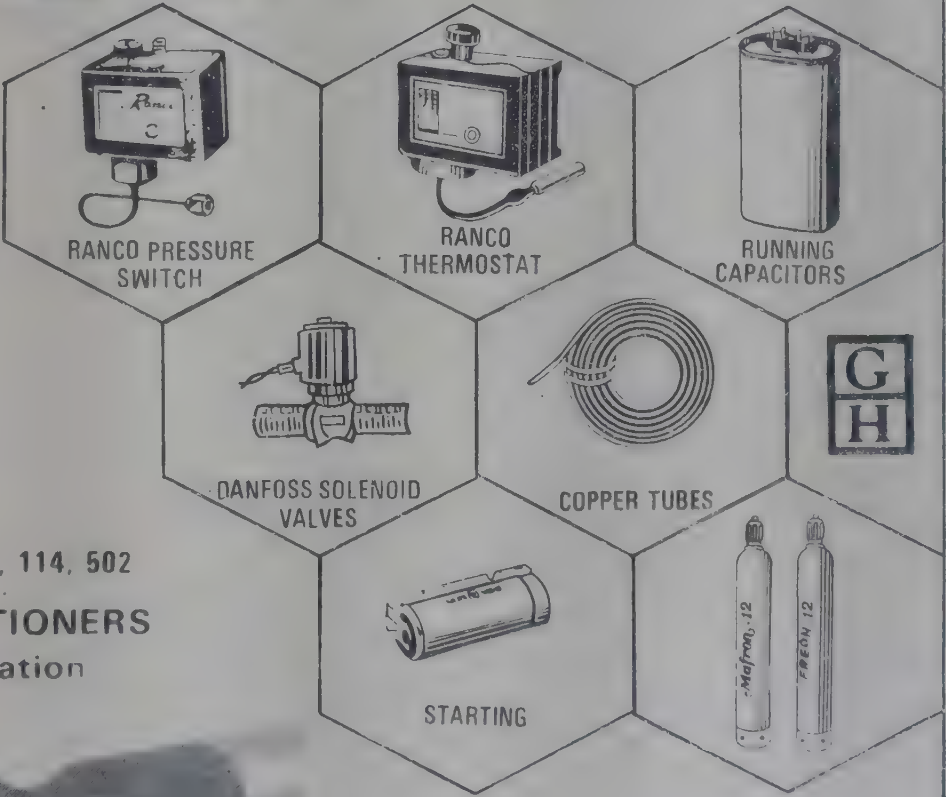

Industrial Projects Division
Project Engineering Division
Appliances Division
Manufacturing Division
International Division
Industrial Division
Electronics Division
Machinery Division
Data Systems Division

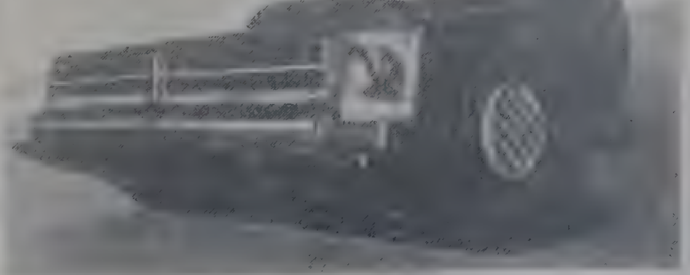
Air Conditioning-Refrigeration

TEL: 243643 ■ 244393 ■ 583799

- EXPANSION VALVES
- SOLENOID & SHUT OFF VALVES
- THERMOSTATS
- OVERLOAD PROTECTORS
- PRESSURE SWITCHES
- DRIERS
- GAUGES
- TOOLS
- COPPER TUBES
- FLARE FITTINGS
- RUBBER HOSES
- STARTING & RUNNING CAPACITORS
- GASES-11, 12 13, 22, 113, 114, 502

AUTO AIR CONDITIONERS
With Perfect Installation


RANCO PRESSURE SWITCH
RANCO THERMOSTAT
RUNNING CAPACITORS
DANFOSS SOLENOID VALVES
COPPER TUBES
G H
STARTING
Mafron-12
FREON 12



TELEX 011-4130 RUIA
GRAM : KOOLFAST

GORAKHRAM HARIBUX

NO. 4 GROUND FLOOR, APEEJAY HOUSE, 130 APOLLO STREET, BOMBAY-400 001.

MFG.DIVISION: **INDUSTRIAL REFRIGERATION**
MAROL CO-OP. INDUSTRIAL ESTATE LTD
MATHURADAS VASANJI RD. SAKI NAKA, BOMBAY-400 059.

Tamil Nadu

Air Conditioning Corpn. Ltd., 8, Greames Rd., Madras 600008.

Hydrogen Pvt. Ltd., 1/155, Mount Rd., Madras 600002.

Uttar Pradesh

Koolaire Pvt. Ltd., Pasonda, Ghaziabad 201001.

West Bengal

A. P. V. Engg. Co. Ltd., 2, Jessore Rd., Calcutta 700028.

Air Conditioning Corpn. Ltd., 17, Taratolla Rd., Calcutta 700053.

American Refrigerator Co. Ltd., 13/C, Russel St., Calcutta 700016.

Dua Refrigeration Co., 1, L. Cross Rd., Calcutta 700020.

Electric Construction & Equipment Co. Ltd., 9, K. Singh Rd., Calcutta 700002.

General Electric Co. of India Pvt. Ltd., Magnet House, Ganesh Chandra Ave., Calcutta 700013.

Guest Keen Williams Ltd., Jeevan Deep, 3A, Shakespeare Sarani, Calcutta 700071.

J. Stone & Co. (India) Pvt. Ltd., 16, New Taratola Rd., Calcutta 700027.

Jay Engg. Works Ltd., 183 A, P. Anwarsha Rd., Calcutta 700031.

National Refrigerators Pvt. Ltd., 87, Lower Circular Rd., Calcutta 700014.

Paharpur Cooling Towers Pvt. Ltd., 1-B, Judges Court Rd., Calcutta 700027.

Refrigeration Accessories Ltd., 13/1/B, Russel St., Calcutta 700016.

Refrigerators (India) Pvt. Ltd., 4-1, Debendra Lal Rd., Calcutta 700025.

AIRCONDITIONING — INDUSTRIAL

Air Conditioning Corpn. Ltd., 17, Taratolla Rd., Calcutta 700053.

American Refrigerator Co. Ltd., 13-C, Russel St., Calcutta 700016.

Batliboi & Co. Pvt. Ltd., Bharat House, Apollo St., Bombay 400023.

Blue Star Ltd., Kasturi Bldg., J. Tata Rd., Bombay 400020.

Bombay Ammonia Pvt. Ltd., 1/24, Asaf Ali Rd., New Delhi 110002.

Danfoss India Ltd., Mani Mahal, Mathew Rd., Bombay 400004.

Freeze King Ind. Pvt. Ltd., 7/17, Kirtinagar, New Delhi 110015.

Frick (India) Ltd., Jeevan Vihar Bldg., Parliament St., New Delhi 110001.

Frigsales (India) Pvt. Ltd., 204, Commerce House, Medows St., Bombay 400023.

Industrial Refrigeration Ind. Pvt. Ltd., 10/65, Kirti Nagar Indl. Area, New Delhi 110015.

J. Stone & Co. (India) Pvt. Ltd., 16, New Taratola Rd., Calcutta 700027.

Jafkay Engg. Corpn., A-12, Marol MIDC Ind. Estate, Bombay 400059.

Lloyd Sales Corpn., 386, Cadell Rd., Bombay 400028.

National Refrigerators Pvt. Ltd., 87, Lower Circular Rd., Calcutta 700014.

Pandya & Co., Nanabhoy Mansion, Sir P. Mehta Rd., Bombay 400001.

Refrige Pvt. Ltd., 16, Shakespeare Sarani, Calcutta 700016.

Refrigeration Inds., Plot No. 76, Rd. No. 14, M.I.D.C., Andheri East, Bombay 400093.

Refrigerators (India) Pvt. Ltd., P-12, CIT Rd., Calcutta 700014.

T. T. Shreewas (Engrs.) Pvt. Ltd., 319, Mount Rd., Nandanam, Madras 600035.

Tropical Refrigeration Ind., Kangra Bhavan No. 2, Dr. A. B. Rd., Bombay 400025.

Utility Engrs. (India) P. Ltd., 16, Shipping Centre, Panchsheel Park, New Delhi 110011.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

ALKALIES

Alkali & Chemical Corpn. of India Ltd., 18, Strand Rd., Calcutta 700001.

Andhra Sugars Ltd., Venkatarayapuram, P.O. No. 2, Tanuku 534211.

Atul Products Ltd., P.O. Atul 396020. Valsad Dist.

Calico Chemicals & Plastics Division, Anik Chembur, Bombay 400074.

Century Chemicals, Industry House, Churchgate Recl., Bombay 400020.

Dhrangadhra Chemical Works Ltd., Nirmal, Nariman Point, Bombay 400021.

Gujarat Alkalies & Chemicals Ltd., P.O. Petrochemicals 391346. Vadodara Dist.

Jayshree Chemicals Ltd., 14, N. Subhas Rd., Calcutta 700001.

Kanoria Chemicals & Ind. Ltd., 16A, Brabourne Rd., Calcutta 700001.

Mettur Chemical & Ind. Corpn. Ltd., Meetur Dam R.S., 636402, Salem Dist.

Punjab Alkalies Ltd., SCO 54-56, Sector 17-A, Chandigarh 160017.

Saurashtra Chemicals, Industry House, Churchgate Recl., Bombay 400020.

Shriram Chemical Ind., 1, Jhandewalan Estate, Naaz Bldg., New Delhi 110055.

Standard Mills Co. Ltd., Chemical Division, Mafatlal House, Backbay Recl., Bombay 400020.

Tata Chemicals Ltd., Bombay House, Homi Mody St., Bombay 400023.

Travancore Cochin Chemicals Ltd., Udyogamandal 683501.

ALLOY STEEL

(See ' Steel Alloy ' in this list.)

ALUMINIUM DOORS, WINDOWS & FURNITURE

Ajax Inds., 116, Mittal Estate, Sir M. Vasanji Rd., Bombay 400059.

Alco Corpn., 12, Gurumukh Sagar, 29th Rd., Bombay 400050.

Aldowiet Engg. Co., Minerva Compound, Bunder Rd., Sewree (East), Bombay 400015.

Almin Inds., 4, Whites Rd., Madras 600014.

Aluminium Enterprises, 65, M. Gandhi Rd., Bombay 400023.

Amerbhoy Dossajee, 148/150, Lohar Chawl, Bombay 400002.

Atlantic Venetian Blinds, Gaikwad Compd., Stn. Rd., Byculla West, Bombay 400011.

Crystal Corpn., 226, Kalbadevi Rd., Bombay 400002.

Decorative Ceiling Centre, 6-1-1063/B/1, Raj Bhavan Rd., Hyderabad 500004.

ajax

MANUFACTURERS OF :

Aluminium Sliding Windows,
Casement Windows, Louvre Windows,
Show-Windows, Partitions,
Entrance Doors, Sliding Doors,
Sliding & Folding Doors, Curtain Walling,
Northlight Glazing, False Ceiling,
Aluminium Grills & other Custom Built
Aluminium Architectural Products

Ask for demonstration of our
Automatic Sliding Doors

AJAX INDUSTRIES
116, MITTAL ESTATE, SIR M. VASANJI ROAD,
BOMBAY 400 059.
Phones : 579434 & 561467. Grams : "AJAXAL".

Featherlite Corpn., 136, Mysore Rd., Bangalore 560026.

Ferro Steel Inds., 36AB, Govt. Ind. Estate, Kandivli, Bombay 400067.

5 Star Aluminium Inds., 201, New Satguru Indl. Estate, W. Express Highway, Goregaon East, Bombay 400063.

General Aluminium Corpn., 10, Tumkur Rd., Bangalore 560022.

Mach-Mohan Engg. Enterprise, 610, Commerce House, Medows St., Bombay 400023.

Sai Aluminium Inds., Hira Kutir, A/16, Shivajinagar, Malad West, Bombay 400064.

Seth Enterprises, B-34, Malad Co-op. Housing Socy. Ltd., Poddar Park Rd., Malad (E), Bombay 400064.

Silver Line Industries, Juhu Rd., Bombay 400054.

Vinalwin Industries, 838, Ganesh Baug Estate, Tambi Naka, Thane 400601.

ALUMINIUM PRODUCTS

Assam

Aluminium Ind. (Assam) Pvt. Ltd., Makum Rd., Tinsukia 786125.

Bihar

Bharat Metal Ind., Bhagalpur 812002.

Gujarat

Bombay Conductors & Electricals Pvt. Ltd., 175/4, Ghodasar, Ahmedabad 380001.

Haryana

Indian Aluminium Cables Ltd., 12/1, Milestone, Delhi Mathura Rd., Faridabad 121003.

Karnataka

General Aluminium Corpn., 302, 14th Main, Raj Mahal Vilas Extn., Bangalore 560006.

Hindustan Aluminium Corpn. Ltd., 45, Race Course Rd., Bangalore 560001.

Jindal Aluminium Ltd., 16th K. M., Tumkur Rd., Bangalore 562139.

Karnataka Aluminium Ltd., No. 1, K. R. S. Rd., Metagalli, Indl. Estate, Mysore 570016.

Kerala

Aluminium Ind. Ltd., I, Ceramic Factory Rd., Kundara 636402. Quilon Dist.

Maharashtra

Ajit India Private Ltd., 408, Ramon House, Backbay Reclm., Bombay 400020.

Alco Corpn., 12, Gurmukh Sagar, 29th Rd., Bandra, Bombay 400050.

Beclawat of India Ltd., Churchgate House, 32/34, V. Nariman Rd., Bombay 400001.

Bralco Metal Inds. Pvt. Ltd., Gupta Mills Est., Reay Rd., Bombay 400010.

Devidayal Aluminium Inds. Pvt. Ltd., Gupta Mills Compd., Reay Rd., Bombay 400010.

Eshaka Dada Bamboowala, 72, Ebrahim M. Merchant Rd., Bombay 400009.

Gem Ind., 130/132, Nishanpada Rd., Bombay 400009.

Hindtex Engrs. Pvt. Ltd., Janmabhoomi Bhavan, Ghogha St., Bombay 400001.

Indian Aluminium Co. Ltd., Air India Bldg., Nariman Point, Bombay 400021.

LALLUBHAI AMICHAND LTD.
Registered & Sales Office :
48/50, Kansara Chawl, Bombay 400 002.
Phones: 362328–362329. Grams: "CYCLEBRAND".

Works :
1. The Dun Aluminium Factory, Plot No. 150, Agarwadi Road, Mankhurd, Bombay 400 043. Phone : 524661 (4 Lines). Telex : 2464.
2. Tube Division, 104, Sion-Matunga Estate, Sion, Bombay 400 022. Phones: 472516, 472517.

Renowned manufacturers of :
1. "Cycle" and "Elephant" Brand aluminium utensils and wares.
2. Electrical shades and loudspeaker horns.
3. "Queen" Brand German Silver, Non-ferrous metal and Stainless Steel Utensils.
4. "ELITE" Brand Milk Boilers, Rice Cookers and Pressure Cookers.
5. Brass and Mild Steel machine screws.
6. Aluminium and Mild Steel spools and cans.
7. Aluminium and Non-ferrous metal rivets.
8. Collapsible Tubes and Rigid Wall Containers.
9. Approved Manufacturers of Hindalium Kitchenwares.
10. "HARALDWARE" range of Aluminium Articles.

Manufacturers & Exporters of :

&

BRAND

Aluminium & Stainless Steel
Household Utensils.

"Agniraj"

Pressure Stoves, Lanterns &
Blow Lamps.

**M/s. PITAMBARDAS LALLUBHAI
& COMPANY**

**P. O. Box No. 2551, Kalbadevi,
Bombay 400 002 (India).**

Phones : *Office* : 364826. *Factory* : 569494.
Grams : " KATORIWALA ", Kalbadevi.
Telex : 11-6246 PLCO IN.

J. B. Metal Inds. Pvt. Ltd., Saki-Vihar Rd., Saki Naka, Bombay 400072.

J. J. Metal Inds., 54, Mohamedali Rd., Bombay 400003.

Jeewanlal (1929) Ltd., Liberty Bldg., Marine Lines, Bombay 400020

Jindal Aluminium Ltd., Prasad Chambers, Swadeshi Mill Compound, Bombay 400004.

Khambete Kothari Cans & Allied Products Pvt. Ltd., B-5, Indl. Area, Ajintha Rd., Jalgaon 425001.

Lallubhai Amichand Ltd., 48/50, Kansara Chawl, Bombay 400002.

Mahavir Metal Works Pvt. Ltd., 17, A. Rehman St., Bombay 400003.

Oriental Containers Ltd., 1076, Dr. E. Moses Rd., Worli, Bombay 400018.

Patel Aluminium Pvt. Ltd., Patel Est., W. Express Highway, Goregaon East, Bombay 400063.

Pitambardas Lallubhai & Co., P. Box 2551, Kalbadevi Rd., Bombay 400002.

Rajesh Aluminium Corpn., 71, Kansara Chawl, Kalbadevi Rd., Bombay 400002.

Rameshchandra Ltd., 235. Kika St., Bombay 400002.

Rashtriya Metal Inds. Ltd., J. B. Nagar, Andheri, Bombay 400059.

Sudarshan Aluminium Inds., 26, Nariman Bhavan, N. Point, Bombay 400021.

Vishal Industries, 481/485, M. Azad Rd., Bombay 400004

Rajasthan

PGFOILS Ltd., Pipalia-Kalan 306307.

Tamil Nadu

Ajit India Pvt. Ltd., Hamid Bldg., Mount Rd., Madras 600006.

C. Govindarajan & Co., 36/37, Angappa Naicken St., Madras 600001.

Jeewanlal (1929) Ltd., 127, Mint St., Madras 600001.

Madras Aluminium Co. Ltd., Mettur Dam 636402. Salem Dist.

Seelans Metal Corpn., 34, Mint St., Madras 600003.

Tripura

Tirthamoyee Aluminium Products, N. Subhas Rd., Agartala 799001.

West Bengal

Ajit India P. Ltd., 35, Chittaranjan Ave., Calcutta 700012.

Aluminium & Alloys Ind., 435, Jessore Rd., Dum Dum, Calcutta 700028.

Aluminium Cables & Conductors Pvt. Ltd., 2A, Shakespeare Sarani, Calcutta 700016.

Aluminium Manufg. Co. Ltd., Jessore Rd., Dum Dum, Calcutta 700028.

Bengal Ind. Corpn., 11, J. D. Jalan Rd., Liluah, Howrah 711204.

Bengal Non-Ferrous Metal Ind., 17/, Naskar Para Lane, Ghusury, Howrah 711107.

Bharat Engg. Co., 40, Strand Rd., Calcutta 700001.

Century Aluminium Mfg. Co. Pvt. Ltd., 58/3, B.R.B.B. Rd., Calcutta 700001.

Dhakeswari Aluminium Works, 2B, Bediadanga 1st Lane, Calcutta 700039.

Durlabh Metal Ind. Pvt. Ltd., 83, Old China Bazar St., Calcutta 700001.

Eastern Aluminium Fabricators Pvt. Ltd., 17/15, The Mall, Calcutta 700052.

Gopal Ind., 4/5, J. Bibi Rd., Ghusury, Howrah 711107.

Harish Metal Ind., 1, K. Jalan Rd., Ghusury, Howrah 711007.

Howrah Metal Casting Works, 22, Belur Rd., Liluah, Howrah 711204.

Howrah Metal Ind., 46/1, Kamini School Lane, Howrah 711101.

Indian Aluminium Co. Ltd., 1, Middleton St., Calcutta 700016.

Industrial Trdg. Corpn., 14, N. S. Rd., Calcutta 700001.

J. Nagardas & Co., 55/3. B. R. Basu Rd., Calcutta 700001.

Kutir Udyog Kendra, 58/3, Canning St., Calcutta 700001.

Lotus Trading Co., 7, Santosh Mitra Square, Calcutta 700012.

Luxmi Metal Works, 40/A, Armenian St., Calcutta 700001.

L. Madanlal (Aluminium) P. Ltd., 46, Strand Rd., Calcutta 700007.

National Metal Works, 247, G. Trunk Rd., Belur Bazar, Howrah 711106.

North Bengal Iron & Aluminium Inds., Burdwan Rd., Siliguri 734401.

Palash Metal Works, 96/98, Dharamtolla Rd., Ghusury, Howrah 711107.

Patel Ind., 17/1, Belur Rd., Liluah, Howrah 711204.

Pioneer Metal Works, 40, Strand Rd., Calcutta 700001.

Premier Irrigation Equipment Pvt. Ltd., 17/1C, Alipore Rd., Calcutta 700027.

S. P. Metal Ind., 5, Narayan Prasad Babu Lane, Calcutta 700007.

Shankar Metal Ind., 38/39, Jaya Bibi Rd., Ghusury, Howrah 711107.

Star Aluminium Works, 28/10, Bediadanga 2nd Lane, Calcutta 700039.

York India Ltd., 2, J. C. Madhab Rd., Calcutta 700020.

ANIMAL FARM EQUIPMENT

Bombay Ammonia Pvt. Ltd., 1/24, A. Ali Rd., New Delhi 110002.

Cirugia Delux Pvt. Ltd., 24, J. Nehru Rd., Calcutta 700013.

Eastern Trdg. Corpn., 849, Lajpat Rai Market, Chandni Chowk, Delhi 110006.

Glenand Products, 2, M. Gandhi Rd., Bangalore 560001.

Ocean Surgical Co., 51/2, D. B. Gupta Rd., Karol Bagh, New Delhi 110005.

P. Basak & Co., 9, C. Modi Lane, Calcutta 700006.

Shaw Wallace & Co. Ltd., 4, Bankshall St., Calcutta 700001.

Sunil Engg. Works, Sindwaimata Rd., Pratapnagar, Vadodara 390004.

ANIMAL FEEDS

Andhra Pradesh

Balaji Foods & Feeds Pvt. Ltd., Turka-Yanjal Village, Post Mangalpally, Hyderabad 501510.

Hy-Fed, Poultry & Cattle Feeds, 4-187, Tilak Rd., Hyderabad 500001.

T. G. Lakshmayya Setty & Sons, P. B. 28, Adoni 518301.

Taraka Feeds, D. No. 6-10-23, 10/1, Arundalpet, Guntur 522002.

Delhi

Nandi Provender Mills, 33, Najafgarh Ind. Area, New Delhi 110015.

Gujarat

Cattle Feed Factory, Lodhawad Chowk, Gondal Rd., Rajkot 360002.

Shah Chemicals & Fertiliser Pvt. Ltd., 1875, Dhan Nivas, Krishnanagar, Bhavnagar 364001.

Karnataka

Bramhappa Tavanappanavar Pvt. Ltd., Krishnaraja Rd., P.B. 7, Davangere 577001.

Mysore Feeds Ltd., 283-284, Old Tharagupet, P.B. 7884, Bangalore 560002.

Ravi Vegetable Oil Industries, P.B. 205, Pune-Bangalore Rd., Davangere 577002.

Sunfarm Feeds (A Div. of Sundatta Foods & Fibres Ltd.), Karwar Rd., P.B. 27, Hubli 580020.

Yarana Feeds & Farms, B-55/56, Indl. Est., Hubli 580020.

Kerala

Mahe Polymers Pvt. Ltd., 'Lamina', Banerji Rd., Cochin 682018.

Madhya Pradesh

Bhandari Crosfields (Pvt.) Ltd., 27, M. Gandhi Rd., Indore 452001.

Jai Kisan Agro Inds., 31-33, Udyog Nagar, Indore 452001.

Raj Inds., Bina 470113.

Maharashtra

Delux Feed Products Pvt. Ltd., 46, Eastern Chambers, Poona St., Bombay 400009.

Foods, Fats & Fertilisers Ltd., Johari Mansion, 259, Kalbadevi Rd., Bombay 400002.

Godrej Soaps Ltd., Eastern Express Highway, Vikhroli, Bombay 400079.

Hindustan Feed Products, Opp. Sewree Rly. Station (East), Bombay 400015.

Hindustan Lever Ltd., Hindustan Lever House, 165/166, Backbay Recl., Bombay 400020.

Jamnadas Madhavji & Co., Tanna House, 11-A, Wodehouse Rd., Bombay 400039.

Tata Oil Mills Co. Ltd., Sewri Mills, Hay Bunder Rd., Bombay 400033.

Tamil Nadu

A. V. M. Cattle & Poultry Feeds Manufg. Inds., 25/689, R. Gowder St., Coimbatore 641001.

Godrej Soaps Ltd., Animal Feeds Dn., I-B, Indl. Estate, Ambattur, Madras 600058.

Savaldas Madhavdas, 250, Subbiah Mudaliar St., P.B. 198, Coimbatore 641001.

Shaw Wallace & Co. Ltd., 8/9, Thambu Chetty St., P.B. 14, Madras 600001.

Uttar Pradesh

Jay Em Provender Mills, 54/1, Nayaganj, Kanpur 208001.

West Bengal

Ballygunge Fodder Mills, 9, Gurusadaya Rd., Calcutta 700019.

Mahakali Food & Feed Suppliers, 207, M. Debendra Rd., Calcutta 700007.

ARCHITECTS REQUISITES

Andhra Scientific Co. Ltd., Machilipatnam 521001.

Bombay Miscellanies Pvt. Ltd., Khan Manzil, 28, Calicut St., Bombay 400001.

Bombay Stationery Mart, 7-A, Sir P. Mehta Rd., Bombay 400001.

Govt. Instruments Workshop, Ind. Estate, Pappanamcode 695018.

Himalaya Stationery Mart, 2, Himalaya House, Palton Rd., Bombay 400001.

P. Orr & Sons Ltd., P.B. 317, Madras 600002.

ASBESTOS PRODUCTS

Asbestos Cement Ltd., Block 'D', Shivsagar Est., Dr. A. Besant Rd., Worli, Bombay 400018.

Asbestos Packing & Manufg. Co. Pvt. Ltd., 15, Parsi Panchayat Rd., Bombay 400069.

Assam Asbestos Ltd., Chandmari, Gauhati 781003.

Bharat Trdg. Co., Agra Rd. Naka, Ghatkopar, Bombay 400086.

Everest Asbestos Cement Ltd., Ashok Bhavan, 93, Nehru Place, New Delhi 110019.

Hindustan Ferodo Ltd., L. B. Shastri Marg, Ghatkopar, Bombay 400086.

Hiralal Gokaldas Dalal & Co., 45, N. Cross Lane, Bombay 400003.

Hyderabad Asbestos Cement Products Ltd., Sanatnagar, Hyderabad 500018.

J. D. Jones & Co. Ltd., C-5, Gillander House, 8, N. Subhas Rd., Calcutta 700001.

Madras Asbestos Pipe Co., 2/142, Mount Rd., Madras 600006.

Mysore Asbestos Ltd., 39, M. G. Rd., Bangalore 560001.

Patoon Pvt. Ltd., 7-A, Elgin Rd., Calcutta 700020.

Pelican Valves and Engg. Works, 27/2, 'Q' Rd., Belgachia, 700037, Howrah Dist.

Reinz-Talbros Pvt. Ltd., 19, Loni Indl. Area, Opp. Mohan Nagar, Ghaziabad 101007. U.P.

Southern Asbestos Cements Ltd., 150-A, Mount Rd., Madras 600002.
Taida Trdg. & Inds. Pvt. Ltd., 175, Vidyanagari Mrg., Kalina, Bombay 400029.
U. P. Asbestos Ltd., B-38, Mandir Mrg., Mahanagar Extn., Lucknow 226006.
Union Asbestos & Allied Products, 40, Strand Rd., Calcutta 700001.
Universal Stores & Engg. Co., 40, Strand Rd., Calcutta 700001.

AUTOMOBILE ANCILLARIES

Andhra Pradesh

India Leaf Spring Manufg. Co. Pvt. Ltd., 62, M. Gandhi Rd., Secunderabad 500003.
Jyothi Ind., C-31, Ind. Estate, Sanatnagar, Hyderabad 500018.
Rockson Springs (India), C-27, Indl. Estate, Sanatnagar, Hyderabad 500018.
Sri Ramdas Motor Transport Pvt. Ltd., Subhas Rd., Kakinada 533001.
Strong-Hold Ind., Inside Gyanbagh, Hyderabad 500012.
Triniti Ind., A-5, Co-op. Estate Ltd., Balanagar, Hyderabad 500037.
Wiper India, C-22, Sanatnagar, Hyderabad 500018.

Bihar

Perfect Electric Concern Pvt. Ltd., Stn. Rd., Jamshedpur 831002.
Tata Engg. & Locomotive Co. Ltd., Jamshedpur 831004.

Delhi

Allens (India) Agency, B-68, Wazirpur Indl. Area, Delhi 110052.
Associated Engg. Works Ltd., Grand Trunk Rd., Shahadara, Delhi 110032.
Asvee Ind. Enterprises, Patel Motor Market, Kashmere Gate, Delhi 110006.
Auto Lamps Ltd., 6, Alipore Rd., Delhi 110006.
Auto Meters Ltd., 157, Cycle Market, Phase I, Jhandewalan, New Delhi 110055.
Auto Pins (India), Kashmere Gate, Delhi 110006.
Auto Steering (India) Pvt. Ltd., Scindia House, Connaught Place, New Delhi 110001.
Brake Linings Ltd., 94, Nehru Place, New Delhi 110024.
Bramec Suri Pvt. Ltd., 1655, S. P. Mukherjee Rd., Delhi 110006.
Clutch Auto Pvt. Ltd., 304, Rohit House, Tolstoy Mrg. New Delhi 110001.
Delhi Electricals, 120, Railway Rd., Shahdara, Delhi 110032.
Elofic Industries (India), Patel Motor Mkt., Kashmere Gate, Delhi 110006.
Escorts Ltd., 11, Scindia House, Connaught Circus, New Delhi 110001.
Falcon Auto & General Inds., 62, Najafgarh Rd., Indl. Area, New Delhi 110015.
Fritz & Singh Pvt. Ltd., B-29/B, Kailash Colony, New Delhi 110048.
Gemco Ind., 15, Shahzada Bagh, Ras B. Marg, Delhi 110035.
Gilton Cables (India), Rd. 16, Rajgarh Colony, Delhi 110031.
Globe Auto Ind., Mayapuri Ind. Area, Delhi 110027.
Goetze (India) Ltd., Tej Bldg., 8-B, B. Shah Zafar Marg, New Delhi 110002.
Hydraulics and Pneumatics India Pvt. Ltd., State Bank Bldg., Chandni Chowk, Delhi 110006.
Indian Auto Supply (Regd.), 70, Gokhale Market, Delhi 110006.
J. M. A. Ind. Pvt. Ltd., 29, Community Centre, New Delhi 110024.
Jalwa Auto Electric, 3/15-A, Asaf Ali Rd., New Delhi 110002.
K. G. Khosla & Co. Pvt. Ltd., 1, D. B. Gupta Rd., New Delhi 110055.
Kundli Engg. Ind. Pvt. Ltd., 703, Akash Deep Bldg., Barakhamba Rd., New Delhi 110001.
Maco P. Ltd., 2A/3, Asaf Ali Rd., New Delhi 110002.
Marshall Inds. of India, 9/52, Indl. Area, Kirti Nagar, New Delhi 110015.
Murarka Engg. Works, 28, Shivaji Marg, New Delhi 110015.
National Rubber Products, 4/14, Kirti Nagar Ind. Area, New Delhi 110015.
Prestolite of India Ltd., 27/4, Ram Singh Bldg., Lothian Rd., Kashmere Gate, Delhi 110006.
Purolator India Ltd., Hauz Khas, P.O. Yusuf Sarai, New Delhi 110016.
Racmann Koshatkinn (Regd.), 53, Ind. Area, Najafgarh Rd., New Delhi 110015.
Rawel Industries Pvt. Ltd., 517, Katra Ishwar Bhawan, Delhi 110006.
Shama Engine Valves Ltd., 14 F, Connaught Circus, New Delhi 110001.
Shar-Lee Filtorites Pvt. Ltd., 52, Okhla Indl. Est., New Delhi 110020.
Shriram Pistons & Rings Ltd., 23, Kasturba Gandhi Mrg., New Delhi 110001.
Siyaram-Kumar Engg. Works Pvt. Ltd., 45, Najafgarh Rd., New Delhi 110015.
Steelcords, 27/91, Shakti Nagar, Delhi 110007.
Super Seals India P. Ltd., 1213, Kailash Bldg., New Delhi 110010.
Supercircle Pvt. Ltd., B-45, Mayapuri Ind. Area, New Delhi 110027.
Usha Telehoist Ltd., Flat No. 410 & 411, Maghdoot, 94, Nehru Place, New Delhi 110024.

Gujarat

Ahmedabad Star Engg. Works Pvt. Ltd., Bapunagar Ind. Estate, Ahmedabad 380023.
Banco Products (India) Ltd., Post Box 89, Vadodara 390001.
C. N. Motors Pvt. Ltd., National Highway No. 8, Naroda, Ahmedabad 382325.
D. C. Engg. Industries, Behind Vikram Mills, Saraspur, Ahmedabad 380018.
Gaskets & Oilseals Pvt. Ltd., Bhaili 391410. Vadodara Dist.
Gaskets & Radiators Pvt. Ltd., Padra Rd., Vadodara. 390001.
Jupi Dyca Products Pvt. Ltd., Near Ajit Mill, Rakhial, Ahmedabad 380023.
Ramon Gujarat Ltd., Tanthithaiya, P.O. Jolwa 394305. Surat Dist.
Sigil India Services Pvt. Ltd., Atladra, Vadodara 380001.
Standard Radiators Ltd., Indl. Estate, Vadodara 390016.
Superb Mech. Engg., C-1/3, G.I.D.C. Indl. Est., Odhavi, Ahmedabad 380021.

United Engg. Works, Ramkumar Mills Comp., Saraspur, Ahmedabad 380018.
Vikram Valves, C-1/33, Ajit Indl. Estate, Rajkot 360003.

Haryana

Auto Pins India Regd., N.I.T., Faridabad 121001.
Clutch Auto Pvt. Ltd., 111-112, Sector 6, Faridabad 121006.
Davis & White (I) Pvt. Ltd., 15/3, Milestone, Mathura Rd., Faridabad 121001.
Escorts Employees Ancillaries Ltd., 20/4, Mathura Road, Faridabad 121001.
Escorts Transmissions Ltd., Faridabad 121001.
Forgings P. Ltd., 18/5, Mathura Rd., Faridabad 121001.
Injecto Pvt. Ltd., 20/5, Mathura Rd., Faridabad 121001.
Jai Bharat Auto Ind., Chaura Bazar, Karnal 132001.
Oswal Electricals, 49, Indl. Area, Faridabad 121001.
Oswal Engg. & Gen. Works, 3E/29B, N.I.T., Faridabad 121001.
Perstolite of India Ltd., 16/4, Mathura Rd., Faridabad 121001.
Super Seals (India) Pvt. Ltd., 12th Milestone, Mathura Rd., Faridabad 121001.
Talbros Automotive Components Ltd., 74, Sector 6, Faridabad 121006.
Usha Die Casting Pvt. Ltd., 5, Indl. Area, Gurgaon 122001.

Karnataka

Canara Workshops Ltd., Kodialbail, Mangalore 575003.
Ideal Jawa India Pvt. Ltd., 7, Ind. Estate, Mysore 570002.
International Instruments Pvt. Ltd., 140, Hosur Rd., Bangalore 560034.
Kar Valves Ltd., Plot No. 26, Peenya Ind. Area, Phase–I, Bangalore 560022.
Macksons (I), 70/4, N. R. Rd., Bangalore 560002.
Motor Ind. Co. Ltd., Hosur Rd., Audugodi, Bangalore 560030.
Mysore Sheet Metal Ind., 1st Cross, Wilson Garden, Bangalore 560027.
Speed-a-Way Pvt. Ltd., 7/5 C, Sindhi Colony, Bangalore 560002.
Stumpp, Schuele & Somappa Pvt. Ltd., Hosur Rd., Bangalore 560034.
Sunrise Auto Inds. Ltd., 25/26, Indl. Suburb, Tumkur Rd., Bangalore 560022.

Kerala

Auto Friction Components (I) Pvt. Ltd., Pappanamcode, Trivandrum 695018.

Madhya Pradesh

Saund Zweirad Union Pvt. Ltd., Jhansi Rd., Gwalior 474001.

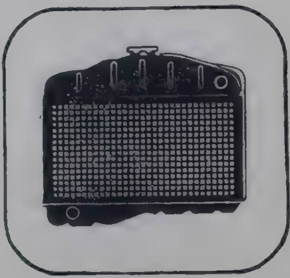
Maharashtra

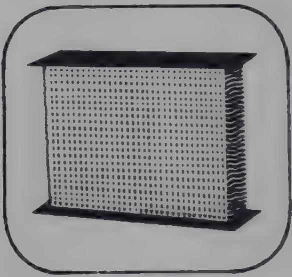
Acme Manufg. Co. Ltd., Construction House, Ballard Estate, Bombay 400038.
Adroit Industries (India), 429, V. Patel Rd., Bombay 400004.
Allied Auto Accessories Pvt. Ltd., M. Vasanji Rd., Bombay 400069.
Anandji Haridas & Co. Pvt. Ltd., Fosberry Rd., Bombay 400015.
Ashweeni Industries, Unit No. 306, Sun Indl. Estate, Sunmill Compd., Lower Parel, Bombay 400013.
Atlas Automotive Components (Divn. of Indokem Pvt. Ltd.), 221, Dr. D. N. Rd., Bombay 400001.
Auto Mughals Pvt. Ltd., Plot E-17, M.I.D.C., Ind. Area, Chikalthana, Aurangabad 431210.
Automat Engg. Pvt. Ltd., Kurla Indl. Estate, Shastri Marg, Bombay 400077.
Automobile Ancillaries of India Pvt. Ltd., Plot No. 31, Kandivli Ind. Estate, Kandivli, Bombay 400067.
Automobile Engg. Co., A-47, Wagle Indl. Estate, Thane 400604.
Automobile Products of India Ltd., Bhandup, Bombay 400078.
Automotive & Allied Ind. Pvt. Ltd., Kalyanpur House, 3rd Rd., Bombay 400052.
Automotive Corpn. (India), Prasad Chambers, M. Karve Rd., Bombay 400004.
Automotive Mfrs. Pvt. Ltd., 108, Bazar Ward, Kurla, Bombay 400070.
Avdel (India) Pvt. Ltd., Ramon House, 169, Backbay Reclamation, Bombay 400020.
Bajaj Auto Ltd., Akurdi, Pune 411035.
Bajaj Tempo Ltd., Akurdi, Pune 411035.
Bestamco, 94, Kadri Park, Irla, Bombay 400056.
Bharat Radiators Pvt. Ltd., S. G. Barve Marg, Kalina, Santa Cruz East, Bombay 400029.
Casablancas Gannon Engg. Ltd., Bombay-Agra Rd., Bhandup, Bombay 400078.
Bhatia Indl. Co., 35, Vihar Rd., Saki Naka, Bombay 400072.
Calama Ind. Ltd., Kodak House, Dr. D. Naoroji Rd., Bombay 400001.
Chandok Automotive Mfrs. Pvt. Ltd., 431, Lamington Rd., Bombay 400004.
Chronomatic Ind. Pvt. Ltd., Prakash Mills Comp., off Globe Mills Passage, Bombay 400013.
Dee-Kay Ind., Lake Rd., Bhandup, Bombay 400078.
Echjay Ind. Pvt. Ltd., Kanjur Vill., Bhandup, Bombay 400078.
Emmes Metals Pvt. Ltd., 147, Govt. Indl. Estate, Kandivli (W), Bombay 400067.
Ensign Engrs. Pvt. Ltd., Dumping Rd., Mulund West, Bombay 400080.
Evergreen Auto Ind., 322, V. Patel Rd., Bombay 400004.
Ex-Cello India Ltd., 78-B, Dr. A. Besant Rd., Bombay 400018.
Fairfield Manufg. Co., Aman Chambers, 113, M. Parmanand Marg, Bombay 400004.
Fer Electricals, A-423-425, Wagle Indl. Estate, 28th Rd., Thane 406004.
Finolex Cables Ltd., 26/77, Bombay-Pune Rd., Pune 411018.
Fuel Injections Ltd., Chitalsar-Manpada, Swami Vivekananda Rd., Thane 400601.
G. K. Auto Inds. Pvt. Ltd., A-32, M.I.D.C., Marol Indl. Estate, Andheri (E), Bombay 400093.
Gabriel India Ltd., S304, L. B. Shastri Marg, Mulund, Bombay 400080.
Globe Auto Electricals Ltd., L. B. Shastri Marg, Mulund, Bombay 400080.
Globe Stores Co., Sitaram Bldg., Near Crawford Market, Dr. D. Naoroji Rd., Bombay 400001.
Globe Steerings Ltd., Shastri Mrg., Bombay 400080.
H. F. Higgins (Eastern) Pvt. Ltd., 139, G, Aggarwal Indl. Est., Vivekanand Rd., Bombay 400060.
Hararwala Engg. Works Pvt. Ltd., 50, Nesbit Rd., Mazgaon, Bombay 400010.

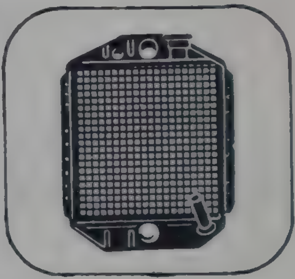
To prolong engine life
by extra cooling efficiency

HYLAND RADIATOR CORES

Manufactured under strict quality control.
They are available in a wide range for Automobiles, Tractors, Industrial Engines and Earth Moving Equipment.







India's First Radiator Manufacturers

LUTHRA
LUTHRA ENGG. AND RADIATOR CO.,
A-26, Shalimar Industrial Estate, Matunga, Bombay-400 019.
Phone: 474159. Gram: 'LUTHERHEAD'. Telex: 011-5318.

Motivation-180

Hindustan Die Casting Works, 282, Wagle Indl. Est., Thane 400604.

Hindustan Ferodo Ltd., L.B.S. Mrg., Ghatkopar, Bombay 400086.

Indian Standard Metal Co. Ltd., I.S.M. Estate, Anant Ganpat Pawar Lane, Bombay 400027.

Indo-German Inds., 317, Bharat Indl. Estate, Tokersey Jivraj Rd., Bombay 400015.

Indo-Spring Inds., Akash Deep, French Bridge, Bombay 400007.

Jasmin Industries, 159, C.S. Track Rd., Kalina, Bombay 400029.

Jaya Hind Industries Pvt. Ltd.. Akurdi, Pune 411035.

Jayant Engg. Works, 1344, Shivajinagar, Pune 411005.

K. S. Diesels Pvt. Ltd., Bombay Mutual Chambers, A. Doshi Mrg., Bombay 400023.

Kalina Metal & Engg. Works, C.S.T. Rd., Bombay 400029.

Keeta & Co., 135, Dr. A. Besant Rd., Bombay 400018.

Kothari Auto Parts Manufg. Pvt. Ltd., 431, Bhadkamkar Marg, Bombay 400004.

La Frenca Ind. Pvt. Ltd., Sonawala Cross Rd., Sonawala Estate. Goregaon East, Bombay 400063.

Lu Bra Diz Tube Engineers, 2-B, Bibijan St., Bombay 400003.

Mahindra & Mahindra Ltd.. Automobile Dn.. Worli Rd.. Bombay 400018.

Mandlecha Metals (India), 5/B, Ramesh Apartment, Narshing Lane, P.B. No. 7630. Malad (West). Bombay 400064.

Matchless Automobile & Engg. Inds., 43. Benham Hall Lane, Bombay 400004.

Menon Pistons, Ind. Estate, Shiroli, Kolhapur 416005.

Metal Stamping Co., Plot A35, Road 10, Wagle Ind. Estate, Thane 400604.

Metalpart Manufrs., 16, Mohamedali Bldg., Mohamedali Rd., Bombay 400003.

Metropolitan Springs Pvt. Ltd., Antop Hill, Wadala, Bombay 400031.

Mungi Electricals, Technicians Block, M.I.D.C., Bhosari Ind. Area, Pune 411026.

Nathani Automotive Products Pvt. Ltd., Adjoining Vidya Vihar Rly. Stn. West, Bombay 400086.

National Auto Ind., 35-C, Govt. Ind. Estate, Kandivli, Bombay 400067.

National Automobile Co. Pvt. Ltd., Nagindas Mansions, Opera House, Bombay 400004.

New Haven Engg. Co. Pvt. Ltd., Nanjee Bldg., Horniman Circle, Bombay 400001.

P.M.P. Auto Pvt. Ltd., Aarey Rd., Goregaon (E), Bombay 400063.

Pals Industries, A-108, Wagle Indl. Estate, 18th Rd., Thane 400604.

Paranjpe Engg. & Foundry Co. Pvt. Ltd., E 14-15, Bhosari Ind. Area, Bhosari, Pune 411026.

Patheja Forgings & Auto Parts Mfrs. Pvt. Ltd., E-20, Bhosari Ind. Block, Pimpri, Pune 411026.

Pethe Engg. Pvt. Ltd., 69, S. K. Bole Rd., Bombay 400028.

Prabhat Inds., Vyapat Bhawan, 3rd Flr., 368/70, N. Natha St., Bombay 400009.

Pramashaw Group of Companies, Raval Bldg., 420, Lamington Rd., Bombay 400004.

Precast Engg. Pvt. Ltd., Ashok Nagar, Kandivli (E), Bombay 400067.

Precision Components Pvt. Ltd., Andheri-Kurla Rd., Marol Naka, Bombay 400059.

Prefit Ind. Pvt. Ltd., 198, Carnac Rd., Bombay 400002.

Premier Automobiles Ltd., Agra Rd., Kurla, Bombay 400070.

Press Metal Corpn. Pvt. Ltd., Marol Naka, Andheri-Kurla Rd., Bombay 400059.

Ramon & Demm Ltd., S. V. Rd., Thane 400607.

Rane Pvt. Ltd., New Queen's Rd., Bombay 400004.

Roplas India Ltd., 145, Bombay-Poona Rd., Pimpri, Pune 411018.

Ruby Coach Builders Pvt. Ltd., 86/92, Andheri-Kurla Rd., Marol Naka, Bombay 400059.

S. A. Engineering Works, 369, Sardar Patel Rd., Bombay 400004.

Sahney Kirkwood Pvt. Ltd., 27, Kirol, Vidyavihar, Bombay 400086.

Schrader-Scovill Duncan Ltd., Nirmal Bldg., Nariman Point, Bombay 400021.

Simmonds Marshall Ltd., Savoy Chambers, 5, Wallace St., Bombay 400001.

Spaco Carburettors India Ltd., Prasad Chambers, Bombay 400004.

Tata Engg. & Loco. Co. Ltd., 24, Homi Mody St., Bombay 400023.

Teksons Ltd., Kolshet Rd., Majiwada, Thane 400601.

United Ind. of India, 82, Opera House, Girgaum Rd., Bombay 400004.

Vibronics Pvt. Ltd., Kurla Indl. Est., Bombay 400086.

Vijay Auto Inds. Pvt. Ltd., 27, A. Gokhale St., Bombay 400004.

Yojana Udyog Pvt. Ltd., 51-C/D, Govt. Indl. Estate, Kandivli (W), Bombay 400067.

Punjab

Akal Spring Pvt. Ltd., Gill Rd., Ludhiana 141003.

Auto Pistons Manufg. Co. Ltd., Batala Rd., Amritsar 143001.

Auto Valve Ind., Sirhind Rd., Patiala 147001.

Emdet Engrs. Pvt. Ltd., P.O. Box 124, Amritsar 143001.

Goetze India Ltd., Patiala 147001.

Gurmukh Singh & Sons Auto Parts Pvt. Ltd., Ludhiana 141003.

Narankar Auto Engg. Works, G. T. Rd., Goraya 144409. Jullundur Dist.

Shree Vijay Inds., 179, Indl. Area A, Ludhiana 141003.

Vinko Auto Inds. Pvt. Ltd., Ladowali Rd., Jullundur 144001.

Rajasthan

Autolite of India, Mahar House, Amer Rd., Jaipur 302001.

Indo-Flex Pvt. Ltd., Tilak Rd., Jaipur 302001.

Hindustan Radiators Ltd., Station Rd., Jodhpur 342001.

Standard Auto Parts Pvt. Ltd., Ind. Estate, Jodhpur 343001.

Tamil Nadu

Amalgamations Repco Ltd., G.N.T. Rd., Madhavaram, Madras 600060.

Ashok Leyland Ltd., Ennore, Madras 600019.

Ashok Radiator Works, Begum Saheb St., 4th Lane, Mount Rd., Madras 600002.

Autolec Ind., C-9, Ind. Estate, Ambattur, Madras 600058.

Beams Mfrs. Pvt. Ltd., A-8, Ambattur Ind. Estate, Ambattur, Madras 600058.

Best & Crompton Engg. Ltd., 13, N. Beach Rd., Madras 600001.

Bimetal Bearings Co. Pvt. Ltd., Huzur Gardens, Sembiam, Madras 600011.

Brakes India Ltd., Padi, Madras 600050.

Carburettors Ltd., 29, Mount Rd., Madras 600002.

D'Engineering Pvt. Ltd., Gopal Bagh, 317, Avanashi Rd., Coimbatore 641018.

Elgi Equipment Pvt. Ltd., India House, Trichy Rd., Coimbatore 641018.

Enfield India Ltd., 3-B, Eldams Rd., Madras 600018.

Engine Valves Ltd., 1, Noble St., Madras 600017.

Gears India Madras Pvt. Ltd., A-4/25, Ind. Estate, Madras 600034.

Hydraulics Ltd., 118, Mount Rd., Madras 600002.

India Filters Manufrs. Pvt. Ltd., B-11, Ambattur Inds. Estate, Madras 600058.

India Pistons Ltd., Huzur Gardens, Sembiam, Madras 600011.

India Radiators Ltd., 99, Armenian, Madras 600001.

Indian Carburettors, K. R. S. Ind. Estate, Madras 600019.

Indian Gasket Manufg. Co., 54, W. M. Church Rd., Madras 600013.

Jobass Woodhead & Sons India Ltd., 41, Thiruneermalai Rd., Madras 600044.

L. G. Balakrishnan & Bros. Pvt. Ltd., India House, Trichy Rd., Coimbatore 641018.

Lucas TVS Ltd., Padi, Madras 600050.

Madras Engg. Inds. Pvt. Ltd., C-6, Ambattur Indl. Estate, Madras 600058.

Mobilities Pvt. Ltd., Kuniamuthur, Coimbatore 641008.

National Fasteners Pvt. Ltd., Developed Plot S 19, Ind. Estate, Guindy, Madras 600032.

Precision Products, C-45, Ind. Estate, Madras 600032.

Premier Instruments (Cbe.) Ltd., Perianaickenpalayam, Coimbatore 641020.

Rambal Pvt. Ltd., 129, Lattice Bridge Rd., Madras 600041.

Rane Brake Linings Ltd., Plot No. 30, Ind. Estate, Ambattur, Madras 600058.

Rane (Madras) Ltd., 47, Velacherry Rd., Madras 600032.

S. & S. Bushings Ltd., 175/1. Anna Salai, Madras 600002.

Shardlow India Ltd., Huzur Gardens, Madras 600011.

Simpson & Co. Ltd., 202, Mount Rd., Madras 600002.

Standard Motor Products of India Ltd., Mount Rd., Madras 600002.

Sundaram Abex Ltd., Padi, Madras 600050.

Sundaram Clayton Ltd., Padi, Madras 600050.

Sundaram Fasteners Ltd., Padi, Madras 600050.

Sundaram Industries Pvt. Ltd., TVS Bldg., West Veli St., Madurai 625001.

Unicorn Pvt. Ltd., 29, Mount Rd., Madras 600002.

Union Co. (Accessories) Pvt. Ltd., 29, Mount Rd., Madras 600002.

Universal Radiators Pvt. Ltd., Mettupalayam Rd., Coimbatore 641011.

Western Thompson (I) Ltd., Pozhal, Madras 600066.

Wheels India Ltd., Pai, Madras 600050.

Wheels & Rims Co. of India Ltd., Huzur Gardens, Madras 600011.

Uttar Pradesh

Abilities India Pvt. Ltd., Gyani Border, Ghaziabad 201006.

Hind Auto Inds. Ltd., 1, M. M. Malviya Marg, Lucknow 226003.

Jain Miniature Bulb Ind., 18, A. Pokharpur, Kanpur 208001.

Kissan Engg. Works Pvt. Ltd., 19, G. T. Rd., Ghaziabad 201003.

Meghdoot Pistons Pvt. Ltd., 6, Ind. Estate, Agra 282001.

Miniature Bulb Ind., (India) Pvt. Ltd., 131, Kanwali Rd., Dehra Dun 245001.

Reinz Talbros Pvt. Ltd., 19A, Loni Ind. Estate, Ghaziabad 201001.

Summit Inds., Old Garh Rd., Hapur 245101.

West Bengal

A. R. Pvt. Ltd., P-74, Lake Rd., Calcutta 700001.

Autometers Ltd., 6-C, Middleton St., Calcutta 700071.

Bengal Enterprise, 1/4C, Khagendra Chatterjee Rd., Cossipore, Calcutta 700003.

Bharat Automobile Ind., 7, G. Chandra Ave., Calcutta 700013.

Dunçan Bros. & Co. Ltd., 31, N. Subhas Rd., Calcutta 700001.

Fritz & Singh Pvt. Ltd., 227, N. S. C. Bose Rd., Calcutta 700047.

Guest, Keen, Williams Ltd., 3/A, Shakespeare Sarani, Calcutta 700071.

Henry Morgan & Co., Gupta Mansions, 71A, N. Subhas Rd., Calcutta 700001.

Hind Die-Castings Pvt. Ltd., 100/101, Dharamtola Rd., Howrah 711106.

Hindustan Motors Ltd., 9/1, R. N. Mukherjee Rd., Calcutta 700001.

John Fowler (India) Ltd., 136B, R. B. Ave., Calcutta 700029.

Nipha Machinery Manufrs. Pvt. Ltd., 25, N. Subhas Rd., Calcutta 700001.

Orient General Ind. Ltd., 111/1, Barrackpore Trunk Rd., Calcutta 700035.

Sankey Wheels Ltd., 3A, Shakespeare Sarani, Calcutta 700016.

Sen Raleigh Ltd., 1, Middleton St., Calcutta 700071.

Star Sheet Metal Works Pvt. Ltd., 25, Panchanantala Rd., Calcutta 700048.

Tecalemit (Hind) Ltd., Gopalpur-Budge Budge Rd., P. O. Sarkarpool, *Via* Maheshtala 743352. 24-Parganas.

Usha Automobile & Engg. Co. Ltd., 2, Ramgopal Ghosh Rd., Calcutta 700002.

Usha Telehoist Ltd., 14, Princep St., Calcutta 700013.

Veegal Engines & Engg. Ltd., 31, Chittaranjan Ave., Calcutta 700012.

Vijayshree Commercial Pvt. Ltd., 4, India Exchange Place, Calcutta 700001.

AYURVEDIC MEDICINES

Aphali Pharmaceuticals Ltd., 1184/4, Shivajinagar, Pune 411005.

Arya Vaidya Pharmacy (Cbe.) Ltd., 366, Trichy Rd., Coimbatore 641008.

Arya Vaidyashala, Kottakkal 676503. Kerala.

Ayurveda Rasa Shala, Karve Rd., Pune 411004.

D. K. Sandu Bros. (Chembur) Pvt. Ltd., Chembur, Bombay 400071.

Dhootapapeshwar Pvt. Ltd., 135, N. Desai Rd., Bombay 400004.

Herbolab Ayurvedic Research Foundation, Baug-E-Sara, 1st Flr., 16, Nepean Sea Rd., Bombay 400036.

Indian Herbs Research & Supply Company, P.B. No. 5, Sharda Nagar, Saharanpur 247001.

Khunteta Products, Bazaza Bazar, Alwar 301001. (Rajasthan).

Mangalam Pharmaceuticals & Laboratories, Post Box 6407, Coimbatore 641038.

Nipachem Laboratories, 24, Ray St., Calcutta 700020.

Rani Drug House, P.O. Nellayi 680305, Trichur Dist. (Kerala State).

Saugar Ayurvedashram Pharmacy, 304, North Raj Mohalla, Indore 452002.

Shree Niranjan Ayurved Sadan, Bawri Gate, Sikar 332001 (Rajasthan).

Shri Saibaba Chemicals & Pharmaceuticals, 1st Flr., 6, Malharrawadi, Dady Seth Agiary Lane, Bombay 400002.

U.P. Co-op. Federation Ltd., 6, Capper Rd., Lucknow 226001.

Vaidyaratnam Oushadhasala, Thaikkattuseri, Ollur, Trichur 680306.

Zandu Pharmaceutical Works Ltd., Gokhale Rd. South, Bombay 400028.

BADGES & EMBLEMS

Amar Plastic Industries, 43, M. Karve Rd., Bombay 400002.

Excel Process Pvt. Ltd., 117, M. Vasanji Rd., Bombay 400069.

Nufields Gift Advertising, Unit 7, 2nd flr., Vivek Ind. Estate, Mogul Lane, Mahim, Bombay 400016.

BAKELITE, PLASTIC & NYLON MOULDING, ETC.

Gupta Bakelite Factory, 220, Gali Basheshar Nath, Subzi Mandi, Delhi 110007.

Model Inds., 100, G. B. Rd., Goregaon West, Bombay 400062.

N. I. F. Mechanical Works, P. Box 69, Chhapara Rd., Navsari 396445. (Gujarat).

Novelty Plastics, Dayalal Compound, Opp. Petrol Pump, Malad (West), Bombay 400064.

BAKING MACHINERY

Indo-Burma Petroleum Co. Ltd., Gillander House, N. Subhas Rd., Calcutta 700001.

Sembhi Ind., Hoshiarpur Rd., Jullundur City 144001.

Small Machinery Manufg. Co., 22, R. G. Kar Rd., Shambazar, Calcutta 700004.

BALL & ROLLER BEARINGS

(See Bearings — Ball, Bi-Metal, Roller & Needle in this list.)

BALL POINT PENS & REFILLS

(See also Pens — Ball Point)

Balkrishna Pen P. Ltd., Nagardas Rd., Andheri, Bombay 400069.

Easyrite Corporation, 309, Lotus House, 33-A, New Marine Lines, Bombay 400020.

Fleet Fasteners Pvt Ltd., Delstar, 9-9A, S. Patkar Mrg., Bombay 400036.

Jayesh Refill Mfg. Co., Old Nagardas Rd., Andheri East, Bombay 400069.

Joshi Formulabs Pvt. Ltd., 9, Lati Plot, Rajkot 360001.

Kiron & Co., 73/75, Samuel St., Bombay 400002.

Lion Pencils Pvt. Ltd., Parijat, 95, Marine Drive, Bombay 400020.

Motiram Harkrishinlal, 273, Abdul Rehman St., Bombay 400003.

Plastall Plastic Ind., Asian Chemical Compd., Jogeshwari East, Bombay 400060.

Sanghvi Swiss Refills Pvt. Ltd., Nagardas Rd., Andheri East, Bombay 400069.

Watumull Ind. Pvt. Ltd., 9-9A, S. Patkar Mrg., Bombay 400036.

BARBED WIRE

(See Wire Products in this list)

BARGES (STEEL)

West Coast Lighterage Co. Pvt. Ltd., Bajaj Bhavan, Nariman Pt., Bombay 400021.

BARRELS & CASES — WOODEN

Cooper & Sons, D. N., 78/80, Kika St., Gulalwadi, Bombay 400004.

R. K. Enterprises, 16A, Horniman Circle, Bombay 400001.

BARRELS, BUCKETS, DRUMS & STEEL AND TIN CONTAINERS

Andhra Pradesh

Hyderabad Tin Products Ltd., Mushirabad, Hyderabad 500020.

Delhi

Kumar Bros. Sheet Metal Works, Bahadurgarh Rd., Delhi 110006.

Sheet Metal Co. of India, 62, Najafgarh Rd., New Delhi 110015.

Gujarat

Apurva Containers Pvt. Ltd., Navbharat Mills Compound, Naroda Rd., Ahmedabad 380002.

Baroda Containers Pvt. Ltd., Old Padra Rd., Vadodara 390001.

Baroda Tin Works, Apollo House, Pratap Nagar Ind. Estate, Vadodara 390004.

Gujarat Metal Box Co., Opp. Madhusudhan Textiles, Naroda Rakhial X Rd., Ahmedabad 380002.

Crown Containers, 167, G.V.M.M., Indl. Complex, Odhav Rd., Ahmedabad 382410.

Kathiawar Metal Tin Works Ltd., Near Lati Plot, Rajkot 360001.

Karnataka

Metal Box Co. of India Ltd., Jepoo, Mangalore 575001.

Mysore Hollowares Corpn., F-63, Ind. Estate, Rajajinagar, Bangalore 560010.

Kerala

Datta Tin Works Pvt. Ltd., Srikandath Rd., Ernakulam, Cochin 682016.

Madhya Pradesh

Hindustan Drum and Barrel Mfg. Co., 2D, Sawers Rd., Ind. Estate, Indore 452003.

Maharashtra

ABCD Drums & Barrels Inds., Bengali House, Kamatipura 5th Lane, Bombay 400008.

Agarwal Containers Pvt. Ltd., 799/5, Bhavanipeth, Pune 411002.

Asnew Drums Pvt. Ltd., Nagindas Chambers, P. D'Mello Rd., Bombay 400001.

Barrel Supply Co., 180, Seth Motishah Lane, Opp. Police Stn., Byculla, Bombay 400027.

Bharat Barrel & Drum Manufg. Co. Pvt. Ltd., Fergusson Rd., Bombay 400013.

Bharat Bucket Factory, 153/55/77, Upper Duncan Rd., Bombay 400008.

Bharat Tank & Steel Co., Podar Chambers, Parsee Bazar St., Bombay 400001.

Bhoruka Drum & Allied Ind. Pvt. Ltd., 11-B, Wagle Estate, Thane 400604.

Bombay Drums Manufrs., Safia Manzil, 24, Calicut St., Bombay 400001.

Can Manufg. Co. Pvt. Ltd., Plot No. 16, Ind. Estate, Kandivli, Bombay 400067.

Diamond Drum & Bucket Factory, 168, Parshuram Puppala Mrg., Two Tanks, Bombay 400008.

Dimple Drums & Barrels Pvt. Ltd., Sita Nivas, Dr. Charatsingh Colony, Andheri-Kurla Rd., Bombay 400093.

Eastern Drum & Bucket Factory, Bengali House, 5th Lane, Kamathipura, Bombay 400026.

Hindustan Sheet Metal Works, 1076, Dr. E. Moses Rd., Worli, Bombay 400018.

Hydro (Engg.) Ltd., 19, Matharpacady Rd., Bombay 400010.

Indian Metal Can Manufrs. Pvt. Ltd., R. S. Nimbkar Marg, Bombay 400008.

Jetha Drums & Containers Pvt. Ltd., Opp. Byculla Goods Depot, Bombay 400027.

K. T. Kubal & Co. Pvt. Ltd., 40, R. S. Nimbkar Marg, Bombay 400008.

Keena Barrels Manufg. Co. Pvt. Ltd., 92, Raviwar Peth, Pune 411002.

Polypack Pvt. Ltd., 353, A-Z, Indl. Estate, Fergusson Rd., Lower Parel, Bombay 400013.

Poysha Ind. Co. Ltd., Messant Rd., Bombay 400033.

Raj Bucket Factory, 58B, M. Azad Rd., Rangwala Compound, Bombay 400011.

Saifee Bucket Factory Pvt. Ltd., 37, Sankli St., Bombay 400008.

Steel Containers Ltd., 149, Jackeria Bazar Rd., Bombay 400015.

Super Tin Containers Pvt. Ltd., D-7, Udyog Sadan II, Central Rd., Andheri East, Bombay 400093.

Tayabi Bucket Factory, 174/178, Janjikar St., Bombay 400003.

Union Steel Ind., Hadapsar Ind. Estate, Pune 411013.

Universal Containers Pvt. Ltd., Nafees Chambers, Quay St., Darukhana, Bombay 400010.

Punjab

Aminchand Bholanath, Tanda Rd., Jullundur 144001.

Watkins Mayor & Co., Empress Garden Rd., Jullundur 144001.

Tamil Nadu

Can Manufg. Co., 295, T.H. Rd., Madras 600021.

Chitram & Co. Pvt. Ltd., Royapuram, Madras 600013.

Drums & Barrels (Madras) Pvt. Ltd., 66, Santhome High Rd., Madras 600028.

Gopal Engg. Works, 88/89, Suryanarayana Chetty St., Royapuram, Madras 600013.

Madras Metal Can Manufrs., C-21-A, Ind. Estate, Madras 600058.

Uttar Pradesh

Metal Press Works Ltd., Freeganj, Agra 282004.

West Bengal

Agarwal Hardware Ind., 24, Old China Bazar St., Calcutta 700001.

Bengal Bucket & Engg. Works, 143/1/1, Cotton St., Calcutta 700007.

Bengal Ind., 23A, N. Subhas Rd., Calcutta 700001.

Bhalotia Metal Mfg. Co., 2, D. Jain Temple Rd., Calcutta 700007.

Bharat Barrel & Drum Manufg. Co., 2, Garstin Place, Calcutta 700001.

Bharat Steel Metal Ind. Ltd., 14/2, Old China Bazar St., Calcutta 700001.

Calcutta Iron & Engg. Co. Pvt. Ltd., 109A/A, B.R.B. B. Rd., Calcutta 700001.

Containers & Closures Ltd., 19, N.S. Rd., Calcutta 700001.

Containers (India) Ltd., 18, C.C. Ghosh Rd., Belgachia, Calcutta 700037.

Dhur Galvanizing Works (1955) Pvt. Ltd., 92, Ultadanga Main Rd., Calcutta 700004.

East India Metal Co. Pvt. Ltd., 41/1B, R. K. Bose St., Calcutta 700003.

Economic Tanks Supply Co., 100, M. Gandhi Rd., Calcutta 700007.

Goodman & Co. (India) Pvt. Ltd., 38, N. Subhas Rd., Calcutta 700001.

Hind Galvanising & Engg. Co. Pvt. Ltd., 96, Garden Reach Rd., Calcutta 700023.

Industrial Containers Pvt. Ltd., P4/1, Oil Installation Rd., Calcutta 700013.

Kamala Sheet Metal Ind. Pvt. Ltd., 98 & 99, Beliaghata Main Rd., Calcutta 700010.

Laxmi Trdg. Co., 192, J. Bajaj St., Calcutta 700007.

M. L. Day & Co., 36, G. C. Ave., Calcutta 700013.

Metal Press Works Ltd., 165, L. Chitpur Rd., Calcutta 700001.

Roy-Singha Engg. Works, 639, Diamond Harbour Rd., Behala, Calcutta 700034.

Simplex Engg. & Foundry Works, 3A, Garstin Place, Calcutta 700001.

BATTERIES — DRY CELL

Amco Batteries Ltd., Unity Bldgs., Narasimharaja Square, Bangalore 560002.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

Estrella Batteries Ltd., Plot No. 1, Dharavi Rd., Matunga, Bombay 400019.

Flash Lights India Pvt. Ltd., 135, Princep St., Calcutta 700001.

Geep Flashlight Ind. Ltd., 28, South Rd., Allahabad 211001.

Graphite India Ltd., 31, J. L. Nehru Rd., Calcutta 700016.

Havero Inds. Ltd., Indl. Est., Lalbaug, Bombay 400012.

Indo National Ltd., Lakshmi Bhavan, 609, Mount Rd., Madras 600006.

J. K. Batteries, 1-A, Indl. Area, Govindpura, Bhopal 462023.

National Carbon Co., 5, Rustomji Parsi Rd., Calcutta 700002.

Toshiba Anand Batteries Ltd., XXXI/1089, M. G. Rd., Cochin 682011.

Union Carbide India Ltd., 1-3, Brabourne Rd., Calcutta 700001.

BATTERIES — STORAGE

Andhra Pradesh

Auto Globe Batteries, Old Malkapet, Hyderabad 500001.

Bihar

Bihar Storage Battery Co., Station Rd., Ranchi 834001.

Hindustan Batteries, Purulia Rd., Kantatoli Chowk, Ranchi 834001.

Unique Battery Manufg., Naya Bazar, Dhanbad 826001.

Delhi

Acme Batteries Pvt. Ltd., Grand Trunk Rd., Delhi 110032.

Battery Separators Pvt. Ltd., 1671, Kashmere Gate, Delhi 110006.

Gambhir Battery Co., 9, Gokhale Market, New Delhi 110006.

Globe Engg. Corpn., 2547, Rajguru Rd., Pahar Ganj, New Delhi 110055.

India Battery Separators Co., Pataudi House, New Delhi 110002.

Leela Separators Pvt. Ltd., 153, Ind. Estate, New Delhi 110020.

Sahni Bros. (India), H/34, Connaught Circus, New Delhi 110001.

Spartan Batteries, 1651, S. P. Mukherji Marg, Delhi 110006.

Super Batteries, 2291/16, Arya Samaj Rd., Karol Bagh, New Delhi 110005.

Suprem Auto Works, B/93, Okhla Indl. Est., Phase II, New Delhi 110020.

Willard India Ltd., Sheetla House, 73-74, Nehru Place, New Delhi 110019.

Gujarat

Abdul Samad Abdul Kader & Co., Kalupur, Ahmedabad 380001.

Autobat Batteries Pvt. Ltd., Ratan Talao, Nadiad 387001.

Bansi Ind. Corpn., Raghunathpura, Surat 395001.

Everest Ind. Corpn. Pvt. Ltd., Pratapnagar, Vadodara 390001.

Jyoti Ltd., Chemical Ind. P.O., Vadodara 390004.

Navinchandra Engg. Works, 44, Bharatkhand Cotton Mills Comp., Naroda Rd., Ahmedabad 380009.

Karnataka

Amco Batteries Ltd., Unity Bldgs., Narasimharaja Sq., Bangalore 560002.

Mysore Electro Chemical Works Ltd., P. Box 1022, Bangalore 560003.

Madhya Pradesh

Apollo Batteries, Punjab Tyresole Bldg., K. K. Rd., Raipur 492001.

J. K. Batteries, 1-4, Indl. Area, Govindpura, Bhopal 462023.

Park Batteries, 36, A. B. Rd., Biaora, Rajgarh 465661.

Maharashtra

Acme Batteries Ltd., 16B, Gokhale St., Bombay 400004.

Bower Battery Manufg. Co. Pvt. Ltd., 54, S. Vivekanand Rd., Goregaon, Bombay 400062.

Estrella Batteries Ltd., Plot No. 1, Dharavi Rd., Matunga, Bombay 400019.

Excel Battery Inds., 202, Shilay Estate, 8, Udyog Nagar, S. V. Rd., Goregaon West, Bombay 400062.

Himco India Pvt. Ltd., 542, Sandhurst Bridge, Bombay 400007.

Holmes Laboratory, Forjett Hill, Bombay 400036.

Lucas Indian Service Pvt. Ltd., Electric Mansion, A. Marathe Mrg., Prabhadevi, Bombay 400025.

Premier Auto Electric Pvt. Ltd., 69, Tardeo Rd., Bombay 400034.

Regal Battery Corpn., 48/A, Saki Naka, Off Saki Vihar Rd., Bombay 400072.

Rita Battery Manufg. Co., Deccan Gym., Pune 411004.

Ruby Battery Corpn. Pvt. Ltd., 31, French Rd., Chowpatty, Bombay 400007.

Sethi Batteries, Gaddigudam, Nagpur 490001.

Silver Batteries, 2, Annesley Rd., Bombay 400007.

Standard Batteries Ltd., Vakola, Santa Cruz East, Bombay 400055.

Super Power Batteries India Pvt. Ltd., Krishna Nivas, M. Parmanand Mrg., Bombay 400004.

Winner Batteries, 7, Udyog Nagar, S. Vivekanand Rd., Goregaon West, Bombay 400062.

Orissa

Orissa Battery Inds., Indl. Estate, Rourkela 769001.

Spark Battery Manufg. Co. Ltd., Ind. Estate, Cuttack 753001.

Tamil Nadu

Ennor Batteries Pvt. Ltd., 5, Greames Rd., Madras 600006.

J. C. Batteries, 155, East Veli St., Madurai 625001.

Standard Batteries Ltd., Oldham Divn., Post Box No. 2635, Madras 600032.

Tamil Nadu Alkaline Batteries Ltd., 3-A, Sterling Rd., Numgambakkam, Madras 600034.

Toshiba Anand Batteries Ltd., 26, Errabalu Chetty St., Madras 600001.

Uttar Pradesh

Geep Flashlight Inds. Ltd., 28, South Rd., Allahabad 211001.

King Battery Works, 119, Grand Trunk Rd., Kanpur 208012.

Willard India Ltd., Sikandrabad Ind. Estate, Sikandrabad 203205, Bulandshahr Dist.

West Bengal

Accurate Power Ind., 3/1A, Barrackpore Trunk Rd., Calcutta 700002.

Battery Manufg. Cartel, 468, Calcutta Jessore Rd., Calcutta 700028.

Bharat Battery Manufg. Co. Pvt. Ltd., 238A, Acharya J. C. Bose Rd., Calcutta 700020.

Calcutta Storage Battery Co. Pvt. Ltd., 42, G. C. Ave., Calcutta 700013.

Chloride India Ltd., 59E, Chowringhee Rd., Calcutta 700020.

Desapriya Auto Works, 115, Bidhan Sarani, Calcutta 700004.

Eastern Battery Ind., 1-B, Paul St., Calcutta 700004.

Electrical Storage Battery Manufg. Co., P. 4, P. C. Nahar Ave., Calcutta 700013.

Free India Dry Accumulators Ltd., 36, Chowringhee Rd., Calcutta 700016.

Oriental Battery Manufg. Co., Grand Trunk Rd., South Howrah 711101.

P. Kishore & Co., 96-A, Chittaranjan Ave., Calcutta 700012.

Sun Battery Co. Pvt. Ltd., 166, U. C. Bannerji Rd., Calcutta 700001.

Supreme Battery Manufg. Co. Pvt. Ltd., M. Ganguly Rd., Calcutta 700002.

Tigon Battery Products, 14, G. C. Mukerjee Rd., Calcutta 700002.

BATTERY CHARGERS & ELIMINATORS

Andhra Pradesh

Kwick Sales, 3-6-369/A9, Rd. No. 1, Himayatnagar, Hyderabad 500029.

Delhi

Bandlish Bros., 53, Panchkuin Rd., New Delhi 110001.

Emgee Corpn., 1543, Bhagirath Place, Chandni Chowk, Delhi 110006.

Intercontinental Agencies Pvt. Ltd., Atma Ram Singh Mansion, 1/21, A. Ali Rd., New Delhi 110002.

Kandhari Radio Corpn., B-103, Naraina Indl. Area, Phase 1, New Delhi 110028.

Modern Trading Co. (Delhi) Pvt. Ltd., Bush House, XI/3833, Pataudi House Rd., Delhi 110006.

Sham Ravindra & Co., 23, New Qutab Rd., Delhi 110006.

Gujarat

Continental Electronics, 177/4, Naroda Indl. Estate, Naroda 382330. (Ahmedabad Dist.).

Karnataka

Electric Power Devices Co., Canara Mutual Bldg., 4, Residency Rd., Bangalore 560025.

Mysore Thermo Electric Pvt. Ltd., 36, Peenya Ind. Area, 3rd Phase, Peenya, Bangalore 562140.

Maharashtra

Asian Traders, 60-A, Girgaum Rd., Bombay 400004.

Chhabi Electricals, 20, Anupam Indl. Est., Bombay 400080.

General Auto Electric Corpn., Dr. Bhadkamkar Mrg., Near Minerva Talkies, Bombay 400007.

Semiconductors Ltd., Radia House, Rampart Row, Bombay 400023.

Star Delta Electricals, Bharat Coal Compound, Bail Bazar, Bombay 400070.

Universal Industrial Products, A-27, Block B, Ghatkopar Indl. Estate, Bombay 400086.

Tamil Nadu

Associated Engineers, Post Box 373, Madras 600002.

G. Janshi & Co., 2/163, Mount Rd., Madras 600002.

Uttar Pradesh

Upton Shreetronix Ltd., 46, Rajinder Nagar Indl. Estate, P.O. Mohan Nagar 201007. Ghaziabad Dist.

West Bengal

Metro Ind. Works, 94, B. Ghose Rd., Calcutta 700040.

Summit Pvt. Ltd., 3, Esplanade East, Calcutta 700069.

BEARINGS — BALL, BI-METAL, ROLLER & NEEDLE

Andhra Pradesh

Indo-Nippon Precision Bearings Ltd., Moula Ali, Hyderabad 500040.

Delhi

Hind Electronic Ind., 69, Najafgarh Rd., New Delhi 110015.

Gujarat

Accurate Engg. Co., Junagadh 362001.

Precision Bearings India Ltd., Maneja, Vadodara 391710.

Suessen Textile Bearings Ltd., Near Makarpura, Vadodara 391710.

Karnataka

Premier Bearing Co., M.S.R. Prasad Ind. Estate, Bangalore 560054.

Rollon Bearings Pvt. Ltd., 17/1A, Asker Cross Rd., Bangalore 560052.

Maharashtra

Amber Bearing Mfg. Co. Pvt. Ltd., G-3, MIDC Hingna Ind. Area, Hingna Rd., Nagpur 440016.

Antifriction Bearings Corpn. Ltd., 402-B, Poonam Chambers, A. Besant Rd., Bombay 400018.

Associated Bearing Co. Ltd.. Chinchwad, Pune 411033.

Bearings & Bushings Corpn., 10, Anupum Ind. Estate No. 3, Opp. Ralliwolf Ltd., Mulund, Bombay 400080.

Gleitlager (India) Pvt. Ltd., Manu Mansion, 16, Bhagat Singh House Rd., Bombay 400023.

J. Mangsun & Co., Plot No. A-483, Rd. No. 24, Wagle Indl. Estate, Thane 400604.

KC Bearings Pvt. Ltd., 4, Kirti Kunj, 14th Rd., Khar, Bombay 400052.

Needle Roller Bearing Co. Ltd., 2nd Pokhran Rd., Thane 400606.

New Era Bearing Industries, B-25, Hingne Indl. Estate, Nagpur 440016.

New Haven Steel Ball Corpn. Pvt. Ltd., 309, P. D'Mello Rd., Bombay 400001.

Precision Bearings (I) Ltd., Jolly Maker Chambers 1, 8th Flr., 227, Backbay Rec., N. Point, Bombay 400021.

Safe Ball Bearing Corpn., Nagdevi Cross Lane, Bombay 400003.

Skefko India Bearing Co. Ltd., M. Gandhi Memorial Bldg., N. Subhas Rd., Bombay 400002.

Unimac Auto Pvt. Ltd., 511, Prasad Chambers, Tata Rd. No. 2, Bombay 400004.

Union Bearing Mfg. Co., 511, Prasad Chambers, Tata Rd. No. 2, Bombay 400004.

Universal Bearings Co. Pvt. Ltd., 11, Temple View, Hughes Rd., Bombay 400007.

Rajasthan

National Engineering Ind. Ltd., Jaipur 302001.

Tamil Nadu

Asian Bearings Ltd., 14, Peter's Rd., Royapettah, Madras 600014.

Bimetal Bearings Ltd., Coimbatore 641018.

Upper India Bearings Pvt. Ltd., A-23, Ind. Estate, Madras 600032.

West Bengal

Ambica Mill Stores, 138, B.R.B.B., Calcutta 700001.

General Bearing and Engg. Co., 138, B. R. B. B. Rd., Calcutta 700001.

SKF Ball Bearing Co. Ltd., 11, R. N. Mukherjee Rd., Calcutta 700001.

Shriram Bearings Ltd., 3A, Shakespeare Sarani, Calcutta 700016.

BELTINGS, HAIR, V-BELTS ETC.

Ajanta Rubbers, Uchani, G. T. Rd., Karnal 132001. (Haryana).

Andrew Yule & Co. Ltd., Belting Dn., Yule House, 8, Clive Row, Calcutta 700001.

Asia Belting & Spg. Mills Ltd., 91, Netaji Subhas Rd., Calcutta 700001.

Bengal Belting Works Ltd., 2, Dalhousie Square East, Calcutta 700001.

Birkmyre Brothers Pvt. Ltd., 87, Stephen House, Calcutta 700001.

Eastern Belting & Cotton Mills Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

Express Industrial Services Pvt. Ltd., Union Bank Bldg., Dalal St., Bombay 400023.

Falcon Tyres Ltd., 5, Crescent Rd., High Grounds, Bangalore 560001.

Fenner India Ltd., Pandyan Bldgs., West Veli St., Madurai 625001.

Gordon Woodroffe (Belting) Pvt. Ltd., 36, Rajaji Salai, Madras 600001.

Hilton Rubbers Pvt. Ltd., 209, Ansal Bhavan, K. Gandhi Mrg., New Delhi 110001.

Himalaya Rubber Products Ltd., 18-B, Brabourne Rd., Calcutta 700001.

Industrial Equipment Syndicate, 15, Nand Deep Indl. Estate, Kondivita Rd., J. B. Nagar, Bombay 400059.

K. K. Rubber Co. (India) Pvt. Ltd., A-3/15, Asaf Ali Rd., New Delhi 110002.

Leather Goods Depot, 94, Jolly Maker Chambers No. 2, N. Point, Bombay 400021.

Lewis & Taylor Pvt. Ltd., Commerce House, Currimbhoy Rd., B. Estate, Bombay 400038.

Mercury Rubber Mills, 2/7, D. B. Gupta Rd., New Delh. 110055.

Murarka Pvt. Ltd., Capital Commercial Centre, Ashram Rd., Ahmedabad 380009.

Nimish Trading Co., Post Box 1354, Bombay 400038.

Nirlon Synthetic Fibres & Chemicals Ltd., Belting Dn., 254B, Dr. A. Besant Rd., Worli, Bombay 400025.

Northland Rubber Mills, 48, G. B. Rd., Delhi 110006.

Pondy Rubber Products, A-12, Mettupalayam Ind. Estate, Pondicherry 605001.

Rostron & Co. Pvt. Ltd., 10, Govt. Place East, Calcutta 700001.

Samsons Rubber Inds. Pvt. Ltd., Plot 3, Sidco Ind. Estate, Madras 600098.

Serampore Belting Works Pvt. Ltd., Serampore 712201. Hooghly Dist.

Super Rubber Enterprises (Regd.), 71/3, Mile Stone, G. T. Rd., Karnal 132001. (Haryana).

Vikram Belts Ltd., 12-G, Shanti Kunj, Opp. G.P.O., Pune 411001.

Vipul Inds., Todi Estate, Sun Mills Compd., Lower Parel, Bombay 400013.

Yenpeyess Rubber Pvt. Ltd., 52, Mundaga Nadar St., Sivakasi 623123.

BICYCLES & ACCESSORIES

Assam

Everest Cycles Ltd., Gopinath Nahar, Gauhati 781001.

Delhi

A. K. Cycle Ind., Dilshad Garden, Delhi 110032.
H. R. Bhalla & Sons Pvt. Ltd., 3, Faiz Bazar, Delhi 110002.
Hitkari Bros. of Delhi, 9, Faiz Bazar, Delhi 110002.
Imperial Technical Works, K78 Hauz Khas, Delhi 110016.
Indian Cycle & Wire Inds., 30, DLF Indl. Area, New Delhi 110015.
Matchless Ind. of India, 236, DLF Indl. Area, New Delhi 110015.
New Era Engg. Co., 26. D.L.F. Ind. Colony, New Delhi 110015.
Raj Cycle Works, F-1, M. Town, New Delhi 110009.
Road King Cycle Co., A-100, Cycle Market, Jhandewalan, New Delhi 110055.
Road King Cycle Ind., 16/194, Faiz Rd., Delhi 110005.
Uttam Cycle Works, 408, R. C. Dehlvi Marg, Delhi 110006.
Zenith Cycle Ind., 9, N. S. Marg, New Delhi 110002.

Haryana

Atlas Cycle Ind. Ltd., Sonepat 131001.
Wearwell Cycle Co. (I) Ltd., Faridabad 121001.

Kerala

Bharat Cycle Ind., Vadakevilla, Quillon 691001.

Madhya Pradesh

Central Cycle Ind., Bhagirathpura, Indore 452001.

Maharashtra

Auto Accessories (I) Ltd., Old Kurla, Bombay 400070.
Bombay Cycle Mfg. Co., 3-B, Udyog Nagar, S. V. Rd., Goregaon (West), Bombay 400062.
Hamilton Industries Pvt. Ltd., Tulsipipe Line Rd., off Haines Rd., Bombay 400013.
Matchless Automobile & Engg. Inds., 42, Benham Hall Lane, Bombay 400004.
National Bicycle Corpn. of India Ltd., 250, Worli, Bombay 400025.
Numex Engrs., Commerce House, N. Master Rd., Bombay 400001.
Transmissions Pvt. Ltd., India House, Opp. G.P.O., Bombay 400001.

Pondicherry

Hema Cycles & Gen. Inds., C-15, Mettupalayam Ind. Estate, Pondicherry 605001.

Punjab

Aero Engg. Works, Gill Rd., Ludhiana 141003.
Anand Cycle Ind., 688, Indl. Area 'B', Ludhiana 141003.
Auto Wheel Ind., 137-C, Indl. Est., Ludhiana 141003.
Avon Cycles Ltd., Ind. Area, Ludhiana 141003.
Bicycle Mfg. Co.-op. Ind. Society Ltd., Ludhiana 141001.
Birdi Cycle Ind., 565, Ind. Area ' B ', Ludhiana 141003.
Chhada Sethi Inds., 103, B. Indl. Est., Ludhiana 141003.
Chawla Cycle Ind., Railway Rd., Jullundur 144001.
Dhingra Cycle Ind., Nirmal Mkt., Gill Rd., Ludhiana 141003.
Guru Nanak Engg. Works, Partap Nagar, Ludhiana 141003.
Hero Cycles, Hero Nagar, G.T. Rd., Ludhiana 141003.
Kapson Ind., Partap Nagar, St. 6, Ludhiana 141003.
Kashmir Cycle Ind., 742, Muradpura, Millerganj, Ludhiana 141003.
Masco Cycle Ind., 743, Ind. Area 'B', Ludhiana 141003.
Metro Cycle of India, 503, Ind. Area 'D', Ludhiana 141003.
Navyug Bicycle Ind., 52/53-R, Ind. Area 'B', Ludhiana 141003.
Newage Cycle Ind., 657, Vishwakarma St., Ludhiana 141003.
P. K. Chopra Ind., 688, Ind. Area 'B', Ludhiana 141003.
Punjab Cycle Parts Mfg. Co., G.T. Rd., Millerganj, Ludhiana 141003.
Ralson Cycles Pvt. Ltd., Ralson Nagar, G.T. Rd., Ludhiana 141003.
Roadmaster Ind. of India Ltd., Ind. Area, Rajpura 140401.
Rockman Cycle Ind., 930, Ind. Area 'B', Ludhiana 141003.
Rolex Cycle Ind., 726, Ind. Area 'B', Ludhiana 141003.
Shaktiman Cycle Ind., Vishwakarma St. 1, Ludhiana 141003.
Sunflower Cycles Pvt. Ltd., Ind. Area 'B', Ludhiana 141003.
Super Cycle & Allied Ind., 3, Gill Rd., Ludhiana 141001.
Surpal Inds., D-18, Focal Pt., Ludhiana 141001.
Trueline (I) Ind., 724, Ind. Area 'D', Ludhiana 141003.
Vespa Cycle Ind., 49-R, Ind. Area 'B'. Ludhiana 141003.

Rajasthan

Elite Engg. Works, Jodhpur 342001.

Tamil Nadu

Govt. Cycle Assembly Unit, Thanjavoor 613001.
T. I. Cycles of India Ltd., Ambattur, Madras 600018.
T. I. Diamond Chains Ltd., Avadi, Madras 600053.
Wheels & Rim Co. of India Ltd., Sembiam, Madras 600011.
Wright Saddles of India, 11/12, N. Beach Rd., Madras 600001.

Uttar Pradesh

Hind Cycles Ltd., Hind Nagar, Ghaziabad 201003.
Popular Cycle Manufg. Co. Pvt. Ltd., Bodla, Agra 282001.
Prakash Engg. Co., Aishbagh, Lucknow 226001.
Rampur Engg. Co. Ltd., Rampur 244901.
Saibra Engg. Works, Aish Bagh Rd., Lucknow 226004.
United Manufg. Co., 20E, Indl. Est., Naini, Allahabad 211008.
Wheel Inds. of India, Bonja Patel Marg, Ghaziabad 201003.

West Bengal

Ancillary Inds. Forging Pvt. Ltd., Block D, Indl. Est., Kalyani 741235.
B. S. Cycle Ind., K. Bhattacharjee Lane, Santragachi, Howrah 711104.
Euresian Equipments & Chemicals Ltd., 7, K. Tagore St., Calcutta 700007.
Indo-Japanese Inds. Ltd., 14, Canal St., Calcutta 700014.
Nundy & Co., P62A, Bentinck St., Calcutta 700001.
Sen-Raleigh Ind. of India Ltd., Mercantile Bldg., Lallbazar St., Calcutta 700001.

BIDIS

Andhra Pradesh

Engine Mark Bidi Factory, Sitaphal Mandi, Hyderabad 500001.
Kohinoor & Dunia Beedi Factory, R. N. Road, Hyderabad 500002.

Gujarat

Asal Phul Chhap Bidi Factory, Santh Pilli, Nadiad 384001.

Gordhandas Bidi Factory, Station Rd., Vadodara 390001.

Karim Bidi Factory, Little Gate, Ahmedabad 380001.

Karnataka

Malabar Krishna Beedi Factory, Tumkur 572101.

Mangalore Ganesh Beedi Works, Hampankatta, Mangalore 575001.

Prakash Beedi Works, Car St., Mangalore 575001.

P. V. S. Beedi Ltd., Kodialbail, Mangalore 575003.

Kerala

Cannanore Beedi Workers Ind. Co-op. Society Ltd., Madan Bldg., Gopal St., Cannanore 670001.

Kerala Beedi Factory, Chalakudy 680307.

Mangalore Ganesh Beedi Works, Kakkat, Cannanore 670001.

M. S. Photo Beedi Co., Ollur 680306. Trichur Dist.

P. V. S. Beedies Ltd., Cannanore 670001.

Ring Mark Beedi Co., Main Rd., Ottapalam 679101.

Union Beedi Factory, Manarghat 678582. Palghat Dist.

Madhya Pradesh

Badshahi Bidi Works, Modai Bhata, M. Gandhi Rd., Raipur 492001.

Prabhulal Patiram & Co., Bidi Factory, Gole Bazar, Raipur 492001.

Tulsibhai Govardhanbhai Beedi Factory, Rewa 486001.

Maharashtra

Bhikusa Yamuna Kshatriya Pvt. Ltd., 42, Guruwar Peth, Pune 411002.

Camel Brand Bidi Factory, No. 1560, Sinnar, Nasik 422001.

Chandratara Bidi Works, 7/3, Bhudhwar, Solapur 413001.

Cock Brand Bidi Factory, 5160/61, Mangalwar Peth, Ahmadnagar 414001.

Jaiprakash Sudhir Pvt. Ltd., Bidi Factory, 3166, Bhagwanpura, Nasik 422001.

Patel Bidi Works, 6-A, Bhawanipeth, Solapur 413001.

Pioneer Industrial Tobacco Works, 153, Imamwada, Bombay 400009.

Sinnar Bidi Udyog Ltd., Congress House, M. Gandhi Rd., Nasik 422002.

Thakur Savadekar & Co. Pvt. Ltd., 377, Guruwar Peth, Pune 411002.

Orissa

Hindustan Bidi Works, Nayapara, Sambalpur 768001.

BISCUIT MAKING PLANTS

Autobisk Plants Co., East Cross 32, Asoka Rd., Mysore 570001.

Industrial Engg. Products, 38, Police Court Lane, Bombay 400001.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Sembhi Industries (Regd.), 117, Aman Nagar, Jullundur 144004 (Punjab).

BISCUITS & CONFECTIONERY

Andhra Pradesh

Ampro Food Products, 15-4-188, Osmanshahi Rd., Hyderabad 500012.

Asoka Biscuit Works, 2-3-745, Amberpet, Hyderabad 500013.

Interfood Pvt. Ltd., B-4, Indl. Area, Uppal, Hyderabad 500039.

Real Food Products, 18-2-45, Chandrayungutta, Hyderabad 500005.

J. B. Mangharam & Co., Tank Bund, Hyderabad 500029.

Shalimar Biscuits Pvt. Ltd., Indl. Est., Hyderabad 500039.

Bihar

Lucky Biscuit Co., Hajiganj, Patna 800008.

Delhi

Britannia Industries Ltd., 33, Rampura Marg, Delhi 110035.

Dalima Biscuits Ltd., 10, Daryaganj, New Delhi 110002.

Karnataka

A. C. Gangaram & Co., East Cross 32, Asoka Rd., Mysore 570001.

Azad Ind., Azad House, Jeppu, Mangalore 575001.

Krisp Biscuit Co., 109, Panthrapalya, Mysore Rd., Bangalore 560039.

Kwality Food Products, Mysore Rd., Bangalore 560039.

Mangharam & Sons, Tumkur Rd., Bangalore 560022.

Marvel Products, 115/34, 1st Flr., 8th Cross, Wilson Gardens, Bangalore 560027.

National Products, 135, Kaval Byrasandra, Bangalore 560006.

Kerala

Pearl Food Products, Chandiroor, Alleppey 688547.

Madhya Pradesh

Arya Confectionery Works, 111, Ind. Estate, Indore 452003.

J. B. Mangharam & Co. Pvt. Ltd., P.O. Residency, Gwalior 474005.

Nandanvan Mfrs. & Traders Pvt. Ltd., Gwalior 474004.

V. G. Confectionery & Biscuit Factory, 88, Indl. Est., Indore 452003.

Maharashtra

B. N. Biscuit & Confectionery Works, Hathibaugh, Love Lane, Mazagon, Bombay 400010.

Britannia Industries Ltd., Reay Rd. East, Mazgaon, Bombay 400010.

Hindustan Biscuit & Confectionery Works, Pipe Rd., Bombay 400070.

Huns Dewan & Co., 158, M. Azad Rd., Bombay 400008.

Parle Products Mfg. Co. Pvt. Ltd., Belvandi House, Dr. A. Besant Rd., Bombay 400025.

Renown Biscuit Co., Connaught Rd., Byculla, Bombay 400027.

Sathe Biscuit & Chocolate Co. Ltd., 820, Bhawani Peth, Pune 411002.

Shangrila Food Products Ltd., 60, Great Social Bldg., Sir P. Mehta Rd., Bombay 400001.

Pondicherry

Aurofood Pvt. Ltd., P.O. Auroville 605101.

Punjab

Rieta Biscuit Co. Pvt. Ltd., Factory Area, Patiala 147001.

Tamil Nadu

Britannia Industries Ltd., M.T.H. Rd., Padi, Madras 600050.

Dollar Food Corpn., 42, Mount Rd., Guindy, Madras 600032.

Neltas Confectionery Works, 32, N.S.B. Rd., Trichy 620002.

Uttar Pradesh

Annapurna Biscuit Manufg. Co., 84/67, G. Trunk Rd., Kanpur 208003.

Kaka Biscuits Manufg. Co., 108/131, Sisamau Bazar, Kanpur 208012.

Lawrie Biscuits, 4, Lalbaug, Lucknow 226001.

Sind Biscuits Manufg. Co., 104/A/333, Ram Bagh, Kanpur 208012.

West Bengal

Britannia Industries Ltd., 15, Taratola Rd., Alipore, Calcutta 700053.

Kolay Biscuit Co. Pvt. Ltd., Kabi Sukanta Sarani, Calcutta 700010.

Kusum Products Ltd., Bombay Mutual Bldg., 9, Biplabi Trailakya Maharaj Sarani, Calcutta 700001.

Lily Biscuit Co. Pvt. Ltd., 3, R K. Sen Lane, Calcutta 700004.

Santosh Biscuit Co. Pvt. Ltd., 179A, Manicktola Main Rd., Calcutta 700054.

BITUMEN

Petroleum Instruments Corpn., Room 4A, 5th Flr., 2, G. C. Ave., Calcutta 700013.

Southern Organo Products Pvt. Ltd., 27, Pulla Ave., Shenoynagar, Madras 600030.

BLADES—HACKSAW & HANDSAW

Crescent Iron & Steel Corpn. Ltd., Industrial Estate, Lalbaug, Bombay 400012.

Eastern Steel Industries, 21-B, Noble Chambers, S. A. Brelvi St., Bombay 400001.

Hada Steel Products Ltd., Sector 15-A/3, Faridabad 121001.

Harbanslal Malhotra & Sons Pvt. Ltd., 12, New C.I.T. Rd., Calcutta 700012.

Indo Hacks Ltd., ' Sai Krupa ', B-4, IDA, Phase I, Pattancheruvu 502319. (Medak Dist.), A.P.

Laldee Pvt. Ltd., Vijay Press Bldg., Naya Bazar, Delhi 110006.

Macditex Engg. Products, Behind Ajit Mills, Rakhial Rd., Ahmedabad 380023.

Maharashtra Commodity Trdg. Co. Pvt. Ltd., 159, Churchgate Reclm., Bombay 400020.

P. U. Coatings, 11, Bank St., Bombay 400023.

S. S. Miranda Pvt. Ltd., Ashoknagar, Kandivli, Bombay 400067.

Technis Inds., 20-A, Noble Chambers, S. A. Brelvi St., Bombay 400001.

Zenith Engrs., 1/18V, Asaf Ali Rd., New Delhi 110002.

BLADES —SAFETY

Centron Industrial Alliance Pvt. Ltd., Ind. Assurance Bldg., Opp. Churchgate Station, Bombay 400020.

Edalji Kerawalla & Co., Baria Bldg., Opp. Crawford Market, Bombay 400003.

Escorts Ltd., Pratap Bldg., Connaught Place, New Delhi 110001.

Harbanslal Malhotra & Sons Pvt. Ltd., New C.I.T. Rd., Calcutta 700012.

Hind Razor & Blade Co. Ltd., Ind. Assurance Bldg., Churchgate, Bombay 400020.

Indo-Swing Private Ltd., Narasapur Rd., Balanagar, Hyderabad 500037.

National Razors & Blades Ltd., 4, Dalhousie Sq. East, Calcutta 700001.

Sharpedge Ltd., 34, Okhla Ind. Estate, New Delhi 110020.

Spencer & Co. Ltd., Mount Rd., Madras 600002.

BLADES—SHEARS, KNIVES

Bashimal Vinod Kumar, 132-134, Pradhan Bldg., Sardar V.P. Rd., Dongri, Bombay 400009.

Bombay Alloy Steel Ind. Pvt. Ltd., 87, Nagdevi Cross Lane, Bombay 400003.

Indo Poly Machines Corpn., Chowk Islamabad, Amritsar 143002.

R. S. Traders, People's Insurance Bldg., Sir P. Mehta Rd., Bombay 400001.

Wudtools, Dada Manzil, 67/69, Mohamedali Rd., Bombay 400003.

Zenith Steel Pipes Ltd., Moti Mahal, 195, Churchgate Recl., Bombay 400020.

BOATS & MOTOR LAUNCHES

Rocklite Fibre Glass Industries, B-57, Wagle Ind. Est., Thane 400604.

Tufflite Plastics Pvt. Ltd., P. Box 849, Coimbatore 641004.

BOILER LAGGINGS & COMPOSITIONS

Commonwealth Insulation Chemicals & Fertilisers Pvt. Ltd., 38, Nariman Rd., Bombay 400001.

Ellore Engg. Co. Ltd., 13/7, Thiruneermala Rd., Chromepet, Madras 600044.

Lloyd Insulations (India), 6, Middleton St., Calcutta 700016.

BOILERS

Andhra Pradesh

Bharat Heavy Plate & Vessels Ltd., Visakhapatnam 530001.

Bihar

Tata Engg. & Locomotive Co. Ltd., Jamshedpur 831001.

Wakefield Equipments (India) Pvt. Ltd., Exhibition Rd., Patna 800001.

Gujarat

Reynolds Engrs. Pvt. Ltd., 47, GIDC Est., Vatva, Ahmedabad 382445.

SLM-Maneklal Ind., Vatva, Ahmedabad 382440.

Haryana

Saraswati Ind. Syndicate Ltd., Yamunanagar 135001.

Karnataka

Sree Jayalakshmi Enterprises, No. 10, R. V. Layout, Platform Rd., Seshadripuram, Bangalore 560020.

Maharashtra

Acme Engg. & Allied Products Pvt. Ltd., 3-15, V. Savarkar Marg, Bombay 400028.

B. R. Hermann & Mohatta (India) Pvt. Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

Batliboi & Co. Pvt. Ltd., V. B. Gandhi Mrg., Bombay 400023.

Citric India Ltd., Empire House, Dr. D. N. Rd., Bombay 400001.

Eastern Textiles, 75, Apollo St., Bombay 400023.

FMC Engg. Works Pvt. Ltd., Sonal Ind. Estate, Off Saki-Vihar Rd., Bombay 400072.

Famalin Traders, 40, Khetwadi 10th Le., Bombay 400004.

Heiza Boilers India Pvt. Ltd., 301, Regent Chambers, Nariman Point, Bombay 400021.

Indra Fabricators, 44, Yusuf Bldg., V. Nariman Rd., Bombay 400001.

Industrial Boilers Pvt. Ltd., 701-C, Poonam Apartments, Dr. A. B. Rd., Bombay 400018.

ISGEC John Thompson Ltd., Great Social Bldg., Sir P. Mehta Rd., Bombay 400001.

Jignesh Metal Manufg. Co., Subash Nagar, Asian Chemical Compound, Jogeshwari (East), Bombay 400060.

Kalpana Boilers & Chemical Plant Mfg. Co., D-9/11, Bhadran Nagar, S. V. Rd., Malad West, Bombay 400064.

Kosha (India) 1972, 2, N. K. Ind. Estate, Viswashnagar, Off Aarey Rd., Goregaon East, Bombay 400063.

Lipi Boilers Pvt. Ltd., 16, Phatak Baug, Navipeth, Pune 411030.

Nestler Boilers Pvt. Ltd., Dalamal Chambers, Sir V. Thackersey Rd., Bombay 400020.

New Standard Engg. Co. Ltd., NSE Estate, Goregaon (East), Bombay 400063.

Nirmal Tdg. Corpn., 289/91, Nagdevi St., Bombay 400003.

Premier Boilers Pvt. Ltd., 16, Nimmco Tiles Compd., Indl. Estate, Lalbaug, Bombay 400012.

Saurashtra Engg. Corpn., Pvt. Ltd., 106-7, Bazar Ward, Khetani Ind. Estate, Bombay 400070.

Shaparia Dock & Steel Pvt. Ltd., Sewree Fort Rd., Bombay 400015.

Shubh Engg. Corpn., 50, Issaji St., Bombay 400003.

Steel Plant Pvt. Ltd., 205, Dr. A. Besant Rd., Bombay 400018.

Thermex (India) Pvt. Ltd., MIDC Plot No. 13, Chinchwad, Pune 411019.

Tube Tools & Hardware Mart, 94, Nagdevi St., Bombay 400003.

Tube-Weld Engg. Works Pvt. Ltd., 118, P. D.Mello Rd., Bombay 400009.

Varsha Boilers Pvt. Ltd., 5, New Marine Lines, Bombay 400020.

Walchandnagar Ind. Ltd., Walchandnagar 413114. Pune Dist.

Wansons (India) Pvt. Ltd., Chinchwad, Pune 411019.

Westerwork Engrs. Pvt. Ltd., 15, Bhandup Village Rd., Bombay 400078.

Orissa

Utkal Machinery Ltd., Rourkela 769001.

Punjab

Leader Engg. Works, Ind. Area, Jullundur 144001.

Tamil Nadu

K.C.P. Ltd., 38, Mount Rd., Madras 600006.

West Bengal

ACC-Vickers-Babcock Ltd., Durgapur 713206.

Calorex India Pvt. Ltd., 13, Camac St., 2nd Flr., Calcutta 700017.

Garden Reach Shipbuilders & Engrs. Ltd., 43/46, Garden Reach Rd., Calcutta 700024.

Heiza-Boilers (India) Pvt. Ltd., 2-B, Burdwan Rd., Alipore, Calcutta 700027.

Industrial Mineral & Mill Stores Traders, Mercantile Bldg., Lall Bazar, Calcutta 700001.

ISGEC John Thompson Ltd., 8, C.R. Ave., Calcutta 700013.

BURNERS
for economy in fuel consumption

Types available:
- AUTOMATIC
- MANUAL
- SEMI-AUTOMATIC
- LOW AIR PRESSURE
- MEDIUM AIR PRESSURE
- PRESSURE JET
- OIL OR GAS FIRING

Buy wisely: buy NESTLER

In collaboration with Nu-Way Heating Plants Limited, U.K.

Consult us for free advice on a perfect firing service.

NESTLER BOILERS
PRIVATE LIMITED

Regd. Office: Dalamal Chambers, Sir V. Thackersey Road, Bombay 400 020. Phones: 290335/295569. Telex: NESTLER 011-3334. Cable: "NESTLER" • Works: Plot C 1, Trans Thane Creek Industrial Area, MIDC, P.O. Turbe at Pavna, Thane-Belapur Road, Thane. Phone: 504 • Branches: I. Indra Palace, 2nd floor, Room Nos. 41 & 42, Connaught Circus, New Delhi 110 001.

J. Stone & Co. (India) Pvt. Ltd., 16, Tartolla Rd., Calcutta 700027.
Jainex Agencies, 16, N. Subhas Rd., Calcutta 700001.
Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.
MacNeill & Magor Ltd., 2, Fairlie Place, Calcutta 700001.
Marshall Sons & Co. (India) Ltd., 75-C, Park St., Calcutta 700016.
Thapar Steinmuller Boiler Co. Ltd., 25, Brabourne Rd., Calcutta 700001.

BOLTS, NUTS, RIVETS & SCREWS

Agarwal Steel Inds., Military Rd., Marol, Bombay 400069.
Alexandra Engg. Works Pvt. Ltd., 29, Quay St., Bombay 400010.
Aminchand Bholanath, Tanda Rd., Jullundur 144001.
Associated Engg. Inds., E-75, Indl. Area, Jullundur 144004.
Auto & General Engg. Co., 204, Okhla Indl. Estate, New Delhi 110020.
Avdel (I) Ltd., 409, Himalaya House, Palton Rd., Bombay 400001.
Banegar Bros. Engg. Works, 139, Bapu Khote St., Bombay 400003.
Bina Industries, Hararwala Bldg. Compd., Islampura, Bombay 400004.
Bolting Manufg. Co., Mehra Ind. Estate, Andheri-Kurla Rd., Bombay 400072.
Bolts, Nuts & Forging Co., 47, Gaushala Rd., Liluah 711204. (W. Bengal).
C. S. K. Industries, 219/C, Old China Bazar St., Calcutta 700001.
Echjay Inds. Pvt. Ltd., Kanjur Village Rd., Bombay 400078.
Fit Tight Nuts & Bolts Ltd., Old Ashram, Andheri-Kurla Rd., Bombay 400069.
Guest Keen Williams Ltd., 97, Andul Rd., Howrah 711101.
Heena Nut Bolt Inds., 91, Nagdevi Cross Lane, Bombay 400003.
India Nut Bolt Mfg. Co., 57, Durgadevi St., Kumbharwada, Bombay 400004.
Indo Foreign Hardware Stores, 193, Nagdevi St., Bombay 400003.
Jagatjit Fasteners Pvt. Ltd., Factory Area, Kapurthala 144601.
Jayant Metal Manufg. Co., 16, Sayani Rd., Bombay 400025.
Jefferson Bolts (India) Pvt. Ltd., 1-8, New Okhla Indl. Complex, Phase II, Scheme II, New Delhi 110020.
L. B. Industries, 21/3, Ind. Area, Azamabad, Hyderabad 500020.
Lallubhai Amichand Pvt. Ltd., 48/50, Kansara Chawl, Bombay 400002.
Lion Nut Bolt Inds., C-1/1039, G.I.D.C., Ankleshwar 393002. (Gujarat).
Maheshwari Engg. Works, Todi Indl. Estate, Sun Mill Compound, Lower Parel, Bombay 400013.
Modern India Engg. Co., 146, M. G. Rd., Calcutta 700007.
New Pensla Inds., S/131, Indl. Area, Jullundur 144004.
Nuts India, 15A, Ratan Villa, Laxminarayan Lane, Matunga, Bombay 400019.
Parasramka Commercial Co. Pvt. Ltd., 12-B, M. Chatterji Lane, Calcutta 700007.
Patna Engg. (Bolts) Works, Gosaintola, Patna 800013.
Pioneer Indl. Corpn., 523, Cotton Exchange Bldg., Kalbadevi Rd., Bombay 400002.
Precision Industrial Components, 15, Elcheewalla Bldg., 11, Keshavji Naik Rd., Near Bhat Bazar Fuvara, Chinch Bunder, Bombay 400009.
R. K. Udyog, 352-B, Daulatpura, Ghaziabad 201001 (U.P.).
Rambal Pvt. Ltd., 129, Lattice Bridge Rd., Madras 600041.
Sanjay & Co., 40, Strand Rd., Room No. 9, 1st Fl., Calcutta 700001.
Sawalka Metal Products, 23A, N. Subhas Rd., Calcutta 700001.
Seelans Metal Corpn., 34, Mint St., Madras 600003.
Shankar Inds. Ltd., 20, Mangoe Lane, Calcutta 700001.
Sheth Mfg. Works, S. V. Rd., Malad (West), Bombay 400064.
SHI Engineers, 46, SIDCO Indl. Estate, Coimbatore 641021.
Shree Krishna Pvt. Ltd., 20, Mangoe Lane, Calcutta 700001.
Sikands Ltd., 61, N.I.T., Faridabad 121001.
Super Fasteners Corpn., 138/140, N. Dhuru Cross Lane, Bombay 400003.
Universal Fasteners Ltd., 17/3, Mathura Rd., Faridabad 121001.
Universal Screw Factory, Chheharta, Amritsar 143001.

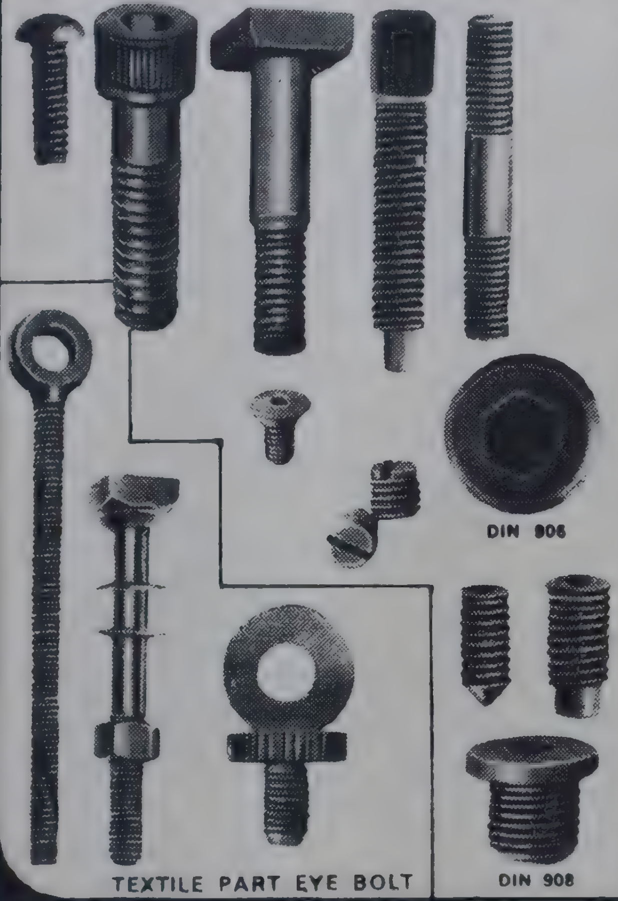
BOTTLING MACHINERY & PLANTS

Indo-Burma Petroleum Co. Ltd., Gillander House, N. Subash Rd., Calcutta 700001.
Larsen & Toubro Ltd., L. & T. House, Ballard Estate, Bombay 400038.
Mohan Ortmann & Herbst Ltd., 5, Mohan Singh Bldg., Connaught Lane, New Delhi 110001.

BOX STRAPPINGS

A-1 Steel Corpn., 211/17, Nagdevi St., Bombay 400003.
Baroda Plastics, A/2, 617, G.I.D.C., Indl. Estate, Makarpura, Vadodara 390010.
Caristrap Ltd., Eros Bldg., 124, M. Karve Rd., Churchgate, Bombay 400020.
Ebrahimjee Essabhai & Sons, 11, Old Hanuman Lane, Princess St., Bombay 400002.
Garware Synthetics Ltd., 135, Dr. A. Besant Rd., Bombay 400018.
Indo Steel Corpn., 148, Sarang St., Bombay 400003.
J. K. Steel Ind. Ltd., 7, Council House St., Calcutta 700001.
M. Paul & Bros., 89, N. Subhas Rd., Calcutta 700001.
Maharashtra Plastic Ind., Subash Nagar, Off Caves Rd., Jogeshwari (East), Bombay 400060.
Mehta Engg. Co., 6, Shree Sadan, Daftary Rd., Malad East, Bombay 400064.
Mysore Vanijya Pvt. Ltd., 31, Mariswamappa Lane, Bangalore 560002.
National Packaging Inds., 341, Tardeo Bldg., Near Tardeo Circle, Bombay 400034.
Nav Bharat Vanijya Ltd., 7, Council House St., Calcutta 700001.
Nirvel Industries, 73, 'Kamleshwar', Santacruz West, Bombay 400054.
Novel Products, 316, Tulsiani Chambers, N. Point, Bombay 400021.
Nyloc Strappings Pvt. Ltd., Nirlon House, 254-B, A. Besant Rd., Bombay 400025.
Ochhavlal Chotalal & Co., 207-209, Nagdevi St., Bombay 400003.
P. Kesavan & Co., T. D. Rd., Ernakulam, Cochin 682011.
Poly Pack, 14, Chand Manzil, Old Bengalipura, Carnac Rd., Bombay 400003.

BOLT NUT STUD & ALLEN SCREWS



HRC 28 to 38, 3 mm to 48 mm Dia)
HIGH TENSILE STEEL

Components	IS	DIN	BS
Hex Bolt Nut & Sc	1364-2389	931-933	1084-916-1768
Allen Socket hd Sc	2269	912	2470-768
Allen CSK & Button hd	6761	6912-7991	2470-768
BSP-Allen Plus	—	908	—
Grub Sc Slotted & Socket	2388-6094	913-914-915-916	2470-768
BSPT/NPT Tapper plus	—	906	—
T Bolts & Tool Post Sc	2014-2585	186-789-476	916-1083
Machine Screws	1365-1366-6101	84-86-88	450
Eye Bolt	4190-5624	580-444	529
Washers	2016-5370-5372	125-126-522	3410

PRECISION INDUSTRIAL COMPONENTS.
15, Elcheewala Building, 2nd Floor,
11, Keshavji Naik Road,
Near Bhat Bazar Fuvara & Masjid Station,
BOMBAY-400 009

TEXTILE, SUGAR & CEMENT
PROJECT MACHINERY FASTENER COMPONENTS

SPARE CAPACITY AVAILABLE FOR

1. TRAUB A — 25
2. CENTRELESS GRINDER
3. THREAD ROLL
4. MILLING — DRILLING

FACTORY AT : **BHAYANDAR EAST**

N.B. :— 1. WE DON'T HAVE ANY PRICE LIST OR OUR PRODUCTS CATALOGUE.

2. WE MANUFACTURE ALL ITEMS AGAINST ORDER ONLY

3. WE ARE REGISTERED WITH GOVT. & SEMI-GOVT. DEPTS.

R. J. Steel & Co., 505, Steel Centre, Iron Market, Bombay 400009.

Rotaseal Packaging Pvt. Ltd., Vithal Udyognagar 388121 (Gujarat).

Shivani Plastic Co., F-16, DSIDC Indl. Complex, Rohtak Rd., New Delhi 110005.

Simplex Engg. Co., 64B, Ahmedabad St., Bombay 400009.

Vora Bros., 115, S. Devji St., Bombay 400003.

Western India Trading Co., 112, N. Dhuru St., Bombay 400003.

BRAIDING MACHINES

Todi Ind. Pvt. Ltd., Todi Estates, Lower Parel, Bombay 400013.

BRASS & COPPER SHEETS & ROLLS, ETC.

Dagger-Forst Tools Ltd., First Pokhran Rd., Thane 400606.

Devidayal Non-Ferrous Inds. Pvt, Ltd., Gupta Mills Estate, Reay Rd., Bombay 400010.

Elphinstone Metal Rolling Mills Pvt. Ltd., 154, Bapu Khote St., Bombay 400003.

J. B. Metal Inds. Pvt. Ltd., 7, Sarvodaya Nagar, Panjrapole Rd., Bombay 400004.

Multimetals Ltd., Heavy Industries Area, Kota 324003. (Rajasthan).

Premier Brass & Metal Works Pvt. Ltd., Seksaria Chambers, Medows St., Bombay 400023.

Rashtriya Metal Inds., Sir M. Vasanji Rd., J. B. Nagar, Bombay 400059.

Shantilal Hiralal & Co., 57B, Khetwadi Main Rd., Bombay 400004.

BRASS & STEEL COMPONENTS

City Engg. Works, 443, D. Bhadkamkar Marg, Bombay 400004.

Industrial Brass Components Corpn., B-27, Udyog Mandal, Jamnagar 361001.

Navbharat Brassware Mfrs., 50, Kamathipura 10th Lane, Bombay 400008.

Rajkamal Trading Corpn., RKLITE House, 89, Govt. Ind. Estate, Kandivli, Bombay 400067.

Shree Vishnu Inds., New Jail Rd., Jamnagar 361005.

Toshee Inds., 8/2, Roop Nagar, Delhi 110007.

BRICK-MAKING PLANTS

Andrew Yule & Co. Pvt. Ltd., 32, Nicol Rd., Ballard Estate, Bombay 400038.

Canara Workshops Ltd., P. Box No. 12, Mangalore 575003.

Kathiawar Metal & Tin Works Pvt. Ltd., Lati Plot, Near City Stn., Rajkot 360001.

National India Engg. Co. Pvt. Ltd., 7, Horniman Circle, Bombay 400001.

BRICKS & TILES

A. N. Bhaskar Sons, 20/4 Km., Mathura Rd., Faridabad 121003.

Acme Tiles Manufg. Co., 494, Duncan Rd., Bombay 400004.

Ajugia Tiles Co., Ghodbunder Rd., Malad West, Bombay 400064.

B. G. Shirke & Co., 72/76, Mundhva, Pune 411013.

Bharat Tiles & Marble Co. Pvt. Ltd., 32, Apollo St., Bombay 400023.

Deepak Tiles Ind. Pvt. Ltd., Bombay-Poona Rd., Tulsi Bag, Panvel 410206. Kolaba Dist.

Duncan Stone Co., 500, M. Azad Rd., Bombay 400004.

Himalayan Tiles & Marble Pvt. Ltd., 17-19, Dalal St., Bombay 400023.

Indiana Tiles & Marble Corpn., 16, Marzban Rd., Bombay 400001.

Jashvant C. Shah & Co., Bharati Nivas, Besant Rd., Santacruz West, Bombay 400054.

Jay Tiles Ind., Behind Tejpal Pvt. Ltd. Suren Rd., Andheri (E), Bombay 400072.

Liberty Tiles & Marble Co., Kurla-Vihar Lake Rd., Bombay 400072.

Maha Gujarat Tiles & Marble Co., Panch Kuva, Opp. English Cinema, Ahmedabad 380001.

Modern Tiles Co. Pvt. Ltd., 92, Veer Savarkar Marg, Mahim, Bombay 400016.

N. M. Mehta & Co., 6, Bhagat Singh Rd., Bombay 400023.

National Tiles & Ind. Pvt. Ltd., 31, Hamam St., Above Dena Bank, Bombay 400001.

Nectiles, 31, Hamam St., Bombay 400001.

New India Mosaic & Marble Co. Pvt. Ltd., Ind. Estate, Lalbaug, Bombay 400012.

Niteo Tiles Pvt. Ltd., G-5, Court Chambers, New Marine Lines, Bombay 400020.

Raju Tiles & Marble Ind., Ambernath Rd., Ulhasnagar, 421003, Thane Dist.

Raval & Co., 21, Bank St., Bombay 400023.

Simplex Art Floorings Pvt. Ltd., Lovji Castle, Dr. Rau Rd., Bombay 400012.

BRIGHT STEEL BARS ETC.

Delhi

H. R. Gupta Ind., 33, N. W. Ave., Punjabi Bagh, New Delhi 110026.

New Era Metal & Gen. Inds., 10, Babar Lane, New Delhi 110001.

Omega Bright Steel Pvt. Ltd., 607, Deepali, 92, Nehru Place, New Delhi 110024.

Gujarat

Bright Bar Manufg. Co., M. Gandhi Rd., Bharuch 392001.

Precision Bright Steel Ind., 696, Reid Rd., Ahmedabad 380001.

Haryana

Anand Steel & Wires (Pvt.) Ltd., 13/6, Mathura Rd., Faridabad 121001.

Bhatia & Sons Ltd., 10, Indl. Est., Sector VI, Faridabad 121001.

Karnataka

Bipsi Blades & Turners Pvt. Ltd., 84, Ind. Suburb, Yeshwantpur, Bangalore 560022.

Madhya Pradesh

Indore Bright Bars, 286, M. G. Rd., Indore 452002.

Maharashtra

Aevee Iron & Steel Works Pvt. Ltd., Eldee Chambers, Broach St., Bombay 400009.

Agarwal Machine & Engg. Stores, 63/69, Nagdevi Cross-lane, Bombay 400003.

Ajmera Bros., 192-A, Panjrapole Main Rd., Bombay 400004.

Akhandanand Engg. & Trdg. Co., Datta Mandir Rd., Off Bhandup Village, Bombay 400078.

Ashok Nut & Bolts Industries, 6, Udyog Nagar, S. V. Road, Goregaon, Bombay 400062.

B. P. Steel Ind. Pvt. Ltd., Mysore Chemical Comp., 39/44, Sion East, Bombay 400022.

Bright Bar Manufg. Co., 401, Cotton Exchange Bldg., Kalbadevi Rd., Bombay 400002.

Chase Bright Steel Ltd., Meher Chambers, Nicol Rd., Ballard Estate, Bombay 400038.

Chawla Steel Industries, Plot No. 6, Sewree Cross Rd., Sewri, Bombay 400015.

Devidayal Rolling & Refineries Pvt. Ltd., Gupta Mills Est., Reay Rd., Bombay 400010.

Dhiraj Iron & Steel Pvt. Ltd., 31, Sindhi Lane, N. Desai Rd., Bombay 400004.

Hercules Bright Steel Pvt. Ltd., 86, Mint Rd., Bombay 400001.

India Steel Inds., 134, N. Dhuru St., Bombay 400003.

India Tubes Mills & Metal Ind. Pvt. Ltd., Dhiraj Chambers, 9, Waudby Rd., Bombay 400001.

Indian Bright Steel Co. Ltd., Meher Chambers, Nicol Rd., Ballard Estate, Bombay 400038.

Industrial Bright Steel Co., 23, Alankar Cinema Bldg., Sardar V. P. Rd., Bombay 400004.

Industrial Engg. Co., 5, Bombay Samachar Mrg., Bombay 400023.

Jayco Steel Corpn., 5-A, 2nd Parsiwada Lane, Behind Alankar Cinema, Bombay 400004.

Kaykay Janack Wires, 101, Steel Chambers, Broach St., Bombay 400009.

Magnificent Engg. Works, C/o Textelo Engg. Works, 52A, Islampura, Nanubhai Desai Rd., Bombay 400004.

Mehta Engg. Works, B-40, Wagle Indl. Est., Thane 400604.

Nagpur Steel & Alloys Pvt. Ltd., F-11, MIDC Ind. Estate, Hingna Rd., Nagpur 440016.

Pratap Bright Steels Pvt. Ltd., 11, Advent, 12-A, Gen. J. Bhosle Mrg., Bombay 400021.

R. Amrutlal & Co., 116, N. Dhuru St., Bombay 400003.

R. C. Khandelwal & Co., 38, Indl. Est., Khopoli 410203. Kolaba Dist.

Shah Patel & Co., 111, Nagdevi St., Bombay 400003.

Special Steels Ltd., Dattapada Rd., Bombay 400066.

Textelo Engg. Works, 52A, Islampura St., Bombay 400004.

Punjab

Hindustan Steel Ind., Rakson House, 43-R, Ind. Area B, Ludhiana 141001.

Tamil Nadu

Alan Bright Steel Pvt. Ltd., 48, SIDCO Indl. Estate, Ambattur, Madras 600098.

Durga Bright Bar Mfg. Co., 3/10, Seshachala Gramani Garden St., Sattangadu, Madras 600019.

Indian Bright Steel Co. Ltd., 111/112, Mannady St., Madras 600001.

West Bengal

Allahabad Merchandise Co. Pvt. Ltd., 310, Jessore Rd., Calcutta 700055.

Allied Steel Products, 11/1, Canal East Rd., Calcutta 700004.

Bagri Steel Ind. (Pvt.) Ltd., 138, B. R. B. B. Rd., Calcutta 700001.

Bells General Inds., 26/1, Strand Rd., Calcutta 700001.

Bhartia Commercial Co. Ltd., B-1, Gillanders House, 8, N. Subhas Rd., Calcutta 700001.

Calcutta Steel Co. Ltd., 4, Old Court House St., Calcutta 700001.

Damehra Steels & Forgings Pvt. Ltd., 15/64, G. T. Rd., Liluah 711204.

Guest Keen Williams Ltd., 97, Andul Rd., Howrah 711001.

Prakash Steel Products, 234, G. Trunk Rd. (North), Howrah 711007.

Steel Rolling Mills of Bengal Ltd., 23, Strand Rd., Calcutta 700001.

BRUSHES

Allied Steel Products, 11/1, Canal East Rd., Calcutta 700014.

Army Brush Factory, 457, Sadar Bazar, Delhi 110006.

Aryan Brush Co. Ltd., Lentin Chambers, Dalal St., Bombay 400023.

Ashish Mfg. Co., Wadala, Bombay 400031.

Baroda Brushware Co., Behind Rly. Stn., Vadodara 390005.

Bombay Brush Co. Pvt. Ltd., 493, Sane Guruji Marg, Bombay 400034.

Climax Brush Works, 123, Amherst St., Calcutta 700009.

Datson Raviraj & Co. Pvt. Ltd., 43, Tamarind Lane, Bombay 400023.

Dey Bros., 23, Biplabi R. B. Bose Rd., Calcutta 700001.

E. A. Currim Pvt. Ltd., 97, Apollo St., Bombay 400023.

Indian Brushware, 1, British Indian St., Calcutta 700069.

Indo Industrial Corpn., 20, Strand Rd., Calcutta 700001.

Industrial Brushware Inds., 238/240, Nagdevi St., Bombay 400003.

Nannooh Bros., 165, Angappa Naicken St., Madras 600001.

New India Brush Inds., 1/31, Ravindranath Layout, New Siddhapudur, Coimbatore 641018.

Fixit
HARDWARE
FIXT DOOR STOPPER
JALPARI DRAWER PULL
RHINO DOOR CHAIN
CAPTAIN KNOB
ASHOK CHAKRA KNOB
METAL ART
VISHAL HANDLE
MFRS: BUILDERS HARDWARE FITTINGS & FURNITURE FIXTURES
SPECIALIST IN: ORNAMENTAL BRASS DOORS, WINDOWS HANDLES & KNOBS, "FIXIT" DOOR STOPPER & SAFETY DOOR CHAIN
METAL ART
FACT: ZAKARIA MASJID STREET, BOMBAY-400009.
SHOW ROOM: 10 BAPU KHOTE STREET. BOMBAY-400003. SHOW ROOM: 341360

BUCKETS

(See Barrels, Buckets, Drums, Steel Containers etc. in this list).

BUILDERS HARDWARE

Amerbhoy Dossajee, 148-50, Lohar Chawl, Bombay 400002.

Anupam Metal Inds., G.B.-7, Virwani Ind. Estate, W. Express Highway, Goregaon (E), Bombay 400063.

Eddy & Co., 148, Lohar Chawl, Bombay 400002.

Metal Art, 10, Bapu Khote St., Bombay 400003.

Nasik Industrial Engineering Corpn., Ram Nivas, Panchavati, Nasik 422003.

Saifee Tube & Hardware Mart, 85B, Mohamedali Rd., Bombay 400003.

Win-Arts Industries, 89, Bhajipala St., Bombay 400003.

(Also see "Construction Materials" in this list).

BUILDING MATERIALS

(See "Construction Materials" in this list).

BURNERS—OIL/GAS

Bharat Standard Industries, 6-7, Sharma Ind. Estate, Walbhat Road, Goregaon East, Bombay 400063.

Kaveri Structurals, Sire Mansion, 123, Mount Rd., Madras 600006.

Vulcan Engrs. Pvt. Ltd., Mahalaxmi Chambers, B. Desai Rd., Bombay 400026.

Wesman Thermal Engg. Processes Pvt. Ltd., 1/2, Allenby Rd., Calcutta 700020.

Westerwork Engineers Ltd., 5-D, Vulcan Insce. Bldg., Veer Nariman Rd., Bombay 400020.

BUS-TRUCK BODY BUILDERS

Andhra Pradesh

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

Shri Ramdas Motor Transport Pvt. Ltd., Subash Rd., Kakinada 533001.

Assam

Kampur Construction Co. Pvt. Ltd., 37, National Highway, Gauhati 781005.

Bihar

Tata Engg. & Loco. Co. Ltd., Jamshedpur 831001.

Delhi

Anand Automobiles, P. O. Usuf Sarai, New Delhi 110016.

Karnataka

Air Flow Transport (India) Pvt. Ltd., 26/28, St. Marks Rd., Bangalore 560001.

Canara Workshops Ltd., Kodiabail, Mangalore 575001.

S. M. Kannappa Automobiles Pvt. Ltd., 2, New Mental Hospital Rd., Near Lalbaug, Bangalore 560027.

Maharashtra

Aryan Motors, Arya Bhawan, Plot 34, MIDC, Andheri East, Central Rd., Bombay 400093.

India Body Builders, 62, B. Shanker Cross Rd., Bombay 400054.

Jafferbhai & Co., Pheroz Mahal, 1, Rahimtulla Rd., Bombay 400003.

Jayanand Khira & Co. Pvt. Ltd., S. Vivekanand Rd., Bombay 400054.

Mahindra & Mahindra Ltd., Gateway Bldg., Apollo Bunder, Bombay 400039.

Premier Automobiles Ltd., L. B. Shastri Marg, Bombay 400070.

Ruby Coach Builders Pvt. Ltd., 75, Dr. A. Besant Rd., Bombay 400018.

Sah & Sanghi, Giri Kunj, 11C, N. S. Patkar Marg, Bombay 400007.

Starline Automobiles, LBS Mrg., Bhandup, Bombay 400078.

Rajasthan

Kamal & Co., Mirza Ismail Rd., Jaipur 302001.

Tamil Nadu

Anamallais Engg., 4-A, Goods Shed Rd., Pollachi 642001.

L. G. Balkrishnan Bros. Pvt. Ltd., P.O. Ganapathy, Coimbatore 641006.

Simpson & Co. Ltd., 202, Mount Rd., Madras 600002.

Sundaram Ind. Pvt. Ltd., Ind. Estate, Madurai 625001.

Uttar Pradesh

Harish Inds., Baghpat Rd., Meerut 250062.

West Bengal

Chopra Motors, 139, Regent Park, Calcutta 700040.

French Motor Car Co. Ltd., 234/3, L. Circular Rd., Calcutta 700020.

CALCULATORS—POCKET SIZE

Bush India Ltd., Calculator Dn., Sukh Sagar, Bombay 400007.

Calcom Electronics, B-23/1, Wazirpur Indl. Area, Delhi 110032.

Digital Equipments Co. Ltd., J-5, Hubsiguda, Tarnaka, Hyderabad 500007.

Electronix Systems, 232A, Grand Paradi Apartments, Cumballa Hill, Bombay 400026.

Intronix, 40, Community Centre, Narain Indl. Area, Phase I, New Delhi 110028.

L. P. Electronics Pvt. Ltd., A-251, Wagle Ind. Estate, Thane 400604.

Microcomp Ltd., 808, Siddharth, Nehru Place, New Delhi 110024.

Vishal Electronics Pvt. Ltd., 46/47, Jerbai Wadia Rd., Parel, Bombay 400012.

CALCULATORS—TABLE SIZE

(Also see Office Equipment).

Advani-Oerlikon Ltd., Ador House, 6, K. Dubash Mrg., Bombay 400023.

Aristo Business Systems, 204, Neelam Bldg., Worli Naka, Bombay 400018.

Blue Star Ltd., Band Box House, Prabhadevi, Bombay 400025.

Business Machines Pvt. Ltd., Asnani Mkt., 10A, Rajendra Place, New Delhi 110008.

DCM Data Products, 18, Barakhambha Rd., New Delhi 110001.

DCM Data Products, 313, Thambu Chetty St., Madras 600001.

DCM Data Products, 47, St. Marks Rd., Bangalore 560001.

Devidayal Electronics & Wires Ltd., Post Box No. 5, Bangalore 560049.

India Electronics Corpn., 27, Kotkar Ind. Estate, Goregaon East, Bombay 400063.

Industrial Electronics, 8, Parvati Ind. Estate, Sun Mill Compd., L. Parel, Bombay 400013.

International Marketing Corpn. P. Ltd., Harilela House, Mint Rd., Bombay 400001.

Kerala State Electronics Devpt. Corpn. Ltd., Nirmal, N. Point, Bombay 400021.

Mecotronics Pvt. Ltd., 11A/1, Mount Rd., Madras 600002.

Methodex System Pvt. Ltd., 33-A, New Marine Lines, Bombay 400020.

Modern Trading Co. (Bombay), Opera House, Bombay 400004.

Multiplex Electronics, 69/71, Ghoga St., Bombay 400001.

National Radio & Electronics Co. Ltd., 5, Montieth Rd., Egmore, Madras 600008.

Oblum Electrical Ind. Pvt. Ltd., 6-3-562/A, Erramanzil, Somajiguda, Hyderabad 500004.

Omron India, 74, Regent Chambers, Nariman Point, Bombay 400020.

Remington Rand of India Ltd., Mehta Mahal, Mathew Rd., Bombay 400004.

Sab Electronics Pvt. Ltd., 302-A, Poonam Chambers, Dr. A. B. Rd., Worli, Bombay 400018.

Stereovision, Heera Mkt., 3/186, Mount Rd., Madras 600002.

Superior Electronic Systems Pvt. Ltd., 129, Champaklal Indl. Est., Bombay 400022.

UMS Radio Factory Pvt. Ltd., Avanashi Rd., Coimbatore 641018.

Weston Electronics (Pvt.) Ltd., 244, Okhla Indl. Est., New Delhi 110020.

CAMPHOR

Camphor & Allied Products Pvt. Ltd., Jehangir Bldg., 133, M. Gandhi Rd., Bombay 400023.

CAMPING EQUIPMENT

Goyalka Bros., P-4, New Howrah Bridge Approach Rd., Nandram Market, Calcutta 700001.

Soobash & Co., 12, Zakaria St., Calcutta 700001.

CAN SEAMING MACHINES

Atlas Works Ltd., 119, Ripon St., Calcutta 700016.

Metal Box Co. of India Ltd., Chowringhee, Calcutta 700020.

CANDLE-MAKING MACHINES

Jayendra Metal Ind. Ltd., Shastriwada, Opp. College, Sayajigunj, Vadodara 390005.

CAPACITORS — ELECTRICAL & ALUMINIUM ELECTROLYTIC

Andhra Pradesh

Bharat Capacitors Ltd., A-1, Electronic Complex, Kosaiguda, Hyderabad 500762.

Maduri Condensers, 8-11, EEIE Phase II, Balanagar, Hyderabad 500037.

Oblum Electrical Industries Pvt. Ltd., 6-3-562/A, Erramanzil, Somajiguda, Hyderabad 500004.

Delhi

Control Electronics Pvt. Ltd., A-52, Okhla Indl. Area, Phase II, New Delhi 110020.

Crescent Capacitors, J-12-12, Rajouri Garden, New Delhi 110027.

Usha Electronics (India) P. Ltd., 2, Anand Lok, New Delhi 110045.

Goa

Goa Capacitors Pvt. Ltd., M-1, Block C, Kundaikar Nagar, Altinho Rd., Panaji 403001.

Gujarat

Baroda Electronics Ind. Pvt. Ltd., 78, Chhani Rd., Vadodara 390002.

Yesha Electricals Pvt. Ltd., C-2 18, Ind. Estate, Gorwa Rd., Vadodara 390003.

Karnataka

Advance Components & Instruments Pvt. Ltd., 278, Gokulam III Stage, Mysore 570002.

Electronics & Capacitors, B-56, Indl. Area, Peenya, Bangalore 562140.

Keltron, Keltron House, Vellayambalam, Trivandrum 695001.

Nippon Electronics (India) Ltd., Bull Temple Rd., Bangalore 560019.

Radio & Electrical Manufg. Co. Ltd., Mysore Rd., Bangalore 560026.

Kerala

Elmech Capacitors Ltd., Durbar Hall Rd., Cochin 682016.

Keltron, Mktg. Divn., Keltron House, Vellayambalam, Trivandrum 695001.

Maharashtra

Ajanta Capacitors Pvt. Ltd., E-41, MIDC Ind. Area, Chikalthana, Aurangabad 431210.

Asian Electronics Ltd., Handloom House, 221, Dr. D. Naoroji Rd., Fort, Bombay 400001.

Capacitor Mfg. Co., A/7, Functional Electronic, MIDC, Bhosari, Pune 411026.

Central Capacitors Pvt. Ltd., 5, Temple Rd., Nagpur 440001.

Chowgule & Co. (Hind) Ltd., India House, Opp. G.P.O., Bombay 400001.

Desai Engg. Pvt. Ltd., 12/3, Boat Club Rd., Pune 411001.

Emco Esta Capacitors, 94, Medows St., Bombay 400023.

Gannon Electrolytics Ltd., Chartered Bank Bldg., M. Gandhi Rd., Bombay 400023.

Gorakhram Haribux, 4, Apeejay House, Ground Flr., 130, Bombay Samachar Mrg., Bombay 400001.

Hind Condensor Pvt. Ltd., Plot No. 209, Pune-Bombay Road, Pimpri, Pune 411018.

Jnana Prabhodhinis Vyapar Udyog Vibhag, 510, Sadashiv Peth, Pune 411030.

Khatau Junker Ltd., Dattapada Rd., Borivli (E), Bombay 400066.

Madhav Capacitors Pvt. Ltd., Bharat Coal Compd., Bail Bazar, Kurla, Bombay 400070.

Malde Capacitors Mfg. Co., W-36, MIDC Ph. II, Manpada Rd., Dombivli 421204. Thane Dt.

Manohar Bros. (Cap.) Pvt. Ltd., 4, Commerce House, 140, N. Master Rd., Bombay 400023.

Mulchandani Electric & Radio Inds. Ltd., Wagle Indl. Area, Thane 400604.

Sangeeta Electronics, 366, Lamington Rd., Bombay 400007.

Shakti Capacitors, Indl. Estate, Sangli 416416.

Shreem Capacitors Pvt. Ltd., Ind. Estate, Jaysingpur 416101.

Tamil Nadu

India Capacitors Ltd., 22, Errabalu Chetty St., Madras 600001.

Manohar Bros., 4, Errabalu Chetty St., Madras 600001.

Southern Capacitors, 393, Mint St., Madras 600001.

Seshasayee Bros. Pvt. Ltd., 8, Rutland Gate 4th St., Madras 600006.

Srijee & Co., 24, Erulappan St., Madras 600001.

Uttar Pradesh

General Electric Co. of India Ltd., Transformer & Capacitor Divn., Naini Works, Naini 211008. (Allahabad Dist.).

Upton Capacitors Ltd., Talab Tikait Ram, Aishbagh, Lucknow 226004.

West Bengal

Chowdhury Ind. Corpn. Pvt. Ltd., 6, Middleton St., Calcutta 700016.

Elmech Capacitors Ltd., 30, Chittaranjan Ave., Calcutta 700012.

India Capacitors Ltd., 49/1, Gariahat Rd., Calcutta 700019.

CAPSULES—GELATINE

Associated Capsules Pvt. Ltd., 131, Kandivli Ind. Estate, Bombay 400067.

Capsules Corp. (India), J1/11, Krishna Nagar, New Delhi 110051.

Capsulation Services Pvt. Ltd., Sion-Trombay Rd., Chembur, Bombay 400071.

Gelikeps Pvt. Ltd., P.O. Atladara, Vadodara 390012.

Indian Pharmacaps & Chemicals Pvt. Ltd., 11-B, Yusuf Bldg., M. Gandhi Rd., Bombay 400001.

Pharmaceutical Capsules Laboratory, Brahman Sabha Bldg., Underia Cross Rd., Bombay 400064.

Seamless Capsules Pvt. Ltd., 81, Andheri-Kurla Rd., Bombay 400059.

Sunil Synchem Ltd., Sheetla House, 1st flr., 73-74, Nehru Place, New Delhi 110019.

CARBON FILM RESISTORS

Kothari Electronics & Inds. Ltd., 114, Nungambakkam High Rd., Madras 600034.

CARBON PRODUCTS—CARBON BLOCKS & BRUSHES

A. K. Motiwala, 145, Lohar Chawl Bombay 400002.

Asia Carbons Ltd., 5, Raman St., Madras 600017.

Assam Carbon Products, Gauhati 781001.

Bhatt & Bros., 14/16, Chewool Wadi, Dr. M. B. Welkar St., Bombay 400002.

Carbon Marketing Co. (India), Tank Rd., Bhandup, Bombay 400078.

Crupp Carbon Papers Mfg. Co., Pvt. Ltd., C-1/222-224. Naroda Indl. Estate, Naroda, Ahmedabad 382330.

Dikson & Co., 8, Bharat House, Apollo St., Bombay 400023.

El-Mech Works, Udyog Bhavan, 97AB No. 4, Off Prabhadevi Rd., Bombay 400025.

Electro Carbon Mfg. Co., Ind. Estate, Jaisingpur 416101, Kolhapur Dist.

Electro Carbonium Ltd., 78, Victoria Rd., Bangalore 560007.

Gujarat Carbon Ltd., Harikripa, Alkapuri, Vadodara 390005.

Indogem Carbon Brush Mfg. Co., 103, Maulana Azad Rd., 30, Raja Bahadur Bldg., Bombay 400008.

Jayantilal & Co., 20, Armenian St., Calcutta 700001.

Joseph Leslie & Co., Apeejay House, 130, Apollo St., Bombay 400023.

Mano-Chem Industries, 402, Ashirwad Apartments, Plot No. 223, Mulund West, Bombay 400080.

Moba Carbon Pvt. Ltd., 48, Wodehouse Rd., Bombay 400005.

Nagina Carbon Brush Mfg. Co. (Regd.), 65, Carmellous Bldg., Pathakwadi. Bombay 400002.

National Carbon Engg. Co., 10-B, Sheriyar Baug, 77, Ramchandra Bhatt Mrg., Bombay 400009.

Oriental Carbon Products Co., 6, R. Ghosh Rd., Calcutta 700002.

Philips Carbon Black Ltd., 31, N. Subhas Rd., Calcutta 700001

Prakash Engg. Works, Jagruti, Indl. Estate, Mugal Lane, Mahim, Bombay 400016.

Precision Fabricators & Mechanical Engrs., 3, Bora Masjid Galli, Zaveri Bazar, Bombay 400002.

Schutz Carbon Electrodes Pvt. Ltd., 82, Stephen House, 5th Flr., 4, Dalhousie Square East, Calcutta 700001.

Sintered Graphite Pvt. Ltd., 15/21, Civil Lines, Kanpur 208001.

CARBONS—CINEMA ARC

Best & Crompton Engg. Co. Ltd., 13/15, North Beach Rd., Madras 600001.

Britelite Carbons Ltd., Pratappura, Halol 389350. Panchmahals Dist. (Gujarat).

R. J. Wood Co. Pvt. Ltd., State Bank Bldg., Chandni Chowk, Delhi 110006.

Sigma Coatings Ltd., B-2, Indl. Estate, Katunga 790031, Rourkela (Orissa State).

Union Carbide (India) Ltd., 1, Middleton St., Calcutta 700016.

CARDBOARD BOXES

Bangalore

Everest Container Corpn., Ind. Suburbs, Yeshwantpur, Bangalore 560022.

Bombay

Babson Paper Box Factory, 17, Dhobi St., Bombay 400003.

Everest Packaging Corpn., Mahakali Caves Ltd., Andheri East, Bombay 400069.

Hemkiran Packaging Pvt. Ltd., Mathuradas Mill Compd., N. M. Joshi Mrg., Bombay 400013.

Krishna Box Factory, Plot No. 37 (II), MIDC Central Rd., Off Mahakali Rd., Andheri East, Bombay 400093.

National Packaging Inds., 341, Birla Bldg., Tardeo, Bombay 400034.

Calcutta

Ads & Prints (1963), A8, Bon Hooghly Indl. Estate, Calcutta 700035.

Antool, S. & Co. Pvt. Ltd., 91, Acharya P. Chandra Rd., Calcutta 700009.

Arun Corrugating & Packaging Ind., 36, Brabourne Rd., Calcutta 700001.

Associated Packaging Ind., 37, Canning St., Calcutta 700001.

Bengal Paper Tube & Box Manufg. Co., 18, Park St., Calcutta 700016.

Board & Paper Converters, 152/6, Salkia School Rd., Howrah 711101.

British Packaging Ind., 3, Portuguese Church St., Calcutta 700001.

Calcutta Paper Ind., 121, Chittaranjan Ave., Calcutta 700007.

Cardboard Box Manufg. Co., 41, Chowringhee Rd., Calcutta 700016.

Cardboard Materials & Printing Co. Pvt. Ltd., 7, Convent Rd., Calcutta 700014.

Cardboard & Paper Products Co., 44, Lockgate Rd., Calcutta 700002.

Central Card Board Box Manufg. Co., 25, Dr. K. Bose St., Calcutta 700009.

Central Trdg. Co., 25, Waterloo St., Calcutta 700001.

Great Bengal Card Board Box Manufg. Co., 46, J. Mitra St., Calcutta 700005.

Impex Corpn., 23/J, R. M. Dutta Garden Lane, Calcutta 700010.

Kajaria Chemipaper Pvt. Ltd., 28, Amratolla St., Calcutta 700001.

Krishna Cardboard Box Manufg. Co., 58, S. Sarkar Rd., Calcutta 700010.

Leonard Card-Board Box Factory Pvt. Ltd., 1/1, Galiff St., Calcutta 700003.

Packaging & Printing Ind., 1, British Indian St., Calcutta 700001.

Profulla Box Manufg. Co. Pvt. Ltd., 80/2, Baitakhana Rd., Calcutta 700009.

Standard Box Co., 6, A. Banerji Lane, Calcutta 700020.

Swastik Box Manufg. Co., 38G, Sitalatala Lane, Narkeldanga, Calcutta 700011.

Technocrafts (India), 56, N. Subhas Rd., Calcutta 700001.

Union Packaging Ind., 1, Transport Depot Rd., Calcutta 700027.

Universal Cardboard Box Factory, 54, Ezra St., Calcutta 700001.

Delhi

Everest Corrugating Ind., 63, Jhandewalan Extn., New Delhi 110055.

Madras

Alex Card Board Pvt. Ltd., 3A/2, Eidams Rd., Madras 600002.

CARPETS

Delhi

Bharat Carpets Pvt. Ltd., 28-B, Connaught Place, New Delhi 110001.

Carpeto Antique, M-45, Greater Kailash-1, New Delhi 110048.

Cosmique International, 191, Faiz Mrg., New Delhi 110005.

East India Carpet Co. Pvt. Ltd., Connaught Place, New Delhi 110001.

Tufted Carpets & Woollen Inds. Ltd., C-92, N. D. S. E. Part II, New Delhi 110049.

Jammu & Kashmir

East India Carpet Co. Pvt. Ltd., Srinagar 190001.

Hadow & Co., C. M., Srinagar 190001.

Oriental Carpet Factory, Shiring Bagh, Srinagar 190001.

Sheikh Co., P.O. Box 83, Srinagar 190001.

Madhya Pradesh

East India Carpet Co. Pvt. Ltd., Maharani Laxmibai Rd., Gwalior 474001.

Maharashtra

Beautex Carpets, Shop No. 65, Tardeo Airconditioned Mkt., Tardeo, Bombay 400034.

Blue Star Carpet Mfrs., 15-16, Raheja Centre, 214, Nariman Point, Bombay 400021.

Colaba Carpet Inds., 81, Wodehouse Rd., Colaba, Bombay 400005.

Hiranand Valiram, 34, Walchand Hirachand Mrg., Bombay 400001.

Indiana Carpet Inds., 215, Arun Chambers, Tardeo Rd., Bombay 400034.

KCM Kohinoor Carpet Mfrs., 83A, Bazargate St., Bombay 400001.

Kim Carpet Ind., Harilela House, Opp. G.P.O., Bombay 400001.

United Felts & Carpets, Udyog Bhavan, W. H. Mrg., Bombay 400038.

W. H. Deeth Pvt. Ltd., 33/34, Dr. A. Besant Rd, Bombay 400018.

Punjab

Model Woollen & Silk Mills, Grover Estate, Verka, Amritsar 143501.

Oriental Carpet Manufrs. (India) Pvt. Ltd., Amritsar 143001.

Rajasthan

Modern Woollen Carpets Pvt. Ltd., Sevarampura, Tonk 304001. (Rajasthan).

Tamil Nadu

Chellarams (Madras), 86, Wallajah Rd., Madras 600002.

Uttar Pradesh

Abbas Wazir Pvt. Ltd., New Bazar, Bhadohi 221401.

Akhtaruzzaman & Bros., Imlaha St., Mirzapur 231001.

Bhadohi Textile Ind. Pvt. Ltd., Bhadohi 221401.

Carpet Co-op. Federation Ltd., Station Rd., Bhadohi 221401.

General Fibre Dealers Pvt. Ltd., Bhadohi 221401.

Hill & Co. Pvt. Ltd., E., Railway Station, Mirzapur 231101.

Jaypee Carpets, Premghan Mrg., Mirzapur 231102.

Kailas Carpet Co., Dholpur House, Agra 282001.

Mahabir Prasad & Co., Main Rd., Bhadohi 221401.

Modi Carpets Ltd., Civil Lines, Modinagar 201204.

Obeetee Pvt. Ltd., Bhariaghat, Mirzapur 231001.

Quality Marked Woollen Carpet Manufacturers Co-op. Assn. Ltd., Gopaldas Rd., Mirzapur 231001.

Samad Carpets Pvt. Ltd., Samad Buildings, Bhadohi 221401.

Shaheen Carpet Inds., Laldiggi, Mirzapur 231002.

Shilpi, Laldiggi, Mirzapur 231002.

West Bengal

Birla Jute Manufg. Co. Ltd., 15, India Exchange Place, Calcutta 700001.

Nylon Carpet Mfg. Co. (India) Pvt. Ltd., 5, Synagogue St., 7th Flr., Calcutta 700001.

Shroff's Carpets, 12, J. Nehru Rd., Calcutta 700013.

CARS & TRUCKS

Ashok Leyland Ltd., Ennore, Madras 600057. (*Leyland Comet* trucks : *Beaver Hipo & Jumbo* trucks.)

Hindustan Motors Ltd., Uttarpara 712258. (*Ambassador* cars, *Hindustan* trucks.)

Mahindra & Mahindra Ltd., Automobile Dn., Worli Rd., Bombay 400018.

Premier Automobiles Ltd., Construction House, Ballard Estate, Bombay 400038. (*Premier President* and *Padmini* cars ; *Premier Pioneer & Premier Roadmaster* trucks.)

Standard Motor Products of India Ltd., 29, Mount Rd., Madras 600002. (*Standard Gazel* cars & *Standard* trucks).

Tata Engg. & Locomotive Co. Ltd., Bombay House, H. Mody St., Bombay 400023. (*Tata* trucks.)

CASEIN & CASEINATES

Anand Dairy Products, Opp. Polson Dairy, Polson Rd., Anand 388001. (Gujarat).

D. Doshi & Co., 111, Wadala Udyog Bhavan, Bombay 400031.
Doshi Brothers, Polson Rd., Anand 388001. (Gujarat).
R. Deepak & Co., Navjivan Socy., Bldg. No. 3/8, Lamington Rd., Bombay 400008.
Ramesh Kapasi, Navjivan Socy., Bldg. No. 3/8, Lamington Rd., Bombay 400008.

CASSETTE TAPE RECORDERS

Anand Audio Mfg. Co., P.O. Deshbandhunagar, Bagulati, Calcutta 700059.
Asian Radios, Bhagirath Palace, Chandni Chowk, Delhi 110006.
Beltek Electronics Pvt. Ltd., A-30, Narain Indl. Area, Phase I, New Delhi 110028.
Chandra Electronics, Near Opera House P.O., Bombay 400004.
Electronic Inds. of India, 4684, Main Ansari Rd., 21, Daryaganj, New Delhi 110002.
General Electronics of Haryana Pvt. Ltd., 17/6, Main Mathura Rd., Faridabad 121001.
Genesis India, 505-506, Red Rose, 50, Nehru Place, New Delhi 110019.
M. I. Electronics, 138, Mount Rd., Madras 600006.
Masterphone Pvt. Ltd., 1423, Chandni Chowk, Delhi 110006.
Orson Video Pvt. Ltd., Arcadia, 2nd Flr., N. Point, Bombay 400021.
Paras Electronics Pvt. Ltd., 5, Comm. Centre, Narain Ind. Area, New Delhi 110028.
Priti Electronics Pvt. Ltd., F21, Jangpura Extn., New Delhi 110014.
Radio & Communication Traders, 111-H/10, Lajpatnagar, New Delhi 110024.
Resa Co., B-8, Ind. Estate, Guindy, Madras 600032.
Televista Electronics Pvt. Ltd., 239, Okhla Ind. Estate, New Delhi 110020.
TNK Electronics, 21, Sooterkin St., Calcutta 700072.
UMS Radio Factory Pvt. Ltd., Coimbatore 641018.
Vinay Electronics Corpn., 336, Lajpat Rai Mkt., Delhi 110006.
Wings Electronics, 309, Lajpat Rai Mkt., Delhi 110006.

CASSETTE TAPES

A V M Projection Service, 57, Dr. Radhakrishna Rd., Mylapore, Madras 600004.
Bel Refrigeration Co., (Electronics Dn.), 4/C, Nungambakkam High Rd., Madras 600034.
Chandrika Electronics Ltd., 139, Sardar Patel Rd., Secunderabad 500003.
Citizen Inds., Post Box 168688, Bombay 400050.
Coney Electronics Pvt. Ltd., 1/40-3, Mount Poonamalle St., St. Thomas Mount, Madras 600016.
Kamal Inds., 2-F, M. Gandhi Rd., Bangalore 560001.
Kapco International, 603, Deepali, 92, Nehru Place, New Delhi 110024.
Kunstcom Electronics (India) Pvt. Ltd., 14, Market II, Phase II, Ashok Vihar, Delhi 110052.
Master Recording Co., 33, 1st Main Rd., Raja Annamalaipuram, Madras 600028.
Movac Electronics Pvt. Ltd., 505, Bharat Indl. Estate, T. J. Rd., Sewri, Bombay 400015.
Music International, 19/21, Steelmade Indl. Estate, M. Maroshi Rd., Andheri East, Bombay 400059.
Nahata Co., 17, Narasingapuram St., Mount Rd., Madras 600002.
Prakash International Pvt. Ltd., Padma Tower, Rajindra Place, New Delhi 110008.
Shah Traders, 505, Parekh Mkt., 39, Kennedy Bridge, Opera House, Bombay 400004.
Susmit Sangita Inter Magnetics Pvt. Ltd., Gyanco Bldg., Main Rd., Ranchi 834001. (Bihar State).
Teisco Electronics, Imperial Cinema Bldg., Dr. Bhadkamkar Mrg., Bombay 400004.

CAST IRON & G. I. PIPES

Baroda Rolling Mills Pvt. Ltd., Chhani Rd., Vadodara 390001.
Crawley & Ray (Founders & Engrs.) Pvt. Ltd., 32, Foreshore Rd., P.O. Botanic Garden, Howrah 711103.
East End Hardwares Pvt. Ltd., 21, M. Debendra Rd., Calcutta 700007.
Kajaria Foundry Engg. Works Pvt. Ltd., 85, Jolly Maker Chambers No. 2, Nariman Point, Bombay 400021.
Kajeco Inds., Sultanganj, Agra 282004.
Nagpur Engg. Co. Ltd., F-8, MIDC Ind. Estate, Hingna Rd., Nagpur 440016.
National Casting Co., 8, B. B. D. Bag East, Calcutta 700001.
Shankar Tubes Ltd., 4, Narkeldanga CIT Main Rd., Calcutta 700054.
Supra Enterprise, 32-33, Nehru Place, New Delhi 110019.

CASTINGS—DIE

Amkay Die Casting Ind., Latif House, Iron Market, Bombay 400009.
Ashok Pressure Castings Pvt. Ltd., 31-A, Ind. Estate, Madras 600058.
Best Cast Pvt. Ltd., 50/12, Brick Kiln Rd., Ottery, Madras 600012.
Cast Master, 46, Ind. Estate, Sector 6, Faridabad 121002. (Haryana).
Crown Castings Pvt. Ltd., B-49/1 & 2, Ind. Estate, Sanatnagar, Hyderabad 500018.
Die Casting Ind. Pvt. Ltd., 12-B, N. S. Rd., Calcutta 700001.
Ductron Castings Ltd., B-45, Indl. Devpt. Area, Uppal, Hyderabad 500039.
Esvee Tool & Design Engrs., 227, Pollachi Rd., Coimbatore 641021.
Ferrodie Ltd., Wagle Ind. Estate, Thane 400604.
Indian Die Casting Inds., Agra Rd., Aligarh 202001.
Kriscast, F-5, Ind. Estate, Ambattur, Madras 600058.
Mysore Precision Die Casting Pvt. Ltd., Tumkur Rd., Bangalore 560022.
Prestolite of India Ltd., 16/4, Main Mathura Rd., Faridabad 121003.
Siraj Die Casting Factory, Rd. No. 16, Thane 400601.
Super Auto India, 50, Indl.-cum-Housing Estate, Sector 6, Faridabad 121006. (Haryana).
Usha Die Casting Pvt. Ltd., 5-39, Gr. Kailash, New Delhi 110043.
Vishwakarma Tin Factory, 11, B.M.C. Ind. Estate, Bapty Rd. West, Bombay 400008.
Yojana Udyog Pvt. Ltd., 325, Kalbadevi Rd., Bombay 400002.

CASTINGS—MALLEABLE

Aminchand Payarelal, Tanda Rd., Jullundur City 144001.

Amit Products Ltd., Behind Arbuda Mills, Rakhial Rd., Ahmedabad 380021.

Bangalore Malleable & Grey Iron Castings, 7th Mile, Mysore Rd., Nayandahalli, Bangalore 560039.

Bihar Malleable Casting Ltd., 16, Hare St., Calcutta 700001.

Bombay Malleable Iron Casting & Allied Ind. Ltd., Neelam, Worli Sea Face, Bombay 400018.

Cochin Malleable Pvt. Ltd., Trichur 680001.

G. G. T. Kaypee Pvt. Ltd., Fitwell House, LBS Mrg., Vikhroli, Bombay 400083.

Gayday Iron and Steel Co. Ltd., 25, G. C. Ave., Calcutta 700013.

Globe Steel Ltd., Ballabhgarh 121004 (Haryana).

Hindustan Malleables and Forgings Ltd., Jalan House, Jharia 828111.

Indian Iron & Steel Co. Ltd., 50, Chowringhee Rd., Calcutta 700071.

Indian Malleable Castings Ltd., 4, Lyons Range, Calcutta 700001.

Indian Smelting & Refining Co. Ltd., Shastri Marg, Bombay 400078.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Kantilal & Co., 160, N. S. C. Bose Rd., Madras 600001.

Malleable Iron and Steel Casting Co. Ltd., Tulsi Pipe Rd., Bombay 400013.

Metro Malleable Manufrs. Ltd., Mysore Rd., Bangalore 560026.

Mukand Iron & Steel Works Ltd., Agra Rd., Kurla, Bombay 400070.

Nitin Castings Ltd., Eastern Express Highway, Thane 400601.

Patnaik Ind. Pvt. Ltd., New Capital, Bhubaneshwar 751001.

Pearlistic Iron Castings & Engg. Works, Dr. R. Prasad Rd., Mulund, Bombay 400080.

Phillips Volkarts Pvt. Ltd., 8B, Lallbazar St., Calcutta 700001.

R. M. Engg. Works, Khokhra Mehmedabad, Ahmedabad 380008.

Shah Malleable Casting Ltd., Ashok Chambers, Broach St., Bombay 400009.

Tubes & Malleables Ltd., 99, Armenian St., Madras 600001.

CASTINGS – NON-FERROUS METAL, ALLOY, IRON, CAST IRON, STEEL, STAINLESS STEEL & BRASS

Andhra Pradesh

Allied Manufrs. Ind., C-16, Ind. Estate, Sanatnagar, Hyderabad 500018.

Duccan Alloy Castings, 5-B, Indl. Development Area, Patancherlu 502319.

Bihar

Bhoruka Inds. Pvt. Ltd., J. Nagar, Jamshedpur 831012.

Diana Moulding Works, Old Purulia Rd., P.O. Mango, Jamshedpur 831012.

Kumardhubi Engg. Works Ltd., Kumardhubi 828203. Dhanbad Dist.

Pathardih Engg. Works, Pathardih 828119. Dhanbad Dist.

Powerdeals, 10223, Gurdwara Rd., Karol Bagh, New Delhi 100003.

Delhi

Chadha Ind. (India), 4, D.L.F. Ind. Area, Najafgarh Rd., New Delhi 110015.

Plycast (Delhi) Pvt. Ltd., B-11, Greater Kailash, New Delhi 110048.

Gujarat

Anil Brass Foundry, 55, Dig. Plot, Jamnagar 361001.

Dodhia Brass Moulding Works, U. Nagar, Jamnagar 361001.

Fabricast, 6-B, Seth Indl. Estate, Suren Rd, Andheri East, Bombay 400093.

Jams Engg. Pvt. Ltd., Plot No. 35, Central Rd., MIDC Estate, Marol, Andheri East, Bombay 400093.

Kansara Bros., Gujarat Hosiery Mills Compound, Ahmedabad 380021.

Khira Foundry & Engg. Works, Patel Colony, Jamnagar 361001.

Metafab & Casting, 72, Union Indl. Estate, Ahmedabad 380023.

Milan Moulding Works, 13/14, Ashish Indl. Estate, Nagarwel Hanuman Rd., Rakhial, Ahmedabad 380023.

National Castings, Ind. Estate, Bapunagar, Ahmedabad 380023.

Pathik Ind., 68/71, Union Co-op. Indl. Estate, Ahmedabad 380021.

Premier Die-Casting & Engg. Co. Ltd., Ramol, Ahmedabad 380008.

Punjab Steel Rolling Mills, Vadodara 390005.

Rohit Castings & Forgings, 97/98, GIDC Chitra, Bhavnagar 364004.

Shree Ram Mills Ltd. (Foundry Divn.), Surat Navsari Rd., P.O. Baroda Rayon, Udhna 394210.

Steelcast Bhavnagar Pvt. Ltd., Bhavnagar 364001.

Haryana

Industrial Casting Corpn., Plot No. 247, Sector 24, Faridabad 121005. (Haryana).

Karnataka

Canara Steel Ltd, Ind. Area, Mangalore 575010.

Kashyap Engg. & Metallurgicals Pvt. Ltd., 2/A-4/5, Ind. Estate, Rajajinagar, Bangalore 560044.

Mysore Machinery Manufrs. Ltd., Mysore Rd., Bangalore 560026.

Mysore Wire & Metal Ind., 13, 4th Cross, Magadi Rd., Bangalore 560023.

Steelcast Specialities, 38, Sarakki Indl. Layout, Bannerghata Rd., Bangalore 560029.

Madhya Pradesh

Bhilai Engg. Pvt. Ltd., Bhilai 490001.

Jash Engineering Pvt. Ltd., Ishwar Niwas, 42, Chhotigwaltoli, Indore 452001.

M. P. Alloy Castings Ltd., Post Box No. 61, Bilaspur 459001.

Maharashtra

Anand Udyog Pvt. Ltd., Agarwal Estate, C. S. T. Rd., Kalina, Bombay 400098.

Aashish Products, Churiwadi, Goregaon East, Bombay 400063.

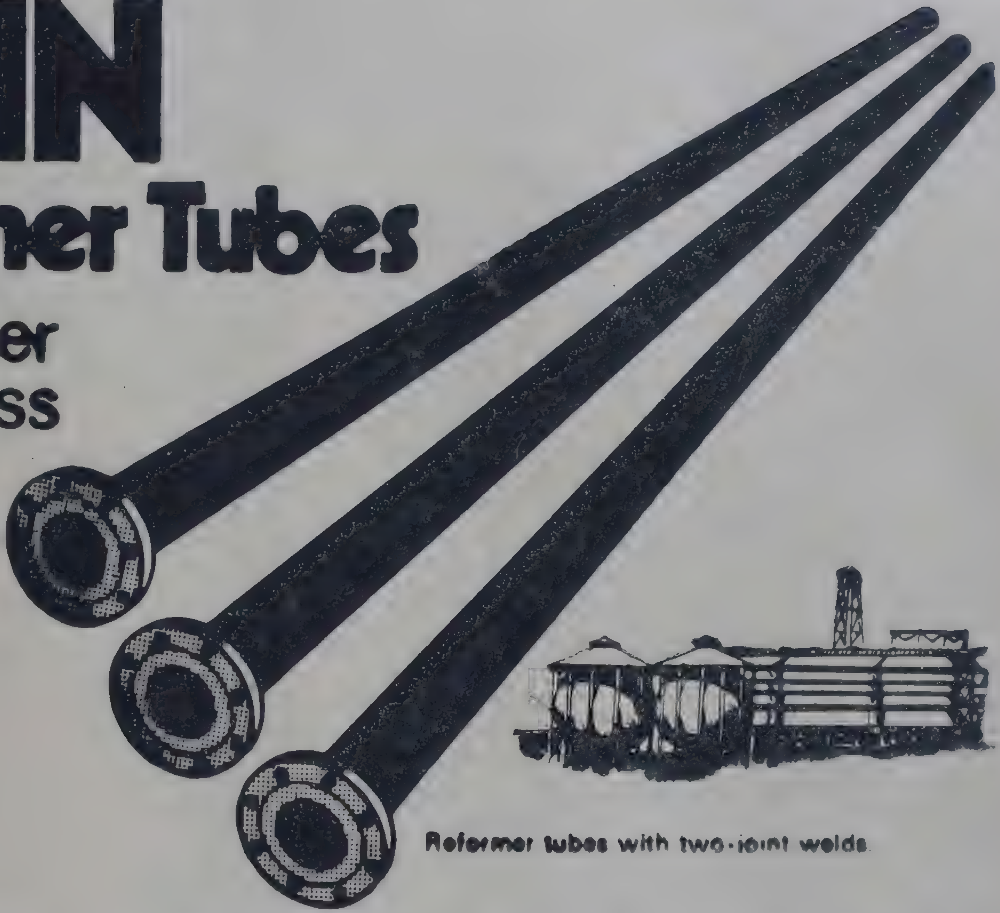
Ashoka Inds., 69, Govt. Ind. Estate, Kandivli, Bombay 400067.

Bagga Agencies Pvt. Ltd., Kala Killa Rd., Dharavi, Bombay 400017.

Bharat Forge Co. Ltd., Mundhwa, Pune 411601.

NITIN
Reformer Tubes

For Fertiliser
and Process
Industries



Reformer tubes with two-joint welds.

Manufactured by the advanced Centrifugal Casting Process in collaboration with world leaders, Schmidt + Clemens, W-Germany.

In the hot corrosive atmospheres of petrochemical and fertiliser plants, reformer tubes encounter temperatures as high as 900°—1050°C

Nitin Reformer Tubes stay on the job for years without let up. Which is why leading fertiliser and chemical plants in India employ Nitin Reformer Tubes in service

Using the advanced Horizontal and Vertical Centrifugal Castings Process, Nitin manufactures entire Reformer Tube assemblies which are totally import substitution items and foreign exchange earners

Confirm the quality of Nitin Reformer Tubes. Ask FACT, Cochin or NOCIL, Bombay to whom the latest deliveries of Nitin Reformer Tubes have been made

Nitin has over a decade of pioneering experience to undertake Static Alloy Steel Castings

NITIN
A kedia ENTERPRISE
NITIN CASTINGS LTD.
Eastern Express Highway,
Post Box No. 74, Thana-400 601
Tel 591932-591933-594550.
(Bombay). Telex 011-2395.

ART-1016

NITIN—MEANS ALLOY STEEL CASTINGS

SE
NITIN CASTINGS LTD.

Bombay Metal & Alloys Manufg. Co. Pvt. Ltd., Darukhana, Bombay 400010

Bombay Metal Refinery, 24, Old Anjirwadi, Mascarenhas Rd., Mazagaon, Bombay 400010.

Business Combine Ltd., Plot No. 16, M.I.D.C. Estate, Satpur, Nasik 422007.

Chandra Alloys & Steel Pvt. Ltd., Plot No. D/14, MIDC., Shiroli, Kolhapur 416122.

Devidayal Metal Ind. Ltd., Darukhana, Bombay 400010.

Emmes Metal Pvt. Ltd., 147, Govt. Ind., Estate, Bombay 400067.

Forward Alloys & Castings, Patil Compd., L. B. S. Mrg., Bhandup, Bombay 400078.

Genco Ind. Pvt. Ltd., Plot No. A52/53, Wagle Ind. Estate, Thane 400604.

Ghatge Patil Inds. Ltd., Uchgaon 416045, Kolhapur Dist.

Indian Smelting & Refining Co. Ltd., Shastri Marg, Bhandup, Bombay 400078.

Indian Standard Metal Co. Ltd., Post Box 6960, Bombay 400027.

Industrial Casting Co., Wagle Ind. Estate, Thane 400604.

Jams Engg. Pvt. Ltd., Plot 35, Central Rd, MIDC Estate, Marol, Andheri (E), Bombay 400093.

K. K. Nag Pvt. Ltd., 23/5A, Bund Garden Rd., Pune 411001.

Kamani Metals & Alloys Ltd., Kurla, Bombay 400070.

Metallica Works Pvt. Ltd., 138, Govt. Ind. Estate, Bombay 400067.

Metalloys Industries, C 11/12, Dalia Indl. Plots, V. Desai Rd., Andheri West, Bombay 400058.

Minhas Steels Pvt. Ltd., 45, Dharmjyot No. 4, A. B. Nair Rd., Bombay 400049.

Montana Pvt. Ltd., Rahimtoola House, Homji St., Bombay 400001.

Northern Alloys Foundry, 9/9, Embassy Centre, Nariman Point, Bombay 400021.

Pentagon Stainless Steel Castings and Alloys Pvt. Ltd., Madhu Mukund, 33, Sion East, Bombay 400022.

Permanent Magnets Ltd., 20, Old Custom House Rd., Bombay 400001.

Phiroze Sethna Ind., 14, J. Tata Rd., Bombay 400020.

Powder Metals & Alloys Pvt. Ltd., A-30, Ind. Estate, Thane 400604.

Prakalp Pvt. Ltd., MIDC Ind. Area, Chikalthana 431210, Aurangabad Dist.

Quality Steel Castings, 45, Dr. Ambedkar Rd., Pune 411001.

Rashtriya Metal Inds. Ltd., M. Vasanji Rd., Bombay 400059.

Sethi Nippon Pvt. Ltd., 26, Avantikabai Gokhale St., Bombay 400004.

Shah Castings, 5th Kumbharwada, Durgadevi Rd., Bombay 400004.

Shah Jayantilal Chunilal & Co., 5th Kumbharwada, Durgadevi Rd., Bombay 400004.

Shell Moulding Equipment, 17-A, Ghatkopar Ind. Estate, Bombay 400086.

Shivaji Works, Shivashahi, Solapur 413224.

Shivasai Tdg. Corpn., 3, Ratan Manzil, Zaveri Bazar, Bombay 400002.

Sim Processors Pvt. Ltd., 220, Tulsiani Chambers, Nariman Point, Bombay 400021.

Steel Knight Castings, Plot D-32, MIDC., Satpur, Nasik 422007.

Steel Smelters, Piramal Ind. Estate, S. V. Rd., Goregaon (W), Bombay 400062.

Supreme Foundry & Engg. Works Pvt. Ltd., 3C1, Court Chambers, 35, New Marine Lines, Bombay 400020.

Suresh Engg. Co. Pvt. Ltd., 414/B, Walbhat Rd., Goregaon East, Bombay 400063.

Trimurty Malleables, Aurangabad 431001.

Uni Abex Alloy Products Ltd., Liberty Bldg., Sir Vithaldas Thackersey Marg, Bombay 400020.

Uni Deritend Precision Castings, Liberty Bldg., Sir Vithaldas Marg, Bombay 400020.

Universal Ferro & Allied Chemicals Ltd., Liberty Bldg., Sir Vithaldas Thackersey Mrg., Bombay 400020.

Universal Foundry Pvt. Ltd., Old Nagardas Rd, Andheri East, Bombay 400069.

Wheelabrator Alloy Castings Ltd., Khopoli 410203. Kolaba Dt.

Punjab

Daulat Indl. Corpn. Pvt. Ltd., Civil Lines, Ludhiana 141001.

Hindmurti Engrs., Preetnagar Rd., Indl. Area, Jullundur 144004. (Punjab).

Partap Steels, Mandi Gobindgarh 147301, Patiala Dist

Rajasthan

Jaipur Metals & Electricals Ltd., Jaipur 302006.

National Engg. Inds. Ltd., Khatipura Rd., Jaipur 302006.

Tamil Nadu

Arkonam Castings & Forgings Ltd., 38, Mount Rd., Madras 600006.

Best & Crompton Engg. Co. Pvt. Ltd., 13/15, North Beach Rd., Madras 600001.

Dharmapuri Steel Castings Ltd., 41, Kasturi Ranga Iyengar Rd., Madras 600018.

Industrial Feeders, Plot 50, Ambattur Indl. Estate, Madras 600058.

K. C. P. Ltd., 38, Mount Rd., Madras 600006.

Kris Cast, F-5, Indl. Estate, Ambattur, Madras 600058.

Metalcast Services, B-12, Ind. Estate, Madras 600058.

Pattern & Carpentry Works, 60, MKN Rd., Madras 600032.

Pioneer Alloy Castings Ltd., 125, St. Mary's Rd., Madras 600018.

Samco Metals & Alloys Pvt. Ltd., 53, Jones Rd., Madras 600015.

Secals Ltd., 8, Rutland Gate, IV St., Madras 600006.

Sivananda Steels Ltd., Ambattur, Madras 600058.

Southern Alloy Foundries Pvt. Ltd., M. Milk Colony, Madras 600060.

Spheroidal Castings Ltd., 46, Thiruneermalai Rd., Chromepet, Madras 600044.

Sri Hari Foundry, 3, Amman Kulam Rd., P. N. Palayam, Coimbatore 641018.

Sri Ramakrishna Steel Inds. Ltd., Karamadai, Coimbatore 641104.

Supertech Castings, 97, Srinagar Colony, Saidapet, Madras 600015.

Tamilnadu Alloy Foundry Co. Ltd., 7, Balajinagar, 2nd St., Madras 600014.

Tansi Foundry & Heavy Machine Shop, Erode 638002.

Trichy Steel Rolling Mills Ltd., Senthannipuram, Tiruchirapalli 620004.

Uttar Pradesh

Aryan Metal Ind., Badli Katra, Mirzapur 231001.

Gupta Non-Ferrous Foundry Ind., Naini 211008, Allahabad Dist.

J. K. Iron & Steel Co. Ltd., Kamla Tower, Kanpur 208001.

Precision Tools & Castings Pvt. Ltd., Malaviya Nagar, Lucknow 226004.

S. P. Foundries, 56/15, Factory Area, Kanpur 208001.

Saru Smelting & Refining Corpn. Ltd., Meerut Cantt. 250001.

West Bengal

Abrasives & Castings Ltd., 11, Canal Rd., Calcutta 700010.

Albraco Metal Works Pvt. Ltd., 1, Mall Rd., Calcutta 700028.

Alloy Metal Ind. Pvt. Ltd., 16, R. S. Mullick Lane, Calcutta 700007.

Bengal Ingot Co. Ltd., 5, Hide Rd., Calcutta 700043.

Binani Metal Works Pvt. Ltd., 38, Strand Rd., Calcutta 700001.

Calcutta Iron, Steel & Non-ferrous Metal Works, P-88/4, Incinerator Rd., Calcutta 700053.

Die Casting Ind. Pvt. Ltd., 12-B, N. Subhas Rd., Calcutta 700001.

East Coast Mfg. & Mktg. Pvt. Ltd., 4, G. C. Avenue, Calcutta 700013.

Hind Die-Casting Pvt. Ltd., 12, Govt. Place (E), Calcutta 700001.

Keymer Begshawe Manufg. Co. Pvt. Ltd., 22, Strand Rd., Calcutta 700001.

Lynx Machinery Ltd., 104, Ultadanga Main Rd., Calcutta 700004.

Orient Steel & Inds. Ltd., 2, Brabourne Rd., Calcutta 700001.

Shalimar Works Ltd., 4, Garden Reach Rd., Kidderpore, Calcutta 700023.

CASTORS & TROLLEY WHEELS

Bombay Star Engg., 7, Mulchand Mansion, 30, Princess St., Bombay 400002.

Globe Indl. Equipments, 57, S. P. Rd., Bangalore 560002.

Great Maharashtra Rubber Works, Post Box 7480, Bombay 400060.

Gujarat Industrial Trucks Ltd., India House, Opp. G.P.O., Bombay 400001.

Hemani Inds., 187, Quay St., Mazgaon, Bombay 400010.

Jayant Dalal Ltd., 163/3, Lloyds Rd., Madras 600014.

King-Dom Inds., Govinda Bldg., Rua Alfonso de Albuquerque, Panaji 403001.

Mahalaxmi Enterprises, 240, Nagdevi St., Bombay 400003.

Nagori & Sons, 41, Hamam St., Narang House, Bombay 400001.

Rezello Inds., 331/333, Ebrahim Rahimtulla Rd., Bombay 400003.

Sabas Engg. Works, 105, Dr. E. Moses Rd., Worli, Bombay 400018.

Sanjay Mechanical Inds., 10, Hill Crest, Plot No. 7, N/S Rd., No. 10, J. V. D. Scheme, Bombay 400058.

Siddh Engrs. Pvt. Ltd, 86, Sukhlaji St., Bombay 400008.

Special Equipment Co., Chandraprabhu Indl. Estate, 20, K. V. Bhai Bai Mukund Mrg., Next to Byculla Goods Depot, Bombay 400012.

Tex-Mach Engrs., 5-B, Singh Indl. Estate, Ram Mandir Rd., Goregaon West, Bombay 400062.

CATALYSTS

Catalyst (India) Ltd., 79, Masjid Bunder Rd., Bombay 400003.

Catalysts and Chemicals India (West Asia) Pvt. Ltd., P.O. Adyar (via Udyogmandal) 683501, Kerala.

United Catalysts (India) Ltd., 240, Dr. D. N. Rd., Bombay 400001.

CELLULOSE PRODUCTS

Kesoram Industries and Cotton Mills Ltd., 42, Garden Reach Rd., Calcutta 700024.

Reliance Cellulose Products Ltd., 156-159, Sardar Patel Rd., Secunderabad 500003.

Technosynd Engrs., A-192, Rd. A, Wagle Estate, Thane 400604.

Travancore Rayons Ltd., 762, Anna Salai, Madras 600002.

CEMENT-MAKING MACHINERY

ACC-Vickers Babcock Ltd.. Express Towers, Nariman Point, Bombay 400020.

Larsen & Toubro Ltd., L. & T. House, Ballard Estate, Bombay 400038.

Minato Shirke Concrete Machines Pvt. Ltd., 72-76, Mundhwa, Pune 411036.

Puzzolana Machinery Fabricators, 3, Gulab Baug, Opp. Acharya Garden, Sion Trombay Rd., Chembur, Bombay 400071.

Rohit Machines Corpn., 14, Rani Jhansi Rd., Motia Khan, New Delhi 110055.

Catalysts

AMA UNC 5

for refineries,
petro-chemical
plants and
ammonia fertilizers.

Also deoxo,
cracking and various
selective hydrogenation
catalysts

REGD OFFICE, FACTORY, RESEARCH & DEVELOPMENT:
Cochin: P.O. Binanipuram-683 502, (Via Udyogamandal), Kerala Cable address: "Catalysts", Udyogamandal
Phones: 5481, 5461, 5403, 5487.

Baroda: A-1/2 Nandesari Industrial Area,
P.O. Nandesari-391 340 Dist BARODA
Phones 326 366
Cable address: "Catalysts Nandesari"

SALES, ADMINISTRATION AND TECHNICAL SERVICE:
Bombay: 240, D Naoroji Road, Bombay 400 001
Cable address: "Flowermead Bombay"
Telex: Bombay (011) 3986 CIWA Phones Sales & Administration: 265789, 262052, 265780
Technical Service: 264849 and 814312

New Delhi, 402, Mansarover Building
90 Nehru Place New Delhi-110 019
Telex (031) 4744 AB UCIL

United Catalysts India Ltd.
Girdler and CCI Catalysts Manufacturers

CEMENT PRODUCTS

Andhra Pradesh

Allied Ind., 1-8-582. Ind. Area, Azamabad, Hyderabad 500020.

Andhra Cements Ltd., Gandhinagar, Vijayawada 520003.

Hyderabad Asbestos Cement Products Ltd., Sanatnagar, Hyderabad 500018.

Kesoram Cement. Basantnagar 505187, Karimnagar Dist.

Panyam Cements & Mineral Ind. Ltd., Cement Nagar P.O. 518206. Kurnool Dist.

Raasi Cement Ltd., 1-10-125, Ashoknagar, Hyderabad 500020.

Tadpatri Cement Ltd., 1-2-9/C, Sardar Patel Rd., Secunderabad 500003.

Delhi

Asbestos Cement Ltd., Ashok Bhavan (6 & 7 Floors), 93, Nehru Place, New Delhi 110024.

Dalmia Cement (Bharat) Ltd., 4, Scindia House, New Delhi 110001.

Hindustan Prestressed Concrete Structures Pvt. Ltd., B-6, A. Ali Rd., New Delhi 110002.

Indian Hume Pipe Co. Ltd., 3A, National Insurance Bldg., Parliament Street, Delhi 110001.

Gujarat

Gujarat Cement Pipe Co., Shah-Alam Rd., Near Sawminarayan College, Ahmedabad 380022.

Royal Minerals & Metals, Royal Bldg., Relief Rd., Ahmedabad 380001.

Saurashtra Cement & Chemical Products Ltd., Ranavav 360560.

Spunpipe & Const. Co., (Baroda) Pvt. Ltd., R. C. Rd., Vadodara 390005.

Vallabhnagar Cement Products, 1669, Khadia, Ahmedabad 380001.

Karnataka

Bagalkot Udyog Ltd., Bagalkot 587111. (Bijapur Dist.).

Hillman Products, 764th Main Rd., Jayanagar, Bangalore 560011.

Surfa Coats Pvt. Ltd., 358, III Block, Rajajinagar, Bangalore 560010.

Madhya Pradesh

Raymond Cement Works, Link Rd., Bilaspur 495001.

Sarda Mineral Corpn., Barhi, Rd., Katni 483501.

Maharashtra

Associated Cement Cos. Ltd., Cement House, 121, M. Karve Rd., Bombay 400020.

Century Cement, Industry House, 159, Churchgate Reclamation, Bombay 400020.

Devi Ind., 1271, Deccan Gymkhana, Pune 411004.

ESCO (Poona) Pvt. Ltd., 2432, East St., Pune 411001.

Hindustan Colour & Chemical Ind., 76, C. P. Tank Rd., Bombay 400004.

Maharashtra Spun Pipe Ind. Pvt. Ltd., 96, M.I.D.C., Poona-Nasik Rd., Bhosari, Pune 411026.

Maihar Cement, Industry House, Churchgate Reclm., Bombay 400020.

National Tiles & Ind. Pvt. Ltd., 31, Hamam St., Bombay 400001.

Oriental Cement Paints Inds., H-13, 'Everest', 9th Flr., Tardeo, Bombay 400034.

Parekh Sales Corpn., 113, Bora Bazar St., Bombay 400001.

THE ASSOCIATED CEMENT COMPANIES, LIMITED

Cement House, 121, Maharshi Karve Road, Bombay 400 020
P.O. Box No. 11023, Bombay 400 020.

Tel. Addresses:
"ACCAGENCY", "ACCPURCHEZ", "ACCADMIN", "ACCGEOLOGY", "ACCMINING", "ACCEXPAN", "ACCPERSNEL", "ACCFINACS", "ACCFABRIK", "ACCREST", "ACCPROD", "ACCEXECUTE", "ACCDATA", "CEMENT", "CEMPUB".

Phone No. 299122

Directors :

Mr. N. A. Palkhivala (Chairman), Mr. P. S. Mistry (Vice-Chairman), Mr. Dharamsey M. Khatau, Mr. S. Moolgaokar, Mr. Kantilal Nahalchand, Mr. S. R. Vakil, Mr. Yogindra N. Mafatlal, Mr. K. M. George, Dr. N. L. Hingorani, Dr. R. R. Hattiangadi, Mr. P. K. Mistry, Mr. P. S. Gopalakrishnan, Mr. J. P. Munsiff, Mr. S. Krishnaswami, Mr. B. N. Reporter, Mr. P. N. Bam, Mr. P. J. Jagus, Mr. T. V. Balan, Mr. H. T. Parekh, Mr. K. L. N. Prasad, Mr. Sher Khan, Mr. Ashim Chatterji, Mr. Y. V. Rami Reddi, Mr. Manish Bahl.

Managing Director : Mr. S. Krishnaswami.
Jt. Managing Director : Mr. B. N. Reporter.
Whole-time Directors : Mr. P. N. Bam, Mr. P. J. Jagus and Mr. T. V. Balan.
Company Secretary : Mr. P. K. Sinor.

Rathi Brothers India, 27, Shankarshet Rd., Pune 411009.

Raymond Cement Works, Jekegram, Thane 400606.

Shetty Chemical & Engg. Works Pvt. Ltd., 43, Tamarind St., Bombay 400023.

Siporex India Ltd., 72/76, Ind. Estate, Mundhwa, Pune 411036.

Snowcem India Ltd., Killick House, Charanjit Rai Mrg., Bombay 400001.

Stocrete Ind., 413, Commerce House, Medows St., Bombay 400023.

Orissa

Hira Cement Works, Cementnagar, P.O. Bardoi 768038. Sambalpur Dist.

Orissa Cement Ltd., Rajgangpur 770017 (Sundergarh Dist.).

Rajasthan

Shree Cement Ltd., Civil Lines, Jaipur 302001.

Udaipur Cement Works, Bajajnagar 313021. Udaipur Dist.

Tamil Nadu

Chettinad Cement Corpn. Ltd., 64, Armenian St., Madras 600001.

Dalmia International, 29, Ind. Estate, Ambattur, Madras 600058.

India Cements Ltd., 175/1, Mount Rd., Madras 600002.

Madras Cements Ltd., 150-A, Mount Rd., Madras 600002.

West Bengal

National Planning & Construction Ltd., 16, G. Chandra Ave., Calcutta 700013.

Sarbamangala Manufg. Co., 31, College St., Calcutta 700012.

CERAMIC MACHINERY

A. N. Bhaskar Sons, Amarnagar, Faridabad 121003.
Gidwaney Bros., 73, N. Subhas Rd., Calcutta 700001.

CERAMICS & POTTERIES

Andhra Pradesh

Associated Glass Ind. Ltd., 1-10-63-64, Rockland, Begumpet, Hyderabad 500016.
Mahalaxmi Glass Works Pvt. Ltd., P.O. Sanatnagar, Hyderabad 500018.
Micro Ceramics Pvt. Ltd., A-8, Co-operative Ind. Estate, Balanagar, Hyderabad 500037.

Bihar

Bengal Bihar Firebricks & Pottery Works Pvt. Ltd., P.O. Mugma 828204, Dhanbad Dist.
Bihar Firebricks & Potteries Ltd., P.O. Mugma 828204, Dhanbad Dist.
India Firebricks & Insulation Co. Ltd., P.O. Marar 829117, Hazaribagh Dist.
Jauhar Firebricks & Refractories Works Pvt. Ltd., P.O. Mugma 828204, Dhanbad Dist.
Kumardhubi Fireclay & Silica Works Ltd., P.O. Kumardhubi 828203, Dhanbad Dist.
Maithan Ceramics Pvt. Ltd., P.O. Chirkunda 828202, Dhanbad Dist.
Nalanda Ceramics & Inds., Main Rd., Ranchi 834001.

Delhi

Bawa Potteries, Mehrauli, New Delhi 110030.
Delhi Blue Art Pottery, 1, Factory Rd., New Delhi 110016.
Ishwar Ind. Ltd., Ishwar Nagar, New Delhi 110020.
Palam Potteries, Gurgaon Rd., New Delhi 110037.
Pelican Ceramics Ind., Mehpalpur, Gurgaon Rd., New Delhi 110037.
Prem Enamel & Metal Factory, Chamelian Rd., Bara Hindu Rao, Delhi 110006.
Scindia Potteries Pvt. Ltd., Sarojini Nagar, New Delhi 110023.
Shiv Raj Pottery Works, 4, Shanker Terrace, Fountain, Chandni Chowk, Delhi 110006.

Gujarat

Anil Pottery Works, Naroda Rd., Opp. Excise Chowkey, Saijpur Bogha, Ahmedabad 382345.
Ashok Pottery Works, Naroda Rd., Ahmedabad 380002.
Ashwin & Co., 535, Relief Rd., Ahmedabad 380001.
Baroda Ceramics Pvt. Ltd., 78, Chhani Rd., Vadodara 390001.
Digvijaya Tiles & Potteries Ltd., Vagadia, Surendranagar Dist.
Electro-Porcelain Ind., Plots 16 & 17, G.I.D.C. Estate, Post Odhav 382415, Ahmedabad Dist.
Jyoti Ltd. Ceramics Divn., P.O. Chemical Industries, Vadodara 390003.
Kathiawar Inds. Ltd., P.O. Sherbaugh 362255, Junagadh Dist.
Khodiyar Pottery Works Ltd., Sihor 364240.
Madhusudan Ceramics, 'Ankur', Near Dinbai Tower, Ahmedabad 380001.
Nawroji N. Vakil & Co., Pottery Works, Vijaya Mills, Naroda Rd., Ahmedabad 380002.
Parshuram Pottery Works Co. Ltd., Morvi 363641.
Rajkamal Pottery Works, Ambawadi, Saijpur Bhoga, Naroda Rd., Ahmedabad 382345.
Shree Laxmi Ceramic Inds., National Highway Rd., Morvi 363642 (Gujarat).
Shree Vallabh Glass Works Ltd., Vallabh Vidyanagar 388120.
Shri Laxmi Pottery Works, Naroda Rd., Behind Kalyan Mills, Ahmedabad 380002.

Haryana

A. N. Bhaskar Sons, Amarnagar, Faridabad 121003.
Hindustan Sanitaryware & Ind. Ltd., Bahadurgarh 124507. Rohtak Dist.
Hindustan Vacuum Glass Ltd., N.I.T., Faridabad 121001.
Somany-Pilkington's Ltd., Kassar 124507. Rohtak.

Karnataka

Fibrebricks and Potteries Pvt. Ltd., Yeshvantpur, Bangalore 560022.
Mysore Porcelains Ltd., Science Institute Post, Bangalore 560012.
Mysore Stoneware Pipes & Potteries Ltd., VI Cross Rd., Gandhinagar, Bangalore 560009.

Kerala

Kerala Ceramics Ltd., Kundara 691501, Quilon Dist.
New India Ceramics Ltd., Feroke 673631, Kozhikode Dist.
Quilon Ceramics, Eravipuram, Quilon 691001.
Standard Pottery Work Pvt. Ltd., Alwaye 683101.
Thomas Stephen & Co. Ltd., P.B. 14, Quilon 691001.

Madhya Pradesh

Associated Cement Co. Ltd., Katni Cement Factory, Katni 483501.
Burn & Co. Ltd., North Civil Lines, Jabalpur 482001.
Gwalior Potteries Ltd., Gwalior 474001.
Ishwar Inds. Ltd., Niwar, Katni 483501, Jabalpur Dist.
Perfect Pottery Co. (Madhya Bharat) Ltd., Hanumantal, Jabalpur 482001.

Maharashtra

Asian Electronics Ltd., Rd. No. 28, D-11, Wagle Ind. Estate, Thane 400604.
Bassein Ceramics Pvt. Ltd., 324, Cooke Bldg., Dr. D. Naoroji Rd., Bombay 400001.
Bombay Potteries & Tiles Ltd., Pipe Rd., Kurla, Bombay 400070.
Borosil Glass Works Ltd., Marol-Maroshi Rd., Off Military Rd., Bombay 400059.
Central Potteries Works, Bagadganj, Nagpur 440008.
Chemet, 210, Dr. D. N. Rd., Bombay 400023.
Eastern Ceramics Ltd., M. Gandhi Rd., Opp. Mitha Ghar, Goregaon West, Bombay 400062.
Haldyn Glass Works Pvt. Ltd., Off Western Express Highway, Goregaon (East), Bombay 400063.
J. G. Glass Industries, Pimpri, Pune 411018.
Jyoti Ceramic Inds., Plot No. C21, NICE, Satpur, Nasik 422007.
K. M. Ceramics, 102, Bank of Baroda Bldg., Palton Rd., Bombay 400001.
Kashmira Ceramic Products Pvt. Ltd., S. Vivekanand Rd., Mira Village, Bombay 400092.
Mahalaxmi Glass Works Ltd., Haines Rd., Bombay 400011.
Mahavir Refractories Corpn., Maker Bhavan No. 2, New Marine Lines, Bombay 400020.
Minerals Grinding Corpn., 56-D, Clerk Rd., Jacob Circle, Bombay 400011.

Navbharat Potteries Pvt. Ltd., Tokersey Jivraj Wadi, Zakaria Bunder Rd., Sewri, Bombay 400015.

Paisa Fund Glass Works, Talegaon Dabhade 410506, Pune Dist.

Precision Ceramics, Post Box 7730, Bombay 400092.

Rescon Manufg. Co. Pvt. Ltd., Moray House, Vivekanand Rd., Bombay 400050.

Orissa

Belpahar Refractories Ltd., P.O. Belpahar 768218.

Orissa Ind. Ltd., Katchery Rd., Rourkela 769001.

Punjab

Himalaya Potteries Ltd., Phillaur 144410. Jullundur Dist.

Snow White Porcelain Enamel Works, Outside Suri Gate, Ferozepur City 152001.

Rajasthan

Bikaner Ceramics Pvt. Ltd., Ind. Area, Bikaner 334001.

Garg Alloys Pvt. Ltd., E-51, Indl. Complex, Bhiwadi 301707. Alwar Dist. (Rajasthan).

Jaipur Glass & Potteries Works Ltd., Tonk Road, Jaipur 302004.

Perfect Pottery Co. Ltd., Bharatpur 321001.

Tamil Nadu

Carborundum Universal Ltd., 11-12, North Beach Rd., Madras 600001.

Dalmia Ceramic Inds., Dalmiapuram 621651. Tiruchirapalli Dist.

E. I. D. Parry (India) Ltd., Dare House, P.B. 12, Madras 600001.

Kent Ceramic Tiles & Co. Pvt. Ltd., 167, Broadway, Madras 600001.

Neiveli Ceramics & Refractories Ltd., P.O. Vadalur 607303, South Arcot Dist.

Seshasayee Ind. Ltd., Serakuppam, P.O. Vadalur 607303, South Arcot Dist.

Stoneware Pipes (Madras) Ltd., Tiruvallur 602001. Chingleput Dist.

Tube Suppliers Ltd., 99, Armenian St., Madras 600001.

W. S. Insulators of India Ltd., Dhun Building, 175/1, Mount Rd., Madras 600002.

Uttar Pradesh

Durga Enterprises (Pvt.) Ltd., Malkanagar, Via Ghaziabad, Meerut Dist.

Indian Ceramic House, Langra-ki-Chowki, Agra 282004.

Lalchand Anand & Sons, South of G.T. Rd., Ghaziabad 201001.

Modern Ceramic Co. Ltd., C-32/27, Vidyapith Rd., Varanasi 221002.

U.P. Ceramics & Potteries Ltd., Model Town, Ghaziabad 201001.

UPSIC Potteries Ltd., B-15, Sarvodayanagar, Kanpur 208005.

West Bengal

Allied Distributors, 33, Brabourne Rd., Calcutta 700001.

Amic Ind. Pvt. Ltd., 10, B.T. Rd., Calcutta 700056.

Arco Ceramics, 8/1, G. Datta Garden Rd., Calcutta 700004.

Art Potteries Pvt. Ltd., Majerhat Nimta, 24 Parganas, Calcutta 700049.

Associated Porcelain Pvt. Ltd., 19, R. N. Mukerjee Rd., Calcutta 700013.

Bengal Enamel Works Ltd., 24, Chittaranjan Ave., Calcutta 700012.

Bengal Linn Ind. Furnace Ltd., 27B, Camac St., Calcutta 700016.

Bengal Metrograph Co. Pvt. Ltd., 53, Pramanick Ghat Rd., Calcutta 700036.

Bengal Porcelain Co. Pvt. Ltd., 1/2, Motisil St., Calcutta 700013.

Bengal Potteries Ltd., 45, Tagore Rd., Calcutta 700015.

Bharat Grinders, 91, Dharamtolla St., Calcutta 700013.

Bharat Tin & Enamel Co. Pvt. Ltd., 72, Tiljala Rd., Calcutta 700046.

Burn & Co. Ltd., Martin Burn House, 12, Mission Row, Calcutta 700001.

Central Glass Ind. Pvt. Ltd., 7, Swallow Lane, Calcutta 700001.

Cieco Pvt. Ltd., 2/1, Barrackpore Trunk Rd., Calcutta 700050.

Enamelnagar Development Corpn. Ltd., 60/2, Dharamtala St., Calcutta 700013.

Gidwaney Bros., 73, N. Subhas Rd., Calcutta 700001.

Grace Mine Tile Corpn., 20/1, Lallbazar St., Calcutta 700001.

Harry Refractory & Ceramic Works Pvt. Ltd., 640, Rabindra Sarani, Calcutta 700003.

Hind Refractories Ltd., Durgapur 713203.

Hindustan Pilkington Glass Works, Hindustan Bldgs., 4, Chittaranjan Ave., Calcutta 700013.

Hindustan Potteries, 12, S. K. Daw Lane, Calcutta 700007.

Hindustan Refractories & Ceramics Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

Hirji & Co. Pvt. Ltd., 20, Pollock St., Calcutta 700001.

India Potteries Ltd., 91, Dharamtala St., Calcutta 700013.

Indo Ashahi Glass Co. Ltd., 30, Chittaranjan Ave., Calcutta 700012.

Jharia Firebricks & Pottery Works Pvt. Ltd., 3, Princep St., Calcutta 700013.

Kusum Engg. & Co. Ltd., 25, Swallow Lane, Calcutta 700001.

New Indian Glass Works (Calcutta) Ltd., 2, Church Rd., Calcutta 700028.

Oriental Metal Ind. Pvt. Ltd., 67, B. B. Ganguly St., Calcutta 700012.

Power Porcelain, Bose Park, P. O. Sukhchar 743179. 24 Parganas Dist.

Reliance Firebricks & Pottery Co. Ltd., 11-12, Esplanade Mansions, Calcutta 700001.

Sangjukta, 186/1, Gopal Lal Tagore Rd., Calcutta 700035.

Scientific Indian Glass Co. Ltd., 98, Christopher Rd., Calcutta 700046.

Shree Gobinddeo Glass Works Ltd., 9, Ezra St., Calcutta 700001.

Sodepur Potteries Ltd., P.O. Sodepur 743178. 24 Parganas Dist.

Sur Enamel & Stamping Works Pvt. Ltd., 24, Middle Rd., Calcutta 700014.

Waldies Ltd., Gillander House, N. Subhas Rd., Calcutta 700001.

(See also ' Crockeries ' in this list.)

CHAIN PULLEY BLOCKS

(See 'Material Handling' in this list.)

CHAINS

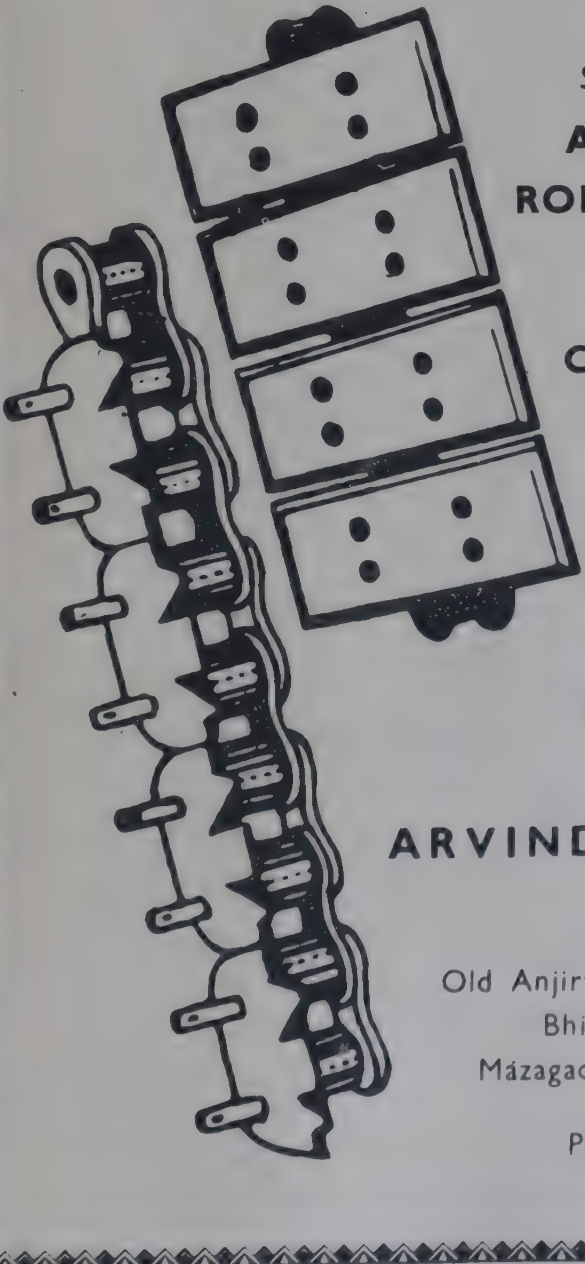
Aadikesh Inds., G/33, Harisiddha Chambers, Near Income-tax Bldg., Ashram Rd., Ahmedabad 380014.

CHAINS MFGRS.

MISTRI DEVSHIBHAI TRIKAMJI & SONS

Office : 37, Ist Kumbharwada (Bhandari Street), BOMBAY 400 004.
Phone : 364874.

MILL GIN STORES & TEXTILE MACHINERY SPARE PARTS MANUFACTURERS



Specialists in :

All kinds of ROLLER CHAIN

and

CONVEYOR CHAIN

ARVIND INDUSTRIES

Factory :
Old Anjirwadi, 34, C. Champshi
Bhimji Cross Lane,
Mázagaon, Bombay 400 010.

Phone : 378725.

Ashok Steel Chain Mfg. Co., 6, Sewree Cross Rd., Bombay 400015.
Bardai Inds., Sewri, Bombay 400015.
Britex Inds., Noble Chambers, 11, Ghogha St., Bombay 400001.
Chains India Pvt. Ltd., Ruby Centre, 75C, Park St., Calcutta 700016.
Communications & Power Equipment Co. Pvt. Ltd., 1, Lalbaug Indl. Estate, Bombay 400012.
Eastern Commercial Corpn., 5/1, Clive Row, Calcutta 700001.
General Textile Stores, 66, Dhanji St., Bombay 400003.
Hybro Chains Pvt. Ltd., No. IG, Nungambakkam High Rd., Madras 600034.
Indian Chain Mfg. Co., 137, B. R. Basu Rd., Calcutta 700001.
Indian Link Chain Manufrs. Ltd., L. B. Shastri Marg, Bhandup, Bombay 400078.
L. G. Balakrishnan & Bros. Pvt. Ltd., Ganapathy, Coimbatore 641006.
Lathiwala & Co., 12, Islampura X Lane, Bombay 400004.
M. R. Kalia Industries, 18/A, Sukeas Lane, Calcutta 700001.
Meccano Machinery Mfg. Co., 19, Arun Chambers, Tardeo Rd., Bombay 400034.
Mistri Devshibhai Trikamji & Sons, 37, 1st Kumbarwada (Bhandari St.), Bombay 400004.
Nav Bharat Link Chain Mfrs. Pvt. Ltd., Tilakraidit, P.O. Govindpura 828109, Dhanbad Dist. (Bihar).
Pahwa Chains Pvt. Ltd., 72, Indl. Area, Chandigarh 160017.
Rolcon Engg. Co. Ltd., Vallabh Vidyanagar 388120 (Gujarat).
S. K. Engg. Co. Pvt. Ltd., Naurangabad, G. T. Rd., Aligarh 202001.
Sanatan Iron & Steel Chain Manufg. Co. Pvt. Ltd., 29B, Bentink St., Calcutta 700001.
Sethi Inds., Tanda Rd., Jullundur 144004.
Standard Materials Agencies, 45/46, Podar Chambers, S. A. Brelvi Rd., Bombay 400023.
T. I. Diamond Chains Ltd., Ambattur, Madras 600053.
Tabard Power Transmission (India) Pvt. Ltd., 35, Golden Beach, Juhu, Bombay 400059.
Transmission Chain Centre, G-37, Sri Narasimharaja Rd., Bangalore 560002.
Veete Chains Pvt. Ltd., Perungudi, Madras 600096.
Wadhwana Mechanical Works, Ranpur 363610, Ahmedabad Dist.
Wipper Drive Engg., 11, Noble Chambers, Ghoga St., Bombay 400001.

CHANDELIERS & CRYSTAL GLASS FITTING

Crystal Town, 48/11, Basheerbagh, Hyderabad 500029.
Jafkay Lights, Dina Bldg., 53, M. Karve Mrg., Bombay 400002.
Kapoor Lamp Shade Co., 82-84, Janpath, New Delhi 110002.
Litolier, Kemp's Corner, Bombay 400036.

CHEMICAL PLANTS & EQUIPMENT

Andhra Pradesh

Kakati Karshak Inds. Pvt. Ltd., Nacharam Ind. Area, Hyderabad 501507.
Incecon Chemical Engg. & Construction Co. Pvt. Ltd., Nacharam Ind. Area, P.O. Uppal, Hyderabad 501507

Delhi

Chemical Construction Co. Pvt. Ltd., 29, M. G. Marg, Lajpat Nagar, IV, New Delhi 110024.
Kinetics Technology India Ltd., Meghdoot, 5th Flr., Nehru Place, New Delhi 110024.
Sethi Engg. Works, 2777, Z. Singh Rd., Delhi 110006.

Gujarat

Anup Engg. Ltd., Anil Starch's Premises, Anil Rd., Ahmedabad 380002.
Cadmach Machinery Co., Ghodasar, Ahmedabad 380008.
Chemtex Engg. Enterprise, L-17, GIDC Ind. Estate, Odhav, Ahmedabad 382415.
Pragnesh Engg. Pvt. Ltd., 178, GIDC Estate, Ankleshwar 393002.
Shreno Ltd., Alembic Rd., Vadodara 390003.

Madhya Pradesh

Union Carbide India Ltd., Post Box 46, Bhopal 462001.

Maharashtra

A. P. V. Equipment Co. Ltd., 32, Nicol Rd., Ballard Estate, Bombay 400038.
Andrew Yule & Co. Ltd., Engg. Div., 32, Nicol Rd., Ballard Estate, Bombay 400038.
B. R. Ind., 164-5, A to Z Ind. Estate, Fergusson Rd., Bombay 400013.
Bermaco Mechanical Engrs., 3, Mercantile Apartment, Opp. Basant Studio, Chembur, Bombay 400074.
Billy Engg. Enterprises, 761, Thiruvottiyur High Rd., Madras 600081.
Blanden Cole & Co. Pvt. Ltd., Rang Udyan, Sitladevi Temple Rd., Bombay 400016.
Bird & Co. Pvt. Ltd., United Bank of India Bldg., 25, Sir P. Mehta Rd., Bombay 400001.
Chemical Development & Construction Corpn., G. B. Rd., Thane 400607.
Control Instruments, Unit No. G 25, Shalimar Indl. Estate, Matunga, Bombay 400019.
D. Munchharam & Sons, Falkland Rd., 7th Cross Lane, Bombay 400004.
Dalal Engineering Pvt. Ltd., 36-37, Jolly Maker Chambers II, Nariman Point, Bombay 400021.
Dalco Engineering Pvt. Ltd., H. A. Ltd. Compound, Pimpri, Pune 411018.
Dave Trading Co., 12/6, Nagdevi St., Bombay 400003.
Diamond Chemical Pumps Co., Wadia Bldg., 9-B, Cawasji Patel St., R. No, 30, Bombay 400001.
Doshi Engg. Works, Village Rd., Andheri (E), Bombay 400069.
Emmes Metals Pvt. Ltd., 147, Govt. Indl. Estate, Kandivli West, Bombay 400067.
Exomet Plastics Ltd., 401, Kakad Chambers, 132, Dr. A. Besant Rd., Bombay 400018.
Falls Ind. In-Corpn., 502, Jolly Bhavan No. 1, 10, New Marine Lines, Bombay 400020.
Frigmaires Engrs., Bharat House, 104B, Bombay Samachar Mrg., Bombay 400023.
G. R. Engg. Works Pvt. Ltd., Poonam Chambers, Shivsagar Estate, Dr. A. Besant Rd., Bombay 400018.
Giri Inds., B/15-18, New Empire Indl. Estate, J. B. Nagar, Andheri East, Bombay 400059.
Gladwyn Engg. Co., Ind. Estate, Shastri Marg, Bombay 400077.
Hind Tank Manufg. Co., 150-B, T. Parsram St., Bombay 400004.

Hindustan Dorr-Oliver Ltd., Dorr-Oliver House, Chakala, Andheri East, Bombay 400093.

Hitendra Metal & Allied Inds., 24, Bansi Bhuwan, 3rd Khetwadi, Bombay 400004.

Industrial & Agricultural Engg. Co. (Bombay) Pvt. Ltd., 43, Forbes St., Bombay 400001.

J. T. Jagtiani, National House, Tulloch Rd., Bombay 400039.

Jay Kay Steel Fabricators, Universal Founders Compound, Andheri (W), Bombay 400069.

K. Mahadev & Co., Pvt. Ltd., Datta Mandir Rd., Bhandup, Bombay 400078.

Khandelwal Mfg. Corpn. Pvt. Ltd., Khandelwal Nagar, Bhandup, Bombay 400078.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Lincon Power Machines, 38, Hamam St., Bombay 400023.

Meccano Machinery Mfg. Co., 19, Arun Chambers, Tardeo Rd., Bombay 400034.

Mirch-Mirex Ltd., Delstar, S. Patkar Rd., Bombay 400036.

Mukund Iron & Steel Works Ltd., L. B. Shastri Marg, Kurla, Bombay 400070.

National Engg. Ind., 32, Jairajbhai Lane, Foras Rd., Bombay 400008.

New India Pharmaceutical Engg. Co., G-11, Shalimar Ind. Estate, Matunga, Bombay 400019.

Parekh Bros. Pvt. Ltd., 65, M. Gandhi Rd., Bombay 400023.

Pioneer Engg. Co., 57, Apollo St., Bombay 400023.

Plastic Fabricators, 6, Laxmiprabha, Dawoodbag Rd., Andheri West, Bombay 400058.

Powergas India Pvt. Ltd., 254-D, Dr. A. Besant Rd., Worli, Bombay 400025.

Pradeep Inds., A 488/489, 'U' Rd., Wagle Estate, Thane 400604.

Rajendra Engg. Corpn., 140, Vallabh Baug Lane, Bombay 400077.

Rathi Indl. Equipment Co. Pvt. Ltd., 162, Wellesley Rd., Pune 411001.

Sherai Engg. Works, 436, Great Western Bldg., N. Master Rd., Bombay 400023.

Simon-Carves India Ltd., Nirlon House, 254-B, Dr. A. Besant Rd., Bombay 400025.

Steel Hard Engg. Corpn., 117, Kika St., Gulalwadi, Bombay 400004.

Surindra Engg. Co. Pvt. Ltd., Surindra House, Safaid Pool, M. V. Rd., Bombay 400072.

Swastik Engg. Products, 205/7, S. V. Rd., Jogeshwari, Bombay 400060.

Syp Engg. Corpn., 4, Patel Indl. Estate, S. V. Rd., Dahisar East, Bombay 400068.

Tripura Industries, 89, Mohamedali Rd., Bombay 400003.

Universal Mechanical Works Pvt. Ltd., Off Fergusson Rd., Worli, Bombay 400018.

Vulcan Laval Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

Rajasthan

Cimmco Ltd., Bharatpur 321001.

Tamil Nadu

Chemech Engrs. Pvt. Ltd., 3, Montieth Lane, Madras 600008.

Chemfab, 55, Edward Elliots Rd., Madras 600004.

Eswaran & Sons Engrs. Pvt. Ltd., 5-7, Second Line Beach, Madras 600001.

K. C. P. Ltd., 38, Mount Rd., Madras 600006.

Kaveri Engg. Industries Ltd., Golden Rock, Tiruchirapalli 620004. (Tamil Nadu).

National Sugar Inds., 734, Mount Rd., Madras 600006.

West Bengal

Bengal Engg. Co. Pvt. Ltd., 12, Dalhousie Sq. East, Calcutta 700001.

Bird & Co. Ltd., Chartered Bank Bldg., Calcutta 700001.

Chemical Vessels Fabricators Pvt. Ltd., 10/1, Deshbandu Rd., Calcutta 700035.

Cieco Pvt. Ltd., 2/1, B. T. Rd., Calcutta 700050.

Durga Engg. Works, 25, Strand Rd., Room No. 668, Calcutta 700001.

Hind Galvanising & Engg. Co. Pvt. Ltd., 96, Garden Reach Rd., Calcutta 700023.

Machinetex Pvt. Ltd., 4A, Council House St., Calcutta 700001.

Macneil & Barry Ltd., 34/1, Diamond Harbour Rd., Calcutta 700027.

Mansfield Oil Gas Co. Pvt. Ltd., 16, R. Chowdhury Rd., Calcutta 700015.

Modern India Machine Tools Pvt. Ltd., 18/1/6, Canal West Rd., Calcutta 700009.

Usha Enterprises, 3A, Chowringhee Place, Calcutta 700013.

Wolverhampton Iron & Steel Co., 137, Canning St., Calcutta 700001.

CHEMICALS

Andhra Pradesh

Andhra Farm Chemicals Corpn. Ltd., Kovvur 534350.

Andhra Sugars Ltd., Venkatarayapuram, Tanuku 534211.

Barium Chemicals Ltd., P.O. Ramavaram 507118, Khammam Dist.

Card Chem Ind., B-12, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Formalin And Fine Chemicals Ltd., Nacharam Ind. Area, Hyderabad 500039.

Hyderabad Chemical Supplies Pvt. Ltd., Sultan Bazar, Hyderabad 500001.

IDL Chemicals Ltd., Kukatpalli, Post Box No. 1, Sanatnagar, Hyderabad 500018.

Indian Chemical & Pharmaceutical Works, 18/2, Ind. Area, Azamabad, Hyderabad 500020.

Orgaroma India Pvt. Ltd., Toli Chowki, Hyderabad 500008.

Reechem Pvt. Ltd., 3-6-147A, Himayatnagar, Barkatpura, Hyderabad 500029.

Bihar

Cyanides & Pigments Ltd., Tisco Central Office, Jamshedpur 831001.

Delhi

Ahmedabad Chemical Co., 255, Katra Peran, Tilak Bazar, Delhi 110006.

Ballarpur Industries Ltd., Thapar House, 124, Janpath, New Delhi 110002.

Daurala Chemical Inds., 18, Barakhamba Rd., New Delhi 110001.

Delhi Cloth & General Mills Co. Ltd., Shriram Chemicals Divn., 1, Jhandewalan Estate, New Delhi 110055.

CDC

CRESCENT DYES & CHEMICALS LIMITED

Manufacturers of:

Auxiliary Products for Textile, Paper, Leather, Pesticidal formulations and other Industries, Heat Treatment Salts, Degreasing Chemicals, Polythene Pipes and Films.

Suppliers of:

Dyestuffs and Processing Products for the Textile Industry, Organic and Inorganic Chemicals, Catalysts, Heat Treatment Furnaces, Plastics, Polyurethane Chemicals, Silicones, Nitrogenous Fertilizers and Titanium Tubes and Sections.

★

Regd. Office : 34, Chowringhee, Calcutta 700 071,
Telegraphic Address: " IMPKEMIX ", Calcutta.
G.P.O. Box No. 182, Calcutta 700 071.
Phone: 24-8111 (18 lines).

Bombay Office : ' Crescent House ', 19, Walchand Hirachand Marg,
Post Box No. 287, Ballard Estate, Bombay 400 038.
Phone: 268051. Auto-Telex: 011-2663 ICIDYES.
Grams: " ICIDYES ", Bombay.

Tech. Service Laboratory (Dyes), Fosbery Road, Sewree, Bombay.
Phone: 394161.

BRANCHES : CALCUTTA: Post Box No. 334. Phone: 222361.
Grams: " ALKALI ".

MADRAS: Post Box No. 130. Phone: 29351.
Grams: " ALKALI ".

DELHI: Post Box No. 107, New Delhi. Phone: 45984.
Grams: " IMPKEMIX ", Delhi.

AHMEDABAD: Navbharat Mills Compound,
Naroda Road, Ahmedabad 380025.

Phone: 373374.

Gogia Chemical Inds., C-37/3, Lawrence Rd. Ind. Area, New Delhi 110035.

Goodwill Dychem Ind., 7, Chamelian Rd., Bara Hindu Rao, Delhi 110006.

High Purity Chemicals Pvt. Ltd., 8/34, Ind. Area, Kirti Nagar, New Delhi 110015.

Hindustan Insecticides Ltd., E3, Defence Colony, Ring Rd., New Delhi 110024.

Hindustan Polymers Ltd., Naaz Bldg., 1-E, Jhandewalan Extn., New Delhi 110055.

Idco Dyestuffs Pvt. Ltd., 191, Rampura Mrg., Rampura, New Delhi 110035.

Indo-Burma Petroleum Co. Ltd., Hindustan Times House, 18/20, K. Gandhi Marg, New Delhi 100001.

National Chemical Ind. Pvt. Ltd., 26, Najafgarh Rd., Ind. Area, New Delhi 110015.

Navin Chemicals Mfg. & Trdg. Co. Pvt. Ltd., 2, Nizamuddin East, New Delhi 110013.

New Central Jute Mills Co. Ltd., Chemicls & Fertilisers Divn., Times House, 7, Bahadur Shah Zaffar Marg, New Delhi 110002.

Pioneer Chemical Co., Tilak Nagar, Delhi 110006.

Sahu Chemicals & Fertilizers, Times House, 7, B. Shah Zaffar Marg, New Delhi 110002.

Shambhu Nath & Sons Ltd., Kanchenjunga Bldg., (7th Fl.), 18, Barakhamba Rd., New Delhi 110001.

Shri Ram Rayons, P.B. No. 1379, Bara Hindu Rao, D.C.M. Premises, Delhi 110006.

Goa

Curti Chemicals Ltd., Salgaocar Bldg., Vasco-da-Gama 403802.

Goa Agro Chemicals Pvt. Ltd., Margao 403601.

Zuari Agro Chemicals Ltd., Jai Kisaan Bhawan, Zuarinagar 403726.

Gujarat

Adarsh Chemicals & Fertilizers Ltd., Udhna 394210.

Alembic Chemical Works Co. Ltd., Alembic Rd., Vadodara 390003.

Anil Starch Products Ltd., Anil Rd., P.O. Railwaypura, Ahmedabad 380002.

Apex Laboratories, 9, Kubernagar, Ahmedabad 380012.

Arat Electro Chemicals Pvt. Ltd., 311/3, Rakhial Rd., Ahmedabad 380023.

Ashahi Chemical Inds. Pvt. Ltd., ' Firdos ', B. Mehta Rd., Shahibaug, Ahmedabad 380004.

Associated Chemical Co., Near Electric Sub-Station, Odhav Rd., Ahmedabad 380021.

Atic Inds. Ltd., P.O. Atul 396020, Valsad Dist.

Atul Products Ltd., P.O. Atul 396020, Valsad Dist.

B.T.X. Chemicals Pvt. Ltd., C1/B/3, Shed, Nandesari Petro-Chem. Indl. Estate, Nandesari 391346, Vadodara Dist.

Baroda Chemical Inds. Ltd., Miyagam, Dabhoi 391110, Vadodara Dist.

Bhavana Chemicals Ltd., S-623, Padra Rd., Vadodara 390001.

Cellulose Products of India Ltd., P.O. Kathwada, Ahmedabad 382430.

Cibatul Ltd., P.O. Atul 396020.

Dhrangadhra Chemical Works Ltd., Dhrangadhra 363315.

Diamines & Chemicals Ltd., C/o Bharat Vijaya Mills Ltd., Kalol 382721.

Didi Pvt. Ltd., Pankaj Soc., R.C. Rd., Vadodara 390001.

Dinesh Chemicals Pvt. Ltd., Hariba Bhuvan, Stn. Rd., Anand 388001.

Everest Chemical Ind., 22, Vasantnagar, Maninagar, Ahmedabad 380008.

Gujarat Alkalies & Chemicals Ltd., Yashkamal, Sayajiganj, Vadodara 390005.

Gujchem Distillers India Ltd., National Chambers, Office Nos. 6, 7, 8, 2nd Flr., Near Deepali Theatre, Ashram Rd., Ahmedabad 380009.

Indian Petro-Chemicals Corpn. Ltd., P.O. Petrochemicals 391346, Vadodara Dist.

J. B. Shah & Co., Pankaj Society, Sarkhej Rd., Ahmedabad 380007.

Jim Chemical Ind. Pvt. Ltd., Shed No. A1-9, Plot No. 272, Makarpura Ind. Estate, Vadodara 390001.

Kwizol-Chem Pvt. Ltd., A1/402, GIDC., Post Box 71, Ankleshwar 393002. Bharuch Dist.

Maize Products, P.O. Kathwada, Ahmedabad 382430.

Mona Chemicals, Charity Trust Bldg., Danapith, Bhavnagar 364001.

Narbada Valley Chemical Ind. Pvt. Ltd., Poicha Rd., Rajpipla 393145.

Navsari Oil Products Pvt. Ltd., Maneklal Rd., Navsari 396005.

Navsynth Chemicals, Sarita Darshan, Opp. Jai Hind Press, Ashram Rd., Ahmedabad 380009.

Newmac Ind., Nima House, Patharkuva, Relief Rd., Ahmedabad 380001.

Raymon Glues & Chemicals, Kanstubh, 46-B, Gautam Nagar, Race Course Circle, Vadodara 390007.

Sarabhai Chemicals, Wadi Wadi, Vadodara 390007.

GUJCHEM DISTILLERS INDIA LTD.

Pioneer Manufacturers of :

Auxiliaries and Speciality Chemicals * Pesticides (2,4-D) * Chlorophenols * Sodium Carboxy Methyl Cellulose * Monochloro Acetic Acid * Industrial Alcohol Acetaldehyde * Acetic Acid.

For Use In

Textile * Rayon * Wool * Jute * Leather * Detergents Pesticides * Paint * Paper * Oil Drilling * Petroleum Petrochemicals * Foods * Pharmaceuticals * Cosmetics And Other Processing Industries.

Marketed At

Ahmedabad, Amritsar, Bombay, Calcutta, Delhi, Madras, Nagpur, Secunderabad, Surat, etc.

★

Regd. Office
National Chambers,
Office Nos. 6, 7, 8,
2nd Floor,
Near Dipali Theatre,
Ashram Road,
Ahmedabad 380 009.
Phone : 78419.
Grams : " GUJCHEM ".

Ankleshwar Factory
5/2, GIDC Industrial
Estate, N. H. No. 8,
Ankleshwar 393 001,
Dist. Bharuch, Gujarat.
Phones : 282, 283.
Grams : " GUJCHEM ".

Bilimora Factory
P.O. Devsar,
Bilimora 396 380,
Dist. Valsad, Gujarat.
Phones : 2464, 2465, 2384.
Grams : " GUJCHEM ",
TLX. 0176-209.

Bombay Office
82, Advent, 8th Floor,
12-A, Gen. J. Bhonsle Marg,
Bombay 400 021,
Maharashtra.
Phone : 234513.
Grams : " GUJCHEMBOM".

Sarabhai M. Chemicals Ltd., Gorwa Rd., Vadodara 390007.

Satyadev Chemicals Pvt. Ltd., Pratapnagar Rd., Vadodara 390004.

Saurashtra Chemicals, Birla Sagar, Porbandar 360576.

Shreyas Chemicals, Dandia Bazar, Vadodara 390001.

Suhrid Geigy Ltd., Wadi Wadi, Vadodara 390007.

Suly Chemicals, G.I.D.C., Makarpura, Vadodara 390004.

Synthad Chemicals Pvt. Ltd., Vallabh Vidyanagar 388120.

Tata Chemicals Ltd., Mithapur 361345.

Transpek ISd. Pvt. Ltd., 635, Kalali Rd., Atladara, Vadodara 390012.

White Chemicals, 158, Hariyala Plot, Atabhai Rd., Bhavnagar 364002.

Haryana

Nuchem Plastics Ltd., 54, Ind. Area, Faridabad N.I.T. 121001.

Karnataka

Agromore Ltd., Mysore Rd., Bangalore 560026.

Indian Vegetable Products Ltd., George Oakes Bldg., N. R. Square, Bangalore 560002.

Mangalore Chemicals & Fertilizers Ltd., 10, Kasturba Rd., Bangalore 560001.

Mysore Acetate & Chemicals Co. Ltd., Mysugar Bldg., J. Wadiyar Rd., Bangalore 560002.

Mysore Chemical Ind., C-21, Ind. Estate, Bangalore 560044.

Sonit Aromatic Chemicals Pvt. Ltd., 257/258, Peenya Indl. Area, Phase IV, Bangalore 560058.

Subhas Lime Chemicals, Omprakash, West Block Rd., Coondapoor 576201.

Kerala

Carbon & Chemicals India Ltd., Post Box 1383, Cochin 682011.

Fertilizers & Chemicals Travancore Ltd., P.O. Udyogmandal 683501.

Kerala Acids & Chemicals Ltd., VI/297, Parur Rd., Alwaye 638102.

Kode Indl. Chemicals, Indl. Estate, Aroor 688534. Alleppey Dist.

Periyar Chemicals Ltd., Aspinwall Bldg., Calvetty, Cochin 682001.

T. K. Chemicals Ltd., 48-54, Veli Indl. Estate, Kochuveli, Trivandrum 695021.

Tata Oil Mills Co. Ltd., No. XXXVII, 169, Tatapuram, Cochin 682014.

Techno Chemical Ind. Ltd., Oyyutti Rd., Calicut 673001.

Travancore-Cochin Chemicals Ltd., P.O. Udyogmandal 683501.

Travancore Electro Chemical Inds. Ltd., Chingavanam 683531.

Travancore Titanium Products Ltd., Kochuveli, Trivandrum 695021.

Madhya Pradesh

Gwalior Rayon & Silk Mfg. (Wvg.) Co. Ltd., P.O. Birlagram. Nagda 456331.

Synthochem, 33-A, Indl. Nagar, Indl. Estate, Indore 452002.

Maharashtra

A.L.A. Chemicals Ltd., Mahalaxmi Chambers, B. Desai Rd., Bombay 400026.

Acidchem Laboratories, 111/A, Old Hanuman Lane, Bombay 400002.

Aegis Chemical Inds. Ltd., Baldota Bhavan, 6th Flr., 117, M. Karve Mrg., Bombay 400020.

Ahura Chemical Products Pvt. Ltd., 84, Sion Rd., Sion East, Bombay 400022.

Albright, Morarji & Pandit Ltd., Raj Mahal, 84, V. Nariman Rd., Bombay 400020.

Amar Dye Chem Ltd., Rang Udyan, Sitladevi Temple Rd., Mahim, Bombay 400016.

Amines Plasticisers Ltd., 'D' Bldg., Shiv Sagar Estate, Dr. A. Besant Rd., Worli, Bombay 400018.

Aniline Dyestuffs & Pharmaceuticals Pvt. Ltd., Mahalaxmi Chambers, 22, B. Desai Rd., Bombay 400026.

Aquapharm Chemical Co., S-113/2, MIDC., Bhosari, Pune 411026.

Aristo Chemicals Pvt. Ltd., Post Box 16316, Bombay 400013.

Arlabs Ltd., India House, W. Hirachand Marg, Opp. G.P.O., Bombay 400001.

Ashdin Chemicals Pvt. Ltd., Nand Dham Estate Bldg., 'B', Uint 6, Marol Maroshi Rd., Bombay 400059.

Ashish Intermediates & Chemicals Pvt. Ltd., 317, Sardar V. P. Rd., Bombay 400004.

Ashok Chemical Co., 49, New Barodane Lane, Vadgadi, Bombay 400003.

Ashok Organic Industries Pvt. Ltd., 406, Sharada Chambers, 33, New Marine Lines, Bombay 400020.

Asian Chemical Co., Chemical House, L.B.S. Marg, Thane 400601.

Asiatic Chemical Co., 703, Sharda Chambers, New Marine Lines, Bombay 400020.

BASF India Ltd., Maybaker House, S. K. Ahire Mrg., Bombay 400025.

Bayer (India) Ltd., Express Towers, Nariman Point, Bombay 400021.

Bec Chemicals Pvt. Ltd., IBP House, S-86, Andheri Kurla Rd., Marol Naka, Bombay 400059.

Bharat Laboratory & Biological House for Agriculture, Pandurang Smriti, Dhule 424001.

Bhavana Chemicals Ltd., 53/57, Laxmi Ins. Bldg., Sir P. Mehta Rd., Bombay 400001.

Biological Evans Ltd., Nirlon House, Dr. A. Besant Rd., Bombay 400025.

Bombay Chemicals Pvt. Ltd., 129, M. Gandhi Rd., Bombay 400023.

Bombay Sewree Chemicals Mfg. Co. Pvt. Ltd., Shale Bldg., Bank St., Bombay 400023.

Borax Morarji Ltd., Raj Mahal, 84, V. Nariman Rd., Bombay 400020.

Brihan Maharashtra Sugar Syndicate Ltd., Commonwealth Bldg., 980, Sadashiv Peth, Laxmi Rd., Pune 411030.

C. D. Corpn., 48, Nav Nandanvan Indl. Estate, LBS Mrg., Mulund West, Bombay 400080.

Calico Mills Chemicals & Plastic Division, Anik Chembur, Bombay 400074.

Camphor & Allied Products Ltd., Jehangir Bldg., 133, M. Gandhi Rd., Bombay 400023.

Catalyst (I.) Ltd., Chinai Bldg., 79, Masjid Bunder Rd., Bombay 400003.

Century Chemicals, Industry House, 159, Churchgate Recl., Bombay 400020.

Chawla Chemical Ind. Pvt. Ltd., Haji Adam Mansion, 6, Homji St., Bombay 400001.

Chemicals & Aromatics, Plot No. B-3, Marol Ind. Area. Mahakali Caves Rd., Andheri East, Bombay 400050.

Chemiefine, Vaibhav Indl. Est., M. Caves Rd., Bombay 400069.

Chemo-Pharma Laboratories Ltd., C.S. 215, Sewree, Bombay 400015.

Chudgor & Co. Pvt. Ltd., Anand Bhavan, Princess St., Bombay 400002.

Colour-Chem Pvt. Ltd., Ravindra Annexe, D. Vachha Rd., 194, Churchgate Recl., Bombay 400020.

Crescent Dyes & Chemicals Ltd., Crescent House, Ballard Estate, Bombay 400038.

Dai-Ichi Karkaria Pvt. Ltd., Liberty Bldg., New Marine Lines, Bombay 400020.

Deepak Nitrite Ltd., 10-B, Bhaktawar, Nariman Point, Bombay 400021.

Dew Fine Chemicals, Plot D-32, MIDC., Satpur, Nasik 422007.

Dharamsi Morarji Chemical Co. Ltd., Prospect Chambers, 317/21, Dr. D. Naoroji Rd., Bombay 400001.

Dhrangadhra Chemical Works Ltd., Nirmal (3rd Fl.), Nariman Point, Bombay 400021.

Didesu Chemicals Pvt. Ltd., 68/A, Jolly Maker Chambers No. 1, 6th Flr., N. Point, Bombay 400021.

Dipsi Chemicals Pvt. Ltd., Bank of Baroda Bldg., Bombay Samachar Mrg., Bombay 400023.

Dr. Beck & Co. (I) Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Drier Chemicals, 100, D. Phalke Rd., Bombay 400014.

Dupher-Interfran Ltd., F/5, Shivsagar, Dr. A. Besant Rd., Bombay 400018.

Dura Chemical Corpn. Pvt. Ltd., 11, Sprott Rd., Ballard Estate, Bombay 400038.

Enar Chemie Pvt. Ltd., 31, Duncan Causeway, Sion, Bombay 400022.

Everest Chemical Ind., 265, Samuel St., Bombay 400003.

Everest Refrigerants Ltd., Khetan Bhavan, 198, J. Tata Rd., Bombay 400020.

Excel Ind. Ltd., 184/87, S. Vivekanand Rd., Jogeshwari, Bombay 400060.

Ferri-Chem Inds., Gandhi Indl. Estate, Safed Pool, Kurla Andheri Rd., Bombay 400072.

Gandhi Parekh Investment Corpn. Ltd., Maker Bhavan No. 2, 18, New Marine Lines, Bombay 400020.

Gharda Chemicals Pvt. Ltd., B-29, M.I.D.C., Dombivli 421203.

Glaxo Laboratories (I.) Ltd., Dr. A. Besant Rd., Worli, Bombay 400025.

Globe Products, Anand Bhavan, S. Gandhi Mrg., Bombay 400002.

Golden Chemicals Pvt. Ltd., Chromium House, S. V. Rd., Dahisar, Bombay 400068.

Goldensun Manufg. Co., Mulchand Mansion, Princess St., Bombay 400002.

Greaves Foseco Ltd., Jolly Bhavan No. 2, New Marine Lines, Bombay 400020.

Herdillia Chemicals Ltd., Air India Bldg., Nariman Point, Bombay 400021.

Hickson & Dadajee Ltd., Shree Pant Bhavan, Sandhurst Bridge, Bombay 400007.

Hico Products Pvt. Ltd., 771, Mogul Lane, Mahim, Bombay 400016.

LUTHRA
TOWER PACKINGS
First choice of chemical & fertilizer plants all over India
PALL RINGS, LESSING RINGS, RASCHIG RINGS, BERL SADDLES, INTALOX SADDLES, TELLERETTE PACKINGS
■ High gas & liquid rate ■ Lower pressure drop ■ Low liquid hold up ■ Better distribution
■ Higher capacity ■ Wider range ■ Less entrainment ■ Greater efficiency
LUTHRA
Luthra Import Substitute Industries
Luthra Industrial Premises, Safaid Pool, 44E Andheri-Kurla Road, Bombay-400 072.
Phone: 679041 ★ Gram: LUTHERHEAD ★ Telex: 011-5318
Motivation-181

Hifchem Pvt. Ltd., Kolshet Rd., Balkum, Thane 400601.

Hindustan Lever Ltd., Hindustan Lever House, 165-66, Backbay Reclm., Bombay 400020.

Hindustan Organic Chemicals Ltd., Rasayani 410207, Kolaba Dist.

Hiremath Chemicals Ltd., 3, Jalkiran 35, Cuffe Parade, Bombay 400005.

Hoechst Dyes & Chemicals Ltd., Hoechst House, 193, Backbay Recl., Bombay 400021.

Idachem Ind. Pvt. Ltd., National Insurance Bldg., 204, Dr. D. Naoroji Rd., Bombay 400001.

India Carbon Ltd., D. Bldg., Shivsagar Estate, Dr. A. Besant Rd., Worli, Bombay 400018.

Indian Dyestuff Ind. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Indian Organic Chemicals Ltd., New Excelsior Bldg. (6th Fl.), Wallace St., Bombay 400001.

Indian Rare Earths Ltd., Pil Court, 111, M. Karve Rd., Bombay 400020.

Indian Vegetable Products Ltd., Forbes Bldg., Charanjit Rai Marg, Bombay 400023.

Indo-Nippon Chemical Co. Ltd., Maker Bhavan 2, 18, New Marine Lines, Bombay 400020.

Indosal Chemical Corpn. Pvt. Ltd., 339, Dr. D. Naoroji Rd., Bombay 400001.

Industrial Chemical Ind., 3/8, Ram Mandir Ind. Estate, Ram Mandir Rd., Goregaon (East), Bombay 400063.

Industrial Solvents & Chemicals Pvt. Ltd., Wagle Ind. Estate, Thane 400604.

J. K. Chemicals Ltd., J. K. Bldg., N. Morarjee Marg, Bombay 400038.

Jay Chemi Colour Ind., 303, Navjivan, 125/127, Kazi Sayed St., Bombay 400003.

K. C. A. Ltd., Rang Udyan, Sitladevi Temple Rd., Mahim, Bombay 400016.

K. C. Chemicals Pvt. Ltd., 507. Kakad Chambers, Dr. A. Besant Rd., Worli, Bombay 400018.

Kamani Metallic Oxides Ltd., Kamani Chambers, 32, R. Kamani Marg, Ballard Estate, Bombay 400038.

Kashyap Chemical Ind., 517, V. Patel Rd., Krishna Bhuvan, Bombay 400004.

Kesar Sugar Works Ltd., New Great Insurance Bldg., 7, J. Tata Rd., Bombay 400020.

Khandelwal Labs. Pvt. Ltd., Khandelwal Bhavan, 166, Dr. D. N. Rd., Bombay 400001.

Kline Chemicals Pvt. Ltd., 167, Dr. A. Besant Rd., Bombay 400018.

Konkan Chemicals Pvt. Ltd., GA-1, Court Chambers, 35, New Marine Lines, Bombay 400020.

Kotak Chemicals Pvt. Ltd., Navsari Bldg., 240, Dr. D. Naoroji Rd., Bombay 400001.

Liberty Chemical Works, Nagardas Rd., Mogra (West), Andheri, Bombay 400069.

Maharashtra Fine Chemicals, 813-14, Bhawani Peth, Pune 411002.

Marvel Pvt. Ltd., B-9, Devkaran Mansion, Pathakwadi, S. Gandhi Marg, Bombay 400002.

Modern Chemical Works, 22, Janki Niwas, N. C. Kelkar Rd., Bombay 400028.

Monsanto Chemicals of India Pvt. Ltd., Wakefield House, 11, Sprott Rd., Ballard Estate, Bombay 400038.

Morani Chemicals Pvt. Ltd., Currimjee Bldg., 111, M. Gandhi Rd., Bombay 400023.

Narbada Valley Chemical Industries Pvt. Ltd., 315/321, Prospect Chambers, Dr. D. N. Rd., Bombay 400001.

National Organic Chemical Ind. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

National Peroxide Ltd., Neville House, Graham Rd, Ballard Estate, Bombay 400038.

Navin Fluorine Ind., Mafatlal Centre, Nariman Point, Bombay 400021.

New Chemi Mineral Mills Pvt. Ltd., Ashok Cross Rd., No. 1, Kandivlee East, Bombay 400067.

Nippon Chemicals & Carbonates Ltd., 424, Arun Chambers, Bombay 400034.

Nirmal Colorants & Chemical Mfg. Co., Sir Vithaldas Chambers, Bombay Samachar Mrg., Bombay 400023.

Olfin Electrokote Rasayani, 34, Pinto Villa, R. B. S. K. Bole Rd., Bombay 400028.

Organo Chemical Inds., Atlanta, Nariman Point, Bombay 400021.

ORWO Pvt. Ltd., Stadium House, V. Nariman Rd., Bombay 400020.

P. K. Velu & Co. Pvt. Ltd., 111, M. Gandhi Rd., Bombay 400023.

Phoenix Chemical Works Pvt. Ltd., Rajan House, Chhavani Galli, Prabhadevi, Bombay 400025.

Pigments & Dyestuffs Pvt. Ltd., Mon Repos, Arthur Bunder Rd., Colaba, Bombay 400005.

Pioneer Magnesia Works Ltd., 113/115, M. Gandhi Rd., Bombay 400023.

Piramal Organic Chemicals Ltd., Morarji Mills Compound, Ambedkar Rd., Bombay 400014.

Polychem Ltd., New Great Insurance Bldg., 7, J. Tata Rd., Bombay 400020.

Polyolefins Ind. Ltd, Mafatlal Centre, Nariman Point, Bombay 400021.

Poona Pharmachem Inds., Laxmy Bldg., Kennedy Bridge, Bombay 400004.

Prakash Chemical Ind., 31, Duncan Causeway, Sion, Bombay 400022.

Progressive Chemicals Corpn., 29, Agarwal Indl. Estate, S. V. Rd., Dahisar East, Bombay 400068.

Pukhraj Engg. & Chemicals, 122, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Rajprakash Chemicals Ltd., 114, Mittal Chambers, N. Point, Bombay 400021.

Ramgor Industries, 5-7, Old Post Office Lane, BMCT Bldg. (4th Fl), Kalbadevi Rd., Bombay 400002.

Roche Products Ltd., 28, Tardeo Rd., Bombay 400034.

Ronuk Ind. Ltd., 11-A, A. Gaffar Khan Rd., Worli Sea Face, Bombay 400025.

Rubo Chem Inds. Pvt. Ltd., 101, Mittal Tower, A Wing, N. Point, Bombay 400023.

Ruman's Indl. Chemical Corpn., RIC House, Off Tank, Rd., Bhandup, Bombay 400078.

S. D. Fine-Chem Pvt. Ltd., Mehta Chambers, Mathew Rd., Bombay 400004.

S. H. Kelkar & Co. Ltd., 36, Mangaldas Rd., Bombay 400002.

S. K. Chemical Ind., 57, Sheriff Devji St., Bombay 400003.

Sadhana Chemicals, RIC House, Off Tank Rd., Bhandup, Bombay 400078.

Sadhana Nitro Chem Ltd., I.B.I. House, S-86, Andheri-Kurla Rd., Bombay 400059.

Sahayog Chemicals Pvt. Ltd., Haroon House, 294, P. Nariman St., Bombay 400001.

Sahyadri Dyestuffs & Chemicals Pvt. Ltd., Mafatlal House, Backbay Recl., Bombay 400020.

Satyen Chemical Inds., Baria Bldg., Opp. Crawford Mkt., Bombay 400003.

Saurashtra Chemicals, Industry House, 159, Churchgate Recl., Bombay 400020.

Seksaria Chemicals Pvt. Ltd., 11-A, Mittal Chambers, Nariman Point, Bombay 400021.

Sofar Chemicals, 15, A. K. Nayak Mrg., Bombay 400001.

Solvents & Chemicals (India), 38, Princess St., Bombay 400002.

Somaiya Organics (I) Ltd., Navrang House, 34, Shivaji Maharaj Marg, Bombay 400023.

Somaiya Organo-Chemicals Ltd., Fazalbhoy Bldg., M. Gandhi Rd., Bombay 400023.

Sparc Chemical Divn., 117-A, Vithalwadi Rd., Pune 411030.

Standard Akali Chemicals Divn., Standard Mills Co. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Star Chemicals (Bombay) Ltd., 21, Noble Chambers, Parsee Bazar St., Bombay 400001.

Sturdia Chemicals Ltd., Neville House, Graham Rd., Ballard Estate, Bombay 400038.

Sudarshan Chemical Ind. Pvt. Ltd., 162, Wellesley Rd., Pune 411001.

Suneeta Chemicals, Plot No. 40, 24, Sector 'A', Indl. Estate, Sanwer Rd., Indore 452003.

Superchem, Kakad Chambers, 132, Dr. A. Besant Rd., Worli, Bombay 400018.

Surfactant Chemicals, 401/405, Jolly Bhavan, 10, New Marine Lines, Bombay 400020.

Suru Chemicals & Pharmaceuticals Pvt. Ltd., Post Box No. 8708, Bombay 400069.

Swadeshi Chemicals Pvt. Ltd., Mahalaxmi Chambers, 6th Flr., 22, B. Desai Rd., Bombay 400026.

Synthetics and Chemicals Ltd., New Great Insurance Bldg., 7, J. Tata Rd., Bombay 400020.

Synthofine Chemicals of India Pvt. Ltd., 144A, Sardar Griha Bldg., 198, L. Tilak Marg, Bombay 400002.

Tata Chemicals Ltd., Bombay House, Homi Mody St., Bombay 400023.

Three 'M' Silicons & Chemicals Pvt. Ltd., 4, Shivaji Ind. Estate, Taikalwadi Rd., Mahim, Bombay 400016.

Travancore Electro-Chemical Inds. Ltd., Empire House, 214, Dr. D. N. Rd., Bombay 400001.

Tulsi Fine Chemical Inds. Pvt. Ltd., 97-E, General Block, Bhosari Ind. Estate, Pune 411026.

Unichem Labs. Ltd., Unichem Bhavan, S. V. Rd., Jogeshwari West, Bombay 400060.

Union Carbide India Ltd., Mehta Mahal, 15, Mathew Rd., Bombay 400004.

United Carbon India Ltd., 178, Backbay Recl., Bombay 400020.

United Phosphorus Pvt. Ltd., Ready Money Terrace (4th Fl.), 167, Dr. A. Besant Rd., Bombay 400018.

Universal Chemicals (I.), 1308, Prasad Chambers, Next to Roxy Cinema, Bombay 400004.

Universal Ferro & Allied Chemicals Ltd., Liberty Bldg., Sir V. Thackersey Mrg., Bombay 400020.

Vapson Products, 419-A, Arun Chambers, Tardeo Rd., Bombay 400034.

Victor Trading & Engg. Co., Victor House, 102, Keshavrao Khadye Marg, Jacob Circle, Bombay 400011.

Vijay Chemical Industries, 6, Zafarbhai Ind. Estate, Kurla-Andheri Rd., Marol Naka, Bombay 400059.

Vijay Ind., Sabun Bhavan, 187, Sheriff Devji St., Bombay 400003.

Vikram Chemicals, B8, Kamdar Park, Gokhale Rd. (South), Dadar, Bombay 400028.

Western Chemical Industries, Sonawala Cross Rd., Goregaon (East), Bombay 400063.

Westerwork Chemicals Pvt. Ltd., 5-D, Vulcan Ins. Bldg., V. Nariman Rd., Bombay 400020.

Zenith Chemicals, Moti Mahal, Churchgate Reclamation, Bombay 400020.

Pondicherry

Aurkay Chemicals, A-5, Mettupalayam Ind. Estate, Pondicherry 605001.

Punjab

Jagatjit Inds. Ltd., Hamira, Koparthala Dist.

Rajasthan

Aspha Labs. Pvt. Ltd., D-81, Ghia Marg, Bani Park, Jaipur 302006.

Rajasthan Glyoxal Ltd., P.O. Box No. 93, Mewar Indl. Area, Udaipur 313001.

Tamil Nadu

Binny Ltd., 7, Armenian St., Madras 600001.

Chemicals & Plastics India Ltd., Dhun Bldg., 175/1, Mount Rd., Madras 600002.

C. J. Hewtett & Sons (India) Pvt. Ltd., 151, Lloyds Rd., Madras 600014.

E.I.D. Parry (India) Ltd., Dare House, Madras 600001.

Industrial Chemicals Ltd., Dhun Bldg., 827, Mount Rd., Madras 600002.

K. Mohan & Co., 541, Poonamalle High Rd., Madras 600003.

Kemcos Chemical Inds., 11/14, Moores Garden, Moores Rd., Madras 600006.

Krishna Ind. Corpn. Ltd., Rama Krishna Bldg., 38, Mount Rd., Madras 600006.

Madras Fluorine Pvt. Ltd., 83, Kamaraj Ave., Adyar, Madras 600020.

Mettur Chemicals & Ind. Corpn. Ltd., Mettur Dam 636402.

Mico Farm Chemicals Ltd., 6, Linghi Chetty St., Madras 600001.

Phoschem, 3, Smith Lane, 36-B/1, Mount Rd., Madras 600002.

Southern Petrochemical Industries Corpn. Ltd., 24, Whites Rd., Madras 600014.

Sphinax Chemical Inds. Pvt. Ltd., 202-B, Arunachala Pandarm St., Madras 600007.

Tamil Nadu Chemical Products Ltd., LLA Bldgs., 735, Anna Salai, Madras 600002.

Tamil Nadu Chromates & Chemicals Ltd., Industrial Complex, Ranipet 632403.

Venkateswara Agro Chemicals & Minerals, Plot 3-B (N.P.), Indl. Estate, Ambattur, Madras 600098.

Uttar Pradesh

Cawnpore Chemical Works Pvt. Ltd., P.O. Anwarganj, Kanpur 208003.

Hind Chemicals Ltd., P.B. No. 227, Kanpur 208001.

J. K. Staple & Tows, Kamla Tower, Kanpur 208001.

Jaiwanti Solvents & Chemicals Ltd., B-1/5, 'L' Rd., Mahanagar Extn., Lucknow 226006.

Silicates & Catalysts, 7, Ind. Estate, M. N. R. Engg. Coll., Allahabad 211004.

West Bengal

Aceto Chemicals Pvt. Ltd., 22, Brabourne Rd., Calcutta 700001.

Alkali & Chemical Corpn. of India Ltd., I.C.I. House, 34, Chowringhee, Calcutta 700016.

Allied Resins & Chemicals Ltd., 13, Camac St., Calcutta 700017.

Ashoke Chemical Ind., 10, Armenian St., Calcutta 700001.

Asiatic Chemical Ind., 71, Canning St., Calcutta 700001.

Asiatic Oxygen Ltd., 8, Dalhousie Square East, Calcutta 700001.

Bengal Chemicals & Pharmaceutical Works Ltd., 164, Maniktala Main Rd., Calcutta 700054.

Bengal Immunity Co. Ltd., 153, Lenin Sarani, Calcutta 700013.

Birla Jute Manufg. Co. Ltd., Calcium Carbide Division. Birla Bldg., 9/1, R. N. Mukherjee Rd., Calcutta 700001.

Burma Lime & Chemical Co. Ltd., 22/3, Jhamapukur Lane, Calcutta 700009.

C. D. Thakkar & Co., 22, Brabourne Rd., Calcutta 700001.

Calcutta Chemical Co. Ltd., 35, Pandita Rd., Calcutta 700029.

Calcutta Chemical Corpn., 27, N. C. Dutta St., Calcutta 700006.

Calcutta Ind. Chemicals & Minerals Co. Ltd., 43, Dharamtolla St., Calcutta 700013.

Durgapur Chemicals Ltd., 6, Little Russell St., Calcutta 700016.

Durgapur Projects Ltd., 1, Shakespeare Sarani, Calcutta 700071.

East Anglia Plastics (I) Ltd., East Anglia House, 3, Camac St., Calcutta 700016.

Henry S. Clerk & Co., Mercantile Bldg., 9, Lall Bazar St., Calcutta 700001.

Hindustan Heavy Chemicals Ltd., Globe Bldg. (4th Fl.), 7-D, Lindsay St., Calcutta 700016.

Howrah Chemical Works, 148, M. Gandhi Rd., Calcutta 700007.

India Alkalies Ltd., 5, Garstin Place, Calcutta 700001.

India Carbon Ltd., 6, Old Post Office St., Calcutta 700001.

Indian Health Institute Laboratory Ltd., 1, Health Institute Rd., Dum Dum Cantt., Calcutta 700028.

Indian Steel Plant Refractories Pvt. Ltd. (Chemical Divn.), 640, Rabindra Sarani, Calcutta 700003.

Indo British Chemical Co., 32/2, Muraripukur Rd., Calcutta 700004.

Indo Pharma Laboratory, 9/12, Lal Bazar St., Calcutta 700001.

J. D. Jones & Co. Ltd., C-5, Gillander House, 8, N. Subhas Rd., Calcutta 700001.

Jayshree Chemicals Ltd., 14, N. Subhas Rd., Calcutta 700001.

Kanoria Chemicals & Ind. Ltd., 16-A, Brabourne Rd., Calcutta 700001.

Kolmak Chemicals Ltd., Parijaat Bldg., 24-A, Shakespeare Sarani, Calcutta 700017.

Krebs & CIE (India) Pvt. Ltd., 6-B, Pretoria St., Calcutta 700071.

Mysore Petro Chemicals Ltd., 14, Netaji Subhas Rd., Calcutta 700001.

Petro Carbon & Chemicals Co., Hindu Family Bldg., 27, Sir R. N. Mukherjee Rd., Calcutta 700001.

Phosphate Co. Ltd., 14, N. Subhas Rd., Calcutta 700001.

Pigments & Chemical Products, 25, Banstolla Lane, Calcutta 700007.

Radha Chemicals Co. Ltd., 29, Waterloo St., Calcutta 700001.

Rohtas Ind. Ltd., 11, Clive Row, Calcutta 700001.

Seth Chemical Works, 160, J. Bajaj St., Calcutta 700007.

Shree Krishna Pannalall, 16, India Exchange Place, Calcutta 700001.

Smith Stainstreet & Co. Ltd., 18, Convent St., Calcutta 700014.

Standard Pharmaceuticals Ltd., 24, Park St., Calcutta 700016.

Tata Fison Ind. Ltd., 16, Hare St., Calcutta 700001.

Waldies Ltd., A-1, Gillander House, N. Subhas Rd., Calcutta 700001.

CHUCKS

Canara Precision Products, 25, Marenahalli, Jayanagar, Bangalore 560041.

Elmeca Works, Behramji Mansion, Sir P. M. Rd., Bombay 400001.

Pelma Engg. Inds. Pvt. Ltd., Behind Rly. Stn., Dharwar 580007.

Ram Engg., B-21, HMT Ind. Estate, Bangalore 560031.

Shree Ram Mills Ltd. (Engg. Divn.), Surat-Navsari Rd., Udhna 394210 (Surat Dist.).

CIGARETTES

Crown Tobacco Co., 65, St. John Baptist Rd., Bandra, Bombay 400050.

D. Macropolo & Co., Kermani Bldg., Sir P. M. Rd., Bombay 400001.

Godfrey Phillips (India) Ltd., Chakala, Andheri, Bombay 400059.

Golden Tobacco Co. Ltd., Tobacco House, Vivekanand Rd., V. Parle West, Bombay 400056.

Hyderabad Deccan Cigarette Factory, Musheerabad, Hyderabad 500020.

I.T.C. Ltd., 287, Ambedkar Rd., Bombay 400012.

National Tobacco Co. of India Ltd., 1 & 2, Old Court House Corner, Calcutta 700001.

Nava Bharat Tobacco Co. Ltd., Ind. Area, Uppal, Hyderabad 500039.

Universal Tobacco Co. Ltd., 8-3-324, Yellaneddiguda, P.B. 2, Hyderabad 500038.

Vazir Sultan Tobacco Co. Ltd., Azamabad, Hyderabad 500020.

CINEMA EQUIPMENT & PROJECTORS

Amar Plastic Ind., 43, Queen's Rd., Bombay 400002.

Cinecita Pvt. Ltd., 1076, Haines Rd., Worli, Bombay 400018.

Cinerama Pvt. Ltd., Metro House, Bombay 400020.

Cinesales Manufg. Pvt. Ltd., 11, Court Rd., Civil Lines, Delhi 110009.

International Talkie Equipment Co. Pvt. Ltd., 4, Tata Rd. No. 1, Swadeshi Mills Comp., Bombay 400004.

National Cine Supply, 16, Tribhuvan Rd., Bombay 400004.

Photophone Ltd., 7, Saki-Vihar Rd., Bombay 400072.

Sixteen MM Projectors Pvt. Ltd., 14/43, Tumkur Rd., Bangalore 560022.

Valco Inds., 957, Sadashiv Peth, Pune 411030.

Zober & Co., 248, M. Azad Rd., Bombay 400008.

CIRCUIT BREAKERS

Asea Ltd., Asea House, Goa St., Bombay 400038.

Kutti & Nathan, 46, Armenian St., Madras 600001.

Versatrip Circuit Breakers Mfg. Co. Pvt. Ltd., 4, Vasant Udyog Bhavan, Sun Mill Compd., Lower Parel, Bombay 400013.

CLAMPING ELEMENTS

Linas Engg. Enterprises Pvt. Ltd., D-75, Ind. Estate, Rajajinagar, Bangalore 560044.

CLOCKS—TRANSISTORISED

Scientific Clock Manufg. Co., Morvi 363641.

Vithal Chhagan & Sons, Rajkot 360001.

COLLAPSIBLE TUBES

Collapsible Tubes Corpn., 162, S. B. Rd., Opp. Phoenix Mills, Lower Parel, Bombay 400013.

Extrusion Processes Pvt. Ltd., Patel Estate, W. Express Highway, Goregaon East, Bombay 400063.

Impact Containers Pvt. Ltd., Post Box 9035, Patel Vanika, Goregaon East, Bombay 400063.

Lallubhai Amichand Ltd., 104, Sion Matunga Estate, Sion, Bombay 400022.

Patel Extrusion Group, Post Box 9025, Goregaon East, Bombay 400063.

Shalimar Textile Mfg. Pvt., Ltd., (Tube Dn.), 117AB, Govt. Ind. Estate, Kandivli, Bombay 400067.

Universal Aluminium Extrusion, CIB Shed Nos. 246/1 & 2, G.I.D.C., Umargam, Valsad Dist., Gujarat.

Universal Cans & Containers Ltd., Century Bhavan, 1st Flr., Dr. A. B. Rd., Bombay 400025.

COMPRESSORS AND SPARES—AIR/GAS

Atlas Copco (India) Ltd., M. Gandhi Memorial Bldg., N. Subhas Rd., Bombay 400002.

Denmark Engg. Works, Near Zakaria Masjid, Relief Rd., Ahmedabad 380001.

Dodge & Seymoor (India) Pvt. Ltd., 2/29, Mount Rd., Madras 600002.

Everest Engg. Works, P. O. Khalsa Coll., Near Phatak No. 22, Islamabad, Amritsar 143002.

Holman-Climax Mfg. Ltd., Dolphin Court, 7A, Middleton St., Calcutta 700071.

Indian Refrigeration Corpn., Near Bhavani Saw Mill, Dhebarbhai Rd. (South), Rajkot 360002. (Gujarat).

Indo Air Inds., 49, Mun. Ind. Estate, Worli, Bombay 400018.

Industrial & Mining Equipment Co. Pvt. Ltd., 113, New Queen's Rd., Bombay 400004.

Ingersoll Rand India Pvt. Ltd., May Baker House, S. K. Ahire Marg, Bombay 400025.

K. G. Khosla Compressors Pvt. Ltd., Sambava Chambers, Sir P. M. Rd., Bombay 400001.

Kakati Karshak Inds. Pvt. Ltd., Nacharam Ind. Area, Hyderabad 501507.

Kay International Pvt. Ltd., 4/8, Asaf Ali Rd., New Delhi 110002.

Macshe Equipment Pvt. Ltd., 7E, Lindsay St., Calcutta 700016.

Marketing India, ITT Company Compd., Sewri Cross Rd., Bombay 400015.

Mining & Drilling Services, 4, Synagogue St., Calcutta 700001.

Oriental Enterprises, P-46A, CIT Scheme XLV, Radhabazar Lane, Calcutta 700001.

Parkeen Bros., 24, N. Master Rd., Bombay 400023.

Precision Fabricators & Mechanical Engrs., Zaveri Bldg., 112, Nagindas Master Rd., Bombay 400023.

Rolex Inds., G. T. Rd., Ghaziabad 201001. U.P.

Shriram Refrigeration Ind. Ltd., 19, K. Gandhi Mrg., New Delhi 110001.

Shubh Inds., 128, Jai Gopal Industrial Estate, 510, Bhavani Shankar X Rd., Bombay 400028.

SLM-Maneklal Inds. Ltd., Mistry Bhavan, D. Vachha Rd., Bombay 400020.

COMPUTERS

(See under Office Equipment).

CONCRETE MIXERS & VIBRATORS

Ashok Engg. & Construction Co., 14, G. C. Avenue, Calcutta 700013.

Ashok Engg. Works, 2/6, Indl. Estate, Gorwa Rd., Vadodara 390016.

C. Comens & Sons Ltd., 103/3, Diamond Harbour Rd., Calcutta 700038.

Flex-Tool Equipment Co., 71/73, Nagdevi St., Bombay 400023.

Freyssinet Prestressed Concrete Co. Ltd., Hamilton House, J. N. Heredia Mrg., B. Estate, Bombay 400038.

International Machines Corpn., 16, Canning St., Calcutta 700001.

Jairamdas & Sons, 7937, Ranigunj, Secunderabad 500003.

Killick Nixon & Co. Ltd., 31, Murzban Rd., Bombay 400001.

Kirloskar Bros. Ltd., Udyog Bhavan, Tilak Rd., Pune 411002.

M. K. Electric Works, 1580, Nai Sarak, Delhi 110006.

Rajen Electric Co., 96/207, D. Phalke Rd., Dadar, Bombay 400014.

Senith Metal Pressings, 18, Chittaranjan Rd., Madras 600081.

Universal Engg. Corpn., E-2/27, Jhandewalan, New Delhi 110055.

Vijay Indl. Products, 5 & 6, Millia Bldg., Narasimharaja Rd., Bangalore 560002.

Z. G. Equipments Pvt. Ltd., 613, GIDC, Makarpura, Vadodara 390010.

CONDUITS & CONDUIT PIPES

Avon Inds., E7/1, Unity Bldg., J. C. Rd., Bangalore 560002.

Homlite Inds., Sarai Misra, Jaiganj, Aligarh 202001.

New India Conduit Pipes (Regd.), 22, Sector 24, Faridabad 121006.

R.S.S.G. Conduits & Tubes Pvt. Ltd., Dahisar, Bombay 400068.

Steel Krafts, G. T. Rd., Panipat 132103. (Haryana).

CONNECTORS (RECTANGULAR)

Bombay Burmah Trading Corpn. Ltd. (Electronics Divn.), Plot No. 2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

Cyclo Electric, Post Box 901, Madras 600020.

Hyderabad Connectronics Ltd., 1-2-412/21, Domalguda, Hyderabad 500029.

Intec Electronics, 2-A, Nungambakkam High Rd., Madras 600034.

CONSTRUCTION MACHINERY

Acme Manufg. Co. Ltd., Antop Hill, Wadala, Bombay 400031.

Acrow India Ltd., Sterling House, 16/2, Dr. A. Besant Rd., Bombay 400018.

Ambica Vijay Works, Ind. Estate, Lalbaugh, Bombay 400012.

C. Bole & Co., 61, N. Dhuru St., Bombay 400003.

Condequip Engrs. & Consultants, Khandelwal House, Marve Rd., Malad West, Bombay 400064.

Empire Dyeing & Manufg. Co. Ltd., Garlick Engg. Div., B. Jagtap Marg, Bombay 400011.

Gammon India Ltd., Gammon House, V. Savarkar Marg, Prabhadevi, Bombay 400025.

Ingersoll Rand India Ltd., 7, Wellesley Place, Calcutta 700001.

International Machines Corpn., 16, Canning St., Calcutta 700001.

Killick Inds. Ltd., Killick House, Home St., Bombay 400001.

Lynx Machinery Ltd., 104, Ultadanga Main Rd., Calcutta 700004.

Millars Machinery Co. Pvt. Ltd., Victoria House, Victoria Rd., Bombay 400027.

Minato Shirke Concrete Machines Pvt. Ltd., 72-76, Mundhwa Indl. Estate, Pune 411036.

Nadirshaw & Bros., Silver Talkies Bldg., 10, Khetwadi Back Rd., Bombay 400004.

Sayaji Iron & Engg. Co. Pvt. Ltd., Chhani Rd., Vadodara 390002.

Speedcrafts Pvt. Ltd., Layak Enclaves, Sahay Nagar, Patna 801506.

Sujauddin & Co., 75, N. Subhas Rd., Calcutta 700001.

Teknoworks (India), Lal Bahadur Shastri Marg, Bhandup, Bombay 400078.

Tyco (India) P. Ltd., 4-F, Neelambar Bldg., 28B, Shakespeare Sarani, Calcutta 700017.

Vibro Machines (India) Pvt. Ltd., 14, G. C. Ave., Calcutta 700013.

CONSTRUCTION MATERIALS

Ajanta Steel Pvt. Ltd., 48, Cross Rd., Opp. Benares Rd., Belgachi 734423, Howrah Dist.

Anand Iron & Steel Ind., 11/115, Teliwara Shahdara, Delhi 110032.

Bombay Bldg. Materials Trading Co., 73, Medows St., Bombay 400023.

Celcrete, Cellular Concrete Plant, Ennore, Madras 600057.

Gobindo Sheet Metal Works & Foundry, 210, M. Gandhi Rd., Calcutta 700007.

Golden Steel Corpn. Pvt. Ltd., 64, G. Trunk Rd., Liluah 711204.

Gupta Iron & Brass Works Pvt. Ltd., 29, Najafgarh Rd., New Delhi 110015.

Nitco Construction Materials Pvt. Ltd., 26/1-C, Hosur Road, Bangalore 560029.

Siporex India Ltd., 72-76, Indl. Estate, Mundhwa, Pune 411036.

Surface Finishing Equipment Co., 5th Chopasani Rd., Jodhpur 342003.

Universal Asphalts, Shivaji Park, Bombay 400028.

CONVEYOR BELTS

Andrew Yule & Co. Ltd., Belting Dn., 8, Clive Row, Calcutta 700001.

Conveyor Equipment Co. Pvt. Ltd., 3, Race Course Rd., Guindpi, Madras 600032.

Debdip Rubber Works Pvt. Ltd., 123, Jessore Rd., Calcutta 700055.

Dunlop India Ltd., 57-B, Mirza Ghalib St., Calcutta 700016.

Eastern Stores & Trading Co. Pvt. Ltd., 115, Nagdevi St., Bombay 400003.

Gemini Corpn., 99, Surat St., Bombay 400009.

H. M. Commisariat & Co., Botawala Bldg., 7, Horniman Circle, Bombay 400023.

Hilton Rubbers Pvt. Ltd., Ansal Bhavan, K. Gandhi Mrg., New Delhi 110001.

Industrial Equipment Syndicate, 15, Nand Deep Indl. Estate, Kondivita Rd., J. B. Nagar, Bombay 400059.

Karyavahi Conveyor Co., New Nagardas Rd., Andheri East, Bombay 400069.

Lewis & Tylor Pvt. Ltd., Commerce House, Currimbhoy Rd., Bombay 400038.

Motilal Kaliandas & Co., 80, Nagdevi St., Bombay 400003.

Nirlon Synthetic Fibres & Chemicals Ltd., Nirlon House, 254-B, Dr. A. Besant Rd., Bombay 400025.

Oriental Rubber Industries Ltd., L. B. Shastri Mrg., Bhandup, Bombay 400078.

R. D. Asher Engg. Division, 10, Homi Mody St., Bombay 400023.

Serampore Belting Works Pvt. Ltd., 36, Strand Rd., Calcutta 700001.

United Rubber & Belting Industries, 5/1, Clive Row, R. No. 59, Calcutta 700001.

Universal Conveyor Beltings Ltd., Plot 10 & 11, Gurukul, Indraprastha Estate, Amarnagar, Faridabad 121003.

CONVEYORS

Andhra Pradesh

Aluminium Industries Ltd., Ramachandrapuram, Hyderabad 500032.

Delhi

Advance Dynamics, B-110, Mayapuri, Phase I, New Delhi 110064.

Indian Hydraulics Inds., 70, Shivaji Mkt., New Delhi 110015.

Mechanical Movements Pvt Ltd., 3, N. Subhas Mrg., New Delhi 110002.

Ushamil Associates Pvt. Ltd., 37-38, Comm. Centre, East of Kailash, New Delhi 110065.

Vinar Ltd., 2/20, Ansari Rd., Daryaganj, New Delhi 110002.

Gujarat

Ahmedabad Victoria Iron Works Co. Pvt. Ltd., Dudheshwar Rd., Ahmedabad 380001.

Anup Engg. Ltd., Ghee Kantawadi, Ahmedabad 380001.

Elecon Engg. Co. Ltd., Vallabh Vidyanagar 388120.

Panchal Workshop, Station Rd., Anand 388001.

Rolcon Engg. Co. Ltd., Anand-Sojati Rd., Vallabh Vidyanagar 388120.

Sanjay Engg. Corpn., 127-128, GIDC Estate, Pandesara, P.O. Pandesara Ind. Estate 394221. Surat Dist.

Karnataka

Associated Cement Companies, Ltd., Shahabad, Gulbarga 585101.

Systems Mfg. Pvt. Ltd., 1A, Peenya Industrial Area, Off Tumkur Rd., Bangalore 562139.

Maharashtra

BUC Mechanical Equipments Pvt. Ltd., 119, ABC Govt. Ind. Estate, Kandivli, Bombay 400067.

Brady Morris Engg. Co. Ltd., Brady House, V. Nariman Rd., Bombay 400001.

Cobit Engg., Blue Pearl, S. Bapat Mrg., Dadar, Bombay 400028.

De Smet India Pvt. Ltd., Shree Niketan, A. Besant Rd., Bombay 400018.

Deccan Mechanical & Chemical Ind. Pvt. Ltd., 78, Bhosari Ind. Area, Pune 411026.

Dynacraft Machine Co. Pvt. Ltd., C. D. Barfiwala Marg, Andheri, Bombay 400058.

East India Engg. Works, A-31, Navyug Nivas, Bhadkamkar Marg, Bombay 400007.

Elektromag Methods, 406, Unique Ind. Estate, Off V. Savarkar Mrg., Bombay 400025.

Flexsteels (Engrs.) Pvt. Ltd., 10, Homi Mody St., Bombay 400023.

Fluid Air Engg. Inds., Sharada Theatre Bldg., 3rd flr., Dadar, Bombay 400014.

Garlick & Co. Pvt. Ltd., Haines Rd., Bombay 400011.

Jay Kay Steel Fabricators, Universal Founders Compound, Mograpada, Bombay 400069.

K. T. Steel Ind. Pvt. Ltd., 21, Broach St., Bombay 400009.

Karyavahi Conveyors Pvt. Ltd., Near Nagardas Rd., Andheri East, Bombay 400069.

Konel Corpn., 401-A, Niranjan, 99, Marine Drive, Bombay 400020.

La'Mina Pvt. Ltd., 15, Aghadi Ind. Estate, Marol, Bombay 400059.

Mukund Iron & Steel Works Ltd., Kurla, Bombay 400070.

Pioneer Equipment Co. Pvt. Ltd., 139, N. Master Rd., Bombay 400023.

Radiant Electric & Machinery Co., C-12A, Commerce Centre, Tardeo Rd., Bombay 400034.

Saideep Electricals, D-19, Gandhi Nagar, Bombay 400063.

Shaparia Dock & Steel Co. Pvt. Ltd., Sewree Fort Rd., Bombay 400015.

Standard Materials Agencies, 45/46, Podar Chambers, S. A. Brelvi Rd., Bombay 400023.

Systems Engg., 63-D, Govt. Ind. Estate, Kandivli, Bombay 400067.

Tak Machinery Ltd., Janmabhoomi Bhavan, Ghoga St., Bombay 400001.

Tata-Robins-Fraser Ltd., 24, Homi Mody St., Bombay 400023.

Testeels Ltd., 317-21, Dr. D. Naoroji Rd., Bombay 400001.

Todi Ind. Pvt. Ltd., Lower Parel, Bombay 400013.

Union Sales Corpn., Bhedwar House, 239, P. D'Mello Rd., Bombay 400001.

Vinar Ltd., 59, Apollo St.. Bombay 400023.

Western Mechanical Ind. Pvt. Ltd., Bhandup Village Rd., Bombay 400078.

Wipperdrive Engg., 70, Podar Chambers, 109, Parsi Bazar St., Bombay 400001.

Orissa

Utkal Machinery Ltd., Rourkela 769001.

Tamil Nadu

Conveyor Equipment Co. Pvt. Ltd., Race Course Rd., Guindy, Madras 600032.

Conveyors (India), Ind. Estate, Madras 600058.

Southern Tool Services, 25, Saroja Mansion, MKN Rd., Madras 600032.

Vinar Ltd., 310/311, Linghi Chetty St., Madras 600001.

Uttar Pradesh

Cawnpore Dyeing and Cloth Printing Co. Ltd., Civil Lines, Kanpur 208001.

Modi Ind. Ltd., Modinagar 201201.

West Bengal

Burn and Co. Ltd., Howrah Iron Works, Howrah 711101.

Eastern Belting & Cotton Mills Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

Garden Reach Shipbuilders & Engineers Ltd., Garden Reach Rd., Calcutta 700024.

Gillanders Arbuthnot & Co. Ltd., A-1, Gillander House, N. Subhas Rd., Calcutta 700001.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Lynx Machinery Ltd., 104, Ultadanga Main Rd., Calcutta 700004.

Marshall Sons & Co. (India) Ltd., 75-C, Park St., Calcutta 700016.

Mechanical Handling Equipment Pvt. Ltd., 33, Chittaranjan Ave., Calcutta 700012.

New India Conveyor Co., 4, Chandni Chowk St., Calcutta 700013.

Parry & Co., Mercantile Bldg., Lall Bazar, Calcutta 700001.

Serampore Belting Works Pvt. Ltd., 36, Strand Rd., Calcutta 700001.

Vinar Ltd., 5A, Lord Sinha Rd., Calcutta 700016.

COOLING TOWERS

Cooling Tower Corpn., 40B, GIDC, Makarpura, Vadodara 390010.

Jafreez Engg. Industries Pvt. Ltd., A-21, MIDC Ind. Area, Andheri East, Bombay 400093.

Jawahar Cooling Towers, Ghorapdeo, 99, Reay Rd., Bombay 400033.

Paharpur Cooling Towers Pvt. Ltd., 1-B, Judges Court Rd., Calcutta 700027.

Rameschandra & Co., 158, Reay Rd., Bombay 400010.

Shri Valji Engineering Works, Suren Rd., Andheri East, Bombay 400093.

Thermopack Engrs. Pvt. Ltd., 21, Steelmade Ind. Est., Marol-Maroshi Rd., Bombay 400059.

COPPER WIRES & TUBES

Ajit Wire Inds., 58, Sir M, V. Rd., Andheri East, Bombay 400059.

Alcobex Metals Pvt. Ltd., 24, Heavy Indl. Area, Jodhpur 342003.

Arpee Electricals Pvt. Ltd., Podar Chambers, S. A. Brelvi Rd., Bombay 400001.

Bhalaria Bros., 96, Nagdevi Cross Lane, Bombay 400003.

Bothra Metal & Wire Inds., Opp. Premier Automobiles, Kurla, Bombay 400070.

D. R. Traders, 13-A, Benham Hall Lane, Bombay 400004.

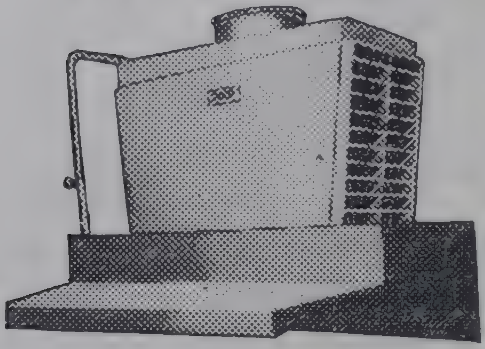
Deepak Wire Inds., 25, Rambaug, Ratlam 457001.

Devidayal Electronics & Wires Ltd., Gupta Mills Estate, Reay Rd., Bombay 400010.

Gorakhram Haribux, 4, Apeejay House, Ground Flr., 130, Bombay Samachar Mrg., Bombay 400001.

Indo-American Electricals Ltd., 21, Old Court House St., Calcutta 700001.

JAFREEZ
COOLING TOWERS



Keep your production running at high efficiency.

In capacities up to 2,000,000 K. cals/hr.

Call Jafreez today.

JAFKAY

JAFREEZ
ENGINEERING
INDUSTRIES
(A Division of Jafkay Engineering Industries Pvt. Ltd.)
A-21, M.I.D.C. Industrial Area, Andheri (East), Bombay 400 093.
Telephones: 576036/575655 Cables : JAFREEZ

AMOL BOSE ADVG 80288

Jayant Metal Mfg. Co. Pvt. Ltd., 16, Sayani Rd., Bombay 400025.

Jyoti Wire Inds., 23A, Shah Indl. Estate, Andheri West, Bombay 400058.

Krishna Engg. Industries, New Chhachhrauli Rd., Jagadhri 135003. (Haryana).

Madras Wire Products Ltd., 9/6, Madras Avadi Rd., Ambattur, Madras 600053.

Mardia Inds., 83, Kika St., Bombay 400004.

Matchless Wire Products, 1/19, T. R. Mudali St., Kondithope, Madras 600001.

Merchants India, Rani Baug, Rewa 486001. (M.P.).

Multimetals Ltd., Heavy Inds. Area, Kansua Rd., Kota 324003. (Rajasthan).

Parikh Metal Inds., 88/90, 3rd Bhoiwada, Bombay 400002.

Prakash Metals, 4, Chintamani Bldg., 2nd Bhoiwada, Bombay 400002.

Sai Inds., Plot 7, Phase II. MIDC Ind. Area, Andheri East, Bombay 400093.

Samarath Electricals, 5/7, Picket Cross Rd., Bombay 400002.

Shalimar Wires & Inds. Ltd., Non-Ferrous Dn., 27A, Camac St., Calcutta 700016.

Shantilal Hiralal & Co., 57-B, Nanubhai Desai Rd., Bombay 400004.

Southern Electromag Pvt. Ltd., 29/1367, Tripunithura Rd., Kadavanthra, Cochin 682020.

Steel Appliances Mfg. Co., 97-D, Govt. Ind. Estate, Kandivli, Bombay 400067.

Synthetic Wire Inds., 12A, Camac St., Calcutta 700017.

Tubes India, 2, Khetwadi 7th Lane, Bombay 400004.

Vindhya Enterprises, Post Box No. 43, Rani Baug, Rewa 486001. (M.P.).

Vishwakarma Casting Works, 175, Kika St., Bombay 400004.

CORK PRODUCTS

Bharat Crown & Metal Ind., Behind India United Mills No. 5, Chinchpokli X Lane No. 2, Bombay 400027.

Cork Industries, P.B. No. 2631. Madras 600032.

Indian Cork Mills Pvt. Ltd., Saki-Vihar Rd., Powai, Bombay 400072.

New Cork Products, 84, S. Bhagat Singh Rd., Bombay 400023.

CORRUGATED BOX MAKING MACHINES

Hermes Group, 13/B, Bakhtawar, 229, Nariman Point, Bombay 400021.

Micro Mechanical Works, L.B.S. Mrg., Vikhroli, Bombay 400083.

Nagpal Inds., 1062, Bartan Mkt., Sadar Bazar, Delhi 110006.

CORRUGATED BOXES

Andhra Pradesh

Cartoons India, D-14, IDA, Jeedimetle, Hyderabad 500854.

Hyderabad Packaging Pvt. Ltd., Ind. Estate, Moula Ali, Hyderabad 500040.

Masanto Containers Pvt. Ltd., 2-3-37, Amberpet, Hyderabad 500013.

Progressive Packaging Pvt. Ltd., B-42, Ind. Estate, Sanatnagar, Hyderabad 500018.

Shree Packaging Corpn., 2-3-720, Amberpet, Hyderabad 500013.

Sri Saibaba Packaging Ind., 6-3-905, Raj Bhavan Rd., Somaji Guda, Hyderabad 500004.
Vistas Corrugated Box Factory, 103, S. Patel Rd., Secunderabad 500003.

Delhi

Ajanta Offset & Packing Pvt. Ltd., B-95, Indl. Area, Wazirpur, New Delhi 110052.
Anil Packaging Ind., 4539, Pahari Dhira, Delhi 110006.
Capital Corrugating Ind., 15, Najafgarh Rd., New Delhi 110015.
Delhi Packaging Pvt. Ltd., 1E/9, Jhandewalan Extn., New Delhi 110055.
Delhi Pulp Ind., Ansal Bhavan, Curzon Rd., New Delhi 110001.
Everest Corrugating Ind., 3-E/6, Jhandewalan Extn., Link Rd., New Delhi 110055.
Ganesh Packaging Ind., C-514, Defence Colony, New Delhi 110003.
Hindustan Papers, 7/33, Daryaganj, New Delhi 110002.
Lakshmi Corrugated Board & Box Inds., 18, DLF Ind. Area, Najafgarh Rd., New Delhi 110015.
Packers Products, 10/58, Indl. Area, Kirtinagar, New Delhi 110015.
Paper Products Ltd., 1/25, Asaf Ali Rd., New Delhi 110002.
Rajdhani Paper & Board Ind., Gali Bahuji, Pahari Dhiraj, Delhi 110006.

Gujarat

Baroda Box Manufg. Co., Indira Nivas, Dandia Bazar, Vadodara 390001.
Baroda Packaging Pvt. Ltd., National Highway No. 3, Chhani, Vadodara Dist.
Creative Corrugating Inds., Ind. Area, Gorwa, Vadodara 390003.
Gujarat Paper Ind., Maneja 391710. Vadodara Dist.
Jayant Paper Mills, Container Division, Utran 394105. Surat Dist.
Paco Ind., R. C. Patel Ind. Estate, Akota Rd., Vadodara 390005.
Pick & Pack, 89, G. V. M., Audyojik Vasahat, Odhav Rd., Ahmedabad 380002.
Saurashtra Packaging Pvt. Ltd., Pattani Bldg., M. G. Rd., Rajkot 360001.
Vakal Traders, Ind. Estate, Vadodara 390003.
Yogi Packaging Ind., 18, Pratap Gunj, Vadodara 390002.

Karnataka

Everest Container Corpn., 'Everest House', 89, Ind. Suburb, Yeshvantpur, Bangalore 560022.
India Packaging Products Pvt. Ltd., 5th Mile, Bellary Rd., Bangalore 560024.
Intact Box Mfg. Co., 35, Ind. Suburb, Yeshwantpur, Bangalore 560022.
Qualipack, 15, Lalbagh Rd., Bangalore 560027.

Maharashtra

Ashok Paper Box Manufg. Co., 38J, Kapreshwar Marg, S. Podar Rd., Bombay 400002.
Atul Packers, 244, Bellasis Rd., Bombay 400008.
Avadhoot Industries, Avadhoot Bhavan, M. Caves Rd., Andheri East, Bombay 400093.
Babsons Paper Box Factory, 17. Dhobi St., Bombay 400003.
Bharat Corrugating Industries, Dalmia Estate, Mulund, Bombay 400080.
Bliss Pack, 25-Interlink Ind. Estate, Caves Rd., Jogeshwari (East), Bombay 400060.
Bombay Packaging Ind., Steelmade Ind. Estate, Marol Maroshi Rd., Marol, Andheri East, Bombay 400059.
Boxpack Paper Ind. Pvt. Ltd., 81, Bhagat Singh Rd., Bombay 400001.
Boxwell (India) Pvt. Ltd., Box House, 54, Kurla-Andheri Rd., Bombay 400070.
Boxwell Inds., C-1, Ind. Estate, Jalna 431203.
Carton Krafts, T.K. Ind. Estate, King Edward X Lane, Sewri, Bombay 400015.
Cepac Packagers, Diamond Indl. Estate, Goregaon, Bombay 400063.
Economic Packaging Corpn., Elve Chambers, Fort, Bombay 400001.
Elphinstone Paper Box Mfg. Co., 510, Off Ram Mandir Rd., Goregaon (W), Bombay 400062.
Eskay Paper Products, 71, Nahur, Opp. Hoechst Pharmaceuticals, LBS Mrg., Mulund West, Bombay 400080.
Everest Packaging Corpn., 25, Mahal Ind. Estate, Mahakali Rd., Andheri (East), Bombay 400093.
Hind Paper Box Manufg. Co., Ishwar Bhawan, A Rd., Churchgate, Bombay 400020.
Hindustan Packing Ind., Kurla-Andheri Rd., Near Saphed Bridge, Bombay 400072.
India Corrugating Ind. Pvt. Ltd., 37-A, Parel Cross Lane, Chinchpokli, Bombay 400012.
IPCO Packaging Pvt. Ltd., Elphinstone Mills (Leather Div.) Comp., Delisle Rd., Bombay 400013.
Jayant Paper Box Factory, 205, Kakad Chambers, 132, Dr. A. Besant Rd., Worli, Bombay 400018.
Kohinoor Paper Box Factory, Mogra West, Andheri East, Bombay 400069.
Krishna Box Factory, 37(II), MIDC, Central Rd., Andheri (E), Bombay 400093.
Master Packaging Service, Minerva Movietone Comp., Bunder Rd., Sewri, Bombay 400015.
National Corrugating & Allied Inds., 17/18, Shah Ind. Estate, Deonar, Bombay 400088.
National Packaging Industries, 341, Birla Bldg., Tardeo, Bombay 400034.
Packfine Corrugating Ind., 7, Sadhana Ind. Estate, Oshiwara, Jogeshwari, Bombay 400060.
Packraft Ind., Sainath Ind. Estate, Shed No. 'D', Off Kotkar Rd., Goregaon East, Bombay 400063.
Panchshil Packaging Ind., Hanuman Silk Mills Comp., Bhandup, Bombay 400078.
Paper Box Co. of India, Mahakali Caves Rd., Bombay 400093.
Paper Corrugation & Packaging Pvt. Ltd., 74-B, Govt. Ind. Estate, Kandivli (West), Bombay 400067.
Paradise Paper Products, Mahendra Ind. Estate, Rd. No. 29, Plot No. 109-D, Sion (East), Bombay 400022.
Perfect Packagings, Subhas Nagar. Off Caves Rd., Jogeshwari (East), Bombay 400060.
Poly-Cone Paper Pvt. Ltd., 213, Udyog Mandir, 7/C, Pitamber Lane, Mahim, Bombay 400016.
SB Cardocrafts, 15, Bombay Talkies Comp., Malad (West), Bombay 400064.
Saurashtra Packaging Service, 606, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.
Saurashtra Paper Box Manufrs., 113, J. Maharaj Lane, 3rd Bhoiwada, Bombay 400002.
Standard Box Ind., Shreeniwas House, Waudby Rd., Bombay 400001.

Swastik Paper Ind., Sewri Cross Rd., Bombay 400015.

Triwal Boards Pvt. Ltd., Rohit Chambers, Ghoga St., Bombay 400001.

United Paper Ind., 9/3, Udyognagar Ind. Estate, S. Vivekanand Rd., Goregaon (West), Bombay 400062.

Zenith Paper Box Mfg. Co., 98, Bara Imam Rd., Bombay 400003.

Punjab

Leader Paper Processing Pvt. Ltd., E-11, Indl. Town, Jullundur 144001.

Tamil Nadu

Chettiar Ind. Corpn., G-4, Vyasarpadi Co-op. Ind. Estate, Madras 600039.

Jayant Packaging Pvt. Ltd., Super 'A' 12 & 13, Ind. Estate, Guindy, Madras 600032.

Madras Paper Convertors & Ind., 3, T. Chetty St., Madras 600001.

Minerva Packaging Products, 1065/A, Tiruvottiyur High Rd., Madras 600019.

Mount Packaging Corpn., 1/12, Vyasarpadi Co-op. Ind. Estate, Madras 600039.

Packwell Ind. Pvt. Ltd., No. 37, Old Trunk Rd., Pallavaram, Madras 600043.

Pee Bee Packaging, 2, Panchaliammankoil St., Arumbakkam, Madras 600029.

Siva Packaging Ind., B-1, Ind. Estate, Ambattur, Madras 600058.

West Bengal

Arun Corrugating & Packaging Inds., 36, Brabourne Rd., Calcutta 700001.

Associated Packaging Ind., 37, B.R.B.B. Rd., Calcutta 700001.

B. Ghosh & Co., Pvt. Ltd., 29, Mission Row Extn., Calcutta 700013.

Bengal Box Manufg. Co., 4, R. K. Chatterjee Rd., Cossipore, Calcutta 700002.

Bharat Paper Products, 352, R. Bahadur Rd., Calcutta 700053.

British Packaging Ind., 3, Portuguese Church St., Calcutta 700001.

Calcutta Paper Ind., 'Punam', 5/2, Russel St., Calcutta 700071.

Card Board Box Manufg. Co., 41, Chowringhee Rd., Calcutta 700016.

Card Board Printing & Processing Ind. Ltd., Alam Bazar, Calcutta 700035.

Card Board Products, 7A. Lower Circular Rd., Calcutta 700017.

Central Card Board Box Manufg. Co., 25, Dr. K. Bose St., Calcutta 700009.

Corrugating & Paper Processing Co. Pvt. Ltd., 25A, Swallow Lane, Calcutta 700001.

Durga Paper Products, 8/1/1, G. Dutta Garden Lane, Calcutta 700004.

Eastern India Box Factory, 1, Chitpore Ghat Lane, Cossipore, Calcutta 700002.

Impex Corpn., 23J, R. M. Dutta Garden Lane, Calcutta 700010.

Kajaria Chemi-Paper Pvt. Ltd., 28, Amratolla St., Calcutta 700001.

National Paper Processing Co., 23/32, Chanditala Main Rd., Calcutta 700053.

Sunrise Packaging Co., 196/C, Chittaranjan Ave., Calcutta 700007.

Union Packaging Industries, 1, Transport Depot Rd., Calcutta 700027.

United Paper Products, 35A, Muraripukara Rd., Calcutta 700004.

CORRUGATED SHEETS

Taida Trading & Inds., Pvt. Ltd., 175, Vidyanagri Mrg., Kalina, Bombay 400029.

COSMETICS

Belfry Conmerx (India) Pvt. Ltd., B-6/1, Comml. Centre, Safdarjung Enclave, New Delhi 110029.

Bengal Chemicals & Pharmaceutical Works, 6, Ganesh Chandra Avenue, Calcutta 700013.

Burleigh & Johnson, 22nd, Mada Church Rd., Santhome, Madras 600008.

Burroughs Welcome & Co. (India) Pvt. Ltd., 16, Bank St., Bombay 400023.

Ciba of India Ltd., 14, J. Tata Rd., Bombay 400020.

Colgate Palmolive (India) Ltd., Steelcrete House, D. Vachha Rd., Bombay 400020.

E. S. Patanwala, Patanwala Bldg., Connaught Rd., Bombay 400027.

Geoffrey Manners & Co. Ltd., Magnet House, Dougall Rd., B. Estate, Bombay 400038.

Glaxo Laboratories (India) Ltd., Dr. A. Besant Rd., Worli, Bombay 400018.

Johnson and Johnson Ltd., 30, Forjett St., Bombay 400026.

Kislin Cosmetics (Regd.), 1/91, Rajindar Nagar, New Delhi 110060.

Lakme Ltd., Bombay House, Homi Mody St., Bombay 400023.

Pond's (India) Ltd., 26, Commander-in-Chief Rd., Madras 600008.

Robert McLeans Cosmetics Pvt. Ltd., 27-B, Camac St., Calcutta 700016.

Shingar Cosmetics Pvt. Ltd., 809, Prasad Chambers. Bombay 400004.

Sunrise Soaps & Chemicals Pvt. Ltd., Galaxmy Commercial Centre, Jawahar Rd., Rajkot 360001.

Swastik Oil Mills, 13, W. Hirachand Marg, Bombay 400038.

T. S. R. & Co., Ramapuram, Madras 600089.

COUPLINGS (FLEXIBLES)

Albro Trading Co., 42, Bhajipala Lane, Bombay 400003.

Alliance Engg. Co., 97, D. Phalke Rd., Bombay 400014.

Ashton Green & Co., Sir Vithaldas Chambers, Apollo St., Bombay 400023.

ESBI Inds., 23-A, Netaji Subhas Rd., Calcutta 700001.

GBM Agencies Pvt. Ltd., Camac Court, 25, Camac St., Calcutta 700016.

Kamini Textile Stores, 21, Parekh Niwas, 1/3, Gazdar St., Chira Bazar, Bombay 400002.

Mark-AEC Inds. Pvt. Ltd., 71, Ganesh Ch. Ave., Calcutta 700013.

Mark Elektriks, Plot No. 15, Gultekdi Ind. Estate, Pune 411009.

New Allenbury Works, 52, Hazra Rd., Calcutta 700019.

Nu-Tech. Engg. Corpn., Bhosari Indl. Estate, MIDC, Pune 411026.

P. Ratilal & Co., 43, Dhanji St., Bombay 400003.

Pembril Fluidrive Ltd., G-56/57, MIDC Area, Aurangabad 431001. (Maharashtra).

RSV Agencies, 103, Gundecha Chambers, 18, N. Master Rd., Bombay 400023.

Rathi Engg. Works, 27, Shankerset Rd., Pune 411009.

Shalimar Steel Works Pvt. Ltd., 53, Netaji Subhas Rd., Calcutta 700001.

Standard Materials Agencies, 45/46, Podar Chambers, S. A. Brelvi Rd., Bombay 400023.

Steel Star Inds. (Regd.), Plot A-2, Gali No. 4, New Rohtak Rd., New Delhi 110005.

Wellman Incandescent India Ltd., 8, Ho Chi Minh Sarani, Calcutta 700018.

CRANES & CRANE COMPONENTS

Bharat Inds. & Commercial Corpn., Tower House, Chowringhee Sqr., Calcutta 700069.

Dehati Engg. Works, 15, Najafgarh Rd., New Delhi 110015.

Jashvant C. Shah & Co., Bharati Nivas, Block 6, 1st Flr., Besant Rd., Santacruz West, Bombay 400054.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Khandelwal Mfg. Corpn. Pvt. Ltd., Khandelwal Nagar, Bombay 400078.

Marshall, Sons & Co. India Ltd., 75-C, Park St., Calcutta 700016.

Mechanical Machinery Makers Pvt. Ltd., 67, Ekdalia Rd., Calcutta 700019.

Shirke Construction Equipments Pvt. Ltd., 72-76, Mundhwa, Pune 411036.

Utkal Machinery Ltd., Kansbahal 770034, Sundargarh Dist. (Orissa).

Western Mechanical Ind. Pvt. Ltd., Industry Manor, Near Century Bazar, Bombay 400025.

WMI Cranes Ltd., Bhandup Village Rd., Bhandup, Bombay 400078.

CRASH HELMETS

Allibhai Premji Tyrewala, Near Apsara Cinema, Bombay 400007.

Cama Motors Ltd., Lal Darwaja, Ahmedabad 380001.

Concord Arai Pvt. Ltd., 26, J. Nehru Rd., Calcutta 700013.

Everlast Fibre Glass Products Pvt. Ltd., 5, Residency Rd., Bangalore 560025.

Gadgets India, Sector 27-A, Faridabad 121002. (Haryana).

Lightcraft Corpn., 68-II, Marol Indl. Area, Andheri (E), Bombay 400093.

Mazdas India, 33, Church St., Bangalore 560001.

New Steel Bird Inds., 1E/14, Jhandewalan Extn., New Delhi 110055.

Pran Uppal, C/o Verma Scooter House, Shop No. 15, Bldg. No. 3, Navjivan Co-op. Housing Socy., Bombay 400008.

Technoplast International, 14, Old Madras Rd., Ulsoor, Bangalore 560008.

Udyogi Bros., 82, J. Bajaj St., Calcutta 700007.

Unique Enterprises, Hebbal, Bangalore 560006.

Unique Enterprises, 1, Atladara Ind. Estate, Atladara, Vadodara 390003.

CROCKERIES—CERAMIC & PORCELAIN

Andhra Pradesh

Deccan Porcelain & Enamel Works Ltd., Bakaram, Hyderabad 500001.

Hyderabad Potteries Ltd., 365-A, Bakaram, Hyderabad 500001.

Klayman Porcelains Ltd., 1-11-251/21, A. & B. Prakasham Nagar, Hyderabad 500016.

Bihar

Reliance Firebricks & Potteries Co. Ltd., P.O. Chanch Pottery, Dhanbad Dist.

Delhi

Bawa Potteries, Mehrauli, New Delhi 110030.

Kashmir Ceramics Ltd., Jeevan Vihar, Parliament St., New Delhi 110001.

Paulsons Ceramic Potteries, WZ 440, Palam Enclave, Delhi 110010.

Punjab Potteries, Gurgaon Rd., New Delhi 110037.

Scindia Potteries Pvt. Ltd., 289/3, Sirojini Nagar, N. Delhi 110023.

Gujarat

Digvijay Tiles & Potteries Ltd., Jamnagar 361001.

Khodiyar Pottery Works Ltd., Opp. Rly. Stn., Sihor 364340.

Haryana

Hitkari Potteries Pvt. Ltd., 63, Ind. Area, Faridabad 121001.

Karnataka

Government Porcelain Factory, Malleswaram, Bangalore 560005.

Kerala

Government Ceramic Factory, Quilon 691001.

Kerala Ceramics Ltd., Kundara 691501. Quilon Dist.

Madhya Pradesh

Gwalior Potteries Ltd., Gwalior 474001.

Perfect Pottery Co. Ltd., Gwarighat Rd., Jabalpur 482001.

Punjab

Himalaya Potteries Ltd., Phillaur 144410.

Hindustan Twyfords Ltd., Bahadurgarh 147021.

Rajasthan

Shivraj Pottery Works, Opp. A.I.R., Jaipur 302001.

(See also under 'Ceramics & Potteries' in this list).

CRUCIBLES

Andhra Graphite Products Pvt. Ltd., Visakhapatnam 530007.

Calcutta Crucible Manufg. Works, 52, Khetra Mitra Lane, Salkia, Howrah 711106.

D. K. & Bros., Post Box 8019, Bombay 400056.

Gopalkrishna Crucible Works, Thadithota, Rajahmundry 533103.

Hind Crucible Co., Maniktala Rd., Calcutta 700054.

Industrial Ceramics Co., H/10, 8th Flr., Everest, Tardeo, Bombay 400034.

Jayanthi Inds., Rajahmundry 533103.

Khandelwal Crucibles & Mineral Industries, Rajahmundry 533101.

Leos Mercantile Corpn., 441, Lamington Rd., Bombay 400004.

Prakash Bros., Telianwala, Rajghat, Varanasi 221001.

Shankar & Co., 200, Chawri Bazar, Delhi 110006.

United Crucible Indl. Corpn., Rajahmundry 533103.

V. Jarton & Co., 71, N. Subhas Rd., Calcutta 700001.

DAIRY MACHINERY

Armcess Engrs. Pvt. Ltd., Super 8 & 9, Indl. Estate, Guindy, Madras 600032.

Bhawani Traders, 217, Princess St., Bombay 400002.

Dairy Equipment Co., National Insurance Bldg., D. Naoroji Rd., Bombay 400001.

Dairy Land, 119, Jogani Indl. Estate, S. Bapat Mrg., Bombay 400028.

Dairy Udyog Milk Container Ind., C/229A/230, Ghatkopar Ind. Estate, Bombay 400086.

Dany Dairy & Food Engrs. Pvt. Ltd., Post Box 115, Saharanpur 247001. U.P.

Desai & Co., A-3, Plot 1, Small Inds. Co-op. Indl. Estate, I. B. Patel Rd., Goregaon East, Bombay 400063.

G. R. Engg. Works Pvt. Ltd., G. R. House, 86, M. Vasanji Rd., Bombay 400059.

Jyoti Ind., C-31, Ind. Estate, Sanatnagar, Hyderabad 500018.

Kishore Trdg. Corpn., Makanji Niwas, Naoroji Lane, Ghatkopar, Bombay 400086.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

New Lahore Engg. Co., Munshi Niketan, A. Ali Rd., New Delhi 110002.

Panchal Workshop, Post Box 62, Anand 388001. (Gujarat).

Purushottam Traders Pvt. Ltd., A-6, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Seven Hills Inds., 8A, Thiruvengadam Rd., Coimbatore 641002.

Swastik Safe & Iron Works Pvt. Ltd., Vallabh Vidyanagar Rd., Anand 388001. (Gujarat).

Unicorn Machinery Mfrs. Pvt. Ltd., 13/1, Rasulpura, Secunderabad 500003.

Venus Trading Co., Anand 388001. (Gujarat).

Vulcan Laval Ltd., Mustafa Bldg., 7-A, Sir P. Mehta Rd., Bombay 400001.

DAIRY PRODUCTS

Anand Dairy Products, C/o Ramesh Kapasi, 3-5-8, Navjivan Socy., Bombay 400008.

Dempo Dairy Ind. Ltd., Dempo House, Campal, Panaji 403001.

Doshi Bros., Polson Rd., Anand 388001.

Foremost Dairies Ltd., 72, Janpath, New Delhi 110002.

Kaira Dist. Co-op. Milk Producers Union Ltd., Anand 388001.

Nestle's Products (I) Ltd., P.B. 427, New Delhi 110001.

Polson Ltd., 65B, Dockyard Rd., Bombay 400010.

Sri Ramakrishna Dairy, 179, Visveswarapuram, Bangalore 560004.

DETERGENTS

Anikel Corpn., 5, Ram Colony, West Mambalam, Madras 600033.

Aerochem Inds., Ind. Estate, Silvassa 396230 (Via Vapi).

Cee Dee Detergents and Chemicals, 11/25, Sabun Katra, Agra 282003.

Darpana Soap Inds., 2/34-A, Baldeo Bag, Jabalpur 482002. (M.P.).

Detergents India, 536, Balaji Colony, Tirupathi 517502.

Detergents India Ltd., Post Box 1427, T. Nagar, Madras 600017.

Dr. Gajra's Morochem Inds., 280, V. Savarkar Mrg., Bombay 400028.

Fateh Inds. & Stores, 313, Samuel St., Bombay 400003.

Haryana Detergents Ltd., Hindustan Times House, 18-20, K. Gandhi Mrg., New Delhi 110001.

Indian Dairy Entrepreneurs Agricultural Co. Ltd., Mandlik House, 2nd Flr., Mandlik Rd., Colaba, Bombay 400039.

Kerala State Detergents & Chemicals Ltd., Kuttippuram 679571. (Kerala State).

Mazda Indl. Chemicals Pvt. Ltd., Mazda Inds. House, Off Haines Rd., Worli Naka, Bombay 400018.

Romil Chemical Inds., 29, Parekh St., Bombay 400004.

Rose Hill Soaps & Chemicals (India), 6, Kutchery Rd., Madras 600004.

Sree Meenakshi Chemical Inds., Sree Meenakshi Gardens, Kizhakattalai, Madras 600043.

Swastik Household & Indl. Products Ltd., Post Box 362, Bombay 400038.

Tejal Chemicals, Opp. Vayda Pole, Chokhandi, Vadodara 390001.

Texspan, 9-E, Elphinstone Rd., Bombay 400012.

Ultramarine & Pigments Ltd., Ranipet 632403. (T. Nadu).

Union Home Products Pvt. Ltd., Wharf St., Bunder, Mangalore 575001.

Whitco Ltd., Kalol 382721. (Gujarat).

DIESEL ENGINES, GENERATOR SETS & COMPONENTS

Andhra Pradesh

Hyderabad Iron & Steel Works Ltd., Ind. Area, Azamabad, Hyderabad 500020.

Sarada Engg. Co., B-6 & 7, Ind. Estate, Moula Ali, Hyderabad 500040.

Shriram Refrigeration Ind. Ltd., P. O. Balanagar Township, Hyderabad 500037.

Bihar

Rajiv Kamal Inds., Bailey Rd., Patna 800001.

Delhi

Atma Group of Industries, 201, Ansal Bhawan, 16, K. Gandhi Mrg., New Delhi 110001.

Trading Engineers (International) Pvt. Ltd., C-42, Wazirpur Ind. Area, New Delhi 110052.

Gujarat

Cyma Industries, Jelly Estate, Mavdi Plot, Rajkot 360004.

Deepak Industries, Opp. Saurashtra Cold Storage, Gondal Rd., V. K. Estate, Rajkot 360002.

Gujarat Forgings Pvt. Ltd., Patel Mfrs. Compd., Ajit Indl. Estate, Rajkot 360003.

Indo-German Industries, Pandit Udyognagar, Mavdi Plot, Rajkot 360004.

Industrial Corpn., Bapu Nagar, Jilla Garden Rd., Rajkot 360002.

Jyoti Ltd., Gorwa Rd., Vadodara 390003.

Milton Engineers, Mavdi Plot, Main Rd., Rajkot 360004.

Patel Engg. Co. (Saurashtra) Ltd., P. Box No. 510, Rajkot 360003.

Patel Manufacturers, Ajit Indl. Estate, Post Box 510, Rajkot 360003.

Rocket Engg. Corpn. (Ahmedabad), Naroda Rd., Saijpur Bogha, Ahmedabad 382345.

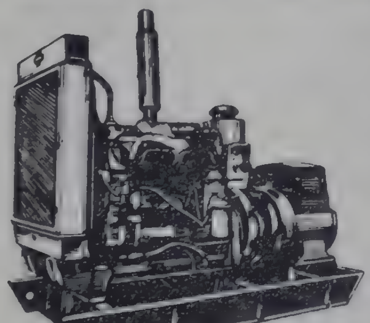
Sensitive Inds., Mavdi Plot, Rajkot 360004.

Sigil (India) Services Pvt. Ltd., Post Box 240, Vadodara 390001.

Karnataka

Eicher Tractors India Ltd., 29-30, Kasturba Rd. Cross, Bangalore 560001.

IS POWER CUT CUTTING INTO YOUR PROFITS



INSTAL

Redy power

DIESEL GENERATING SET

For instant power at any time

Available on short delivery basis and backed by efficient and reliable After Sales-Service in capacities 3 KVA Thro' 1000 KVA

For Baseloads, Standby & Emergency Power Systems, Mobile, Totally Enclosed and special purpose applications.

tei TRADING ENGINEERS (INTERNATIONAL) PVT. LTD.

DELHI : C-42, Wazirpur Industrial Area, Delhi 110 052. Telex : 031-4381
Tel. : 741312, 741838, 743784, 743815 Grams : " REDYPOWER
3/3-A, Asaf Ali Road, New Delhi 110 002. Tel.: 268736, 268737, 268738
Telex : 031-2744. Grams : " UNIBUILT ".

BOMBAY : 43, Mittal Chambers (4th Floor), Nariman Point, Bombay 400 021
Tel.: 220128, 223646, 231013. Telex: 011-5532. Grams: "UNIBUILT

CALCUTTA : 15, Prafulla Sarkar Street, Calcutta 700 072.
Tel. : 272477, 272483. Telex: 021-3530. Grams : " WESTDAX".

Maharashtra

Agra Engg. Co., 40, Bank St., Bombay 400023.

Arjansingh Khemchand, 118, Commerce House, Medows St., Bombay 400023.

Bombay Plants Pvt. Ltd., A-179 & 181, Z Lane, Rd. 16, Wagle Ind. Estate, Thane 400604.

Diesel Parts (India), 16, Gitanjali Bldg., Behind Radio Club, Colaba, Bombay 400005.

Economic Traders, Churchgate Chambers, Marine Lines, Bombay 400020.

Elmot Engg. Co. Pvt. Ltd., 2, Udyog Nagar, S. Vivekanand Rd., Goregaon West, Bombay 400062.

Elve Business Contacts Corpn., Elve Chambers, Green St., Bombay 400023.

Everest Engg. Corpn., 12, Hornby View Bldg., Gunbow St., Bombay 400001.

Gadre Inds., 2094E, Vikramnagar, Kolhapur 416005.

Geco Trdg. Corpn., 6, K. K. Mansions, 289, Nagdevi St., Bombay 400003.

Greaves Lombardini Ltd., 732A, Poona Satara Rd., Pune 411009.

H. T. C. Diesel Engines Pvt. Ltd., Plot No. 33, Kandivli Govt. Ind. Estate, Kandivli West, Bombay 400067.

Industrial Controls and Appliances Pvt. Ltd., C-47/49-A, Chakala Rd., Andheri East, Bombay 400093.

International Export Import Co., 65, Mody St., Bombay 400001.

Javahar Engines Pvt. Ltd., Shrirampur 413709, Ahmednagar Dist.

K. S. Diesels Pvt. Ltd., 19-A, Doshi Marg, Bombay 400023.

Kirloskar Cummins Ltd., Kothrud, Pune 411029.

Kirloskar Oil Engines Ltd., 13, L. Kirloskar Rd., Khadki, Pune 411003.

Mather Greaves Ltd., Pune 411019.

Mercantile & Indl. Development Co. Ltd., National House, 6, Tulloch Rd., Bombay 400039.

National Metal Ind., 15/A, Parel Village Rd., Bombay 400012.

Numex Engineers, 48-B, Saki Vihar Rd., Saki Naka, Bombay 400072.

Powerica Sales & Services Pvt., 210, Commerce House, 140, Medows St., Bombay 400023.

Premier Automobiles Ltd., L. B. Shastri Mrg., Bombay 400070.

Rathi Engg. Works, Near Chitnis Park, Nagpur 440002.

Ruston & Hornsby (I) Ltd., Chinchwad, Pune 411019.

Sigil India Services Pvt. Ltd., 381, Dr. D. Naoroji Rd., Bombay 400001.

Tekma Ind., 49-B, Saki Vihar Rd., Saki Naka, Bombay 400072.

United India Engg. Co., Commerce House, 140, N. Master Rd., Bombay 400023.

Vinod Bearing & Marine Corpn., 101, N. Dhuru St., Bombay 400003.

Punjab

Goetze (I) Ltd., Bahadurgarh 147021, Patiala Dist.

Tamil Nadu

Balaram Engg. Works, 16, Davidson St., Madras 600001.

Marshall, Sons & Co. (Mfg.) Ltd., 33/34, Ambattur Ind. Estate, Madras 600058.

Premier Inds., 33, Sembudoss St., Madras 600001.

Simpson & Co., Ltd., 202, Mount Rd., Madras 600001.

Uttar Pradesh

Indian Diesel Machines, D-2, Murli Nagar, Lucknow 226001.

Prabhat Engrs., Belanganj, Agra 252004.

Rajasthan Engine & Pump Inds., 6/321, Belanganj, Agra 282004.

West Bengal

Crawley & Ray (Founders & Engrs.) Pvt. Ltd., 32, Foreshore Rd., Howrah 711103.

Dassani Engrs. & Agencies Pvt. Ltd., 16, G. C. Ave., Calcutta 700013.

Elecdies (India), 12-B, N. Subhas Rd., Calcutta 700001.

Electrical Elements Co., 2, G. C. Ave., Calcutta 700013.

Indian National Diesel Engine Co. Ltd., 6, Little Russel St., Calcutta 700071.

Rajkissen Radhakissen Mitter & Co., 21, N. Mitter St., Calcutta 700006.

Universal Engineers & Traders, 20, N. Subhas Rd., Calcutta 700001.

DISTILLERIES & BREWERIES

Andhra Pradesh

A. P. Govt. Power Alcohol Factory, Shakarnagar 503180. Nizamabad Dist.

Hindustan Polymers Ltd., Pendurthi Rd., Visakhapatnam 530001.

K. C. P. Ltd. (Distillery), Vuyyuru 521165. Krishna Dist.

Sri Sarvaraya Sugars Ltd., Chelluru 533261. East Godavari Dist.

Goa

Arlem Breweries Ltd., Mormugao Harbour 403803.

Gujarat

Alembic Chemical Works Co. Ltd., Ind. Area, Vadodara 390003.

Sardesai Brothers Ltd., P.O. Sardesai Factory 396380. Valsad Dist.

Haryana

Haryana Distillery, Yamunanagar 135001.

Karnal Distillery Co. Ltd., Karnal 132001.

Panipat Co-operative Distillery, Panipat 132103.

Himachal Pradesh

Mohan Meakin Breweries Ltd., Solan 173212.

Solan Breweries, Solan 173212.

Karnataka

Amrut Distilleries, Sampangi Tank Rd., Bangalore 560027.

Khoday Distilleries Pvt. Ltd., 10, 1st Main Rd., Gandhinagar, Bangalore 560009.

Mysore Breweries Ltd., Jalahalli Camp Rd., Bangalore 560022.

Mysore Sugar Co. Ltd., Mandya 571401.

United Breweries Ltd., 24, Grant Rd., Bangalore 560001.

Kerala

McDowell & Co. Ltd., Shertally 688524, Alleppey Dist.

Polsons Distillery, Post Box 6, Chalakudy 680307.

Premier Breweries Ltd., Kanjikode West 678623 (Palghat Dist.).

Travancore Sugars & Chemicals Ltd., Pamba Distillery, Tiruvalla 689101.

Madhya Pradesh

Lilasons Breweries Pvt. Ltd., Indl. Area, Govindpura, Bhopal 462023.

Maharashtra

Associated Breweries & Distilleries, Meher House, 2nd Flr., 15, Cawasji Patel St., Bombay 400001.

Doburg Lager Breweries Pvt. Ltd., 82, N. Master Rd., Bombay 400023.

Hindustan Breweries & Bottling Ltd., Arcadia, 7th Flr., N. Point, Bombay 400021.

Jain Plastics & Chemicals Pvt. Ltd., 152, Polan Peth, Jalgaon 425001.

Kolhapur Sugar Mills Ltd., Kasba Bavada, Kolhapur 416006.

Maharashtra Sugar Mills Ltd., Tilaknagar 413720, Ahmednagar Dist.

Tilaknagar Distillieries & Inds. Ltd., Indl. Assurance Bldg., Churchgate, Bombay 400020.

Vinedale Distilleries Pvt. Ltd., 202, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Walchandnagar Ind. Ltd., Walchandnagar 413114, Pune Dist.

Punjab

Bhagat Ind. Corpn. Ltd., P.O. Distillery Khasa, Amritsar 143007.

Jagatjit Ind. Ltd., P.O. Jagatjitnagar 144802, Kapurthala Dist.

Punjab Breweries Ltd., Post Box 167, Ludhiana 141001.

Rajasthan

Udaipur Distillery Co. Pvt. Ltd., Udaisagar Rd., Udaipur 313001.

Tamil Nadu

Arvind Distillery Pvt. Ltd., "Meco House", 11-A/3, Mount Rd., Madras 600002.

E. I. D. Parry (India) Ltd., Dare House, Madras 600001.

McDowell & Co. Ltd., 22-23, Moore St., Madras 600001.

Sakthi Sugar Ltd., 72, Sengupta St., P.B. 960, Ramnagar, Coimbatore 641001.

Trichy Distilleries & Chem. Ltd., 17/4, Nungambakkam High Rd., Madras 600034.

Uttar Pradesh

Central Distillery & Chem. Works Ltd., Meerut Cantt. 250001.

Modi Distillery, Modinagar 201204.

Mohan Meakin Breweries Ltd., Mohannagar, Ghaziabad 201007.

Mohan Meakin Breweries Ltd., Lucknow Distillery, Dallygunge, Lucknow 226001.

Rampur Distillery & Chem. Co. Ltd., Rampur 244901.

Standard Refinery & Distillery Ltd., Unnao 209801.

West Bengal

Carew & Co. Ltd., 6, Old Court House St., Calcutta 700001.

Bengal Distilleries Co. Pvt. Ltd., 4/5, Bankshall St., Calcutta 700001.

Ruttonjee & Co. Ltd., 6, Old Court House St., Calcutta 700001.

Shaw Wallace & Co. Ltd., 4/5, Bankshall St., Calcutta 700001.

DISTILLERY PLANTS—SMALL

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Naranlala Metal Works, Near Rly. Stn., Navsari 396445.

DOMESTIC GRINDERS & MIXERS

A. N. Sales Enterprises, 3196, D. B. Gupta Rd., New Delhi 110055.

Abhisek Engg. Corpn., 2/3, Ponnavel Pillai Gardens, Aminjikarai, Madras 600029.

Ansons Electro Mechanical Works, 248–252, Abdul Rehman St., Bombay 400003.

Blumac Electricals India, Unity Bldg., Bangalore 560002.

Devidayal Stainless Steel Inds. Ltd., Reay Rd., Bombay 400010.

Ditz Electricals (India) Ltd., 29, Malkaganj Rd., Delhi 110007.

Elektrika Engg. Co., 23, Maharaja Tagore Rd., Calcutta 700031.

Gansons Ltd., 645, Mount Rd., Madras 600006.

GB Inds., 8/B, Ghanashyam Indl. Estate, Veera Desai Rd., Andheri West, Bombay 400056.

Home Service Appliances, United Bldgs., Patel Rd. (N), Coimbatore 641009.

Jyoti Electricals, P–38, India Exchange Place, Calcutta 700001.

Kohli Indl. Corpn., E–15, Nandjyot Indl. Estate, Safaid Pool, Kurla Andheri Rd., Bombay 400072.

Meena Equipments, Coimbatore 641009.

Meco-Tronics Pvt. Ltd., 47, Mount Rd., Madras 600002.

Meenu Equipments, Site No. 48, II Main Rd., Indl. Town, Rajajinagar, Bangalore 560044.

Metropolitan Inds., 72, Sastri Rd., Coimbatore 641009.

P. Suren & Co., 109, Samapur (Badli), Delhi 110042.

Prajay Electronics, 36, Vembuli Subedar St., Madras 600016.

Rajen Electric Co., 95/227, Dadasaheb Phalke Rd., Bombay 400014.

Rallis India Ltd., 21, Ravelin St., Bombay 400001.

Samrat Thermoplastic Inds., Plot No. 33/34, 'S' Block, Indl. Estate, Bhosari, Pune 411026.

Star Marketing & Services Ltd., Dhanraj Mahal, C. S. M. Mrg., Bombay 400039.

V. G. Panneerdas & Co., 3, K. H. Rd., Bangalore 560027.

Vummidiars, 162, Mount Rd., Madras 600002.

Western India Electricals Corpn., 23, Ansari Rd., Daryaganj, New Delhi 110002.

DOORS—FLUSH

Amar Inds., Acme Indl. Estate, Sewree (E), Bombay 400015.

Arvind Timber Products Pvt. Ltd., 501, Rewa Chambers, New Marine Lines, Bombay 400020.

Bull Door, 83/105, Victoria Rd., Mustafa Bazar, Bombay 400010.

Central India Board Products, Pathrota Rd., Itarsi 461111.

Deluxe Flush Doors Corpn., 38, Bombay Timber Mkt., Reay Rd., Bombay 400010.

Indian Plywood Mfg. Co. Ltd., 9, Wallace St., Bombay 400001.

Kutty Flush Doors & Furniture Co. Pvt. Ltd., Poonamale High Rd., Koyambedu, Madras 600107.

Meghalaya Plywoods Ltd., Bara Bazar Rd., Shillong 793002.

Mysore Commercial Union Ltd., Yeshwantpur, Bangalore 560022.

Nagaland Forest Products Ltd., Tijit. Mon. Dist. 798621. (Nagaland).

Nuboard Manufg. Co. Ltd., Shahbad Rd., Rampur 244901.

Phoenix Plywood Pvt. Ltd., P. Bag 278, Kottayam 686001. Kerala State.

Plyboards (India), Dibrugarh 786001.

Purushotham Gocouldas Plywood Co., Cannanore 670001.

Sarda Plywood Inds., 9, Parsee Church St., Calcutta 700001.

Wood Art Flush Doors, Plot No. 96, Rd. No. 16, MIDC Indl. Area, Andheri East, Bombay 400093.

DRAWING OFFICE EQUIPMENT

(See under Office Equipment).

DRILLS & DRILLING MACHINES, ETC.

Addison & Co. Ltd., Mount Rd., Madras 600002.

Alfa Tools Pvt. Ltd., 178, G.I.D.C. Indl. Estate, Ankleshwar 393001 (Gujarat).

Atlas Copco (India) Ltd., M. Gandhi Memorial Bldg., Netaji Subhas Rd., Bombay 400002.

Borewell Equipment Co., Unit No. 2 & 3, Electronic Complex, Kushaiguda, Hyderabad 500762.

Dagger Master Tool Inds. Ltd., 1st Pokhran Rd., Thane 400606.

Drillco Metal Carbides Ltd., 1187/59, Jangli Maharaj Rd., Shivajinagar, Pune 411005.

Haryson Engg. Co., Plot A 420, Wagle Indl. Estate, Rd. 28, Thane 400604.

Industrial & Mining Equipment Co. Pvt. Ltd., Aman Chambers, 113, New Queen's Rd., Bombay 400004.

Killick, Nixon & Co. Ltd., Drilling Dn., 31, Murzban Rd., Bombay 400001.

Krishna Rock Drills Pvt. Ltd., 197, Park Lane, Secunderabad 500003.

L.M.P. Precision Engg. Co. Pvt. Ltd., Post Box 7, Mahadeo Nagar, Bilimora 396321.

Machine Tools & Accessories Pvt. Ltd., 10/9, Ambattur Indl. Estate, Madras 600058.

New Bharat Engg. Works (Jamnagar) Ltd., Post Box No. 131, Jamnagar 361002.

P. M. Chacko & Associates, Thambay Bldg., M. G. Rd., Cochin 682011.

Praga Tools Ltd., 6-6-8/32, Kavadiguda Rd., Secunderabad 500003.

Priti Engrs., 110, Medows St., Bombay 400023.

RMT Drill P. Ltd., Pollachi Rd., Coimbatore 641021.

Radha Foundry, P.O. Red Fields, Coimbatore 641018.

Revathi — CP Equipment Ltd., Coimbatore 641021.

Royal Foundry, Rly. Rd., Batala 143505. (Punjab).

Sarasvathi Inds., 499, Sivasakhti Colony, Ganapathy, Coimbatore 641006.

Sarbjit Inds., Ram Tirath Rd., Amritsar 143001.

Sumathi Drilling Machine Tools, 7/7, Avanashi Rd., Chinniyampalayam, Coimbatore 641014.

V. U. Engg. Works, Vadgaon, Belgaum 590005.

Water Development Society, C-2 & C-5, Indl. Estate, Moula Ali, Hyderabad 500040.

DRUGS & PHARMACEUTICALS

Andhra Pradesh

Biochemical & Synthetic Products Ltd., Sanatnagar, Hyderabad 500018.

Biological E. Ltd., 18/1 & 3, Azamabad, Hyderabad 500020.

Hyderabad Chemicals & Pharmaceutical Works Ltd., Azamabad Ind. Area, Hyderabad 500020.

J. & J. Dechane, Residency Rd., Hyderabad 500001.

Nath Laboratories, 23A, Ind. Estate Expansion, Balanagar, Hyderabad 500037.

Shetty's Pharmaceuticals & Biologicals Ltd., A-7-12, Musheerabad, Hyderabad 500020.

Siri Pharma, Sirinagar Ind. Estate, Vijayawada 520007.

Standard Organics Ltd., 6/3/348, Salopia, Dwarakapuri Colony, Hyderabad 500004.

Uni-Sankyo Ltd., Plot 37, Rd. No. 10, Banjara Hills, Hyderabad 500034.

Uniliods Ltd., 3-6-524, Himayatnagar, Hyderabad 500029.

Warner Hindustan Ltd., Warangal Rd., Uppal, Hyderabad 500039.

Assam

Drugs India (Manufg.), Dispur, Gauhati 781005.

United Colours & Chemicals (Assam) Pvt. Ltd., G. Bordoloi Rd., Panbazar, Gauhati 781001.

Bihar

National Chemical & Pharmaceutical Works, 5, Kankarbagh Rd., Patna 800001.

P. C. Laboratories, Dak Bungalow Rd., Patna 800001.

Delhi

Allied Chemicals & Pharmaceuticals Pvt. Ltd., Bajaj Bldg., D. B. Gupta Rd., New Delhi 110055.

Associated Pharma, 8/29, Kirti Nagar Ind. Area, New Delhi 110015.

Ayurvedic Pharmaceutical Co. Ltd., 264, Kamla Market, New Delhi 110001.

Dabur (Dr. S. K. Burman) Pvt. Ltd., 8/3, Asaf Ali Rd., New Delhi 110002.

Everest Pharmaceutical Works, F-34, N.D.S.E., Part 1, New Delhi 110049.

La Medica Pvt. Ltd., Post Box No. 1387, Delhi 110006.

Ranbaxy Labs. Ltd., 78, Nehru Place, New Delhi 110019.

Remedies (I) Pharmaceuticals, G-102, Kirti Nagar. New Delhi 110015.

Goa

Bevit Pharmaceuticals Pvt. Ltd., Post Box 5, Vasco Da Gama 403802.

Carter-Wallace Ltd., Rua de Ourem, Panaji 403001.

Drogaria Salcete, Margao 403601.

Drugs & Chemicals (I), P.B. 42, Margao 403601.

Geno Pharmaceuticals Ltd., Mapusa Indl. Estate, Karaswada, Mapusa 403507.

Gujarat

Acron Pharmaceuticals, Sorabji Comp., Old Vadaji, Ahmedabad 380013.

Alar Laboratories, Shree Kunj, Navrangpura Rd., Ahmedabad 380009.

Alembic Chemical Works Co. Ltd., Alembic Rd., Vadodara 390003.

Allied Pharmaceutical Laboratories, Ranmukteshwar Mahadev Rd., Ind. Area, Pratapnagar, Vadodara 390004.

B-Tex Ointment Manufg. Co., 20/21-D, Udyog Nagar, Navsari 396445.

Cadila Laboratories, Ghodasar, Maninagar, Ahmedabad 380008.

Carewell Pharmaceuticals, CBI-16, GIDC Ind. Estate, Makarapura Rd., Vadodara 390009.

Cornet Pharmaceutical Pvt. Ltd., Opp. Naroda Station, Naroda 382325.

Didi Pvt. Ltd., Race Course Rd., Vadodara 390001.

Farmson Pharmaceutical Gujarat Pvt. Ltd., Shankar Bhuvan, Sayajiganj, Vadodara 390005.

RANBAXY LABORATORIES LIMITED

Head Office : 78, Nehru Place, New Delhi 110 019.

Phones : 682445 (4 lines). Cables : "RANBAXY".

Regd. Office : Sahibzada Ajit Singh Nagar 160 055. Dist. Ropar (Punjab).

Manufacturers of :

Drugs and medicines of repute. Range of Ethical specialities include Antibiotics, Antibacterials, Analgesics, Tranquillizers, Nutritional products and other useful Chemotherapeutic Agents. Bulk Drugs & Fine Chemicals, Laboratory Chemicals, Reagents, Garlic Pearls and Herbal Shampoos.

Managing Director : Bhai Mohan Singh.

Plants :

Pharmaceutical : Okhla, New Delhi 110 020.

Chemical : Sahibzada Ajit Singh Nagar 160055 (Punjab).

Cosmetic : Okhla Phase II, New Delhi.

Regional Offices : Bombay, Calcutta, Madras and New Delhi.

Branches : Ahmedabad, Hyderabad, Kanpur, Patna and Chandigarh.

Depot : Faridabad.

Some of the prominent products in RANBAXY range are :—

Calmpose (Diazepam), Roscillin (Ampicillin), Tibirim (Rifampin), Ranphenicol (Chloramphenicol), Gramoneg (Nalidixic Acid), Sudhinol-N Compound (a combination of D'propoxyphene Napsylate, Paracetamol and Diazepam), Lolipid (Clofibrate), Spasril (Clidinium Bromide + Chlordiazepoxide), Fortwin Injection (Pentazocine Lactate), Ranodine (Iodine + B-Complex), Ranvit (B-Complex Forte + Vit. C), Ranferon-12 (Iron, Folic Acid and Vit. B_{12}), Spectra (Doxepin HCl), Sporidex (Cephalexin), Sporidine (Cephaloridine), Tetradox (Doxycycline), Melubrine (Chloroquine), Artagen (Naproxen).

RANBAXY's Basic Drugs & Fine Chemicals Plant is presently engaged in the manufacture of basic drugs viz. Diazepam, Ampicillin, Chloroquine Phosphate, Chlordiazepoxide, Clofibrate, Laboratory Reagents and Chemicals and Doxycycline.

RANBAXY, in the field of consumer products, is marketing 'KOPECTOL', a fast acting anti-diarrheal, 'GARLIC PEARLS' (Soft Gelatine Capsules of Garlic Oil) and 'NATURELLE' Herbal Shampoos. More O.T.C. products are at different stages of development.

Company's Research Division is constantly working on developing new basic drugs to meet with its ambitious plans for expansion.

Girish Pharmaceutical Works, Opp. Putali, Navsari Bazar, Surat 395002.

Gujarat Pharmaceutical & Chemical Works, Near Chamundi Mata, Asarva, Ahmedabad 380016.

Indigenous Drug Pharmaceuticals, Madhi 394340, Surat Dist.

Iris Laboratories (I), Ramol Rd., Khokhra Mehemdabad, Ahmedabad 380008.

Jaychem Lab, 12/1689-98, Sarkezi Manzil, Saiyadwada, Shapore, Surat 395003.

Lunik Pharma, 18, Sohag Raman Nagar Society, Maninagar, Ahmedabad 380008.

McGaw-Ravindra Laboratories (I) Ltd., Rohit Mills Premises, Amraiwadi Rd., Ahmedabad 380008.

Mercury Pharmaceutical Inds., Mercury House, R. C. Dutt Rd., Vadodara 390005.

Paragon Laboratories, F-4, Bardanwala Rd., Jamnagar 361001.

Puro Pharma Laboratories, Pravin Nagar, Sherkhej Rd., Ahmedabad 380007.

Rup Pharma, A-1, Udyognagar, Navsari 396445.

SG Chemicals & Pharmaceuticals Ltd., Dr. Vikram Sarabhai Mrg., Wadi Wadi, Vadodara 390007.

Shri Rasashram Pharma Laboratories, Gondal 360311.

Stan-Rel Pvt. Ltd., Ranmukteshwar Rd., Ind. Area, Pratapnagar, Vadodara 390004.

Synbiotics Ltd., P.B. 129, Wadi Wadi, Vadodara 390007.

Haryana

Curewel (I) Ltd., Plot No. 2, Sector 6, Faridabad 121001.

Ethichem Laboratories, Civil Rd., Rohtak 124001.

National Laboratories, 20th Mile Stone, Mathura Rd., Ballabhgarh 121004.

Himachal Pradesh

Abgel Drugs & Chemicals Pvt. Ltd., 12, Indl. Area, Parwanoo 173220.

Pharma Chemico Laboratories, Solan 173212.

Karnataka

Associated Drug Co. Pvt. Ltd., Sampangi Tank Rd., Bangalore 560002.

Avon Malariana Pharma, 840/14B, Jeppu Rd., Mangalore 575002.

Bangalore Pharmaceutical Research Laboratories, 163, Reservoir St., Basavangudi, Bangalore 560004.

Eros Pharma, 61, Ind. Area, Rajaji Nagar, Bangalore 560019.

Fine Chemical Laboratories, Yeshwantpur, Bangalore 560022.

Hindustan Theramids, 163, O.V.H. Rd., Basavangudi, Bangalore 560004.

Indian Process Chemical Laboratory (Pvt.) Ltd., Yeswantpur, Bangalore 560022.

International Chemical & Biological Inst. Pvt. Ltd., 7, South End Rd., Basavangudi, Bangalore 560004.

Juggat Pharma Pvt. Ltd., 35, Sampangi Tank Rd., Bangalore 560027.

Madras Chemicals & Pharmaceuticals Ltd., No. 7, Harris Rd., Benson Town, Bangalore 560046.

Micro Labs Pvt. Ltd., 7/10, Kumara Krupa Rd., Bangalore 560001.

Mysore Ind. & Testing Laboratory Ltd., I.T.L. Bldg., Malleswaram, Bangalore 560003.

Kerala

Brothers Pharmaceuticals, Navaikulam 695603. Quilon Dist.

Cochin Pharmacol Co., P.O. Punkunnam, Trichur 680002.

Dennis Pharmaceuticals, 12/1269, Kunnukuzhi, Trivandrum 695001.

Electrochemical Manufg. Co., Mulagunnathukavu 680581. Trichur Dist.

Enoch Pharma, Q. S. Rd., Quilon 691008.

Marco Chemicals, 20/269, West Fort, Trichur 680004.

Navaratna Pharmaceutical Laboratories, Navaratna House, Manthra Rd., Cochin 682001.

Phair Laboratories, Ettumannoor 686631.

Pharmaceuticals & Chemicals (Trav.) Pvt. Ltd., Trivandrum 695001.

Puro Pharma Pvt. Ltd., W22/189, Alleppey 688001.

Trinity Pharmaceuticals (I) Pvt. Ltd., Ran Vihar, Aranattukara 680618, Trichur Dist.

Madhya Pradesh

Bharat Pharmaceuticals, 23, Yeswant Niwas Rd., Indore 452003.

Bombay Ideal Products (I), 6, Ind. Estate, Indore 452003.

Bombay Pharma Products, 122, Palsikar Colony, Indore 452002.

Fine Pharmaceutical Ind., 24, Adarsh Nagar, Indore 452001.

Imphalabs, 111, Ind. Estate, Indore 452003.

Jamsons Laboratories, 43, Ind. Estate, Indore 452003.

Joy Pharmaceutical Laboratories, 17, Pagnispaga, Indore 452002.

M. K. Industries, Melonigunj, Jabalpur 482001.

MAB-LAB, 82, Ravindra Nagar, Indore 452001.

Pure Pharma Products (I), 41-44, Ind. Estate, Indore 452003.

Royal Laboratories, 42, Agrasen Nagar, Bijasani Rd., Indore 452001.

Saugar Ayurvedashram Pharmacy, 304, North Raj Mohalla, Indore 452002.

Suneeta Laboratories Pvt. Ltd., 89-B/90, Ind. Estate, Indore 452003.

Vadson Laboratories, Ind. Estate, Raipur 492001.

Vostok Laboratories, 44, Marothya Bazar, Indore 452001.

Maharashtra

Abbott Laboratories (I) Pvt. Ltd., Jehangir Bldg., M. Gandhi Rd., Bombay 400023.

Acichem Laboratories, 1, Prabhat Nagar, Jogeshwari West, Bombay 400060.

Ajanta Pharma Pvt. Ltd., 31-0, MIDC Area, Chikalthana, Aurangabad 431210.

Ajit Laboratories Pvt. Ltd., Ind. Estate, Miraj 416410.

Alarsin Pharmaceuticals, 12, Rampart Row, Bombay 400023.

Albert David Ltd., Maker Bhavan No. II, 18, New Marine Lines, Bombay 400020.

Alma Laboratories, Fort House, Behind Handloom House, Dr. D. Naoroji Rd., Bombay 400001.

Alta Laboratories Pvt. Ltd., 532, S. Bapat Mrg., Dadar. Bombay 400028.

Amber Research & Pharmaceutical Works, Anand Bhavan, S. Gandhi Mrg., Bombay 400002.

Amsar Pvt. Ltd., 2, Hormuz Mansion, 72, B. Desai Rd., Bombay 400026.

Anand Synthochem Pvt. Ltd., 142, Ghaswala Estate, Jogeshwari, Bombay 400060.

Andre Laboratories, Aidun Bldg., 1st Dhobi Talao Lane, Bombay 400002.

Anglo-Thai Corpn. Ltd., Ewart House, Homi Mody St., Bombay 400023.

Aristo Pharmaceuticals Pvt. Ltd., 332, Adhyaru Ind. Estate, Sun Mill Compd., Lower Parel, Bombay 400013.

Asepticus Co., Swadeshi Market, Kalbadevi Rd., Bombay 400002.

Ashok Laboratories Pvt. Ltd., 92, Municipal Ind. Estate, Off Haines Rd., Worli, Bombay 400018.

Associated Laboratories Pvt. Ltd., 83B, Dr. A. B. Rd., Worli, Bombay 400018.

Associated Pharmaceutical Co., 20/24, Champa Gali Cross Lane, Singapuri (Dasani) Bldg., Bombay 400002.

Atul Drug House Ltd., Baldota Bhavan, 117, M. Karve Mrg., Bombay 400020.

Auxil Pharmaceuticals, 1, S. Vivekanand Rd., Andheri West, Bombay 400058.

Bayer (I) Ltd., Express Towers, Nariman Point, Bombay 400020.

Beacon Pharmaceuticals, 135/136, Andheri Kurla Rd., Bombay 400069.

Beechum (I) Pvt. Ltd., Beechum House, Mahim, Bombay 400016.

Bell Pharma, 119/1, Taikal Wadi Rd., Mahim, Bombay 400016.

Bharat Laboratories, 534, Sandhurst Bridge, Bombay 400007.

Biddle Sawyer & Co. (I) Pvt. Ltd., 25, Dalal St., Bombay 400023

Binichem Laboratories, 123/124, Kapadia Ind. Estate, Andheri Kurla Rd., Old Ashram, Bombay 400068.

Biochem Pharmaceutical Ind., ' A ' Aidun Bldg., 1st Dhobi Talao Lane, Bombay 400002.

Biological E. Ltd., Nirlon House, Dr. A. Besant Rd., Bombay 400025.

Blue Cross Laboratories Pvt. Ltd., 305, Raheja Centre, N. Point, Bombay 400021.

Boehringer-Knoll Ltd., United India Bldg., Sir P. Mehta Rd., Bombay 400001.

Bombay Tablet Manufg. Co., 304, S. Gandhi Marg, Bombay 400002.

Boots Co. (I) Ltd., Asian Bldg., 17, Nicol Rd., Ballard Estate, Bombay 400038.

British Pharmaceutical Laboratories, 380/382, J. Shankarsett Rd., Chira Bazar, Bombay 400002.

Broadway Laboratories (I), A/26-27, Shriram Ind. Estate, 13, G. D. Ambedkar Rd., Wadala, Bombay 400031.

Burroughs Wellcome & Co. (I) Pvt. Ltd., 16, Bank St., Bombay 400023.

C. E. Fulford (I) Pvt. Ltd., Oxford House, Apollo Bunder. Bombay 400039.

Charak Pharmaceuticals, Shakti Mills Lane, Off Haines Rd., Bombay 400011.

Chelsea Pharmaceuticals Pvt. Ltd., Post Box No. 11213, Bombay 400020.

Chem-Med. Analytical Laboratories, 5-6, Kakad Estate, Seaface Rd., Worli, Bombay 400018.

Chemical Ind. & Pharmaceutical Labs. Ltd., 289, Bellasis Rd., Byculla, Bombay 400008.

Chemo-Pharma Laboratories Ltd., C. S. 215, Sewree, Bombay 400015.

Chemosyn Pvt. Ltd., 38, Suren Rd., Andheri East, Bombay 400059.

Chemspec, 32, Morvi House, 28-30, Goa St., Bombay 400001.

Chowgule & Co. (Hind) Pvt. Ltd., India House, W. Hirachand Marg, Bombay 400001.

Chudgor & Co. Pvt. Ltd., Anand Bhavan, S. Gandhi Marg, Bombay 400002.

CIBA of India Ltd., 14, J. Tata Rd., Bombay 400020.

Comtack Laboratories, 85, Dr. A. Besant Rd., Worli, Bombay 400018.

Cynamid India Ltd., 254-D/2, Dr. A. Besant Rd., Worli, Bombay 400025.

Deltakem Pharmaceuticals, 266, Dr. A. Besant Rd., Worli, Bombay 400025.

Diamo-Chem Laboratories Pvt. Ltd., B-67, L. Tata Rd., Diamond Cinema Bldg., Bombay 400092.

Dupher-Interfran Ltd., F/5, Shivsagar Estate, Dr. Annie Besant Rd., Bombay 400018.

E. Merck (I) Pvt. Ltd., Shivsagar Estate 'A', Dr. A. Besant Rd., Bombay 400018.

Eagle Pharmaceutical Works, 114, Belgami Rd., Match Factory Lane, Kurla West, Bombay 400070.

Ebers Pharmaceuticals Pvt. Ltd., Dhannur, Sir P. M. Rd., Bombay 400001.

Eisen Pharmaceutical Co. (Pvt.) Ltd., 34/7, Erandwana, Pune 411004.

Ellis & Martin, Opp. G.P.O., Kothari Mansion, Bombay 400001.

Elys Chemical Laboratories Pvt. Ltd., D-26, Thane Belapur Rd., Turbhe 400613. Sanpada Village, Thane Dist.

Empire Chemical Works, 11-A, Agra Rd., Vikhroli, Bombay 400079.

Ethix Pharmaceuticals & Chemicals Pvt. Ltd., C/3/8, Kripa Nagar, S. V. Rd., Bombay 400056.

Ethnor Ltd., Spencer Bldg., 30-A, Forjett St., Bombay 400026.

Eupharma Laboratories, Tejpal Scheme Rd., No. 5, Vile Parle East, Bombay 400057.

Fairdeal Corpn. Pvt. Ltd., 42-48, S. Vivekanand Rd., Jogeshwari, Bombay 400060.

Franco-Indian Pharmaceuticals Pvt. Ltd., 54B, Sir Mathuradas Vasanji Rd., Andheri East, Bombay 400093.

Franco Italian Co., Plot 17-A.B. Govt. Ind. Estate, Charkop Rd., Kandivli, Bombay 400067.

G. Amphray Labs., Sambava Chambers, Sir P. Mehta Rd., Bombay 400001.

G. Loucatos & Co., Mercantile Chambers, Graham Rd., Ballard Estate, Bombay 400038.

Gambers Laboratories, 28, Bell Bldg., 29, Sir P. Mehta Rd., Bombay 400001.

Gemini Laboratories, 5-28-116/1, Paithan Rd., Aurangabad 431001.

Geoffrey Manners & Co. Ltd., Magnet House, N. Morarjee Marg, Ballard Estate, Bombay 400038.

German Remedies Pvt. Ltd., Shivasagar Estate, Block 'A', Worli, Bombay 400018.

Glaxo Laboratories (I) Ltd., Dr. A. Besant Rd., Worli, Bombay 400025.

Glenmark Pharmaceuticals Pvt. Ltd., B/2, Mahalaxmi Chambers, 22, Bhulabhai Desai Rd., Bombay 400026.

Great India Ind. & Pharmaceutical Labs., 221, Jijibhoy Lane, Bombay 400012.

Heni Chemical Inds., 2-A, Ganga Vihar, 94, Kazi Syed St., Bombay 400003.

Himalaya Drug Co. Pvt. Ltd., Shivsagar 'E', Dr. A. Besant Rd., Bombay 400018.

Hindustan Antibiotics Ltd., Pimpri, Pune 411018.

Hindustan Pharmaceutical Works, Manisha Ind. Estate, Boisar Rd., Palghar 401404.

GEOFFREY MANNERS & CO., LTD.

Manufacturers & Distributors:
Basic Bulk Drugs, Pharmaceutical Formulations, Cosmetics, Toiletries and consumer goods.

Registered & Head Office:
Magnet House, Narottam Morarjee Marg,
Ballard Estate, Bombay 400 038.
Phone : 266991.

Ethicals, Pharmaceuticals and Personnel Divisions and Budget Department:
Udyog Bhavan, Walchand Hirachand Marg,
Ballard Estate, Bombay 400 038.
Phone : 266002.

Factories:
(1) Hattersley Mills Estate, Lal Bahadur Shastri Marg,
Ghatkopar, Bombay 400 086.
Phone : 582361.
(2) Plot No. 81, MIDC Estate, Satpur, Nasik 422 007.
Phone : 88172.

Bombay Sales Office:
Veer Savarkar Marg, Dadar, Bombay 400 028.
Phone : 4229428.

Sales Offices:
Ahmedabad, Bangalore, Calcutta, Chandigarh, Cochin, Gauhati, Hyderabad, Jaipur, Kanpur, Madras, New Delhi, Patna.

Hindustan Remedies, 20-A, Ajmal Rd., Vile Parle East, Bombay 400057.

Hoechst Pharmaceuticals Ltd., Hoechst House, Nariman Point, Bombay 400021.

Hyleg Comfry Health Products Pvt. Ltd., Clark House, 8, Wodehouse Rd., Bombay 400039.

IPCA Laboratories Pvt. Ltd., 48, Kandivli Ind. Estate, Bombay 400067.

Ideal Pharmaceuticals, 48, Nehru Rd., Vile Parle (East), Bombay 400057.

Indian Schering Ltd., Deonar, Sion-Trombay Rd., Chembur, Bombay 400071.

Indoco Remedies Ltd., 101, Neelam, 108, A. Gaffarkhan Rd., Worli, Bombay 400018.

Indo-Continental Pharmaceutical Agency, Mangaldas Market Bldg., 3-D Block, R. No. 455, Bombay 400002.

Indo-German Alkaloids, Mahakali Rd., Andheri East, Bombay 400093.

Indo-Pharma Pharmaceutical Works Ltd., Shanti Bhavan, Kohinoor Rd., Bombay 400014.

Industrial & Research Institute Pvt. Ltd., Phool Baug, Opp. Rly. Stn., Goregaon, Bombay 400063.

Inga Laboratories Pvt. Ltd., Mahakali Rd., Andheri East, Bombay 400093.

J. L. Morison, Son & Jones (I) Ltd., 79, Dr. A. Besant Rd., Bombay 400018.

Jaypee Pharmaceuticals, Prem Nagar, P.B. 110, Thane 400601.

John Wyeth & Brother Ltd., Steelcrete House, D. Vachha Rd., Bombay 400020.

GLAXO LABORATORIES (INDIA) LIMITED

Registered Office :
Dr. Annie Besant Road,
Bombay 400 025.

Manufacturers of :

Pharmaceuticals, Corticosteroids, Antibiotics, Vaccines, Infant Foods, Nutritional Supplements, Fine Chemicals, Laboratory Chemicals, Animal Feed Supplements and Veterinary Products.

Factories at : Aligarh, Bombay and Thane.
Branches at : Bombay, Calcutta, Madras and New Delhi.

Depots at :
Ahmedabad, Ambala, Bangalore, Cuttack, Ernakulam, Gauhati, Hyderabad, Indore, Jaipur, Kanpur, Lucknow, Ludhiana, Patna, Srinagar, Thane, Vijayawada.

●

Chairman : S. Bhoothalingam
Managing Director : J. S. Khambata
Company Secretary : J. A. Moos

●

Telegrams : " GLAXOLABS ", Bombay, Calcutta, Madras, New Delhi.

Telephone Nos. :				
	Bombay H. O.	4223871	Madras	414146
	Bombay Branch	4223871	New Delhi	632269
	Calcutta	459195		

P.O. Box Nos.: 202 (Bombay 400 001) 3211 (Madras 600 032)
(Calcutta 700027) 3517 (New Delhi 110 024)

Telex Nos.:
Bombay, No. 2454 — GLAXLAB BY
Calcutta, No. 7449 — GLAXLAB CA
Madras, No. 487 — GLAXLAB MS
New Delhi, No. 2512 — GLAXLAB ND

HENI

LEADING INDIAN MANUFACTURERS AND EXPORTERS OF PHARMACOPOEIAL GRADE FINE CHEMICALS

Such as :

1. Chlorbutol IP/BP/USP/NF
2. Di-Iodohydroxyquinoline IP/BP/USP
3. Iodo-Chlorohydroxyquinoline IP/USP
4. Phenolphthalein IP/USP/BP/NF—White
5. Phenolphthalein IP/USP/BP/NF—Yellowish-white
6. Phenolphthalein A.R. (Analytical Reagents)
7. Potassium Chloride IP/BP
8. Potassium Iodide IP/BP
9. Potassium Citrate IP/BP
10. Sodium Iodide IP/BP
11. Sodium Citrate IP/BP
12. Paracetamol IP/BP
13. Chloramphenicol IP/BP.

For your requirements please contact :

HENI CHEMICAL INDUSTRIES

2-A, Ganga Vihar, 94, Kazi Sayed Street,
(Khand Bazar),
BOMBAY 400 003 (INDIA).

Telephones:
Office : 338127
333225
Factory: 593357
507719

Cable: "VISHNUCHEM", BOMBAY-3

An Important Landmark

today a famous International Symbol

The Tower and Bridge is a familiar landmark in West Germany, where Hoechst is the Number One pharmaceutical company, and also in over 110 countries where Hoechst operates.

It is a symbol of the world-wide Group of Hoechst where Research has been a tradition for nearly 120 years.

The Tower symbolises Hoechst's high standards and aspirations. The Bridge: Hoechst's world-wide connections and the confidence that links Hoechst with people throughout the world.

In India the Hoechst symbol is your guarantee for quality products.

Hoechst Pharmaceuticals Limited has just completed 25 years of operations in India and contributed not insignificantly to the health and well-being of her people.

1956-1981
25 Years of Service

Hoechst

Johnson & Johnson Ltd., 30, Forjett St., Bombay 400026.

Ketan Pharmaceuticals, 103, S. Gandhi Marg, Bombay 400002.

Kims Laboratories, Steelmade Ind. Estate, Marol, Bombay 400059.

Kirti Works (Tablets), 98-B, T. H. Kataria Marg, P.O. Box No. 6473, Mahim, Bombay 400016.

Klini Pharma Corpn. of India, Rajdeep, 63-E, Linking Rd., Santa Cruz West, Bombay 400054.

Kopran Chemical Co. Pvt. Ltd., Andheri-Kurla Rd., Saki Naka, Bombay 400072.

Laboratories Grimault Pvt. Ltd., 20, Haines Rd., Bombay 400011.

Lamrin Pharmaceuticals Pvt. Ltd., 19, Sheila Mahal, Colaba, Bombay 400005.

Lenec Institute of Pharmaceuticals Pvt. Ltd., Saki-Vihar Rd., Andheri (E), Bombay 400072.

Leo Pharma, 49, Sidhpura Ind. Estate, S. Vivekananda Rd., Goregaon (West), Bombay 400062.

Libra Drugs (I), 92, Mangalwar Peth, Pune 411011.

Livite Laboratories (I), Pvt. Ltd., 3/46, Tardeo Airconditioned Market, Bombay 400034.

Lupin Laboratories, 159, C.S.T. Rd., Kalina, Santa Cruz East, Bombay 400098.

Lyka Laboratories, 77, Nehru Rd., Vile Parle East, Bombay 400057.

Lyovak Laboratories, 26, Nathoo Ind. Estate, Andheri-Kurla Rd., Marol Naka, Bombay 400059.

Mac Laboratories Pvt. Ltd., Great Social Bldg., Sir P. Mehta Rd., Bombay 400001.

Martidale Pharmaceuticals Pvt. Ltd., Savoy Chambers, Wallace St., Bombay 400001.

Martin & Harris Pvt. Ltd., Savoy Chambers, Wallace St., Bombay 400001.

May & Baker (I) Pvt. Ltd., 'Maybaker House', 216, Sudam Kalu Ahire Marg, Prabhadevi, Bombay 400025.

Magna Laboratories, Suman Villa, 2nd Hasnabad Lane, Santa Cruz West, Bombay 400054.

Medley Laboratories Pvt. Ltd., Medley House, D-2, MIDC Area, Andheri East, Bombay 400093.

Merck Sharp & Dohme of India Ltd., New India Centre, 17, Cooperage Rd., Bombay 400021.

Mepro Laboratories, Ganeshmal Sobhagmal Bldg., S. Memon St., Bombay 400002.

Milnex Laboratories, 9, Sprott Rd., Ballard Estate, Bombay 400038.

National Pharmaceuticals, 17/17, Patel House, C. Patel St., Bombay 400001.

Navil Laboratories, Noor Mahal, 117/127, Tardeo Rd., Bombay 400034.

Neil Pharmaceuticals, D-4, Commerce Centre, Tardeo Rd., Bombay 400034.

Neo Pharma Pvt. Ltd., Kasturi Bldg., J. Tata Rd., Bombay 400020.

Nicholas Laboratories India Ltd., Deonar, Bombay 400088.

Nila Products Ltd., 98, Dadar Main Rd., Bombay 400014.

Nitson Laboratories, 1003, Raheja Centre, 214, N. Point, Bombay 400021.

Nogi & Co., Suren Rd., Andheri East, Bombay 400069.

Novus Pharmaceuticals, Shreenath Ind. Estate, Mahakali Rd., Andheri East, Bombay 400093.

Nymph Laboratories, 164, Senapati Bapat Rd., Lower Parel, Bombay 400013.

Oriental Pharmaceutical Ind. Ltd., Tulsi Pipe Rd., Bombay 400016.

P. C. I. Pharmaceuticals Pvt. Ltd., 304, Arun Chambers, J. Dadajee Rd., Bombay 400034.

Papu Products (Pharm.) Pvt. Ltd., Eupharma House, Tejpal Scheme, Rd. No. 5, Bombay 400057.

Parke-Davis (I) Ltd., Saki Naka, Bombay 400072.

Penta Pharma Laboratories, 110, Reay Rd., Bombay 400033.

Pfizer Ltd., Express Towers, Nariman Point, Bombay 400021.

Pharma Chem Manufg. Corpn., 11, Chakravarti Ashok Rd., Kandivli East, Bombay 400067.

Pharma Medico (I) Pvt. Ltd., 1, Prabhat Nagar, Jogeshwari West, Bombay 400060.

Pharma Search Lab., 72/73, Worli Hill Estate, Bombay 400018.

Pharmaceutical Co. of India, 301, Arun Chambers, J. Dadajee Rd., Bombay 400034.

Pharmakab Laboratories, Bhagavat Kirti Mandir, Murarjipeth, Solapur 413001.

Pharmax (I) Pvt. Ltd., 9, Kurla Ind. Estate, Near Sevasadan Rd., Ghatkopar, Bombay 400077.

Pharmed Gujarat Lyophilisation, Aban House, 25-31, Ropewalk Lane, Bombay 400023.

Pharmed Pvt. Ltd., Aban House, 25-31, Rope Walk Lane, Bombay 400001.

Pharmpak Pvt. Ltd., Sion-Trombay Rd., Chembur, Bombay 400071.

Prof. Gajjar's Standard Chemical Works Ltd., 2, Masrani Lane, Off Halpakhady Rd., Kurla, Bombay 400070.

PFIZER LIMITED

Manufacturers and Distributors of :

A complete range of Pharmaceuticals, Pharmaceutical Chemicals, Nutritional and Healthcare Products, Agricultural and Animal Health Products, and Feed Supplements.

Registered Office :

Express Towers, Nariman Point,
Bombay 400021.
Phone: 232824 (20 lines).

Offices & Depots :

Ahmedabad, Bangalore, Bombay, Calcutta, Cochin, Cuttack, Gauhati, Indore, Jaipur, Lucknow, Ludhiana, Madras, New Delhi, Patna, Pune, Secunderabad, and Srinagar.

Plants :

1. **Thane-Belapur Road, Thane.**
Phones : 922-8231/8421.

2. **178, Industrial Area, Chandigarh.**
Phones: 32591-2-3.

Rallis India Ltd., Ralli House, 21, Raveline St., Bombay 400001.

Raptakos Brett & Co., Ltd., 47, Dr. A. Besant Rd., Worli, Bombay 400025.

Reno Chemicals, Pharmaceuticals & Cosmetics Pvt. Ltd., 68, Shantinagar Ind. Estate, Santa Cruz, Bombay 400055.

Richardson-Hindustan Ltd., Tiecicon House, Dr. E. Moses Rd., Mahalaxmi, Bombay 400011.

Rippon Pharmaceutical Laboratories, 85/86, Andheri Kurla Rd., Bombay 400059.

Roc Pharmaceuticals, 808-B, Ambedkar Rd., Dadar T.T., Bombay 400014.

Roche Product Ltd., 28, Tardeo Rd., Bombay 400034.

Romex Pharmaceuticals, 23, Nawab Bldg., 327, Dr. D. Naoroji Rd., Bombay 400001.

Roussel Pharmaceutical (I.) Ltd., D. Shivsagar, Dr. A. Besant Rd., Worli, Bombay 400018.

Ruhr Chemicals, 235, Dadar Commercial Premises, Phalke Rd., Dadar, Bombay 400014.

S. C. Roy & Co., 508, S. Memon St., Bombay 400002.

Samarth Pharmaceuticals, Ram-Mandir Rd., Goregaon West, Bombay 400062.

Sandoz (I) Ltd., Sandoz House, Dr. A. Besant Rd., Worli, Bombay 400018.

Sanjay Pharmaceuticals, Precious Bldg., Nr. Cotton Green Rly. Stn., Sewri, Bombay 400015.

Scientific Pharmacy, Navyug Ind. Estate, M. Vasanji Rd., Bombay 400057.

Searle India Ltd., Ralli House, 21, Raveline St., Bombay 400001.

Sigma Laboratories, 43 (South), Wadala, Bombay 400031.

Signet Pharmaceuticals, 56, Sidhpura Estate, S. V. Rd., Goregaon, Bombay 400062.

Smith & Nephew (I) Ltd., Poiser, Kandivli, Bombay 400067.

Spectrum Pharmaceuticals, A/32-33, Nand Dham Ind. Estate, Maroshi Rd., Marol, Bombay 400059.

Spencer & Co. Ltd., Spencer's House, Forjett Rd., Bombay 400036.

Standard Chemical & Pharmaceutical Co., Atlas Mills Comp., Reay Rd., Bombay 400010.

Stap Pharmaceuticals, 22, Nand-Deep Ind. Estate, Andheri-Kurla Rd., Kondivita Lane, Bombay 400069.

Sunways (I) Pvt. Ltd., Jaiprakash Rd. No. 2, Goregaon (E), Bombay 400063.

Synthiko Formulations Pvt. Ltd., Jay House, Andheri Kurla Rd., Opp. Mittal Ind. Estate, Andheri East, Bombay 400059.

T. Walker's Pharmaceuticals Labs., 92/10, Navi Peth, Pune 411030.

Tata Fison Ind. Ltd. (Pharma Division), Ralli House, 21, Raveline St., Bombay 400001.

Technichem Laboratories, 8, Bhavana, 422, Cadell Rd., Bombay 400025.

Thera Chem Laboratories, Prem Bhavan, J. Dadajee Rd., Bombay 400007.

Therapeutic Pharmaceuticals, Kakad Chambers, Dr. A. Besant Rd., Bombay 400018.

Thomas Pharmaceuticals, 23, Hamam St., Bombay 400001.

Triumph Products, K. S. A. Bldg., B. Shankar Rd., Dadar, Bombay 400028.

Unichem Laboratories Ltd., 4, 5 & 6, Jogeshwari Estate, S. V. Rd., Jogeshwari (West), Bombay 400060.

SANDOZ (INDIA) LIMITED

Manufacturers of :

Dyes and Chemicals, Pharmaceuticals & Agrochemicals

(Under licence from SANDOZ Ltd., Switzerland)

Importers, Exporters and Distributors

Head Office: SANDOZ House, Dr. Annie Besant Road, Worli, Bombay 400 018.
Telephone : 379941 (16 lines).
Telegrams : "SANDOPHARM",
"SANDYE". "SANDOAGRO".

Factory : SANDOZ Baug, Kolshet, Thane District.
Telephone : 594161.

Chairman : Mr. S. Ranganathan.

Managing Director : Dr. J. N. Banerjee.

Heads of Divisions :

W. Staub, Deputy Managing Director and Head of Finance and Administration Division ; Dr. S. K. Bhattacharya, Director and Head of the Pharmaceutical Division ; Y. H. Desai, Director and Head of the Dyes and Chemicals Division ; A. K. Nehru, Head of the Agrochemicals Division ; Dr. S. Ramanathan, Works Manager.

Sales Offices (Pharmaceuticals)

Ahmedabad, Amritsar, Bangalore, Bombay, Calcutta, Cuttack, Ernakulam, Gauhati, Hyderabad, Indore, Jaipur, Lucknow, Madras, New Delhi, Patna.

Distributors (Pharmaceuticals)

Goa : Cosme Matias Menezes Ltd., Panjim, Goa ; Jammu : Prem Medical Agencies, Jain Bazar, Jammu Tawi ; Srinagar : Dwarka and Co., Lambert Lane, Srinagar 1 ; Kashmir : Friends Medical Stores, Islamabad (Anantnag), Kashmir.

Unique Pharmaceutical Laboratories, 83-B & C, Dr. A. Besant Rd., Bombay 400018.

Usan Laboratories Pvt. Ltd., Amin Villa, 13, Dattatraya Rd., Santacruz West, Bombay 400054.

Varma Pharmacy Pvt. Ltd., 59, Ind. Estate, Hadapsar, Pune 411013.

Vibro Pharma Pvt. Ltd., Lalwani Indl. Estate, 14, G. D. Ambedkar Rd., Wadala, Bombay 400031.

Vicco Laboratories, Jayendra Mahal, Ambedkar Rd., Bombay 400014.

Vir Pharmaceuticals, Ramdas Bhuvan, Shivaji Park Rd. No. 3, Bombay 400028.

Vitachem Pharmaceuticals, Wassaimul Bldg., M. Shaukatali Rd., Bombay 400007.

Vival Laboratories, Udyognagar, S. V. Rd., Goregaon West, Bombay 400062.

Walter Bushnell Pvt. Ltd., Steelcrete House, D. Vachha Rd., Bombay 400020.

Wander Ltd., Shivsagar 'A', Dr. A. Besant Rd., Worli, Bombay 400018.

Warren Pharmaceuticals Pvt. Ltd., 78-B Govt. Ind. Estate, Kandivli, Bombay 400067.

West Coast Pharmaceuticals Pvt. Ltd., West Coast House, Nr. Shiroli Octroi Naka, Kolhapur 416001.

Western India Pharmaceutical Co., 1-B, Rajdeep, 63-E, Linking Rd., Santa Cruz West, Bombay 400054.

Wockhardt Pvt. Ltd., 216-A, Dr. A. Besant Rd., Bombay 400025.

Wyeth Lab. Ltd., Steelcrete House, D. Wachha Rd., Bombay 400020.

Zenith Chemical Works Pvt. Ltd., 4, French Bridge, Bombay 400007.

Pondicherry

Ananda Pharmaceuticals, 78, Amalathadai Noda St., Pondicherry 605001.

Punjab

Franklin Laboratories (I) Pvt. Ltd., Maharani Jhansi Rd., Ludhiana 141001.

Healone Laboratories, Medicine Manufg. Corpn. Ind. Society Ltd., College Rd., Mansa 151505.

Medico Pharmaceutical Processors, P. Box 109, Amritsar 143001.

Mehta Pharmaceuticals Pvt. Ltd., G.T. Rd., Chheharta 143105.

Swatantra Asian Chemical Pvt. Ltd., Railway Rd., Gurgaon 122001.

Unimax Laboratories, Jandiala Guru, Amritsar 143001.

Rajasthan

Archem Labs., H-50, Jakhareshwar Marg, M. S. Circle, Bani Park, Jaipur 302006.

Delux Pharma, Municipal Godown Rd., Abu Rd. 307026.

Jaipur Pharmaceutical Works, 2, S. P. Ind. Estate, Jaipur South 302001.

Tamil Nadu

Amrutanjan Ltd., 14/15, Luz Church Rd., Madras 600004.

Ancient Pharma, 5, SPG. Church Lane, Madurai 625001.

Bahola Pharma, "Murthy Gardens", 11-B, Sri Nagar Colony, Kumbakonam 612001.

Citadel Fine Pharmaceuticals Pvt. Ltd., 43, Main Rd., Velacheri, Madras 600042.

Dadha Pharma Pvt. Ltd., 151, Lloyds Rd., Madras 600014.

Indo-French Pharmaceutical Co., Catholic Centres, Madras 600001.

Little's Oriental Balm & Pharmaceuticals Pvt. Ltd 118, Broadway, Madras 600001.

Medo Pharma, Mohan Mansion, 38-C, Mount Rd., Madras 600006.

Micro Labs Pvt. Ltd., 17, Kilpauk Garden Rd., Madras 600010.

Mount Mettur Pharmaceuticals Pvt. Ltd., No. 7, Thanga Pattai, Tiruvanmiyur, Madras 600041.

Orient Pharma Pvt. Ltd., Old Trunk Rd., Pallavaram, Madras 600043.

Pharmaceutical Co. of India, 13, Manikeshwari Rd., Kilpauk, Madras 600010.

Retort Laboratories, Milk Colony Rd., Madhavaram, Madras 600060.

Solar Pharmaceutical Inds., Byepass Rd., Madurai 625016.

Spencer & Co. Ltd., 153, Mount Rd., Madras 600002.

Tablets Ltd., 366, T. H. Rd., Madras 600081.

Tamil Nadu Dadha Pharmaceuticals Ltd., Dadanagar, Madras 600074.

Vellore Research Laboratories, Chidambaram Nagar, Sattur 626203.

Ward, Blenkinsop & Co. (I) Ltd., 150-A/2, Mount Rd., Madras 600002.

Uttar Pradesh

Anandakar Karyalaya Pvt. Ltd., Khatrana Tola, Etawah 206001.

Arpike Pvt. Ltd., 22, A. P. Sen Rd., Lucknow 226001.

Bharat Pharma & Chemicals, A-5, 6, Indl. Estate, Hathras 204101.

Chemidoc Enterprises Pvt. Ltd., 170/1, Noorullah Rd., Allahabad 211001.

Emson & Co., B-16, Ind. Estate, Meerut Rd., Ghaziabad 201001.

Flora Pharma Pvt. Ltd., Sushila Sadan, 112/212, Swaroop Nagar, Kanpur 208001.

Garga Pharma Pvt. Ltd., Talkotora Rd., Ind. Area, Lucknow 226001.

Parkar Pharm Pvt. Ltd., 84/10, Fazalganj, Kanpur 208012.

Piya Pharmaceutical Works, Mohan Nagar, Ghaziabad 201001.

Pratap Pharma Pvt. Ltd., 167, Rajpur Rd., Dehra Dun 248001.

Premier Laboratories, 45, Subedarganj, G.T. Rd., Allahabad 211001.

Scientific Research Ind. (I) Pvt. Ltd., 4, Chitwapur Rd., Lucknow 226001.

Sundew Chemical Industries Pvt. Ltd., 58/5, Indl. Area, Site 4, Sahibabad, Ghaziabad 201005.

West Bengal

A. J. Judah Pharmaceutical Pvt. Ltd., 34, Regent Park, Calcutta 700040.

Albert David Ltd., 15, Chittaranjan Ave., Calcutta 700013.

Bengal Chemical & Pharmaceutical Works Ltd., 6, G. C. Ave., Calcutta 700013.

Bengal Immunity Co., Ltd., Immunity House, 153, Lenin Saranee, Calcutta 700013.

Bio-Drug Laboratories Pvt. Ltd., 348, M. Nandakumar Rd. (North), Calcutta 700035.

British Medicine Pharmaceutical Co. Pvt. Ltd., 5/1, H. Mukherjee Rd., Calcutta 700025.

Calcutta Chemical Co. Ltd., 35, Panditia Rd., Calcutta 700029.

Carbon Laboratories, 17, Mall Rd., Calcutta 700028.

DEY'S MEDICAL STORES (MFG.) LTD.

Manufacturers and Distributors of :
PHARMACEUTICALS
Manufacturers of :
Sterling/Winthrop Products, New York.
Head Office : 6/D, Lindsay Street, Calcutta 700 016.

Factory : 62, Bondel Road, Calcutta-700019.
Marketing Division : "DEY'S BLOCK", 41, Chowringhee Road, Calcutta-700071.
Calcutta Office : 41, Chowringhee Road, Calcutta-700071.
Bombay Office : Kakad Chambers, 132, Dr. Annie Besant Road, Worli, Bombay 400018.
Delhi Office : 2/3619, Netaji Subhas Marg, Daryaganj, New Delhi 110 002.
Madras Office : 150, Linghi Chetty Street, Madras 600001.
Patna Office : Jamal Road, Patna 800001.
Gauhati Office : 1, Gopal Road, Panbazar, Gauhati 781001.
Cuttack Office : Yanaki Nivas, Mission Road, Cuttack 753001.
Jaipur Office : J-51, Krishna Marg, 'C' Scheme, Jaipur 302001.
Lucknow Office : Dey's House, 61/C, Singar Nagar, Lucknow 226005.
Secunderabad Office : Durga Bhawan (1st Floor), 141/1, Rashtrapati Road, Secunderabad 500003.
Mohali Office : B-48, Industrial Phase VI, Mohali, Punjab.
Indore Office : 8/2, Old Palasia, Indore 452001.
Ahmedabad Office : Dey's Block, Panchavati Marg, Opp. Krishna Society, Ahmedabad 380006.
Bangalore Office : 43, Armugham Circle, Basavangudi, Bangalore 560004.
Jabalpur Office : "Girdhari Mansion", 781, Wright Town, Jabalpur 482 002 (M.P.).
Cochin Office : XLI/275, Providence Road, Cochin 682 018.

Dabur (Dr. S. K. Burman) Pvt. Ltd., 142, R. Behari Ave., Calcutta 700029.

Dacca Ayurvedic Pharmacy Ltd., 195, P. A. Shah Rd., Calcutta 700045.

Dey's Medical Stores (Manufg.) Ltd., 6/D, Lindsay St., Calcutta 700016.

Dolphin Laboratories Pvt. Ltd., 41/2B, Sarat Bose Rd., Calcutta 700020.

East India Pharmaceutical Works Ltd., 6, Little Russe. St., Calcutta 700016.

Frank Ross & Co. Ltd., 7, J. L. Nehru Rd., Calcutta 700013,

G. D. Pharmaceuticals Pvt. Ltd., 9, Girish Ave., Calcutta 700003.

Gluconate Ltd., 23, Camac St., Calcutta 700016.

India Alkalies Ltd., 5, Garstin Place, Calcutta 700001.

Indian National Drug Co. Pvt. Ltd., 5/2, Beliaghata Main Rd., Calcutta 700010.

Indo Pharma Laboratory, 9/12, Lall Bazar St., Calcutta 700001.

International Remedies Pvt. Ltd., 52B, Kali Temple Rd., Calcutta 700026.

Kemp and Co. Ltd., 32C, Chittaranjan Ave., Calcutta 700012.

Martin & Harris Pvt. Ltd., Mercantile Bldg., 9, Lall Bazar St., Calcutta 700001.

Organon (I) Ltd., Himalaya House, 38, J. L. Nehru Rd., Calcutta 700071.

Reckitt & Coleman of India Ltd., 41, Chowringhee Rd., Calcutta 700016.

Sen's Chemical Works Pvt. Ltd., 271, Chittaranjan Ave., Calcutta 700006.

Smith Stanistreet Pharmaceuticals Ltd., 18, Convent Rd., Calcutta 700014.

Stadmed Pvt. Ltd., 84, Chowringhee Rd., Calcutta 700020.

Union Drug Co. Ltd., 182, Rai Bahadur Rd., Calcutta 700034.

DRUMS

(See Barrels, Buckets, Drums, Steel Containers, etc. in this list).

DRY ICE

Indian Farmers Fertilisers Co-op. Ltd., Mistry Chambers, Near Cama Hospital, Khanpur, Ahmedabad 380001.

Sirdar Carbonic Gas Co. Ltd., Connaught Rd., Bombay 400010.

South India Carbonic Gas Ind. Ltd., Mysore Rd., P.O. Govt. Electric Factory, Bangalore 560026.

DUPLICATING MACHINES

(See under Office Equipment).

DYESTUFFS

Andhra Pradesh

Om Dye Chem, 15-1-1, Osman Gunj, Hyderabad 500012.

Delhi

Atlas Dyestuff Pvt. Ltd., 2141, Tilak Bazar, Delhi 110006.

Haryana Rang Udyog, B-8, Bhagwan Dass Nagar, Delhi 110026.

Idco Dyes & Chemicals P. Ltd., 189-90, Lawrence Rd., Rampura, Delhi 110035.

Jagadamba Ind. Corpn., 190, Rampura Marg, Delhi 110035.

National Colour Co., Tilak Bazar, Delhi 110006.

Gujarat

Ashok Chemical Ind., Station Rd., Bhavnagar 364001.

Asian Dyestuffs Ind., Kaji's Dhaba, Astodia Rd., Ahmedabad 380001.

Associated Chemical Ind., Opp. Vijay Mill, Naroda Rd., Ahmedabad 380002.

Associated Dyestuff Industries, S/68, Mun. Ind. Estate, Ahmedabad 380021.

Atul Products Ltd., Atul 396020 (Valsad Dist.).

Azo Dyes Corpn., A7, New Cloth Market, Outside Raipur Gate, Ahmedabad 380002.

Chemicals & Dyestuffs Ind., Kalia Kuva, College Rd., Nadiad 387001.

Chemico Intermediates Pvt. Ltd., Plot No. A/17/7, Rd. No. 6, Udyognagar, Udhna 394210.

Chemoacet Ind., M. Gandhi Rd., Udhna Ind. Estate, Udhna 394210.

Coaltar Chemicals Manufg. Co., 55, Hirabhai Market, Ahmedabad 380022.

Collective Chemiplastex Ltd., 17, GIDC Estate, Behrampura, Ahmedabad 380022.

Comet Dyestuffs Pvt. Ltd., Vijaya Mills Comp., Naroda Rd., Ahmedabad 380002.

Devarsons Pvt. Ltd., Narayan Niwas, Astodia, Ahmedabad 380001.

Dychem Corpn., Bhavani Chambers, Ashram Rd., Ahmedabad 380009.

Dye-Azo Pvt. Ltd., C-2/20, Ind. Estate, Vadodara 390003.

Indian Texdyes Ind., Patdi State Bldg., Outside Panch-Kuva Gate, Ahmedabad 380002.

Madhu Pharma Chem. Pvt. Ltd., 18/1, G.I.D.C., Vatva, Ahmedabad 382445.

Modern Dyestuff Ind., 10-20, Ind. Estate, Godhra 389001.

Modi Dyes & Chemicals Ind., B-73/74, Rd. No. 4, Udyognagar, Udhna 394210.

Premier Chemicals, Chhani Rd., Vadodara 390003.

R.L.C. Corpn., C-8, Ajanta Society, Race Course Rd., Vadodara 390007.

Rainbow Dyestuffs Ltd., Elempecco Bldg., 3rd Flr., Lokmanya Tilak Rd., Vadodara 390005.

Rainbow Ind. Pvt. Ltd., Pratapnagar Rd., Vadodara 390004.

Rockwell Dye-Chem Inds., 101, GIDC, Nandesari 391340 (Valsad Dist.).

Sahas Dyes & Chemicals Inds. Pvt. Ltd., Pushpak Bldg., Khanpur, Ahmedabad 380001.

Shree Ban Dyes, Bansidhar House, Kankaria Rd., Ahmedabad 380022.

Shree Dira Dye-Chem, Bahucharji Rd., Vadodara 390003.

Syndet Pvt. Ltd., Prajapati Bhuvan, Khadia Char Rasta, Ahmedabad 380001.

Textile Aniline & Chemical Co. Pvt. Ltd., Chasmawala House, Pratapnagar Rd., Vadodara 390004.

Textile Dyestuffs Ind., Odhav Rd., Ahmedabad 380021.

Venus Ind., Munsar Rd., Surendranagar 363001.

Venus Texdyes Corpn., 7, Parikh Estate, Dabhoi Rd., Vadodara 390004.

Karnataka

Bangalore Ind. Products Corpn., 7-B, Ind. Area, Yeshwantpur, Bangalore 560023.

Kerala

Fab Dyekem Pvt. Ltd., XXXIV/266, Tripunithura Rd., Cochin 688016.

Madhya Pradesh

M. P. Dye Chem Inds., 9, A/L Indl. Est., Polo Ground, Indore 452001.

Maharashtra

Ajay Dye-Chem Ind., 377, I. Rahimtulla Rd., Bombay 400003.

Amar Dye-Chem Ltd., Rang Udyan, Sitladevi Temple Rd., Mahim, Bombay 400016.

Amrit Chem Dye Ind., 236, Samuel St., Bombay 400003.

Anand Dyes Ind. Pvt. Ltd., 188/122, Kazi Syed St., Bombay 400003.

Aniline Dyes & Chemical Co., 3, Gilder Lane, Bombay 400008.

Aniline Dyestuffs & Pharmaceuticals Pvt. Ltd., Mahalaxmi Chambers, 22, B. Desai Rd., Bombay 400026.

Arlabs Ltd., 6, India House, W. Hirachand Marg, Bombay 400001.

Bharat Dyes & Chemical Co., 119, V. V. Chandan St., Vadgadi, Bombay 400003.

Bharat Texdyes Ind., Mansoor Bldg., 98, S. Gandhi Marg, Bombay 400002.

Cauvery Chemicals Manufg. Co. (India), Rawal Chambers, Samuel St., Bombay 400003.

Central Dyes Products Pvt. Ltd., Indu Chambers, 349/53, Samuel St., Bombay 400003.

Chemi Dyes Manufrs., 187, Sheriff Devji St., Bombay 400003.

Chemicals & Allied Products, Beside Basant Pictures, Koliwada-Borla Rd., Chembur, Bombay 400074.

Chemico Intermediates Pvt. Ltd., Hamam House, A. Doshi Mrg., Bombay 400023.

Chemiequip Pvt. Ltd., 306, Green St., Bombay 400001.

Chem-Met Inds., 55/56, Datta Mandir Rd., Bhandup, Bombay 400078.

Chemotex Enterprise, 348/50, Shirin Chambers, Samuel St., Bombay 400003.

Chemtech (I), Devchhaya, Block No. 3, North South Rd., No. 5, Juhu Scheme, Vile Parle (West), Bombay 400056.

Colour Chem Ltd., Ravindra Annexe, D. Vachha Rd., Bombay 400020.

Colour Industries, 265, Kalbadevi Rd., Bombay 400002.

Columbia Chemi-Colour Ind. Pvt. Ltd., 81, Dr. A. Besant Rd., Worli, Bombay 400018.

Crescent Dyes & Chemicals Ltd., Crescent House, B. Estate, Bombay 400038.

Dychem Manufg. Co. Pvt. Ltd., Navsari Chambers, Outram Rd., Bombay 400001.

Dye-Sento Products, Caves Rd., Jogeshwari (E), Bombay 400060.

Dyes Dispersing Agents Pvt. Ltd., Bajaj Bhavan, 5th Flr., Block No. 55, Nariman Point, Bombay 400021.

Dyetex Corpn., 340-42, Samuel St., Bombay 400003.

Emulsol Industrial Products, 771, Mogal Lane, Mahim, Bombay 400016.

Fabstof Dyes & Chemicals, Khetani Estate, Magan Nathuram Rd., Kurla, Bombay 400070.

Gharda Chemicals Pvt. Ltd., 48, Hill Rd., Bandra, Bombay 400050.

Golden Dyes Corpn. (I) Pvt. Ltd., Bela Court No. 2, Colaba, Bombay 400005.

Gopran Chemicals, Shiv Kripa, Mahant Rd. (Ext.), Vile Parle (E), Bombay 400057.

Gujarat Chemical Ind. Pvt. Ltd., Winsol Comp., Kurla-Andheri Rd., Bombay 400072.

Hind Dyes Manufg. Co. Pvt. Ltd., 181B, Hanuman Wadi, Bombay 400070.

Hoechst Dyes & Chemicals Ltd., Hoechst House, N. Point, Bombay 400021.

Hooseinbhoy A. Laljee Sons & Co., Navsari Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Idachem Ind. Pvt. Ltd., National Insurance Bldg., 204, Dr. D. Naoroji Rd., Bombay 400001.

India Chemi-Dye Ind., 126, V. V. Chandan St., Vadgadi, Bombay 400003.

Indian Chem-Colour Ind., 313, Samuel St., Bombay 400003.

Indian Dyestuff & Chemicals Mfg. Co., 503, 'Gokul', Baroda St., Bombay 400009.

Indian Dyestuff Inds. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Jakoven Ind., Datta Mandir Rd., Bhandup, Bombay 400078.

Jasani Colour Manufg. Co., Gaya Bldg., 87/123, Masjid Bunder Rd., Bombay 400003.

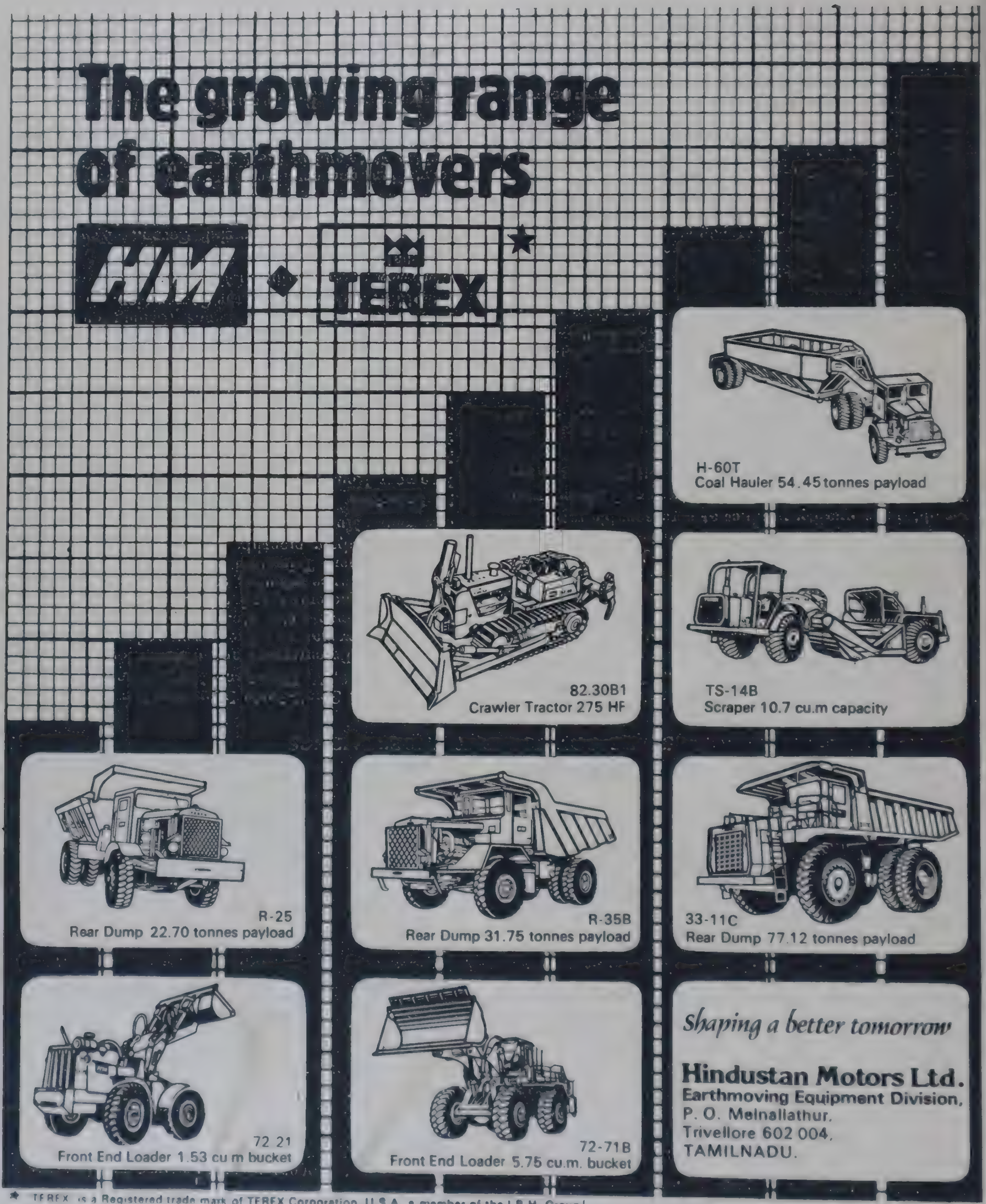
Jasani Dye-Chem Ind., 264, Samuel St., Bombay 400003.

Jay Chemi-Colour Ind., 'Navjivan', 125/127, K. Syed St., Bombay 400003.

Jeevan Products, 412, Jolly Bhavan No. 2, 7, New Marine Lines, Bombay 400020.

Kaloomal Shorimal Sachdev Rangwala Pvt. Ltd., Shalimar, 216, Marine Drive, Bombay 400020.

Kuldip Colour Ind., 340, Samuel St., Bombay 400003.



The growing range of earthmovers

HM ◆ TEREX*

H-60T
Coal Hauler 54.45 tonnes payload

82.30B1
Crawler Tractor 275 HP

TS-14B
Scraper 10.7 cu.m capacity

R-25
Rear Dump 22.70 tonnes payload

R-35B
Rear Dump 31.75 tonnes payload

33-11C
Rear Dump 77.12 tonnes payload

72-21
Front End Loader 1.53 cu.m bucket

72-71B
Front End Loader 5.75 cu.m. bucket

Shaping a better tomorrow

Hindustan Motors Ltd.
Earthmoving Equipment Division,
P. O. Melnallathur,
Trivellore 602 004,
TAMILNADU.

★ 'TEREX' is a Registered trade mark of TEREX Corporation, U.S.A., a member of the I.B.H. Group'

ASP- HM—383

Lona Inds. Pvt. Ltd., 532, Alta Bhavan, S. Bapat Mrg.. Dadar, Bombay 400028.

M. K. Soorenji & Co., Nazir Bldg., 12, Calicut St., Ballard Estate, Bombay 400038.

Mahalaxmi Textile Ind., 410, Lotus House, 33, New Marine Lines, Bombay 400020.

Mehta Dye-Chem Ind., Anant Deep, 273-77, N. Natha St., Masjid Bunder Rd., Bombay 400009.

Monarch Dyes & Chemicals, Shirin Chambers, Samuel St., Bombay 400003.

Napro Ind., Chitalsar Manpada, Thane 400607.

Naresh Ameeta Dye Chem Inds., Gold Mohar, 174, Princess St., Bombay 400002.

National Chemical & Colour Co., 267, Samuel St., Bombay 400003.

National Dyes, Bombay Mutual Chambers, 19/12, Hamam St., Bombay 400001.

Navin Ind., Indu Chambers, 349/53, Samuel St., Bombay 400003.

Organo Dyestuff Ind., 202-203, Plot No. 85-86, M. Vasanji Rd., Bombay 400059.

Oriental Chemindus Pvt. Ltd., 2/7th Flr., Tardeo Air-conditioned Mkt., Bombay 400034.

Oriental Intermediates (I), 107, Janjikar St., Bombay 400003.

Parekh Dyechem Ind. Pvt. Ltd., Mafatlal House, Backbay Recl., Bombay 400020.

Pigments & Dyestuffs Pvt. Ltd., Mon Repos, A. Bunder Rd., Colaba, Bombay 400005.

Prakash Trading Co., 43, Laxmi Bldg., Sir P. Mehta Rd., Bombay 400001.

Pravin International Traders, Varjiwan Mansion, 60/62, S. Gandhi Marg, Bombay 400002.

Premier Dyes Corpn., 127, M. Gandhi Rd., Bombay 400023.

Ravi Chem Dye, 121, Atlanta, Nariman Point, Bombay 400021.

S. K. Kabbur Pvt. Ltd., 3, Bastion Rd., Bombay 400001.

Sacrone Products, 617, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Sahyadri Dyestuffs & Chemicals, Mafatlal House, Backbay Reclamation, Bombay 400020.

Sandoz India Ltd., Sandoz House, Dr. A. Besant Rd.. Bombay 400018.

Shankar Dyes & Chemical Ind., Sunderbaug Estate, Tulsiwara Bridge, Jogeshwari, Bombay 400060.

Shree Dye Chem, 616, Prasad Chambers, Opera House, Bombay 400004.

Sterling Dyes Pvt. Ltd., 296, Samuel St., Bombay 400003.

Suhrid-Geigy Trading Ltd., Express Bldg., Churchgate, Bombay 200020.

Textachem Ind., 310-312, Samuel St., Bombay 400003.

Ultramarine & Pigments Ltd., Baldota Bhavan, 117, M. Karve Rd., Bombay 400020.

Uma Chemical Ind., 288, Samuel St., Bombay 400003.

United Chemie, 39/43, Abdul Rehman St., Bombay 400003.

United Dyechem Ind. Pvt. Ltd., 349/53, Samuel St., Bombay 400003.

Universal Dyestuff Inds. Ltd., 61/63, Kazi Syed St., Bombay 400003.

Vat Chem Ind., 6, Haresh Chambers, 313/19, Samuel St., Bombay 400003.

Vipul Dyes & Chemicals Pvt. Ltd., 339, Samuel St., Bombay 400003.

Vishnu Dye-Chem Pvt. Ltd., 915, Prasad Chambers, Near Roxy Cinema, Bombay 400004.

Western India Dyestuffs Corpn., 61/5, Ramchandra Lane, Marve Rd., Malad, Bombay 400064.

Winsol Chemical Ind. Pvt. Ltd., Winsol House, Kurla-Andheri Rd., Kurla, Bombay 400072.

Tamil Nadu

Bhathey Dyes Inds., 169-E, Ramnad Rd., Madurai 625009.

SKC Dyestuff & Chemical Ind., 81, N. Mudali St., Madras 600001.

Vanavil Dyes & Chemicals Ltd., Kadikadu, P. O. Cuddalore 607003.

Uttar Pradesh

Notional Chemical & Dyes Co., D-43/22, Sadanand Bazar, Ramapura, Varanasi 221001.

West Bengal

Luxmi Narayan Dyestuff & Chemical Works Pvt. Ltd., 65/1, Anwarshah Rd., Calcutta 700033.

Sricol Chemical Ind. Pvt. Ltd., 37, Armenian St., Calcutta 700001.

EARTHMOVING EQUIPMENT

Bharat Earth Movers Ltd., Unity Bldg., J. C. Rd., Bangalore 560002.

Chowgule Engg. Co. Pvt. Ltd., Mormugao Harbour 403803. Goa.

Earthmoving Construction & Equipment Co., 393B, Lamington Rd., Bombay 400004.

Escorts Ltd., Faridabad 121001.

LARSEN & TOUBRO LTD.

Manufacturers/manufacturers' representatives of:

Earthmoving and agricultural equipment, material handling equipment, equipment for drilling and mining, plant and equipment for dairy, meat processing and cold storage, pneumatic grain dischargers and garbage compost milling plants, equipment for sugar, fertiliser, chemical, pharmaceutical, petro-chemical and other process industries, plant and equipment for cement, pulp and paper, and iron and steel industries; electrical switchgear and other electrical equipment; petrol pumps, pin disc grinders, taper plug and gate and check valves, instruments and other appliances and equipment; aluminium capsules, crown corks and rolled-on pilfer proof caps; tyre curing machinery.

(Further details under Bombay Section).

Regd. and Head Office :

L&T House, Ballard Estate, Bombay 400 038.

Calcutta Office : 3B, Shakespeare Sarani,
Calcutta 700 071. Phone : 442301.

Madras Office : 9-10, Club House Road, Mount Road,
Madras 600 002. Phone : 82141.

New Delhi Office : 32, Shivaji Marg, P.O. Box 6223,
New Delhi 110 015. Phone : 582644.

General Marketing & Mfg. Co. Ltd., 6, G.S.T. Rd., St. Thomas Mount, Madras 600016.

Hindustan Motors Ltd., Earth Moving Equipment Divn., P.O. Melnallathur 602004, Chingleput Dist. (Tamil Nadu).

Hindustan Tractors Ltd., Tractor House, Vishwamitri, Vadodara 390001.

Indo Trdg. Enterprises, 20, N. Subhas Rd., Calcutta 700001.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Marshall Sons & Co. India Ltd., 75-C, Park St., Calcutta 700001.

Standard Clutches & Spares, Lake Rd., Bhandup, Bombay 400078.

EDUCATIONAL EQUIPMENT

Andhra Pradesh

Andhra Scientific Co. Ltd., Cantonment Rd., Machilipatnam 521001.

Delhi

Electrica Radios & Electronic Ind., F-28, D. B. Gupta Market, Karol Bagh, New Delhi 110005.

Kayvee Radios, 1204, Nai Wala No. 5, Karol Bagh, New Delhi 110005.

Haryana

Hargolal & Sons, Hargolal Rd., Ambala Cantt. 133001.

Oriental Science Apparatus Workshop, Alexandra Rd., Ambala Cantt. 133001.

Maharashtra

Applied Electronics Pvt. Ltd., Aplab House, Plot No. A-5, Wagle Ind. Estate, Thane 400604.

Biotech Laboratories, 397/7, S. Bapat Mrg., Pune 411016.

Cinerama Pvt. Ltd., Metro House, M. G. Rd., Bombay 400020.

Educational Scientific Instrument Co., 110/113, Himalaya House, Palton Rd., Bombay 400001.

Tamil Nadu

Standard Scientific Instruments Co., 115, Brodies Rd., Madras 600001.

West Bengal

Beliss & Marcom (India) Ltd., 6, Little St., Calcutta 700016.

Instruments & Chemicals Ltd., 4, Wood St., Calcutta 700016.

National Instruments Ltd., Jadavpur, Calcutta 700032.

ELECTRIC CONTROL PANELS

Advance Group, B-55, Mayapuri Indl. Area, Phase 1, New Delhi 110064.

Allied Electrical Industries, Madanzampa Rd., Vadodara 390001.

Amar Electronics, 61/8, Ajit Bhavan, Rajasthan Co-op. Society, J. B. Nagar, Bombay 400059.

Andrew Yule & Co. Ltd., Electrical Unit, 114, Mayurbhanj Rd., Calcutta 700023.

Bharat Switchgear & Consultants, 3, Favourite Ind. Estate, Masrani Lane, Kurla, Bombay 400070.

Consolidated Engg. A.G., 55-C, Deshapran Sasmal Rd., Calcutta 700033.

D. C. Ghose & Co. (Agents) Pvt. Ltd., 11, Govt. Place East, Calcutta 700069.

DI

METALCLAD
WEATHERPROOF

INDUSTRIAL
PLUGS & SOCKETS

A Complete Range...

- From 5 Amps to 100 Amps.
- 2 Pole & Multi-pole.
- At 250 volts and 500 volts.
- Ensures firm Electrical Contact and withstands an Electrical Test. Equal to accepted Standards (BSS & ISI)

DI PRODUCTS ARE TESTED AND TYPE APPROVED BY CHIEF INSPECTORATE OF ELECTRONICS, BANGALORE, L.R.D.E. BANGALORE, INDIAN INSTITUTE OF SCIENCE, BANGALORE & D. T. D. & P. (AIR) NEW DELHI FOR USE ON VARIOUS DEFENCE EQUIPMENTS.

Dattatraya Industries-PVT. LTD.
691/A, Pune-Satara Road, Pune-9.
Pune Regd. Office & Factory Phones : 442724 & 447675.
Gram: 'DIPRO' Pune.

Bombay Office:

Sitaram Bldg., D. N. Road (Near M. Phule Market),
Bombay-400 001.

Phone : 343566.

Gram : "DATTAINDUS" Bombay-400 001.

Elma Electric Co. Pvt. Ltd., Plot 303, Rd. 32, Wagle Ind. Estate, Thane 400604.

Elmech International Pvt. Ltd., 35, C.R. Avenue, Calcutta 700012.

Engineers Guild, Fancy Lane, Calcutta 700001.

Essen Deinki, 368, Ind. Area, Chandigarh 160002.

Ganapathy Engg. Mfrs. Pvt. Ltd., Ganapathy, Coimbatore 641006. (T. Nadu).

K. L. K. Industrial Lines, Plot No. 2-B/10, IIIrd Main Rd. (South), Ambattur Indl. Estate, Madras 600058.

M. C. Mody & Bros. (Engg. Deptt.), 19, Prabhadevi Ind. Estate, V. S. Rd., Bombay 400025.

Macneill & Magor Ltd., 2, Fairlie Place, Calcutta 700001.

Mayfair Electricals, Block A14, 7th Flr., Chatterjee International Centre, 33A, Chowringhee Rd., Calcutta 700071.

Osaka Electronics Enterprises, 122, Vithal Udyognagar, Vallabh Vidyanagar 388120.

Portex Electric Controls, 7, New Okhla Indl. Complex, Phase I, New Delhi 110020.

Rotomac Electricals Ltd., 1-D, Mandeville Gardens, Calcutta 700019.

Simplicity Switchgear Pvt. Ltd., B-44, Mayapuri Phase I, New Delhi 110064.

Spartan Electricals Ltd., Mathuradas Mills Compd., N. M. Joshi Mrg., Bombay 400013.

Taurus India, 6, 1st Cross St., R. K. Nagar, Madras 600028.

Tower Engg. Pvt. Ltd., 501-E, Poonam Chambers, Dr. A. Besant Rd., Worli, Bombay 400018.

Universal Electrics Ltd., F-45, South Extn., Part I, New Delhi 110049.

Vinal Pvt. Ltd. (Pharma Dn.), 147/1, Sadhana, 14th Rd., Chembur, Bombay 400071.

Zodiac Power Controls Pvt. Ltd., D-17, Everest Bldg., 5th Flr., Tardeo, Bombay 400034.

ELECTRIC FANS

(See under 'Fans' in this list).

ELECTRIC GOODS

Aristo Electric Inds., 220, Gali Basheshar Nath, Subzi Mandi, Delhi 110007.

Dattatraya Inds. Ltd., Sitaram Bldg., D. N. Rd. (Near M. Phule Mkt.), Bombay 400001.

Ellora Art Industries, Shreeji Bhuwan, Lohar Chawl, Bombay 400002.

Escee Kitchenaid, Shreeniwas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

Flexpro Electricals, Post Box 16, Nasik Road 422101.

Jyoti Marketing & Projects Ltd., Bombay Shopping Centre, Race Course, Vadodara 390005.

M. C. Engg. Co. Pvt. Ltd., 220, Okhla Ind. Est., New Delhi 110020.

Modi & Modi Manufg. Co., 11, Linghi Chetty St., Madras 600001.

Shakti Capacitors, Industrial Estate, Sangli 416416.

Vadilal H. Barodia & Co., 46, Dr. D. D. Sathe Marg, Bombay 400004.

ELECTRIC LAMPS & ACCESSORIES

Bihar

Pradip Lamp Works, Jayakrishna Rd., Patna 800009.

Delhi

Auto Lamps Ltd., 6, Alipur Rd., Delhi 110006.

Neonlite Manufg. Co., 21, Darya Ganj, New Delhi 110002.

Peico Electronics & Electricals Ltd., 68, Najafgarh Rd., New Delhi 110015.

ELECTRIC GOODS

Jyoti Marketing and Projects Limited

HEAD OFFICE :

Bombay Shopping Centre, Race Course, Vadodara 390 005. Telephone : 63886.
Grams: "JYOTIAGENT". Telex: 0175-215.

Please forward your enquiries for :

'Jyoti' Electric Motors, Hyper Fractional HP Motors, 'Jyoti' Switchgears, 'Zerotrip' Single Phasing Preventers, 'Bharat Lindner' HRC Fuses, 'Dynamo' Sleevings, Insulating Materials, 'Yesha' Capacitors and 'NIMA' Fans.

Branches :

Bangalore, Bhopal, Bombay, Calcutta, Gauhati, Indore, Jaipur, Jamshedpur, Lucknow, Madras, New Delhi, Patna, Pune, Secunderabad, Senthi, (Chittorgarh), Vadodara.

SHOWROOM :

Sterling Centre, Dr. Annie Besant Road, Worli, Bombay 400 018.
Phones : 377005 & 373166.
Grams : "JYOTIPUMPS". Telex : 011-2750.

Sylvania & Laxman Ltd., 68/2, Najafgarh Rd., New Delhi 110015.

Karnataka

Metal Lamp Caps India Ltd., 2, Murphy Rd., Ulsoor, Bangalore 560008.

Mysore Lamp Works Ltd., P.B. No. 1209, Bangalore 560055.

Neon Signs (Mysore) Pvt. Ltd., 26, 1st Main Gandhinagar, Bangalore 560009.

Kerala

Toshiba Anand Lamps Ltd., P. O. Athani 683585. Alwaye.

Madhya Pradesh

Kalpana Inds., A-4/D, Indl. Est., Indore 452003.

Maharashtra

Bajaj Electricals Ltd., 45-47, Veer Nariman Rd., Bombay 400023.

Bijlee Products (I.) Pvt. Ltd., 70, Hadapsar Ind. Estate, Pune 411013.

Cielmac Pvt. Ltd., 35, Mahal Ind. Estate, Mahakali Caves Rd., Bombay 400093.

Crafts de Fluorescent, Plot 221, Goregaon Mulund Link Rd., Off L. B. S. Mrg., Bhandup, Bombay 400078.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

Ellora Art Ind., Shreeji Bhuvan, Lohar Chawl, Bombay 400002.

Fixo-Lite Inds., 305, Abdul Rehman St., Bombay 400003.

Genelec Ltd., Hindco Works, Subhash Rd., Jogeshwari East, Bombay 400060.

Glolite Electricals, Anjirwadi, Champsi Bhimji Rd., Bombay 400010.

Hindco Lighting Ind. Ltd., Hindlight House, Subash Nagar, Jogeshwari (East), Bombay 400060.

Lamp Caps and Filaments Ltd., 32, R. Dadaji St., Bombay 400001.

Markcel Pvt. Ltd., Shreeji Bhuvan, Lohar Chawl, Bombay 400002.

Peico Electronics & Electricals Ltd., Shivsagar Estate, Block A, Dr. Annie Besant Rd., Bombay 400018.

Premier Lighting Ind. Pvt. Ltd., Jhaveri Bldg., 348-352, A. Rehman St., Bombay 400003.

Rakesh Bulb Industries, Raghu Prasad, 7, Taduwala Rd., Pune 411001.

Tamil Nadu

International Lighting Ind., 26, Arumugam St., Madras 600001.

Kalpana Lamp Components Pvt. Ltd., 24, S. Sreenivasa Iyengar Rd., Alwarpet, Madras 600018.

Sankar Electric Industries, Super B-4, Ind. Estate, Madurai 625001.

Zenith Lamps & Electricals Ltd., Grand Trunk Rd., Madhavaram, Madras 600060.

Uttar Pradesh

Hind Lamps Ltd., Shikohabad 205135.

Miniature Bulb Industries (India) Ltd., 131, Kanwali Rd., Dehra Dun 248001.

West Bengal

Bengal Electric Lamp Works, 4, Fairlie Place, Calcutta 700001.

Bharat Electrical Ind. Ltd., 23, R. Mukherjee Rd., Calcutta 700001.

Dazzle Products Ltd., 138, B. R. B. Basu Rd., Calcutta 700001.

Deepsun Ind. Corpn., 36, Ezra St., Calcutta 700001.

Electric Lamp Mfrs. (India) Ltd., 1, Tartolla Rd., Calcutta 700024.

General Electric Co. of India Ltd., 6, Chittaranjan Ave., Calcutta 700013.

J. K. Dey & Sons, 13, Old China Bazar St., Calcutta 700001.

Jayanta Electric Lamp Works, 33/4, M. Pukur Rd., Calcutta 700001.

Lite Eng. Ind., 19, Pollock St., Calcutta 700001.

Mazda Lamp Company, 225D, Acharya J. C. Bose Rd., Calcutta 700020.

Unique Electrical Works, 12-B, Rai Charan Pal Lane, Calcutta 700046.

Universal Lamp Mfg. Co. Pvt. Ltd., 93-B, Ripon St., Calcutta 700016.

ELECTRIC LAUNDRY APPARATUS

Bajaj Electricals Ltd., 45-47, V. Nariman Rd., Bombay 400001.

Escee Kitchenaid, 'Shreenivas House', 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

ELECTRIC LIFTS

Best & Crompton Engg. Co. Ltd., 13/15, North Beach Rd., Madras 600001.

Bharat Bijlee Ltd., Electric Mansion, Prabhadevi, Bombay 400025.

Consolidated Hoists Pvt. Ltd., Pune 411009.

Electric Construction & Equipment Co. Ltd., ECE House, 28-A, K. Gandhi Mrg., New Delhi 110001.

Otis Elevator Co. (India) Ltd., Gateway Bldg., Apollo Bunder, Bombay 400039.

OTIS

OTIS ELEVATOR CO.
(INDIA) LTD.

Registered Office :
Gateway Building, Apollo Bunder,
Bombay 400 039.

P. L. Vahi, *Managing Director.*
L. K. Negandhi, *Financial Manager & Secretary.*
B. W. Khanorkar, *Marketing Manager.*
Telephones : 230686, 230738, 230831.
Telex : 011-5376-OTIS IN.

●

Factory & Factory Office :
M. N. Nair, *Whole-time Director & Works Manager.*
Akurli Road, Kandivli East, Bombay 400 067.
Telephones : 693346 (4 lines), 693806.

●

Bombay District Office :
S. S. Sujan, *Bombay District Manager.*
Rehem Mansion No. 1,
42, Shahid Bhagatsingh Road, Bombay 400 039.
Telephone : 231878.

●

Calcutta District Office :
Mr. M. P. Singh, *Calcutta District Manager.*
Jeevan Deep, 1, Middleton Street, Calcutta 700 071.
Telephones : 442402/03, 445110.

●

New Delhi District Office :
A. S. Herwadkar, *New Delhi District Manager.*
Otis House, 7/48, Malcha Marg, Chanakyapuri,
New Delhi 110 021.
Telephones : 374501/2/3.
Telex : 031-3438-OTIS IN.

●

Madras District Office :
J. M. Bhavnagarwala, *Madras District Manager.*
Bharat Insurance Building, 91, Anna Salai,
Madras 600 002.
Telephones : 86021/2.

ELECTRIC METERS & MEASURING INSTRUMENTS

(See under Meters & Measuring Instruments).

ELECTRIC MOTORS

(See under Motors—Electric).

ELECTRIC TOOLS & STAMPINGS

Aarvy Power Tools Pvt. Ltd., 174, GVMM Ind. Complex, Odhav Rd., Ahmedabad 382410.

Devidayal Stainless Steel Ind. Pvt. Ltd., Darukhana, Reay Rd., Bombay 400010.

Kulkarni-Black & Decker Ltd., Shirol 416103. Kolhapur Dist.

Westrex Electrical Stampings, 107, Mittal Estate, Saki Naka, Bombay 400059.

ELECTRIC WIRES, CABLES & ACCESSORIES

Andhra Pradesh

Andhra Industrial Works, C-2, Indl. Estate, P. B. No. 20, Cuddapah 516001.

Bojat Agro Industrial Corpn., Enikebadu, Vijayawada 520005.

Galada Continuous Castings Ltd., P-2/6, I.D.A. Block 111, Uppal, Hyderabad 500039.

Hyderabad Aluminium Industries, A-6, Cooperative Industrial Estate, Balanagar, Hyderabad 500037.

Krishan Conductors Pvt. Ltd., Anjaneya Pantula St., Labripet, Vijayawada 520005.

Premier Metal Works, C-1, Industrial Estate, Vijayawada 520007.

Radiant Cables Pvt. Ltd., Sanatnagar, Hyderabad 500018.

Ranka Cables Corporation, Industrial Estate, Cuddapah 516001.

Sakti Engineering Co., Museum Road, Governorpet, Vijayawada 520001.

Technind Cables, F-5, Industrial Estate, Nandyal 518502.

Assam

Assam Conductors & Tubes Ltd., P.O. Bamuni Maidan, Gauhati 781021.

Bihar

Express Cables Pvt. Ltd., Fraser Rd., Patna 800001.

Maruti Wire Industry Pvt. Ltd., Cantt. Rd., P.O. Khaganal, Patna 801105.

Muzaffarpur Hosiery Industries & Agencies Pvt. Ltd., Exhibition Rd., Patna 800001.

Universal Wires & Industries, India Machinery Bldg., 2nd Flr., Exhibition Rd., Patna 800001.

Delhi

Aluminium Industries Ltd., H-108, Himalaya House, Kasturba Gandhi Marg, New Delhi 110001.

G. S. Inds., 4-F, Vijaynagar, Kingsway, Delhi 110009.

Grandlay Electricals (India), 3/4, Asaf Ali Rd., New Delhi 110002.

Indian Aluminium Cables Ltd., 7th Flr., Kanchenjunga Bldg., 18, Barakhamba Rd., New Delhi 110001.

Modi Plastic & Estate Pvt. Ltd., 227, Guru Nanak Auto Market, Kashmeri Gate, Delhi 110006.

Premier Cable Co., 14/15F, Connaught Place, New Delhi 110001.

R. S. Hard Metal Manufacturing Co., 26, Feroze Gandhi Rd., Lajpat Nagar III, New Delhi 110024.

Standard Metal Wires Pvt. Ltd., A-26, Naraina Industrial Area, Phase I, New Delhi 110028.

Gujarat

Ashapura Electricals, A-2-629, GIDC Makarpura Indl. Estate, Vadodara 390003.

Bombay Conductors & Electricals Pvt. Ltd., P.B. No. 9002, Maninagar, Ahmedabad 380008.

Devendra Wire Works, Rd. No. 3, Udhna Udyognagar, Udhna 394210.

Diamond Cables, 5/12, 'A' Indl. Estate, Gorwa Rd., Vadodara 390003.

Hindustan Conductors Pvt. Ltd., Opp. W. Rly. 'D' Cabin, Chhanni Rd., Vadodara 390002.

India Metal Traders, Rd. No. 10, Indl. Estate, Udhna 394210.

Prem Conductors Pvt. Ltd., 211, New Cloth Market, Ahmedabad 380002.

Sampat Heavy Engineering Co., 231, Anand Cloth Market, Nr. Sarangpur Bridge, Ahmedabad 380002.

Unique Industries, P. B. No. 54, Nadiad 387001.

Haryana

Haryana Conductors Pvt. Ltd., 17th Milestone, G. T. Rd., Kundli 131028.

Himachal Pradesh

Himachal Conductors Pvt. Ltd., Sabathu Rd., Saproon 173211, Solan Dist.

Salecha Cables Pvt. Ltd., 22, Indl. Area, Mehatpura.

Jammu & Kashmir

Diko Cables, The Bund, Srinagar 190001.

Kumar Electricals, 31, Indl. Estate, Hira Nagar 184142.

Ravi Conductors, 26-A/D, Gandhi Nagar Extension, Jammu 180004.

Karnataka

Bangalore Cables Pvt. Ltd., 11 KM, Hosur Rd., Bangalore 562129.

Bharat Conductors Pvt. Ltd., A-8, Peenya Indl. Estate, Peenya, Bangalore 562140.

Karnataka Conductor Pvt. Ltd., Udyambagh, Belgaum 590006.

Sharavathy Conductors Pvt. Ltd., 19, OMR Industrial Estate, 6th Mile, Old Madras Rd., Bangalore 560016.

Transmission Wire & Accessories, Raghava Sadana, Ramvilas Rd., Mysore 570001.

Kerala

Anjaniya Industries, Plot 88, Major Indl. Estate, South Kalamassery 670562.

General Metals, (Props., Premier Enterprise Pvt. Ltd.), Indl. Estate, Trivandrum 695019.

Madhav Aluminium Conductors Pvt. Ltd., Saraf House, W/Island, Cochin 682003.

Southern Cables & Engineering Works, Chulikkal, Cochin 682005.

Madhya Pradesh

Deora PU Caboon Manufacturing Co. Pvt. Ltd., 17/18, Polo Ground, Indore 452001.

Gwalior Cables & Conductors Ltd., Indl. Estate, Birla Nagar, Gwalior 474004.

Jayant Copper & Steel Products, Sadar Bazar, Bilaspur 495001.

K. V. Cables & Conductors, Patel Nivas, Ramdasnagar, Bilaspur 495001, M.P.

M.P. Wires & Conductors Pvt. Ltd., 31, Indl. Estate, Gwalior 474004.

Mutha Industrial Corporation, Halwai Lane, Raipur 492001.

Narmada Industries, 6/1, Indl. Estate, Govindpura, Bhopal 462001.

Skyline Industries Pvt. Ltd., 8/4, Sukliya Indl. Area, Indore 452003.

Veekay Electricals, 994, Wright Town, Jabalpur 482001.

Vindhya Enterprises, P. B. No. 43, Rani Baug, Rewa 486001.

Maharashtra

Devidayal Electronics & Wires Ltd., Gupta Mills Estate, Reay Rd., Bombay 400010.

Dharendra Wire Industries, 198/24, Kalbadevi Rd., Bombay 400002.

Insulating Wire Industries, A-59, 1st Flr., Virvani Indl. Estate, Western Express Highway, Goregaon (East), Bombay 400063.

Jay Electric Wire Corpn. Ltd., Maker Bhavan No. 2, New Marine Lines, Bombay 400020.

Laxmi Wire & Metal Industries, 202, Arun Chambers, 2nd Flr., Tardeo Rd., Bombay 400034.

Madhu Electricals, 5-B, Vijay Chamber, Tribhuvan Rd., Bombay 400004.

Patel Wire Industries, Daya Mandir, 4th Flr., 43/25, Mumbadevi Rd., Bombay 400003.

Wandleside National Conductors Ltd., Ind. Estate, Lalbaug, Bombay 400012.

(Also see Wires, Cables and Accessories in this list.)

Orissa

Hira Cable Works, P.O. Hirakud, Sambalpur Dist. 768016.

Gupta Cables Pvt. Ltd., Station Rd., Bhubaneswar 751006.

Punjab

Associated Wires and Conductors Co. Pvt. Ltd., Tanda Rd., Jullundur City 144001.

ESS ESS Kay Engg. Pvt. Ltd., Factory Area, Kapurthala 144601.

Ganga Steel Rolling Mills & Co., 188/5, B. T. Bye Pass Rd., Ludhiana 141001.

Industrial Cables India Ltd., Industrial Area, Rajpura 140401.

United General Industries, E/4, Indl. Focal Point, Mohali, Rupar Dist.

Rajasthan

Indo Engineering (Kota) Pvt. Ltd., Gumanpura, Kota 324001.

Jaipur Metals & Electricals Ltd., Nr. Rly. Station, Jaipur 302006.

Metal Extrusions, 44, Sudershanpura Indl. Estate, Jaipur 302006.

Murarka Enterprises, 11-B, Vallabhnagar, Kota 324007.

New Age Cable Company, Amber Rd., Jaipur 302001.

Oswal Cables Pvt. Ltd., D-249, Devi Marg, Bani Park, Jaipur 302006.

Paras Pvt. Ltd., 16, Indl. Area, Banswara 327001.

Prem Cables Pvt. Ltd., P.O. Pipalia Kalan 306307. *Via* Sojat Rd.

Rajasthan Wire Products, 36, Sudershan Estate, Jaipur 302006.

Tamil Nadu

Madras Electrical Conductors Pvt. Ltd., 37, Arcot Rd., Madras 600626.

Modi Electric Manufacturing Co., 10-B, Kasturi Ranga Iyengar Rd., Alwarpet, Madras 600018.

Reavathee Enterprises, Developed Plot No. 30, Industrial Estate, Guindy, Madras 600632.

Uttar Pradesh

Agarwal Cables, Malgodown Rd., Faizabad 224001.

Anand Cables, 21, Vidhan Sabha Marg, Lucknow 226001.

Arkay Wires Pvt. Ltd., 117/491, Pandu Nagar, Kanpur 208005.

Kashi Cables, D-7, Indl. Estate, Varanasi 221002.

Smita Conductor Pvt. Ltd., Village Kot, Ghaziabad 201001.

West Bengal

Aluminium Cables & Conductors (U.P.) Pvt. Ltd., 2-1, Shakespeare Sarani, Calcutta 700016.

B. S. Industries, 2, Maharishi Devendra Rd., Calcutta 700007.

Bihar Cable & Wire Industries Ltd., P-21/22, Radha Bazar St., Calcutta 700001.

Bindawala Industrial Corpn., 6, Hanspukar 1st Lane, Calcutta 700007.

Calcutta Cables Co., 6, Punam Chand Bagaria Rd., Bally 711201.

Electrical Accessories Co., Mercantile Bldgs., 2nd Flr., Lall Bazar St., Box No. 2198, Calcutta 700001.

Electrical Manufacturing Co. Ltd., 136, Jessore Rd., Calcutta 700055.

J. J. H. Industries Ltd., 9, Transport Depot Rd., Calcutta 700027.

Jeewanlal (1929) Ltd., Crown Aluminium House, 23, Brabourne Rd., Calcutta 700001.

Khemka Cable Works Pvt. Ltd., 83, Beadon St., Calcutta 700006.

National Cable Works Ltd., 20, Goalpara Rd., Calcutta 700060.

National Screw & Wire Products Ltd., 51, Stephen House, 4, Dalhousie Square East, Calcutta 700001.

ELECTRICAL APPLIANCES—DOMESTIC

Delhi

Elite Electl. Inds., 5332, Chandrawal Rd., Subzi Mandi, Delhi 110007.

Jain Industries, 483, Bartan Market, Sadar Bazar, Delhi 110006.

M. C. Engg. Co. Pvt. Ltd., 220, Okhla Ind. Est., New Delhi 110020.

Monarch Engg., 110, New Okhla Ind. Complex, Phase I, New Delhi 110020.

Nagpal Traders Pvt. Ltd., M-12, Gr. Kailash Market, New Delhi 110048.

Soneeka Appliances, P-15, Green Park Ext., New Delhi 110016.

Haryana

American Universal Electric (I) Ltd., Model Town, Faridabad 121003.

Karnataka

Associated Electronic & Electrical Ind. (Bangalore) Pvt. Ltd., 1, Church St., Bangalore 560001.

Fortune Electrical (India) Pvt. Ltd., 173, Rashtreeya Vidyalaya Rd., Visveswarapuram, Bangalore 560004.

National Radio & Electronics Co. Ltd., 36/79, Silver Jubilee Park Rd., Bangalore 560002.

Maharashtra

Anchor Inds., 185, Bombay Talkies Compd., Malad, Bombay 400064.

Bajaj Electricals Ltd., 45-47, V. Nariman Rd., Bombay 400023.

Devidayal Stainless Steel Ind. Pvt. Ltd., Darukhana, Reay Rd., Bombay 400010.

Escee Kitchenaid, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

Filco Electric Inds., Hammersmith Indl. Estate, S. Temple Rd., Bombay 400016.

Homa Ind., 125-H, Andheri Kurla Rd., Bombay 400059.

Industrial Controls & Appliances Pvt. Ltd., 47, Chakala Rd., Andheri (East), Bombay 400069.

Killick Nixon Ltd., Killick House, Home St., Bombay 400001.

Peico Electronics & Electricals Ltd., Shivsagar Estate, Dr. Annie Besant Rd., Bombay 400018.

R. G. Keswani Ind., 132, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

Racold Appliances Pvt. Ltd., 17, 1st Pasta Lane, Colaba, Bombay 400005.

S. R. Products, W-41, M.I.D.C., Bhosari, Pune 411026.

Sol Ray Appliances Pvt. Ltd., 311, Mirabelle, 33A, New Marine Lines, Bombay 400020.

Standard Electrical Products, Oshiwara Bldg., S. V. Rd., Jogeshwari West, Bombay 400060.

Veejay's Trading Corporation, 49, K. M. Sharma Marg, Bombay 400002.

Vohras Enterprises, 22, Police Court Lane, Bombay 400001.

Tamil Nadu

Govel Appliances Pvt. Ltd., 34, Veerabhadra Iyer St., Madras 600034.

Standard Electric Appliances, 27, Gen. Patters Rd., Madras 600002.

Uttar Pradesh

India Sales & Service Pvt. Ltd., C32/27, Vidyapith Rd., Varanasi 221002.

West Bengal

General Electric Co. of India Ltd., 6, Chittaranjan Ave., Calcutta 700013.

ELECTRICAL APPLIANCES—INDUSTRIAL

Delhi

Asea Ltd., 310, Bhandari House, Nehru Place, New Delhi 110024.

German Electric Co. Inc., United India Life Bldg., Conn. Place, New Delhi 110001.

Kunjal Electricals Pvt. Ltd., 1805, Electl. Mkt., Chandni Chowk, Delhi 110006.

MC Engg. Co. Pvt. Ltd., Unit II, 20, Okhla Indl. Estate, New Delhi 110020.

Maharashtra

Aerolite Inds., 7, Mehta Indl. Estate, I. Patel Rd., Goregaon East, Bombay 400063.

Alpha Electric & Engg. Co., 13/15, New Prabhat Chambers, 89, Ranade Rd., Dadar, Bombay 400028.

Asea Ltd., Asea House, Goa St., Ballard Estate, Bombay 400038.

Dattatraya Industries Pvt. Ltd., 691-A, Poona–Satara Rd., Pune 411009.

Escee Kitchenaid, 'Shreenivas House', 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

Forward Engg. Ind., Plot No. A-8, Road No. 1-N, M.I.D.C., Thane 400604.

Kalki Inds., Kalki Estate, Goregaon East, Bombay 400063.

Lawkim Ltd., 16, Horniman Circle, Bombay 400023.

Navbharat Electrical Industries, Premji Chambers, Hospital Lane, Bombay 400001.

Peico Electronics & Electricals Ltd., Shivsagar Estate, Dr. Annie Besant Rd., Bombay 400018.

Shalimar Electronic Inds., Navketan Ind. Estate, Mahakali Rd., Bombay 400069.

Sushra & Co., Ghatkopar Indl. Est., Shastri Marg, Bombay 400086.

Vimal Electl. Inds., 100, Lalbaug Garden Rd. No. 1, Malad West, Bombay 400064.

Tamil Nadu

Electrical Fittings & Equipment (Madras) Pvt. Ltd., 99, Mount Rd., Madras 600002.

English Electric Co. of India Ltd., Pallavaram, Madras 600043.

Kumar Electl. Inds., 42, N.S.C. Bose Rd., Madras 600001.

West Bengal

Asea Ltd., 4, Lyons Range, Calcutta 700001.

Motor & Machinery Manufrs. Ltd., 10, Jawpur Rd., Calcutta 700030.

ELECTRICAL DISTRIBUTION & TRANSMISSION LINE EQUIPMENT

Andhra Pradesh

Venkateswara Transmissions Pvt. Ltd., Plot No. 23B, Patancherlu 502320. Medak Dist.

Delhi

Allied Electric & Hardware Ind. Pvt. Ltd., 10307, Motia Khan, New Delhi 110055.

Asea Ltd., 301, Bhandari House, 91, Nehru Place, New Delhi 110024.

S.A.E. (India) Ltd., 29 & 30, Community Commercial Centre, Basant Lok, Vasant Vihar, New Delhi 110057.

Gujarat

Amul Transmission Line Hardware Pvt. Ltd., Parikh Estate, Dabhoi Rd., Vadodara 390004.

Appex Electricals, Vijay Ind. Estate, Padra Rd., Samiala, Vadodara 390001.

Bharat Lindner Pvt. Ltd., C-2/19, Ind. Estate, Vadodara 390003.

Electro Engg. Products, 77, Haribhakti Colony Extn., Old Padra Rd., Vadodara 390007.

Jaibharat Poles Manufg. & Engg. Co., 4/5, Ind. Estate, Vadodara 390003.

Johnson Electric Co., Chhani Rd., Navayard, Vadodara 390002.

Power Build Pvt. Ltd., Vallabh Vidyanagar 388120. (Via Anand).

Transasia Transformers Pvt. Ltd., 86, Ind. Estate, Naroda, Ahmedabad 380002.

Karnataka

Fortune Electrical (India) Pvt. Ltd., 173, Rashtreeya Vidyalaya Rd., Visveswarapuram, Bangalore 560004.

Govt. Electric Factory, Mysore Rd., Bangalore 560026.

Sagar Steel Pvt. Ltd., 2/13A, B. V. K. Iyengar Rd., Bangalore 560053.

Maharashtra

Asea Ltd., Asea House, Goa St., Bombay 400038.

Bombay Switchgears, Laxmi Woollen Mills Estate, Off Haines Rd., Shakti Mills Lane, Bombay 400011.

Manufacturers of E. H. V. TOWERS & SWITCHYARD STRUCTURES

Phone : 72484 Telex : 845-8048 Grams: "CHOURARIA"

Sagar Steel Private Ltd.

Regd. & Admn. Office: 2/13, B. V. Krishna Iyengar Road,
Bangalore-560 053.

Manufacturers & Exporters of: **Transmission Line Towers, Microwave Antenna Towers, Flood Light Towers, Aerial Masts, Floor Gratings, Railway Electrification Structures, Sub-station Switchyard Structures and Galvanised Strips & Flats, etc.**

Works: Plot No. 20, Doddenkundi Industrial Area II, P.O. Mahadevapura,
Bangalore-560 048.

Electro Metal Ind., Kolshet Rd., Thane 400601.

East Asiatic Electric Corpn., Manhar Bldg., 187, Lohar Chawl, Bombay 400002.

Engineers' Enterprises Pvt. Ltd., Plot No. A-102, Rd. No. 16, Wagle Estate, Thane 400604.

Esenpro Transmission Equipments Pvt. Ltd., Esenpro House, 24, Marol Co-op. Indl. Socy. Ltd., M. Vasanji Rd., J. B. Nagar, Bombay 400059.

Jayant Inds., 33, Naik Nivas, 30, Benham Hall Lane, Bombay 400004.

Kamani Engg. Corpn. Ltd., Kamani Chambers, Ballard Est., Bombay 400038.

Kirloskar Pneumatic Co. Ltd., Hadapsar Ind. Estate, Pune 411013.

Kiron Textile Ind., Yusuf Bldg., M. Gandhi Rd., Bombay 400023.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Magco Controls, Post Box 6666, Bandra, Bombay 400050.

Morarji Dorman Smith Ltd., Prospect Chambers, 317/21, Dr. D. Naoroji Rd., Bombay 400001.

Power & Control Transformers Ind. Pvt. Ltd., Feltham House, Graham Rd., B. Estate, Bombay 400038.

S. R. Products, W-41, M.I.D.C., Bhosari, Pune 411026.

Srikesh Engg., Noble Chambers, 11, Ghogha St., Bombay 400001.

Star Delta Electricals, 135A, Maulana Azad Rd., Bombay 400008.

Steelite Engg. Corpn., Manek Mansion, 8, Nanabhai Lane, Bombay 400001.

Orissa

Hirakud Indl. Works, Hirakud 768016.

Tamil Nadu

Best & Crompton Engg. Ltd., 13/15, N. Beach Rd., Madras 600001.

English Electric Co. of India Ltd., Pallavaram, Madras 600043.

Hivelm Inds. Ltd., 135, Lattice Bridge Rd., Adyar, Madras 600020.

Seshasayee Inds. Ltd., Vadalur 607303. S. Arcot Dist.

West Bengal

Asea Ltd., 4, Lyons Range, Calcutta 700001.

Bagchi Electric Co., 262, Acharya P. Chandra Rd., Calcutta 700006.

D. C. Ghose & Co. (Agents) Pvt. Ltd., 11, Govt. Place East, Calcutta 700069.

East India Electricals, 20, A. Hamid Rd., Calcutta 700001.

Electric Construction & Equipment Co., 10, Camac St., Calcutta 700016.

Electrical Manufg. Co. Ltd., 136, Jessore Rd., Calcutta 700055.

EMC Steelal Ltd., 51, Canal East Rd., Calcutta 700010.

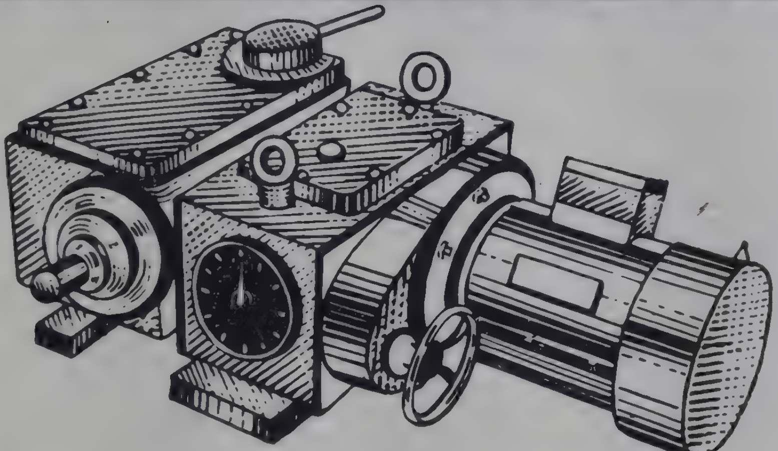
Fort Gloster Ind. Ltd., 31, Chowringhee Rd., Calcutta 700016.

Hengers (I) Pvt. Ltd., 59-B, Chowringhee Rd., Calcutta 700020.

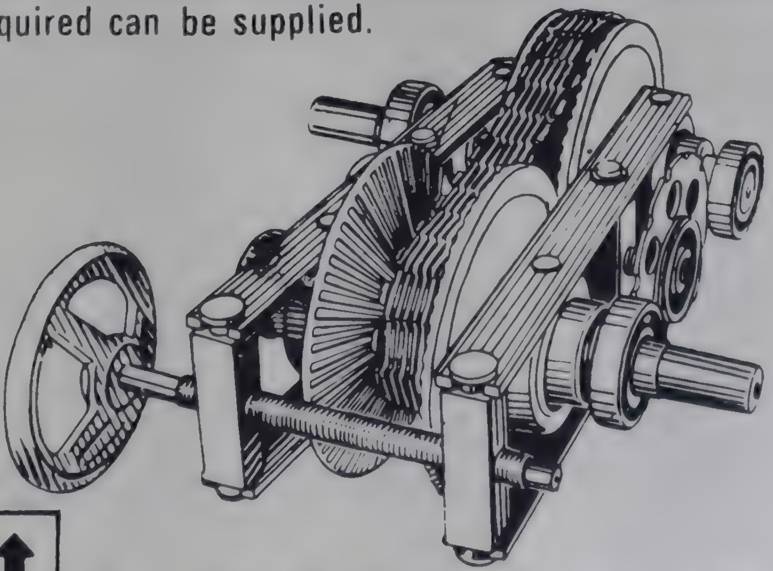
Hind Galvanizing & Engg. Co. Pvt. Ltd., 96, Garden Reach Rd., Calcutta 700023.

Indo Asiatic Corpn., 30, G. C. Avenue, Calcutta 700013.

jaimpex P.I.V.
POSITIVE INFINITE
VARIABLE SPEED DRIVE



For Smooth Positive Infinite Variation of speeds as desired. P.I.V.—Basic, Motorised and or compact with gears, with remote control devices and technogenerators if required can be supplied.



jaimpex for smooth & sound power transmisson

Bombay Office:
ESENPRO HOUSE, 24, Marol Co-Operative Industrial Estate Ltd.
Mathurdas Vassanji Road, Bombay 400 059
Phone: 586132, Gram: "ESSENCE" Bombay
Works: Plot Nos. AA-4/9. P.O.G.I.D.C. Est.,
Valsad (W. Rly.) Gujarat State-396035
Phone: 32 (Gundlav Exch.) • Gram: "Jaimpex" Valsad.

J2

Master craftsman

of the electrical industry

Crompton Greaves
LIMITED

DISCOVER THE GREATER RELIABILITY OF UNILEC

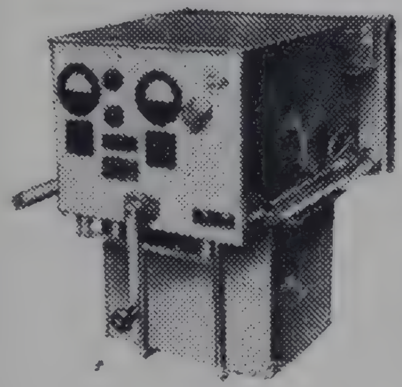
UNILEC electrical equipment is precision-engineered to rigid standards of quality to guarantee the safety of your power system. Make sure you get the original UNILEC quality by buying from us, or from our authorised distributors.

Single Phase Meter

Single Phase A.C. Electricity Energy Meter, Type K-2, from 2.5 Amps., whole current and transformer-operated types, to I.S. Specification No. 722.

Resistors

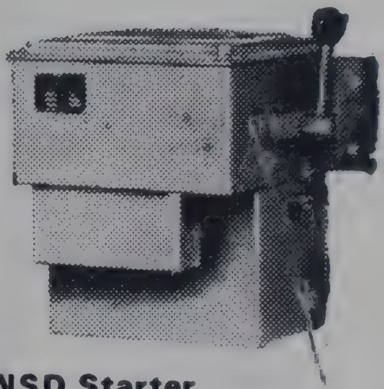
Carbon Film Resistors, $\frac{1}{4}$, $\frac{1}{2}$ and 1 Watt, from 10 Ohms to 3.3 Meg. Ohms.



L.T. Switchgear

Type IML-2, Low Tension, Manually-Operated, Bulk Oil Circuit Breakers.
Breaking Capacity 25 MVA and Currents upto 800 Amps. Can be executed in basic units or multiple panels

Recently introduced 11-KV Bulk Oil Circuit Breakers of 250 MVA upto 800 Amps.



NSD Starter

Oil-immersed Star Delta Starter upto 120 H.P. Also manufacture starters for Slip Ring Motors and Auto Transformer types.

Capacitors

Polyester, Polypropylene, Styroflex and Metallized Polyester Film Capacitors. Working voltage upto 3,000 Capacity from 0.001 mfd. to 10 mfd.

Unilec

Manufacturers:

UNITED ELECTRICAL INDUSTRIES LTD.

P.B. No. 87, Quilon, Kerala. Telex: 0886—227 Grams: METERS

Dattaram-UEI-5

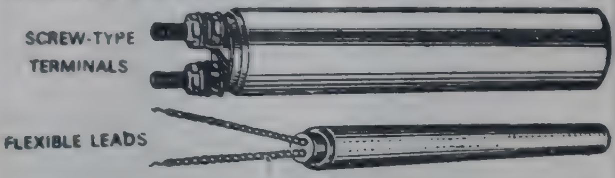
QUIKHEAT

INDUSTRIAL

ELECTRIC HEATERS

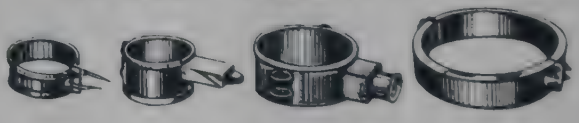
A complete range of Long life,
Custom-Built with quick delivery

CARTRIDGE HEATERS



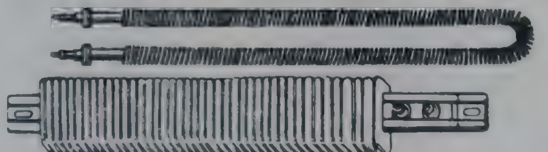
*-most concentrated electric heat-source
used as INSERTS
for metal parts heating*

BAND HEATERS



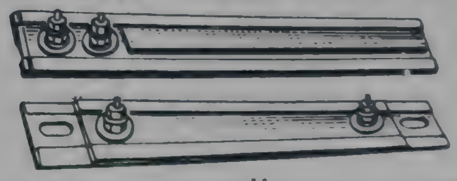
*-conform to surface of the cylinder
in Plastic Injection and Moulding
machines*

FINNED HEATERS



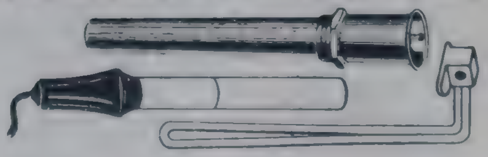
*-designed for rapid heat transfer
for air heating*

STRIP HEATERS



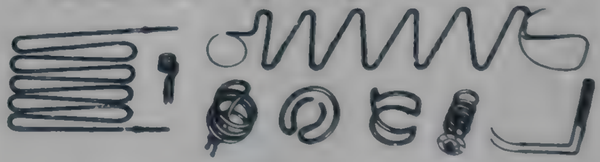
*-compact, versatile easy to use
heat-source*

IMMERSION HEATERS



*a 100% efficient heat source
for oils, water and chemicals*

TUBULAR HEATERS



*-An extremely versatile heat-source
for heating Gases, Solids & Liquids*

NICHROME/KANTHAL

FURNACE

HEATING COILS

Designed and Fabricated
to Customers' Specifications

For further details please contact:

**ENCEE ELECTRIC HEAT
CORPORATION**

416, Commerce House, Medows Street,
FORT, BOMBAY-400 023
Gram: QUIKHEAT Phone: 272618

ELECTRICAL EQUIPMENT FOR LARGE PLANTS

Delhi

Asea Ltd., 301, Bhandari House, 91, Nehru Place, New Delhi 110024.

Bharat Heavy Electricals Ltd., H. Times House, 18, K. Gandhi Marg, New Delhi 110001.

Electric Construction & Equipment Co. Ltd., ECE House, 28A, Kasturba Gandhi Mrg., New Delhi 110001.

Gujarat

Electric Control Gear Mfg. Co., Ahmedabad 380021.

Hindustan Brown Boveri Ltd., P. Box 284, Vadodara 390001.

Jyoti Ltd., Ind. Area, Vadodara 390003.

Madhya Pradesh

Heavy Electricals (India) Ltd., P.O. Piplani, Bhopal 460021.

Maharashtra

Asea Ltd., Asea House, Goa St., Ballard Estate, Bombay 400038.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

Dattatraya Industries Pvt. Ltd., 69–A, Pune–Satara Rd., Pune 411009.

Forward Engg. Ind., Plot No. A-8, Road No. 1-N, M.I.D.C., Thane 400604.

Hind Rectifiers Ltd., Lake Rd., Bhandup, Bombay 400073.

Hindustan Brown Boveri Ltd., Brown Boveri House. 264-265, Dr. A. Besant Rd., Bombay 400025.

Hindustan Klockner Switchgears Ltd., Dattapada Rd., Borivli, Bombay 400092.

Indian Engg. Co., 132, Dr. A. Besant Rd., Bombay 400018.

Larsen & Toubro Ltd., L. & T. House, Dougall Rd., Ballard Beach, Madras 600001.

Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.

Siemens India Ltd., 134A, Dr. A. Besant Rd., Worli, Bombay 400018.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

Tamil Nadu

Hackbridge-Hewittic & Easun Ltd., 5-7, Second Line Beach, Madras 600001.

Shanti Enterprises, 3A, Avenue Rd., Madras 600034.

West Bengal

Andrew Yule & Co. Ltd., Yule House, 8, Clive Row, Calcutta 700001.

Asea Ltd., 4, Lyons Range, Calcutta 700001.

Electric Construction and Equipment Co. Ltd., 9, K. Singhee Rd., Calcutta 700002.

Krugg Engrs., 22, Rabindra Sarani, Calcutta 700001.

ELECTRICAL HEATING APPLIANCES

(See Heaters, Heating Appliances, Industrial Ovens, Incubators, etc. in this list.)

ELECTRICAL HEATING ELEMENTS

Bajaj Engg. Co., 5, Ind. Development Area, Balanagar, Hyderabad 500037.

Bharat Electricals (Sales), 60, Apollo St., Bombay 400023.

Bright Trade Syndicate, Diamond Bldg., Lohar Chawl, Bombay 400002.

Commonwealth Electl. Inds., 27, Mangaldas Rd., Lohar Chawl, Bombay 400002.

Daspats Sales Corpn., 1475, Dakhni Rai St., Daryaganj, New Delhi 110002.

Doshi Metal Industries, 3, Jawahar Rd., Udyognagar, Udhna 394210.

Electratek Inds., 18, V. V. Rd., Bangalore 560004.

Escee Kitchenaid, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

G. K. Trdg. Co., 46, Mohatta Mkt., Palton Rd., Bombay 400001.

Himalaya Electl. Inds. (India) Pvt. Ltd., 8711, Roshanara Rd., Delhi 110007.

I.G.E. (India) Ltd., Nehru House, 4, Bahadur Shah Zafar Mrg., New Delhi 110002.

Impex Trdg. Co., Kothari Mansion, Opp. G.P.O., Bombay 400001.

Kantilal Chunilal & Sons, 80/82, Vithalwadi, Bombay 400002.

Orient Electricals, P. Box 1656, Madras 600001.

Ramson Electrical Inds., 10072, Gali Zamar Wali, Nawab Ganj, Pul Bangash, Delhi 110006.

Raval & Co., Shreeji Bhuvan, Lohar Chawl, Bombay 400002.

Telelec Corpn. (India), N-29, No. 4 Lane, Anand Parbhat, Rohtak Rd., New Delhi 110005.

ELECTRICAL INDUSTRIES

Ahmedabad Electricity Co. Ltd., 83, 'Advent', G. Bhonsle Marg, Backbay Reclamation, Bombay 400021.

(See under Switches, Switchgears & Accessories.)

THE AHMEDABAD ELECTRICITY COMPANY LIMITED

Registered Office :

Jubilee House, Shahpur, Ahmedabad 380001.

Secretary : J. J. Rana, M.A., LL.B., M.B.A., F.C.S.

Head Office :

" Electricity House ", Lal Darwaja, Ahmedabad 380 001.

S. Datta, B.Sc., B.E.E., F.I.E.E. (U.K.), *Chief Executive.*

H. M. Pai, B.Sc. (Eng.), F.I.E., *Dy. Chief Executive (Technical).*

S. C. Shah, B.Com., LL.B., F.I.C.W.A., *Dy. Chief Executive (Finance & Management Services).*

U. K. Sheth, B.Sc., Mech. & Elec. Engineer (Durham), *Dy. Chief Executive (Commercial).*

H. U. Shah, B.A. (Hons.), LL.B., M.L.W., M.B.A., *Dy. Chief Executive (Personnel).*

Power Station : **Sabarmati, Ahmedabad 380 005.**

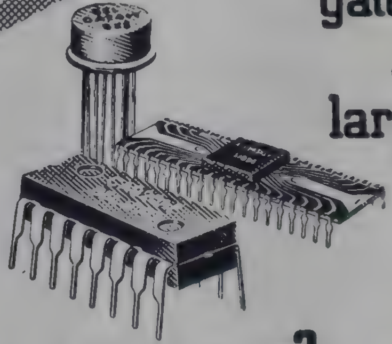
Bombay Office :

83, " Advent ", General Bhonsle Marg, Backbay Reclamation, Bombay 400 021.

BEL ENTERS LSI ERA IN ICs

Computer-aided design, microlithography, and Ion Implantation, Metal and Silicon gate technology

-leading to large scale integration.



Soon, BEL will bring you LOVAG, C^{2}L, and SOS ICs.

Since BEL pioneered commercial production of ICs in this country, the technology has become more advanced. ICs have now become more complex and much smaller in size. Thanks to the computer-aided design and other modern facilities, BEL could easily transcend to the new innovations in IC technology.

The new generation of IC technology calls for more sophisticated techniques and testing parameters BEL has now equipped itself with sophisticated facilities such as microlithography and Ion Implantation — which will enable BEL to produce microprocessors and other large scale ICs. And BEL has the capability to provide the most critical component for digital watches, the LSIs.

With these latest additions to bipolar and CMOS ICs, BEL is in the process of enlarging its current product range in ICs. At several stages of development are: BEL 7000 AM/FM radio IC, designed to give 1 watt power at 6V; type BEL 7001 for tape recorder applications, telephone dialler IC and PCM CODEC ICs and a number of new generation ICs.

The driving force behind BEL's leadership thrust has been its components capability. BEL's unique in-depth expertise in IC technology is only too well matched by its achievements in other component areas: receiving valves, transmitting tubes, X-ray tubes, cathode ray tubes, TV picture tubes, microwave tubes, passive vacuum devices, display devices, hybrid microcircuits, printed circuit boards, precision crystal filters and ceramic capacitors.

These technological triumphs notwithstanding, it is BEL's state-of-the-art systems capability, as evidenced by its sophisticated systems and equipment that keeps India on the electronics map of the world.

BHARAT ELECTRONICS LTD.
(A Government of India Enterprise)
Bangalore • Ghaziabad • Pune

BEL—leaders in professional electronics

CAS-BEL-8141

CDIL **Continental Device India Limited**

Leading Manufacturers of

Silicon Semiconductor Transistors, Diodes, Zener Diodes, ICs, Electronic Equipment including test equipment, control equipment, process controllers, timing systems, solar cells & solar panels.

OTHER SERVICES OFFERED:

- Turnkey know-how for semiconductors, electronic components and consumer products.
- Design & Development services for special semiconductors, electronic circuit & sub-assemblies and special purpose equipment.
- Marketing products in the domestic and export markets.
- Sub-assembly and fabrication work undertaken for large-scale requirement of components, modules and sub-assemblies.
- Consultancy services offered for sophisticated electronic requirement.

Contact: Marketing Manager

Continental Device India Ltd., C-120, Naraina Industrial Area, New Delhi-110 028, India.
Tel: 536150 (4 Lines), Cable: 'PREET' NEW DELHI Telex: 031-2770

ELECTRONIC COMPONENTS/INSTRUMENTS

Andhra Pradesh

Electronics Corpn. of India Ltd., Ind. Devpt. Area, Cherlapalli, Hyderabad 500762.

Ferro Electrics Pvt. Ltd., Uppal, Hyderabad 500039.

General Trading Co., B-2/3, Ind. Estate, Moula Ali, Hyderabad 500040.

Hyderabad Electronic Instruments Ltd., 111/D, Sarojini Devi Rd., Secunderabad 500003.

Instrument Techniques Laboratory, B-2, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Micro Ceramics Pvt. Ltd., A-8, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Scientific Electricals Sales Pvt. Ltd., Shalibanda, Hyderabad 500002.

Solid State Devices India Ltd., 8–2–629, Rd. No. 1, Banjara Hills, Hyderabad 500034.

Southern Electrodes Ltd., Electroincs Dn., Moula Ali Ind. Area, Hyderabad 500040.

Varicon Pvt. Ltd., B-37, Ind. Estate, Sanatnagar, Hyderabad 500001.

Bihar

Peak Electronics, P. Box 40, Giridih 815301.

Delhi

Atlas Radio & Electronic Ind. Pvt. Ltd., 5A/7, Ansari Rd., Daryaganj, New Delhi 110002.

Belltek Electronics Pvt. Ltd., A-80, Naraina Indl. Area, Phase 1, New Delhi 110028.

Bhurji Supertex, B-29/B, Gali No. 9, Anand Parbat Indl. Area, New Delhi 110005.

Bolton Ind. Corpn., A-31, Kailash Colony, New Delhi 110048.

Continental Device India Ltd., C-120, Naraina Indl. Area, New Delhi 110028.

Delta Electronics Pvt. Ltd., C-120, Naraina Indl. Area, New Delhi 110028.

Delton Cable Industries Pvt. Ltd., Delton House, 24, Daryaganj, New Delhi 110002.

Electronic Inds. of India, 4684, Ansari Rd., Daryaganj, New Delhi 110002.

Indian Technological Products, Flat No. 305-6, Bldg. No. 35–36, Nehru Place, New Delhi 110024.

J. V. Electronics Ltd., 808-9, Meghdoot Bldg., 94, Nehru Place, New Delhi 110024.

K.L.B. Electronics, 3E/14, Jhandewalan Extn., New Delhi 110055.

M. C. Engineering Co. Pvt. Ltd., 220, Okhla Industrial Estate, New Delhi 110020.

Metores Corpn. Ltd., 808–9, Meghdoot Bldg., 94, Nehru Place, New Delhi 110024.

Modern Garments Pvt. Ltd. (Electronics Division), 3, Community Centre, East of Kailash, New Delhi 110024.

Parko Electronics (Regd.), 430, Lajpat Rai Mkt., Delhi 110006.

Peico Electronics & Electricals Ltd., 68, Najafgarh Rd., New Delhi 110015.

Stead Electronic Ind., 17-U.A., Jawahar Nagar, Delhi 110007.

Telesound India Ltd. G-4, South Extension I, New Delhi 110049.

Union Radio & Appliances Pvt. Ltd., K-3, South Extn. Part I, New Delhi 110049.

Usha Electronics (I) Pvt. Ltd., 2, Anand Lok, New Delhi 110049.

Varicon Pvt. Ltd., 239, Okhla Indl. Estate, New Delhi 110020.

Vitronic Elektroniks Ltd., B-47, Connaught Place, New Delhi 110001.

Gujarat

Alchemie Pvt. Ltd., Opp. Potatia Talao, Saraspur, Ahmedabad 380018.

Baroda Electronics Ind. Pvt. Ltd., 78, Chhani Rd., Vadodara 390002.

Continental Electronics, 177/4, Naroda Indl. Estate, Naroda 382330. (Ahmedabad Dist.).

Jivan Electro Instruments, 394, Makarpura, Vadodara 390010.

Kohinoor Electronics Corpn., Post Box 537, Rajkot 360002.

Luster Ceramics Pvt. Ltd., 4/19, Ind. Estate, Gorwa Rd., Vadodara 390003.

Parry Engg. & Electronics Pvt. Ltd., 178, GIDC Indl. Est., Naroda, Ahmedabad 380002.

Simplex Electronics, Kalidas Mill Compound, Gomtipur, Ahmedabad 380021.

Standard Electronics Ind. (Gujarat) Pvt. Ltd., 81, Chhani Rd., Opp. Jakat Naka, Vadodara 390002.

Haryana

Continental Device India Ltd., 14/5, Mathura Rd., Faridabad 121003.

Crown Electronik Pvt. Ltd., Plot No. 88, DLF Indl. Area, 13/7, Mathura Rd., Faridabad 121003.

Eastern Electronics (Delhi) Ltd., 1K-2, Ind. Area, N.I.T., Faridabad 121001.

Usha Rectifier Corp. (I), Ltd., 12/A, Delhi-Mathura Rd., Faridabad 121003.

Karnataka

Bharat Electronics Ltd., Jalahalli Post, Bangalore 560013.

British Physical Laboratories India Pvt. Ltd., M. Gandhi Rd., Bangalore 560001.

Hegde & Golay Pvt. Ltd., " Shreeshyla ", Bangalore 560011.

Kamal Ind., 2-F, M. Gandhi Rd., Bangalore 560001.

Karnataka State Electronic Devpt. Corpn., 30, Race Course Rd., Bangalore 560001.

Nippon Electronics (India) Pvt. Ltd., Bull Temple Rd., Bangalore 560019.

Rao Insulating Co. Pvt. Ltd., Whitefield P.O. 562136. Bangalore Dist.

Sarit Manufg. & Research Centre, 5/3, Bore Bank Rd., Bangalore 560006.

Kerala

Kerala State Electronics Dev. Corpn. Ltd., 1133 & 1134, Keltron House, Vellayambalam, Trivandrum 695001.

O/E/N India Ltd., Electrogiri, Mullanthuruthy, Cochin 682314.

Maharashtra

A. Lunar Engg., Moroba Nivas, 210 A-B, Girgaon, Bombay 400004.

Advani-Oerlikon Pvt. Ltd., Dr. E. Shirodkar Rd., Parel, Bombay 400012.

Afco Ltd., Plot No. 2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

ELECTRONIC COMPONENTS

PIONEER IN CONNECTORS

Series RF. UHF. N, BNC Connectors, Reducing Adapters, Power Connectors, Plessy Connectors for High Voltage, Printed Circuit Connectors, Fuse Holders, Jewel Lamps Holders, Rectangular, Mini-Hook, Etc.

Pen Stylus Needles and Needle Electrode.

A. LUNAR ENGINEERING

Moroba Nivas, 210 A-B, Girgaon,
Bombay 400 004.

Phones :
Office : 381073 *Res.* : 381870

Agronic Services, 201, Shivshakti Indl. Estate, Near Shreyas Talkies, L. B. S. Mrg., Ghatkopar, Bombay 400086.

Allied Electronics Corpn., 94, Kansara Chawl, Bombay 400002.

Amphetronix Ltd., Plot No. 105, Bhosari Indl. Area, Pune 411026.

Applied Electronics Pvt. Ltd., Aplab House, Plot No. A-5, Wagle Ind. Estate, Thane 400604.

Asha Bros. Pvt. Ltd., 35-C, Rd. No. 27, Wagle Indl. Estate, Thane 400604.

Asian Electronics Ltd., Handloom House, 221, Dr. D. Naoroji Rd., Bombay 400001.

Bakelite Hylam Ltd., Tiecicon House, 18, Dr. E. M. Moses Rd., Bombay 400011.

Beacon Industrial Electronics Pvt. Ltd., Shree Ram Ind. Estate, Block A-13, Ambedkar Rd., Bombay 400031.

Bio-Care Equipment, 702, Vaishali Apartments, Janki Kutir, Juhu, Vile Parle West, Bombay 400056.

Bombay Burmah Trading Corpn. Ltd. (Electronics Divn.), Plot No. 2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

Bright Star Manufg. Works, Aroon Ind. Estate, Malad, Bombay 400064.

Bush India Ltd., Post Box No. 3, Thane Indl. Area, Thane 400604.

Dr. Beck & Co. (I) Ltd., Pimpri, Pune 411018.

Dattatray Ind. Pvt. Ltd., 691/A, Pune-Satara Rd., Pune 411009.

Devidayal Electronics & Wires Ltd., Gupta Mills Estate. Reay Rd., Bombay 400010.

Dominion Radios, 15, New Queen's Rd., Bombay 400004.

Edgar Handley & Co. Pvt. Ltd., Seksaria Chambers, 135, Nagindas Master Rd., Bombay 400023.

Electronica, Elektra House, 691/1A, Pune Satara Rd., Pune 411009.

Elpro International Ltd., Chinchwad, Pune 411019.

Emco Electronics, 106, Indl. Area, Sion, Bombay 400022.

Excella Electronics, 54, Annapurna Ind. Estate, 46, Tilak Rd., Ghatkopar (East), Bombay 400077.

Expo Electronics Pvt. Ltd., 72-73, Jolly Maker Chamber No. 1, Nariman Point, Bombay 400021.

Filtronics, T-170, Bhosari Indl. Estate, Pune 411026.

Formica India Ltd., Akurdi, Pune 411035.

Goyal Electronic Ind., 319, Prasad Chambers, Near Roxy Cinema, Bombay 400004.

Hakotronics Pvt. Ltd., Bhor Inds. Bldg., Sussex Rd., Bombay 400027.

Hind Rectifiers Ltd., Lake Rd., Bhandup, Bombay 400078.

Hindustan Conductors Pvt. Ltd., 24-B, S. Abdulla Rd., Bombay 400001.

INBELEC, Electronic Components Divn. of Philips India, Ltd., Band Box House, Dr. A. Besant Rd., Worli, Bombay 400018.

Indian Electronics, Asha Studio, Chembur, Bombay 400071.

Indian Engg. Co., 132, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

International Meters & Electronics Corpn., 19-C, Shalimar Ind. Estate, Bombay 400019.

Interwood Decorators Pvt. Ltd., C-201, Usha Nagar, Bhandup, Bombay 400078.

Jain Electronics, F-37, Nandhdham Ind. Estate, Marol, Bombay 400059.

Kaycee Industries Ltd., 32, Nicol Rd., Ballard Estate, Bombay 400038.

Khandelwal Herrmann Electronics Pvt. Ltd., Khandelwal Ind. Estate, Bhandup, Bombay 400078.

L. P. Electronics Pvt. Ltd., Plot No. A-251, Road 'B', Wagle Indl. Estate, Thane 400604.

Mahindra & Mahindra Ltd. (Electronics Division), Worli Rd. No. 13, Worli, Bombay 400018.

Mohns Electronics, Mohns House, 81, MIDC, Marol II, Andheri, Bombay 400093.

Monga Electronics Pvt. Ltd., Arun Bazar, Vivekanand Rd., Malad (West), Bombay 400064.

Morris Electronics Ltd., Bhosari Ind. Estate, Pune 411026.

Motwane Pvt. Ltd., 127, M. Gandhi Rd., Bombay 400023.

Mulchandani Elec. & Radio Ind. Ltd., Sukh Sagar, Hughes Rd., Bombay 400007.

Murphy India Ltd., Shirodkar Rd., Parel, Bombay 400012.

National Radio & Electronics Co. Ltd., Mahakali Caves Rd., Chakala, Andheri (E), Bombay 400069.

Peico Electronics & Electricals Ltd., Band Box House, Dr. A. Besant Rd., Bombay 400025.

Permanent Magnets Ltd., Sylvester Bldg., 20, Shaheed Bhagat Singh Rd., Bombay 400023.

Plastic Dies Co., Electronics Dn., 22-B, Govandi Stn. Rd., Bombay 400088.

Rescon Manufg. Co. Pvt. Ltd., Jamunotry, 26th Rd., Bandra, Bombay 400050.

Ruttonsha International Rectifier Pvt. Ltd., G.P.O. Box No. 661, Bombay 400001.

Saha Soshin Electronics Ltd., 266, Dr. A. B. Rd., Bombay 400025.

Sahney Kirkwood Commutators Pvt. Ltd., 27, Kirol, Vidyavihar, Bombay 400084.

Sanes Varicon Pvt. Ltd., A-2, Bhosari Ind. Estate, Pune-Nasik Rd., Pune 411026.

Semiconductors Ltd., Radia House, Rampart Row, Bombay 400023.

Siemens India Ltd., 134A, Dr. A. Besant Rd., Bombay 400018.

Symtronics, Plot No. S-1, M.I.D.C. Indl. Area, Bhosari, Pune 411026.

Systech Pvt. Ltd., 124C, Erandawana, Opp. Kamala Park, Pune 411004.

Telerad Ltd., Saki-Vihar Rd., Chandivli, Post Box No. 8929, Bombay 400072.

Uranus Electrotechnik, 6, Sewree Bunder Rd., Bombay 400015.

Vibronics Pvt. Ltd., 4, Kurla Ind. Estate, Agra Rd., Ghatkopar, Bombay 400086.

Punjab

Patiala Resistors Ltd., 1, Nehal Bagh, Patiala 147001.

Punjab State Indl. Dev. Corpn. Ltd., P. Box No. 81, Chandigarh 160017.

Rajasthan

Gilard Electronics, 13/16-B, Indl. Estate, Kota 324007.

Tamil Nadu

Baliga Lighting Equipment Pvt. Ltd., Madras 600028.

CVP Lektronics, 29, IV Main Rd., Raja Annamalaipuram, Madras 600028.

Elahi Electronics, 18, Madhuvan Karai St., Madras 600016.

Hilversum Electronics Pvt. Ltd., 144, Siveram-Perungudi, Thoraipakkam, Adyar, Madras 600020.

Hogg Electronic Corporation, 306, Avanashi Rd., Coimbatore 641018.

M. R. Electronic Components Ltd., 11-A/3, Mount Rd., Madras 600002.

Procon Instrumentation Pvt. Ltd., 3-A, Thandavaraya Gramani St., Santhome, Madras 600004.

Technolab Instruments Co., 1/155, Mount Rd., Madras 600002.

U.M.S. Radio Factory Pvt. Ltd., Avanashi Rd., P.O. Box 3771, Coimbatore 641018.

Uttar Pradesh

J.K. Electronics, 84/55, G. T. Rd., Kanpur 208003.

Siva Electronics (I) Pvt. Ltd., Rajindra Nagar Indl. Colony, Mohan Nagar, Ghaziabad 201001.

Teletube Electronics Pvt. Ltd., D-34, Sector 17, Kavinagar Indl. Area, Ghaziabad 201001.

West Bengal

East Coast Enterprises Ltd., 33, Brabourne Rd., Calcutta 700001.

Elvoc Pvt. Ltd., 36, Panditia Rd., Calcutta 700029.

Indo-Burma Petroleum Co. Ltd., Gillander House, N. Subhas Rd., Calcutta 700001.

Metroark Pvt. Ltd., P.B. 16903, Calcutta 700034.

Usha Telehoists Ltd., 14, Princep St., Calcutta 700016.

ELECTRONIC TIMERS

Gravity Instruments Pvt. Ltd., Rakhial, Ahmedabad 380023.

Neutronic Mfg. Co., 12A, Marol Maroshi Rd., Andheri East, Bombay 400059.

Pla Electro Appliances, Thakor Estate, Kurla Kirol Rd., Vidya Vihar West, Bombay 400086.

GRAUER & WEIL (INDIA) LTD.

Sukh Sagar, S. Patkar Marg, Chowpatty,
Bombay 400 007.

OFFICE	TELEX	GRAMS	WORKS
359581-2 350454/350481	011-3091	WISHWELL	695271-2

GROWEL

A Symbol of Quality in Metal Finishing

MFG. OF METAL FINISHING

Cleaners, Brighteners, Salts, Strippers, Plating on Aluminium/Plastic/Printed Circuit Boards. Electroless Copper/Nickel/Tin, Nickel Sulphate, Nickel Chloride, Nickel Carbonate, Nickel Sulphamate, Cadmium Oxide. Polishing Compositions and Buffing Compositions.

Manual—Semi- and Fully - automatic — Programme Controlled Plants, Equipment — Titanium Baskets, Heating/Cooling Coils, Fingers for Caustic Soda Plants/Pumps and Components.

Shah Electronics, 1117, Prasad Chambers, Opera House, Bombay 400004.

Subtronics, Kaliandas Udyog Bhavan, 147, Near Century Bazar, Worli, Bombay 400025.

TSC Industries, 373, Dr. D. N. Rd., 3rd Flr., Bombay 400001.

ELECTROPLATING MATERIALS

Canning Mitra Phoenix Ltd., 5, Convent St., Bombay 400039.

Delta Chemicals, Sonawala X Rd., Bombay 400063.

Electro Ind. Pvt. Ltd., Ind. Area, Pratapnagar, Vadodara 390004.

General Inds., 2, Indl. Site, Indiranagar, Bangalore 560038.

Grauer & Weil (I) Ltd., Sukh Sagar, Hughes Rd., Bombay 400007.

Machsons Pvt. Ltd., 40/B, Milan, 87, Tardeo Rd., Bombay 400034.

Mathuradas Bros. & Co., 76/78, Thakurdwar Rd., Bombay 400002.

Mica Ind., 4, Parvati Ind. Estate, Sun Mill Rd., Bombay 400013.

Platewell Processes & Chemicals Ltd., Padra Rd., Altadra, Vadodara 390001.

Precious Electro Chemicals Pvt. Ltd., Stadium House, Churchgate, Bombay 400020.

Progressive Chemicals Corpn., 29, Agarwal Indl. Estate, S. V. Road, Dahisar East, Bombay 400068.

Sonak Ind., 37, Doctor's Comp., Parel Cross Rd., Bombay 400012.

Weldun Engg. & Trading Co., 71A, N. Subhas Rd., Calcutta 700001.

ELECTROPLATING PLANTS

Grauer & Weil India Ltd., Sukh Sagar, Hughes Rd., Bombay 400007.

Kirti Engg. Works, B. K. Chhabra Compound, Vakola Bridge, Santa Cruz (E), Bombay 400055.

Navyug Ind., L. J. Cross Rd. N. 1, Mahim, Bombay 400016.

ELEVATORS

(See under Electric Lifts in this list).

EMBOSSING MACHINES, GUNS AND TAPES

Bradma of India Ltd., Lakshmi Bldg., Sir P. Mehta Rd., Bombay 400001.

M. M. Industries, Hampton Court, N. Parekh Mrg., Near Colaba P. O., Bombay 400005.

EMERGENCY LIGHT

Automation, 310 'Neelam', Dr. R. G. Thadani Mrg., Worli, Bombay 400018.

Brisk Electro Sales Pvt. Ltd., Lamington Chambers, Lamington Rd., Bombay 400004.

Indian Technological Products, Flat No. 305, Bldg. No. 35-36, Nehru Place, New Delhi 110024.

K. I. A. & Co., 230, Arun Chambers, Bombay 400034.

Kheraj Electrical Inds., 147, Lohar Chawl, Tavawala Bldg., 2nd flr., Bombay 400002.

Naik Bros., 15, Memorial Hall St., Madras 600003.

Test Equipments (Elec.) Pvt. Ltd., Worli Naka, Bombay 400018.

Vijay Lakshmi Electric Co., Sitaram Bldg., 37, Dr. D. N. Rd., Bombay 400001.

ENAMELWARE

Andhra Pradesh

Deccan Porcelain & Enamel Works Ltd., 2707, Bakaram, Mushirabad, Hyderabad 500020.

Nellore Enamels, Ind. Estate, Nellore 524001.

Maharashtra

Anant Machinery Pvt. Ltd., Plot No. 3B, Chinchwad Ind. Area, Chinchwad, Pune 411019.

Atlas Engineering Works, Old Anjir Wadi, Champshi Bhimji Rd., Mazagaon, Bombay 400010

Enamelled Wires Ltd., Khanna Construction House, 44/A, Gaffar Khan Rd., Bombay 400018.

Lans Metals Pvt. Ltd., Kasturchand Mills Compd., Bapat Mrg., Bombay 400016.

Ogale Glass Works Ltd., Ogalewadi 415105. Satara Dist.

Pioneer Enamelling Works, Lakshmi Bldg., Sir P. Mehta Rd., Bombay 400001.

Tamil Nadu

Madras Enamel Works Ltd., 65, Sydenham Rd., Madras 600003.

West Bengal

A. K. Sarkar Ind. Pvt. Ltd., 32-1, Dalhousie Sq. East, Calcutta 700001.

Bengal Enamel Works Ltd., 24, Chittaranjan Ave., Calcutta 700012.

Bharat Tin & Enamel Co. Pvt. Ltd., 2A, Shakespeare Sarani, Calcutta 700016.

Blue Star Enamelware Co. Pvt. Ltd., 4, Dalhousie Sq. East, Calcutta 700017.

Sur Enamel & Stamping Works Ltd., 24, Dr. L. M. Bhattacharya Rd., Calcutta 700014.

ENGINES — DIESEL

(See 'Diesel Engines' in this list.)

ENGINES, EXPELLERS — OIL

Kirloskar Oil Engines Ltd., 13, Laxmanrao Kirloskar Rd., Khadki, Pune 411003.

New Bharat Engg. Works (Jam.) Ltd., Pandit Nehru Rd., Jamnagar 361002.

Patel Manufacturers. P. Box 510, Rajkot 360001.

Shree Shankar Steel Inds., Samir Takuja, Gaya 823001.

Swastik Engrs., 7, Bhaktinagar, Stn. Rd., Rajkot 360002.

(See also 'Oil Mill Machinery' in this list).

ESSENCES

A. Boake Roberts & Co. India Ltd., 1-5, Seven Wells St., St. Thomas Mount, Madras 600016.

Asian Chemical Works, 124-26, Princess St., Bombay 400002.

Naarden Chemical Works (India) Ltd., Plot No. 6, Saki Naka, Bombay 400076.

EXPLOSIVES

Indian Detonators Ltd., Kukatpalli, P.O. Sanatnagar, Hyderabad 500018.

Indian Explosives Ltd., 34, Chowringhee, Calcutta 700071.

Sharda Industrial Engg. Works, 8, Siddapura Ind. Estate, Masrani Lane, Halav Pool, Kurla, Bombay 400070.

FABRICATION — STEEL

(See under Steel Fabrication in this list.)

FANS — ELECTRIC

Andhra Pradesh

Hyderabad Engg. Inds., Balanagar Township, Hyderabad 500037.

Haryana

American Universal Electric (I) Ltd., Medel Town, Faridabad 121003.

Gujarat

Nima Ltd., Tandalja, Vadodara 391410.

Karnataka

Fibre Lamination of India, 7/1, S. R. Nilaya, G.E.F. Post, Mysore Rd., Bangalore 560026.

Maharashtra

Almonard Pvt. Ltd., 4, Saki-Vihar Rd., Bombay 400072.

Bajaj Electricals Ltd., 45, V. Nariman Rd., Bombay 400023.

Crompton Greaves Ltd., 1, V. B. Gandhi Mrg., Bombay 400023.

Devidayal Fans, Dn. of Electrical Stampings Ltd., Darukhana, Bombay 400010.

Emco Electra Pvt. Ltd., 94, N. Master Rd., Bombay 400001.

Innova Engg. P. Ltd., Plot 140, Marol Co-op. Indl. Estate, Marol, Bombay 400059.

Matchwel Electricals (I) Ltd., Off Nagar Rd., Pune 411014.

Rallis India Ltd., 21, Raveline St., Bombay 400001.

Vishal Appliances Pvt. Ltd., 207, Rewa Chambers, 31, New Marine Lines, Bombay 400020.

Punjab

Beegee Corpn. Pvt. Ltd., 25, Factory Area, Patiala 147001.

Tamil Nadu

National Electricals, 3-10, Ambattur Indl. Estate, Madras 600058.

P. S. G. & Sons, Peelamedu, Coimbatore 641004.

Uttar Pradesh

Engg. & Pulp Products Pvt. Ltd., B-29/15, Lanka, Varanasi 221005.

Sansar Fan Inds., G. T. Rd., Mohannagar, Ghaziabad 201007.

West Bengal

Bharat Electrical Ind. Ltd., P11, Mission Row Extn., Calcutta 700001.

Calcutta Fan Works Pvt. Ltd., Post Box 16246, Calcutta 700029.

Caravan Fan Inds., P-24, Transport Depot Rd., Calcutta 700027.

Clyde Fan Co. Pvt. Ltd., Rai Bahadur Rd., Behala, Calcutta 700034.

G. T. R. Company Pvt. Ltd., 37, Dum Dum Rd., Calcutta 700030.

General Electric Co. of India Ltd., 6, Chittaranjan Ave., Calcutta 700013.

Jay Engineering Works Ltd., 183-A, Prince A. Shah Rd., Calcutta 700031.

Khaitan Fans Pvt. Ltd., 'Everest', 18th Flr., 46-C, Jawaharlal Nehru Rd., Calcutta 700001.

Marshall Sons & Co. (India) Ltd., 75-C, Park St., Calcutta 700016

Modifan Inds., 55, Canning St., 3rd flr., B Block, Calcutta 700001.

Orient General Ind. Ltd., 6, Ghori Bibi Lane, Calcutta 700054.

Panday Ind. Pvt. Ltd., 202/2, N. Subhas Rd., Calcutta 700047.

Polar Fan Inds., 51, Ezra St., Calcutta 700001.

FANS — INDUSTRIAL & BLOWERS

A. Stock & Co. Ltd., 3, Camac St., Calcutta 700016.

Air Conditioning Corp. Ltd., 17, Taratolla Rd., Calcutta 700053.

Almonard Pvt. Ltd., 4, Saki Vihar Rd., Bombay 400072.

American Refrigeration Co. Ltd., 13-C, Russell St., Calcutta 700071.

Andrew Yule & Co. Ltd., 8, Clive Rd., Calcutta 700001.

Bharat Electric & Engg. Corpn., 21, Dalal St., Bombay 400023.

C. Bhole & Co., 61, N. Dhuru St., Bombay 400003.

C. Doctor & Co. Pvt. Ltd., 11, Homi Mody St., Bombay 400023.

Durable Steel Products, 16/5, Mathura Rd., Faridabad 121003. (Haryana).

Duvent Fans Pvt. Ltd., Khaleel Shirazi Estate, 329, Pantheon Rd., Egmore, Madras 600008.

Electrical Products Corpn., Calcutta 700033.

Flow Link Inds., 370, Jodhpur Park, Calcutta 700068.

Forge & Blower Co., Naroda Rd., Ahmedabad 380002.

G. T. R. Co. Pvt. Ltd., 37, Dum Dum Rd., Calcutta 700074.

General Electric Co. of India Ltd., Magnet House, 6, C. R. Avenue, Calcutta 700013.

Gupta Bakelite Factory, 220, Gala Basheshar, Subzi Mandi, Delhi 110007.

Herberts & Growers Engg. Co., 2, Ambalal Doshi Mrg., Opp. Share Bazar, Bombay 400023.

Innova Engg. Pvt. Ltd., Plot 140, Marol Co-op. Indl. Estate, Marol, Bombay 400059.

La Vulcan Engrs., 96, L. B. S. Mrg., Opp. Union Bank, Vikhroli, Bombay 400079.

Lalvani Metal Works, Safed Pool, Kurla-Andheri Rd., Bombay 400072.

Multi-Tech. Engrs. Pvt. Ltd., Fitwell Engg. Compd., 2nd Pokhran Rd., Thane 400604.

National Agricultural & Diesel Inds., 2, Errabalu Chetty St., Madras 600001.

New Standard Engg. Co. Ltd., Caroll Rd., Bombay 400013.

Pullman Engg. Co., Rattan Inds. Compd., L. B. S. Mrg., Bhandup, Bombay 400078.

S. F. Products India Ltd., P. Box No. 411, Calcutta 700011.

Supreme Elec. & Engg. Works, Acharya Indl. Estate, Wadavli, Chembur, Bombay 400074.

Tero Sales, 86, Mahendra Chambers, 134–136, Dr. D. N. Rd., Bombay 400001.

Universal Fabrication & Blower Inds., Saki Vihar Rd., Saki Naka, Bombay 400072.

Wesman Engg. Co. Pvt. Ltd., 1/2, Allenby Rd., Calcutta 700001.

FASTENERS — INDUSTRIAL

Andhra Pradesh

Screwmans, B.I. Unit, Ind. Estate, Vijayawada 520007.

Bihar

Bihar Fasteners Ltd., Katari Hill Rd., Gaya 823001.

Indian Steel & Wire Products Ltd., P.O. Indranagar, Jamshedpur 831008.

Delhi

Auto & General Engg. Co., 204, Okhla Indl. Estate, New Delhi 110020.

Gujarat

Industrial Fasteners of Gujarat Pvt. Ltd., Opp. Makarpura Rly. Station, Maneja 391710. Vadodara Dist.

Haryana

Jagatjit Engineering Works Pvt. Ltd., 17/6, Mathura Rd., Faridabad 121001.

Lakshmi Precision Screws Ltd., Hissar Rd., Rohtak 124001. (Haryana).

Sikands Ltd., 61, N.I.T., Faridabad 121001.

Karnataka

Emcee Automatics, 32, Small Scale Ind. Area, 'V' Block, Rajajinagar, Bangalore 560010.

Reliance Fasteners Pvt. Ltd., 157, Indl. Town, Rajajinagar, Bangalore 560044.

Sri Venkateswara Enterprises, B-69, H.M.T. Ind. Estate, Bangalore 560031.

Maharashtra

A. A. Dehgamwalla & Co. Pvt. Ltd., 58, Sarang St., Bombay 400003.

Agarwal Steel Ind., Military Rd., Marol, Bombay 400069.

Automat Engg. P. Ltd., 14A, Kurla Indl. Estate, Bombay 400086.

Avdel (I) Pvt. Ltd., Ramon House, Backbay Recl., Bombay 400020.

Bright Bolt Pvt. Ltd., Nanjee Bldg., 17-B, Horniman Circle, Bombay 400023.

Fit Tight Nuts & Bolt Ltd., Old Ashram, Andheri-Kurla Rd., Andheri, Bombay 400069.

Hindustan Steel Ind., 4, Govt. Ind. Estate, Kandivli West. Bombay 400067.

Industrial Components, Sun Mill Compound, Bombay 400033.

Manco Ind., Shed No. F, Sainath Ind. Estate, Off Aarey Rd., Goregaon East, Bombay 400063.

Precision Fasteners Ltd., 15, MIDC Indl. Area, Thane Belapur Rd., Kalwe, Thane 400601.

Precision Steel Fasteners, S. No. 209, Bombay-Pune Rd., Pimpri, Pune 411018.

Precision Taps & Dies Pvt. Ltd., 17, Gunbow St., Fort. Bombay 400001.

Sang Fasteners, Plot No. A-167, Wagle Estate, Thane 400604.

Sheth Manufg. Works, Rambaug, Vivekanand Rd., Bombay 400064.

Swastik Metal Ind., 168, C.S.T. Rd., Kalina, Bombay 400055.

Virani Fasteners & Bolts Pvt. Ltd., Maker Bhavan No. 2, New Marine Lines, Bombay 400020.

Punjab

Jagatjit Fasteners Pvt. Ltd., P.B. 20, Kapurthala 144601.

Tamil Nadu

National Fasteners Pvt. Ltd., Developed Plot No. S-19, Industrial Estate, Guindy, Madras 600032.

Needle Ind. (I) Ltd., P.O. Ketti 643215. Nilgiris.

Rambal Pvt. Ltd., Lattice Bridge Rd., P.B. 1101, Madras 600041.

Southern Ind. Corpn. Ltd., 99, Armenian St., Madras 600001.

Sundaram Fasteners Ltd., Padi, Madras 600060.

West Bengal

Agarwal Ind., 1, Bonfield Lane, Calcutta 700001.

Ashok Traders, 2 India Exchange Place, 2nd Fl., Calcutta 700001.

Asoka Mercantile Corpn., 10/1, Ganpat Rai Khemka Lane, Liluah 711204.

Bolts, Nuts and Forging Co., 32, N. Subhas Rd., Calcutta 700001.

Forging & Allied Products, 5/6/2, Dharmatalla Rd., Salkia, Howrah 711106.

Guest, Keen, Williams Ltd., 97, Andul Rd., Howrah 711103.

Howrah Iron & Washers Manufg. Works, 77/13, Benares Rd., Howrah 711001.

India Fasteners, 115, Howrah Rd., P.O. Salkia, Howrah 711106.

Indian Eyelet Ind., 22, B.R.B. Bose Rd., Calcutta 700001.

Khan Pal Chowdhury & Co. Pvt. Ltd., 71/A, N. Subhas Rd., Calcutta 700001.

M. S. Ind., P-10, New Howrah Bridge Approach Rd., Calcutta 700001.

Mahabir Steel Ind., 10/3, Alipur Park Place, Calcutta 700027.

Sajjan Ind. Corpn., P-18, New C.I.T. Rd. (Bina Estate), Scheme LVII, Calcutta 700012.

Saroj Iron & Steel Co. Pvt. Ltd., 85/1, Upper Chitpur Rd., Calcutta 700006.

Shree Krishna Pvt. Ltd., 20, Mangoe Lane, Calcutta 700001.

Shree Lakshmi Iron Co., 222, G. Ghosh Rd., P.O. Belurmath 711202, Howrah Dist.

Standard Screw Ind., 34, N. Subhas Rd., Calcutta 700001.

Steel & Allied Products Ltd., 2/1, Hussain Shah Rd., Calcutta 700023.

Thisa (I.) Pvt. Ltd., E-2, Gillanders House, Calcutta 700001.

FELTS

Feltex India, 29, Muktaram Babu St., Calcutta 700007.

Southern Felt Industries, 152, Thambu Chetty St., Madras 600001.

FERRO-ALLOY

Andhra Pradesh

Ferro-Alloys Corpn. Ltd., Shreeramnagar, Srikakulam 532101.

Bihar

Pyrites Phosphates & Chemicals Ltd., Dr. Joseph House, Canal Rd., Dehri-on-Sone 821307.

Karnataka

Electro Metallurgical Works Pvt. Ltd., Dandeli 581325.

Mysore Iron & Steel Ltd., Bhadravati 577301.

Sandur Manganese & Iron Ores Ltd., Lohadri Bhavan, Sandur 583119, Bellary Dist.

Maharashtra

Ferro-Alloys Corpn. Ltd., Post Box 9, Tumsar 441912.

Khandelwal Ferro Alloys Ltd., 79/87, D. Lad Path, Bombay 400033.

Moldex Inds., 187, Dr. D. Naoroji Rd., Bombay 400001.

Tata Iron & Steel Co. Ltd., New India Assurance Bldg., M. Gandhi Rd., Bombay 400023.

Universal Ferro & Allied Chemicals Ltd., Liberty Bldg., New Marine Lines, Bombay 400020.

Orissa

Indian Metals & Ferro Alloys Ltd., Bhubaneswar 751010.

Uttar Pradesh

Indian Thermit Corpn. Ltd., 84/22, Fazalganj, Kanpur 208012.

West Bengal

Siddhartha Ferro Alloys Ltd., 25, N. Subhas Rd., Calcutta 700001.

FERTILISERS

Andhra Pradesh

Andhra Sugars Ltd., Venkatarayapuram, Tanuku 534211, West Godavari Dist.

Bawa Fertilizer Co., 3-6-345/A/1, Bashir Bagh, Hyderabad 500029.

Coromandel Fertilisers Ltd., 126, Sarojini Devi Rd., Secunderabad 500003.

Fertilisers & Ind. Corpn., Main Rd., Nidadavolu 534301, West Godavari Dist.

International Ore & Fertilizer (I) Pvt. Ltd., 66, Rashtrapathi Rd., Secunderabad 500003.

Jayalakshmi Fertilisers, Venkatarayapuram, Tanuku 534211, West Godavari Dist.

Assam

Assam Agro Ind. Development Corpn. Ltd., Ulubari, Gauhati 781007.

Associated Industries (Assam) Ltd. (Chemical-Unit), P.O. Chandrapur 781550, Kamrup Dist.

Firtichem Ltd., Kannachal Rd., Silpukhuri, Gauhati 781003.

Bihar

Chemi Fertilisers, S. P. Varma Rd., Patna 800001.

Pyrites, Phosphates & Chemicals Ltd., Dr. Joseph House, Canal Rd., Dehri-on-Sone 821307, Rohtas Dist.

Delhi

Fertilizer Corpn. of India Ltd., 55, Nehru Place, New Delhi 110024.

Indian Explosives Ltd., Himalaya House, 23, K. Gandhi Marg, New Delhi 110001.

Indian Farmers Fertiliser Cooperative Ltd., 54, Nehru Place, New Delhi 110024.

Japan Urea Centre, 7, Rajendra Place, New Delhi 110008.

Krishak Bharat Co-operative Ltd., Red Rose House, 49-50, Nehru Place, New Delhi 110019.

Shriram Chemical Ind., Naaz Bldg., 1, Jhandewalan Estate, New Delhi 110055.

Goa

Zuari Agro Chemicals Ltd., P.O. Zuari Nagar 403726.

Gujarat

Adarsh Chemicals & Fertilisers Ltd., Udhna 394210. (Surat Dt.).

Alembic Chemical Works Co. Ltd., Alembic Rd., Vadodara 390003.

Anil Starch Products Ltd., Anil Rd., Ahmedabad 380002.

Chemfert Products & Services, 296. GIDC, M-Pura, Vadodara 390001.

Gujarat Narmada Valley Fertilizers Ltd., Narmadanagar 392015. Bharuch Dist.

Gujarat State Fertilisers Co. Ltd., P.O. Fertiliser Nagar 391750, Vadodara Dist.

Indo-German Fertiliser Corpn., Mohammadpura, Bharuch 392001.

Kisan Bros., A/37, Capital Commercial Centre, Opp. Town Hall, Ahmedabad 380009.

Paushak Ltd., Alembic Rd., Vadodara 390003.

Karnataka

Darshak Ltd., Post Bag 9992, Bangalore 560009.

Mangalore Chemicals & Fertilizers Ltd., Panambur, Mangalore 575010.

United India Fertilisers Co. Pvt. Ltd., 5/1, J. C. Rd., Bangalore 560002.

Kerala

Fertilisers & Chemicals Travancore Ltd., P. O. Udyogamandal 683501.

South India Chemicals & Fertilisers Ltd., Manorama Bldg., Kottayam 686001.

Madhya Pradesh

Dewas Chemicals & Fertilisers Mfg. Co. Ltd., 148, R. N. Tagore Marg, Chhavani, Indore 452001.

M. P. Agro Morarji Fertilisers Ltd., 170, Ravindranath Tagore Mrg., Indore 452001.

M. P. Chemical Corpn., 78, Navlakha Rd., Sanyogita Ganj, Indore 452001.

Maharashtra

Agro Nutrients Pvt. Ltd., Vijay Bhavan, Morshi Rd., Amravati 444601.

Aries Agro-Vet Industries Pvt. Ltd., 53/54, B. Nand Bhuvan Estate, M. Kaves Rd., Bombay 400059.

BASF India Ltd., Maybaker House, S. K. Ahire Mrg., Bombay 400025.

Bharat Fertiliser Ind. Ltd., 12, Nanabhai Lane, Near Flora Fountain, Bombay 400023.

Bharat Laboratory & Biological House for Agriculture, Pandurang Smriti, Jambhale Nagar, Dhule 424001.

Borax Morarji Ltd., 84, Nariman Rd., Bombay 400020.

C. Dhanvantrai & Co., Lentin Chambers, 36, Dalal St., Bombay 400023.

Catalyst (India) Ltd., Chinal Bldg., 79, Y. Meheralli Rd., Bombay 400003.

Chembur Bone & Fertiliser Co. Pvt. Ltd., Darabshaw House, S. Vallabhdas Marg, Bombay 400038.

Deccan Sales Corpn. Ltd., Moray House, 226, S. V. Rd., Bandra, Bombay 400050.

Deepak Fertilisers & Petrochemicals Corpn. Ltd., 10-B, Bakhtawar, Nariman Point, Bombay 400021.

Dewa Fertilisers & Feeds Ltd., Eucharistic Cong. Bldg., 5, Convent St., Bombay 400001.

Dharamsi Morarji Chemical Co. Ltd., Prospect Chambers, 317-21, Dr. D. Naoroji Rd., Bombay 400001.

Fertilizer Corpn. of India Ltd., Trombay Unit, Chembur, Bombay 400074.

Granulated Fertilizers & Feeds Pvt. Ltd., 40, Western India House, Sir P. M. Rd., Bombay 400001.

Harshadray Pvt. Ltd., Jiji House, Ravelin St., Bombay 400001.

Indian Potash Ltd., Mittal Chambers, Nariman Pt., Bombay 400021.

Kamdhenu Chemicals & Fertilisers Ind., 1379, Bhawani Peth, Pune 411002.

Kolhapur Chemicals & Fertilisers Pvt. Ltd., 401-D, Poonam Apartments, Dr. A. B. Rd., Worli, Bombay 400018.

Mulchand M. Choksey & Co., 19-21, Hamam St., Bombay 400001.

Pankaj Chemicals & Fertilisers, 211, Samuel St., Vadgadi, Bombay 400003.

Potash Fertilisers Ltd., 6, Lotus Court, J. Tata Rd., Bombay 400020.

Rallis India Ltd., Rallis House, 21, Ravelin St., Bombay 400001.

Rashtriya Chemicals & Fertilisers Ltd., Technical Bldg., Marvali, Chembur, Bombay 400074.

Sepulchre Bros. (I) Ltd., Taj Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Shaw Wallace & Co. Ltd., 3, Walchand Hirachand Mrg., Bombay 400038.

Sunrise Manures & Chemicals, 813-14, Bhavani Peth, Pune 411002.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

Orissa

Orissa Fertilisers & Chemical Ltd., Main Rd., Rourkela 769004.

Punjab

Northern India Fertilisers & Agri. Supply Corpn., 85, Sector 18-A, Chandigarh 160017.

Punjab National Fertilizers & Chemicals Ltd., SCO 54-56, Sector 17-A, Chandigarh 160017.

Tridhara Krishi Sampada Pvt. Ltd., Fertiliser Division, 1290, Sector 21-B, Chandigarh 160017.

Rajasthan

Jeevan Fertilisers & Chemicals Co. Pvt. Ltd., 42, Large Scale Ind. Area, Kota 324003.

Rajasthan State Mines & Minerals Ltd., 133, Saheli Mrg., Udaipur 313001.

Tamil Nadu

Coimbatore Pioneer Fertilisers Ltd., Muthugoundanpudur (Via Sulur) 641402. (Coimbatore Dist.).

E. I. D. Parry (India) Ltd., Dare House, P. B. 12, Madras 600001.

Indian Potash Ltd., 2/3, Pathari Rd., Off Mount Rd., Madras 600006.

Jai Bharat Chemicals & Fertilisers Co., 5/141, Mount Rd., Madras 600006.

Kothari (Madras) Ltd., 20, Nungambakkam High Rd., Madras 600034.

Krishna Ind. Corpn. Ltd., Ramakrishna Bldgs., 38, Mount Rd., Madras 600006.

Madras Fertilisers Ltd., Manali, Madras 600068.

Mysore Fertiliser Co., 'Lotus Court', 165, Thambu Chetty St., Madras 600001.

Peninsular Bone Mill, 28/29, Coral Merchant St., Madras 600001.

Peirce Leslie India Ltd., Race Course Rd., Coimbatore 641018.

Premier Fertilisers Ltd., 151, Mount Rd., Madras 600002.

Samy Fertiliser Co., 55, Sathy Rd., Erode 638001.

Scientific Fertiliser Co. Pvt. Ltd., P. B. No. 744, Ponnurangam Rd., R. S. Puram, Coimbatore 641002.

Southern Petrochemical Ind. Corpn. Ltd., 24, Whites Rd., Madras 600014.

T. Stanes & Co. Ltd., 8-23-24, Race Course Rd., Coimbatore 641018.

Uttar Pradesh

Indian Explosives Ltd., Fertiliser Divn., Post Box 267, Kanpur 208001.

Sahu Chemicals & Fertilisers, Sahupuri, Varanasi 221009.

U. P. State Agro Ind. Corpn. Ltd., 22, Vidhan Sabha Marg, Lucknow 226001.

West Bengal

A. Talukdar & Co. (Fertilisers) Pvt. Ltd., 15, Clive Row, Calcutta 700001.

Asian Bone Fertilisers Co., 4/77, Darbanga Tolla, Siliguri 734401.

Assam Fertilisers (Pvt.) Ltd., 12, Burdwan Rd., Calcutta 700027.

Avenue Manures Ltd., 26, Chittaranjan Ave., Calcutta 700012.

B. C. Paul & Co., 18, N. Subhas Rd., Calcutta 700001.

Brahmaputra Fertilisers & Distributors Pvt. Ltd., 2, Church Lane, Calcutta 700001.

Deluxe Chemical Inds., 192, Jamunalal Bajaj St., Calcutta 700007.

East Coast Fertilisers & Chemicals Ltd., 4, G. C. Avenue, Calcutta 700013.

Ghosal Banerjee & Co., 23, Strand Rd., Calcutta 700001.

Jardine Henderson Ltd., 4, Clive Row, Calcutta 700001.

Jay Shree Chemicals & Fertilisers, Nanla Bose Rd., Khardah 743155, 24 Parganas Dist.

Khaitan Sons & Co. (Manure) Pvt. Ltd., 26, Chittaranjan Ave., Calcutta 700012.

Mogra Manure & Bone Mills, 5 & 6, Fancy Lane, Calcutta 700001.

Phosphate Co. Ltd., 14, N. Subhas Rd., Calcutta 700001.

R. C. Mitter & Sons, Ramesh Kuthi, 54, R. K. Bose St., Calcutta 700003.

R. N. Chatterjee & Co., 135, Canning St., Calcutta 700001.

Shaw Wallace & Co. Ltd., 4/5, Bankshall St., Calcutta 700001.

Universal Fertiliser Co. Pvt. Ltd., 26/2 A, S. B. De St., Calcutta 700012.

FIBRE REINFORCED PIPES

Coromandel Prodorite P. Ltd., 11/12, North Beach Rd., Madras 600001.

FIBREGLASS & FIBREGLASS PRODUCTS

Acropolymers Pvt. Ltd., 13-14, Asaf Ali Rd., New Delhi 110002.

Concord Arai Pvt. Ltd., 13, G. S .T. Rd., Guindy, Madras 600032.

Fibreglass Pilkington Ltd., Bombay-Agra Rd., Thane 400601.

Glassfibre & Allied Inds., 15, Geeta Indl. Socy., I. B. Patel Rd., Goregaon East, Bombay 400063.

Hindustan Pilkington Glass Works Ltd., Hindustan Bldg., 4, Chittaranjan Ave., Calcutta 700013.

Indoglass Pvt. Ltd., 407, Arun Chambers, Tardeo Rd., Bombay 400034.

J. C. Electricals, Golecha House, Madras 600003.

Jhaveri Thanawala Pvt. Ltd., 47, Tamarind St., Bombay 400023.

Max Inds., 3A, Pollock St., Calcutta 700001.

Rawji Industrial Corpn., 111/115, Kazi Syed St., Bombay 400003.

Sahyadri Enterprises, M. H. Patrawala Ind. Estate, 20, Dr. E. Moses Rd., Mahalaxmi, Bombay 400011.

Sterling Enterprises, 17, Anju Shopping Centre, Tilak Rd., Santacruz West, Bombay 400054.

U-Foam Ltd., Sanathnagar, Hyderabad 500018.

Unique Enterprises, 1, Atladara Ind. Estate, Vadodara 390003.

U. P. Twiga Fiberglass Ltd., Twiga House, 3, Comm. Centre, East of Kailash, New Delhi 110065.

Vidyut Udyog, 158, Lohar Chawl, 2nd Flr., Bombay 400002.

VMT Fibreglass Ind., 70, B.R.B.B. Rd., Calcutta 700001.

Attention: R&D Laboratories

For all your advanced filtration needs, simply specify Whatman.

If you're a scientist engaged in research & development of virtually any industry, Whatman has the largest range of filtration and chromatography products for you.

Beginning with a variety of conventional cellulose filter papers and extending right through to the most specialised products worldwide : glass microfibre filters ■ phase separators ■ Benchkote ■ indicator and test papers ■ extraction thimbles ■ Gamma–12 in-line filters ■ chromatography papers etc.

Whatman has a whole range of products for air and water pollution monitoring.

Whatman

☐ Please send me technical literature on

Name ______________ Title ______________
Organisation ______________
Address ______________
____

Whatman Ltd.,
Indian Liaison Office
301. Mittal Chambers. 228. Narimán Point. Bombay-400 021

FIBREGLASS TANKS & REACTION VESSELS

FRP Linings Pvt. Ltd., 206, Arun Chambers, Tardeo, Bombay 400034.

Polyplast, Thakore Estate, Khalai Village, Vidyavihar (West), Bombay 400086.

FILM STRIP PROJECTORS

Andhra Scientific Co. Ltd., Machilipatnam 521001.

FILTERS, FILTER PAPERS & FILTER PRESSES, ETC.

Aquatreat Equipments, 31-3-17, Maruthinagar, Vijayawada 520001.

BASP Industries, G. P. Inds. Compd., 96, Panch Pakhadi, Wagle Indl. Estate, Thane 400604.

Bharat Indl. Corpn., 90, Bhajipala St., Bombay 400003.

Billy Engg. Enterprises, 761, Thiruvottiyur High Rd., Madras 600081.

Briteman Filters, 90, Bajipala Lane, Bombay 400003.

Brito-Matics (India), C-9, Nand Dham Ind. Estate, Marol, Andheri (E), Bombay 400059.

Cances Corpn., 97, Kutchery Rd., Mylapore, Madras 600034.

Candy Filters (India) Ltd., Mahalaxmi Chambers, B. Desai Rd., Bombay 400026.

Crystal Filter Co., 33/1/1, Natabar Paul Rd., Howrah 711101.

Dinshaw Iron Works, 265, M. Shaukatali Rd., Bombay 400008.

Elofic Inds. Pvt. Ltd., Kashmere Gate, Delhi 110006.

Filtroll (India), 105, Princess St., Bombay 400002.

Fimcron India Pvt. Ltd., M-97, Greater Kailash, New Delhi 110048.

Fritz & Singh Pvt. Ltd., B-29/B, Kailash Colony, New Delhi 110048.

Gladwyn Engg. Co., 13-A, Kurla Indl. Estate, Ghatkopar, Bombay 400086.

Goa Sintered Products Pvt. Ltd., Magalee, P.O. Curtorim 403709. (Goa).

Indian Filters Mfg. Co., R. K. Maniyar Estate, 93, Vijayakarwadi, S. V. Rd., Malad, Bombay 400064.

John Fowler India Ltd., Marshall's Bldg., S. Ballabhdas Marg, Bombay 400038.

Kaushik Engg. Co., 111, N. Master Rd., Bombay 400023.

Khosla Texchem Filters, 3/1126, 'Navjivan', Lamington Rd., Bombay 400008.

Kirloskar Filters Pvt. Ltd., Kothrud, Pune 411029.

Metals Mfg. Co., Post Box 16215, Bombay 400010.

Mineral Process Equipment Pvt. Ltd., Opp. Borosil Glass Works, Marol Maroshi Rd., Andheri East, Bombay 400059.

Navgire & Co., Plot No. C-34, Rd. No. 27, Wagle Estate, Thane 400604.

Otoklin Filters of India, 1006, Prasad Chambers, Near Roxy Cinema, Bombay 400004.

Parkison & Co., C Unit, 45 No. Krishna Kripa, Kandivli West, Bombay 400067.

Permanent Papers, 187, S. Devji St., Bombay 400003.

Pharmalab Inds., Star Metal Compd., Agra Rd., Vikhroli, Bombay 400083.

Polymer Papers Ltd., 12/6, Mathura Rd., Faridabad 121003. (Haryana).

Porrits & Spencer (Asia) Ltd., 308, Kanchenjunga, 18, Barakhamba Rd., New Delhi 110001.

Purolator India Ltd., Hauz Khas, Yusuf Sarai, New Delhi 110016.

Rajaniklal, 32, Park Mansions, Park St., Calcutta 700016.

Reliance Heat Transfer Pvt. Ltd., 46, Veer Nariman Rd., Bombay 400023.

S. F. Engg. Works, 262, M. Azad Rd., Nagpada, Bombay 400009.

Shanker & Co., Dajiba House, 3rd Khetwadi Lane, Bombay 400004.

Shar-Lee Filtorites Pvt. Ltd., 52, Okhla Ind. Estate, New Delhi 110020.

Shavo Norgren India Pvt. Ltd., 9, Wallace St., Bombay 400001.

Sparkler Eastern Pvt. Ltd., 35, Chittaranjan Ave., Calcutta 700012.

Standard Filter Concern, 16/1, Nilmoni, 12, J. Mohan Ave., Calcutta 700006.

Steelbird Inds., 1E/14, Jhandewalan, New Delhi 110055.

Tak Machinery Ltd., Jolly Maker Chambers No. 2, Nariman Pt., Bombay 400020.

Tenacity Filters Pvt. Ltd., 21/6, Hadapsar Ind. Estate, Hadapsar, Pune 411013.

Whatman Ltd., 101, Mittal Chambers, 228, N. Point, Bombay 400021.

YO-tana Machine Tools, C-1/10, G.I.C.D., Odhav, Ahmedabad 380021.

FILTER RODS FOR CIGARETTES

Filtrona India Ltd., 31, Murzban Rd., Bombay 400001.

FINS & FINNED TUBES

Fin-Tubes Mfg. Co., Plot No. 290/2, GIDC, Vapi 396195, Valsad Dist. Gujarat State.

Nerkar & Associates, 4, Municipal Ind. Estate, Jacob Circle, Bombay 400011.

FIRE FIGHTING EQUIPMENT

Delhi

Delhi Garage Pvt. Ltd., Connaught Place, New Delhi 110001.

DGL Pvt. Ltd., 14-M Block, Connaught Cir., New Delhi 110001.

Indian Engrs., B69/2, Wazipur Indl. Area, Delhi 110052.

Gujarat

Abdul Samad Abdul Kadar & Sons, 1839, Panchpalli, Kalupur, Ahmedabad 380001.

Newage Ind., Ambawadi Ind. Estate, Surendranagar 363001.

Northern Alloys Foundry, No. 69, G.I.D.C. Chitra, Bhavnagar 364001.

Shah Bhogilal Jethalal & Bros., Gheekanta Rd., Near Liberty Cinema, Ahmedabad 380001.

Swastik Ind. Corpn., Udyognagar, Bhavnagar 364001.

Karnataka

Fire & Safety Equipments, 171, Commercial St., Bangalore 560001.

S. Ramu & Bros., 95-G, Dr. A. N. Krishna Rao Rd., Visweswarapuram, Bangalore 560004.

Kerala

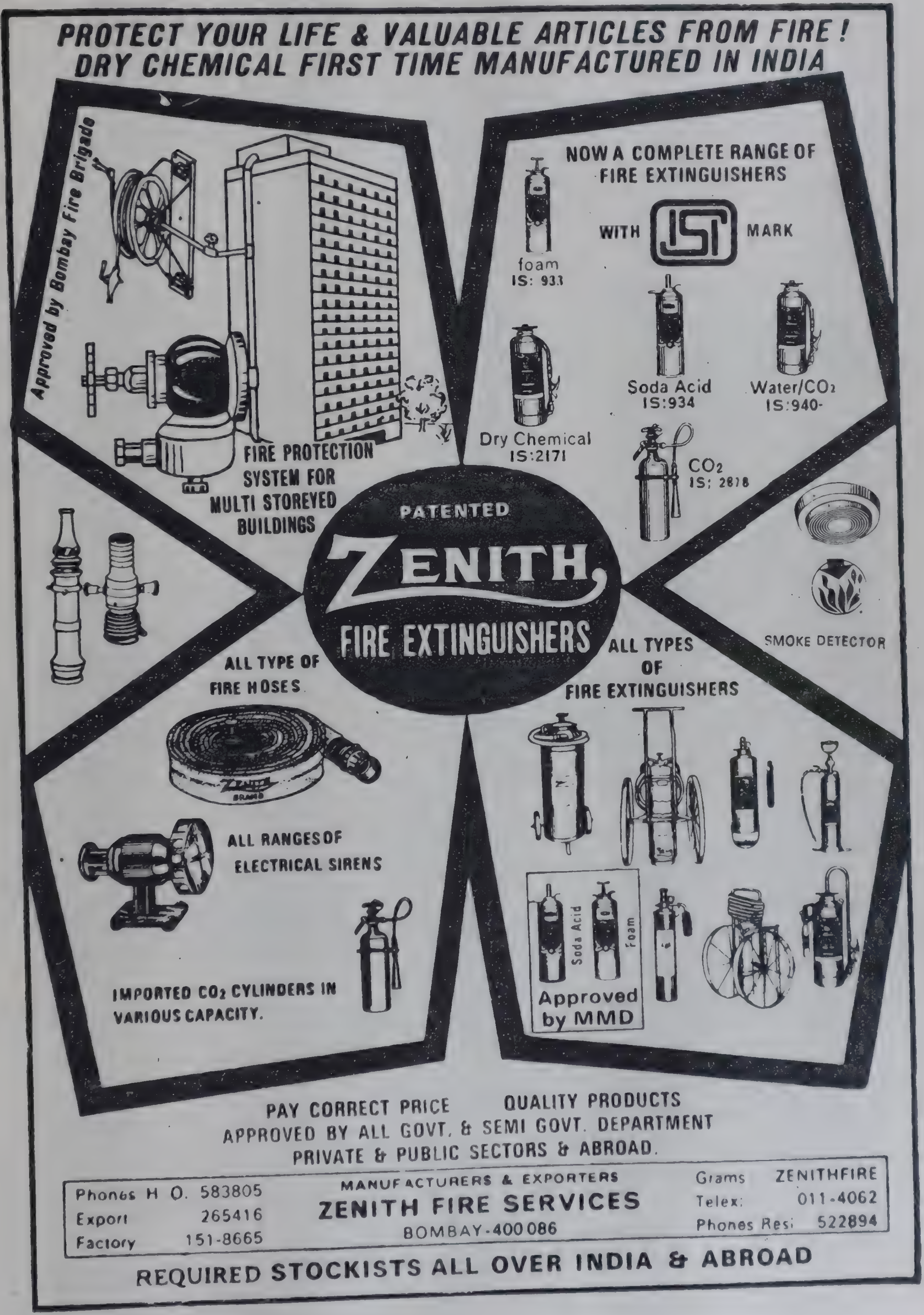
Metropolitan Engg. Co., Power House, Trivandrum 695001.

Maharashtra

Anupam & Co., 536A, Netaji Subhas Rd., Mulund, Bombay 400080.

Apollo Fire Fighter, 121/21, S. Devji St., Bombay 400003.
Asia Engg. Co., 39, Nagdevi St., Bombay 400003
Avon Services (Prod. & Agen.) Pvt. Ltd., Baldota Bhavan, 117, M. Karve Marg, Bombay 400020
Bharat Engg. Works, 10, Marine Chambers, 43, New Marine Lines, Bombay 400020.
Bharat Pipe & Sanitary Corpn., 67/69, Mohamedali Rd., Bombay 400003.
Bharat Textile Ind., 4th Lane, Darukhana, Bombay 400010
Bharati Fire Engrs., 3/6, Anupam Ind. Estate, L. B. S. Mrg., Bombay 400080
Cease Fire Safety Engrs. Pvt. Ltd., Mohamedi House, Mohamedali Rd., Bombay 400003.
Co2 Fyr Fyter Co., 15, Navjivan Soc., Bhadkamkar Marg, Bombay 400007.
Esoofaly Mohamedaly & Co., 102-A, Sarang St., Bombay 400003
Fire Equip. Corpn., 166, Dr. D. N. Rd., Bombay 400001.
Fire Protection Systems, 7/3, Five Stars, Bund Garden Rd., Pune 411001
Hiren Industrial Corpn., 8, Krishna Kunj, 144/45, M. G. Rd., Ghatkopar (E), Bombay 400077.
Indian Fire Engg. Co., National Library Bldg., S. Vivekanand Rd., Bombay 400050.
Indian Fire Equip. Corpn., 79, Mohamedi House, Mohamedali Rd., Bombay 400003.
Industrial Com. Corpn., 157, N. DhuruSt., Bombay 400003.
Infire, National Library Bldg., S. V. Rd., Bombay 400050.
Jainco Ind., 64, Nizam St., Bombay 400009.
Jay Nit Engg. Co., Milan Indl. Estate, Unit No. 3/21, Off T. J. Rd., Cotton Green, Bombay 400033.
Joseph Leslie Agencies Pvt. Ltd., Apeejay House, 130, Apollo St., Bombay 400023.
Josh Fire Fighting Equipments Pvt. Ltd., B-6, Ind. Estate, Road A, St. 3, Satpur, Nasik 422007.
Kooverji Devshi & Co. Pvt. Ltd., 105, Arun Chambers, Tardeo Rd., Bombay 400034.
Laxmi Sprinklers, Kalachowki Rd., Bombay 400033.
M. I. Ansari, 36-38, Islampura Crosslane, Bombay 400004.
Mather & Platt Ltd., 8, Graham Rd., Ballard Estate, Bombay 400038.
Minimax Ltd., Janmabhoomi Chambers, W. Hirachand Mrg., Bombay 400001.
Monster Enterprises, 202, Varma Chambers, Homji St., Bombay 400001.
National Fire Equip. Co., 11, Bank St., Bombay 400023.
Necet Trading Corpn. Pvt. Ltd., 94, Nagdevi St., Bombay 400003.
New Engg. Corpn., 91, Nagdevi Crosslane, Bombay 400003.
Oriental Metal Pressing Works Pvt. Ltd., 131, Worli, Bombay 400018.
Peter Autokits P. Ltd., Mathuradas Vasanji Rd., Makvana Lane, Marol Naka, Andheri (E), Bombay 400059.
Pioneer Equipment Co. Pvt. Ltd., Seksaria Chambers, Medows St., Bombay 400001.
Radiant Fire Prot. Engrs., 818, Parekh Market, 39, Kennedy Bridge, Bombay 400004.
Ravi Inds. Pvt. Ltd., Naupada, LBS Mrg., Thane 400602.
Safex Fire Services, 202-A, Dhanraj Ind. Estate, Sun Mill Rd., Bombay 400013.
Subtronics, Kaliandas Udyog Bhavan, 147, Near Century Bazar, Worli, Bombay 400025.
Supremex Equipments, D-2/A, Ghatkopar Ind. Estate, LBS Mrg., Bombay 400086.

SE SUPREMEX
FIRST AID FIRE FIGHTING EQUIPMENTS
APPROVED BY ISI TAC & MMD
EXTINGUISHERS
FOAM PRODUCING EQUIPMENTS
MONITORS
THEY ARE SUPREME IN QUALITY AND PERFORMANCE
Manufacturers & Exporters of all types of fire fighting equipments
SUPREMEX EQUIPMENTS PHONE 583005
FACTORY OFFICE GHATKOPAR INDUSTRIAL ESTATE UNIT D 2 A & D 5 A L B SHASTRI MARG,
GHATKOPAR (WEST) BOMBAY 400086 INDIA CABLE STOP BURN BOMBAY 400086



PROTECT YOUR LIFE & VALUABLE ARTICLES FROM FIRE !
DRY CHEMICAL FIRST TIME MANUFACTURED IN INDIA

Approved by Bombay Fire Brigade

FIRE PROTECTION SYSTEM FOR MULTI STOREYED BUILDINGS

NOW A COMPLETE RANGE OF FIRE EXTINGUISHERS WITH ISI MARK

foam IS: 933

Soda Acid IS:934

Water/CO_2 IS:940

Dry Chemical IS:2171

CO_2 IS: 2878

PATENTED

ZENITH

FIRE EXTINGUISHERS

SMOKE DETECTOR

ALL TYPE OF FIRE HOSES

ALL TYPES OF FIRE EXTINGUISHERS

ALL RANGES OF ELECTRICAL SIRENS

IMPORTED CO_2 CYLINDERS IN VARIOUS CAPACITY.

Soda Acid Foam Approved by MMD

PAY CORRECT PRICE QUALITY PRODUCTS
APPROVED BY ALL GOVT. & SEMI GOVT. DEPARTMENT
PRIVATE & PUBLIC SECTORS & ABROAD.

Phones H O. 583805
Export 265416
Factory 151-8665

MANUFACTURERS & EXPORTERS
ZENITH FIRE SERVICES
BOMBAY-400 086

Grams ZENITHFIRE
Telex: 011-4062
Phones Resi 522894

REQUIRED STOCKISTS ALL OVER INDIA & ABROAD

Swastik Industrial Corpn., 19, Hamam St., Bombay 400001.

United Engg. Co., 67-69, Mohamedali Rd., Dada Manzil, Bombay 400003.

Universal Fire Equipment Corpn., 101, Champaklal Ind. Estate, Sion East, Bombay 400022.

Vijay Machinery Stores, 35, Chandivali Village, Bombay 400072.

Weweld Regulator Co., 33, Shethi Ind. Estate, 10E, Suren Rd., Andheri East, Bombay 400093.

Zenith Fire Services, 127/129, Mody St., Bombay 400001.

Tamil Nadu

Fyrkool Pvt. Ltd., 41, Thambu Chetty St., Madras 600001.

Roberts Mclean & Co. Ltd., 32-B, Greams Rd., Madras 600006.

West Bengal

Annapurna Metal Works, Tijala, Calcutta 700039.

Indian Metal Ind., 9, Bonefield Lane, Calcutta 700001.

K. K. Bose & Co., 27/1B, Simla Rd., Calcutta 700006.

Machine & Mill Stores Corpn. Pvt. Ltd., 76/19, Benaras Rd., Howrah 711101.

Roberts Mclean & Co. Ltd., 27-B, Camac St., Calcutta 700016.

Royson (Fire Eng.) Pvt. Ltd., 55, Gariahat Rd., Calcutta 700019.

Sur Enamel & Stamping Works Pvt. Ltd., 24, Dr. M. L. Bhattacharya Rd., Entally, Calcutta 700014.

Surex Sales Pvt. Ltd., P-14, C.I.T. Rd., Calcutta 700014.

Zenith Industrial Equipments, 14/1/1A, Jackson Lane, Calcutta 700001.

FISHING AIDS

Cholamandal Marine Fibres, 13, Mowbray's Rd., Madras 600018.

Chowgule & Co. Pvt. Ltd., Shipbuilding Dn., Bakhtawar, 4th Flr., Nariman Point, Bombay 400021.

East India Trading Co., 2, Church Lane, Calcutta 700001.

Gladstone Lyall & Co. Ltd., 4, Fairlie Place, Calcutta 700001.

Modern Nets Ltd., Chowpatty Chambers, Bombay 400007.

FLASHLIGHTS & TORCH LIGHTS

Flash Light India Pvt. Ltd., 135, Princep St., Calcutta 700013.

Geep Inds. Syndicate Ltd., 28, South Rd., Allahabad 211001.

Govindson Enterprise, 59, Evergreen Indl. Estate, Mahalaxmi, Bombay 400011.

Metal India Inds., 3, Saki Naka, Bombay 400072.

Sen Bros. Pvt. Ltd., 3, Amartolla St., Calcutta 700001.

Union Carbide India Ltd., 1-3, Brabourne Rd., Calcutta 700001.

United Flashlight Ind. Pvt. Ltd., 14/2, Old China Bazar St., Calcutta 700001.

FOOD PROCESSING & CANNING MACHINERY

A. P. V. Engg. Co. Pvt. Ltd., 2, Jessore Rd., Calcutta 700028.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Mather & Greaves Ltd., Chinchwad, Pune 411019.

Mather & Platt Ltd., 8, Graham Rd., Ballard Estate, Bombay 400038.

Raylons Metal Works, Kondivita Lane, J. B. Nagar, Andheri East, Bombay 400059.

Universal Mechanical Works Pvt. Ltd., 112, Lower Parel, Bombay 400013.

Vacuum Plant and Instrument Manufg. Co. Pvt. Ltd., Mundhwa, Pune 411036.

Vitro Pharma Products Pvt. Ltd., 89, Ind. Estate, Kandivli, Bombay 400067.

Vulcan Laval Ltd., Mustafa Bldg., 7-A, Sir P. Mehta Rd., Bombay 400001.

FOODS — FISH & MEAT CANNING

Andhra Pradesh

Fish Products Ltd., Jagannaickpur, Kakinada 533002.

Universal Sea Foods Pvt. Ltd., Sulurpeta 524121.

Goa

Goa Exotic Canners & Freezers, Rue Jose Falcao, Panaji 403001.

Konkan Fisheries Pvt. Ltd., Marmugao 403803.

Karnataka

Coronet Canning Co., Raj Mandir, Malpe 576118. S. Kanara.

Madonna Frozen Foods, Mukka, Srinivasnagar 574157. South Kanara.

Kerala

Canning Ind. (Cochin) Ltd., Trichur 680005.

Choice Canning Co., P.O. Box 325, Cochin 682002.

Cochin Fish Canning Co., Near Aroor Bridge, Cochin 682006.

Darloo Canning Ltd., Moospet Rd., Trichur 680005.

Eastern Marine Products, Kuthirapanthy Ward, Alleppey 688001.

High Seas Fishing Enterprises, 28/825, Kochupalli Rd., Thoppumpady, Cochin 682005.

International Fisheries Ltd., Karuvelipady, Cochin 682005.

Island Club Canning Co., Wellingdon Island, Cochin 682003.

Kerala Fisheries Corpn., P. Box No. 1115, Ernakulam, Cochin 682011.

M. K. Fisheries, P. Box No. 1236, Cochin 682011.

Malabar Marines, 14/1455, Thoppumpady, Cochin 682005.

Sea Food Exporting Co., 634, Pilithottam, Quilon 691006.

Tata Oil Mills Co. Ltd. (Fisheries Div.), Karuvelipadi, Cochin 682005.

West Coast Sea Foods, 18/366, Kochangadi, Cochin 682002.

XL Sea Foods, 27/479-A, Thoppumpady, Cochin 682005.

Maharashtra

A. Kalvert & Co., 90, Mazagon Rd., Bombay 400010.

Castlerock Fisheries (Bombay), Dalamal Chambers, New Marine Lines, Bombay 400020.

Dr. Writers Chocolate and Canning Co., B. Shankar Rd., Bombay 400028.

James Smith & Co., 9-A, Jakaria Bunder Rd., Bombay 400015.

Pure Products & Madhu Canning Ltd., Sion Trombay Rd., Bombay 400084.

Tamil Nadu

Eastern Seafoods Exports Pvt. Ltd., Ennore Coastal High Rd., Madras 600019.

Thoughtful mothers have a Nourishing thought for a breakfast

Druk

JAMS

Apricot, Mixed fruit, Mango, Orange, Pineapple, Raspberry, Strawberry.

Orange Marmalade

Prepared from the finest fresh fruits, **Druk** Jams provide extra nourishment your family needs. Everybody will relish the taste and ask for more. Give them a healthy break at breakfast. Serve them **Druk** Jams.

Druk
PINEAPPLE JAM
Druk
ORANGE MARMALADE
Druk
MIXED FRUIT JAM
Druk
MIXED FRUIT JAM

BHUTAN FRUIT PRODUCTS LTD. SAMCHI–BHUTAN

Distributors : TRADE LINKS LIMITED, 'Prabhat Kiran', 17, Rajindra Place, New Delhi.

Indo Marine Agencies (Tamil Nadu), 45, M. Labhai St., Madras 600011.

Southern Seafoods Pvt. Ltd., 15, Montieth Rd., Madras 600008.

FOODS — FRUIT & VEGETABLE CANNING

Andhra Pradesh

Govt. Fruit Preservation Factory, Anantharajupeta 516105. Cudappah Dist.

Rai & Sons Pvt. Ltd., Juice Lane, Kukatpalli, Hyderabad 500037.

Salchar Food Products, 35, Panjagatta, Hyderabad 500034.

Sri Venketeshwara Fruit Canning Inds., Nuzvid 521201, Krishna Dist.

Delhi

Ambrosia Food & Canning Ind., 51-B, Rampur Marg Indl. Area, New Delhi 110035.

Depro Foods Ltd., A-61, Amar Colony, Lajpat Nagar, New Delhi 110024.

Edward Keventers Pvt. Ltd., S. Patel Rd., New Delhi 110011.

Essex Farms Pvt. Ltd., 4, Mehrauli Rd., New Delhi 110030.

Excelsior Food & Chemical Ind., 4, Paharganj Lane, New Delhi 110055.

Food Specialities Ltd., M-5A, Connaught Circus, New Delhi 110001.

Midland Fruit & Veg. Products India Ltd., Okhla Ind. Estate, New Delhi 110020.

Northland Inds., B-47, Rampura Marg, New Delhi 110035.

Rai & Sons (Pvt.) Ltd., 9-A, Connaught Place, New Delhi 110001.

Goa

Chowgule & Co. Hind Pvt. Ltd., Margao 403601, Goa.

Costa & Co. Pvt. Ltd., P. B. No. 16, Margao 403601.

Goa Exotic Canners & Freezers, Jose Falcao Rd., Panaji 403001.

Goa Food Products Ltd., Margao 403601, Goa.

Virginkar Food Inds. Pvt. Ltd., Rua Inacio Loyola, Margao 403601.

Gujarat

Jagdish Fruit Canning Co., Snail Rd., Ranavav 360550, Junagadh Dist.

Roreick & Co. Ltd., Roreick House, Modi South, Nadiad 387001.

Himachal Pradesh

Himachal Pradesh Fruit Canning Unit, Naubahar, Simla 171002.

Mohan Meakin Breweries Ltd., Solan 173212.

Solan Food Products Pvt. Ltd., Solan 173212.

Jammu and Kashmir

Kay Food Preservers & Canners, Moti Bazar, Srinagar 190001.

Tulip Products, Ind. Estate, Barzulla, Srinagar 190001.

Karnataka

Bolsts Indian Condiments Pvt. Ltd., 9, Ashley Park Rd., Bangalore 560001.

Can Can Food Products, 14/1, Srinivasa Colony, Bangalore 560027.

Canara Sea Food Packers, Govt. Ice Factory Bldg., Hoige Bazar, Mangalore 575001.

Food Concentrates (I), B-49, Ind. Estate, Rajajinagar, Bangalore 560010.

Hindustan Canning Co., Marnamikatta Rd., Mangalore 575001.

Kissan Products Ltd., Old Madras Rd., Bangalore 560016.

Kwality Food Products, Mysore Rd., Bangalore 560026.

Mysore Food Processing & Canning Co., Pvt. Ltd., 70, Charles Campbell Rd., Bangalore 560023.

Sowcar Canning Co., Udyavara, Udipi 576101, South Kanara Dist.

Vita Food Products, Mysore Rd., Bangalore 560026.

Kerala

Ashiana Greens & Foods Ltd., Cannanore 670001.

Kaycee Plantations & Canning Co., High Rd., Trichur 680001.

Midland Fruit & Vegetable Products (India) Ltd., Punalur 691305.

National Dairy & Canning Co., Ltd., Trivandrum 695001.

Parur Canning Ind. Pvt. Ltd., Parur 683513.

Maharashtra

A. Kalvert & Co., 90, Mazgaon Rd., Bombay 400010.

Anand Canning Ind. Pvt. Ltd., Regent Chambers, Nariman Point, Bombay 400021.

Asian Dehydrates Ltd., 40, Police Court Lane, Bombay 400001.

Bombay Foods Pvt. Ltd., Khatau Chawl, Haines Rd., Bombay 400011.

Chitale Agricultural Products Ltd., 635/63-64, Vijayanagar Colony, Pune 411002.

Corn Products Co. (I) Pvt. Ltd., Shreenivas House, Waudby Rd., Bombay 400001.

D. & P. Products Pvt. Ltd., Agra Rd., Bhandup, Bombay 400078.

Dr. Writer's Chocolate & Canning Co., B. Shankar Rd., Bombay 400028.

Fruit Farm Products, Byramji Mansion, Sir P. Mehta Rd., Bombay 400001.

Gits Food Products (I), 201, Hadapsar Ind. Estate, Pune 411013.

Herbertsons Ltd., Ewart House, Homi Mody St., Bombay 400023.

Jivan Foods Pvt. Ltd., Worli Sea Face, Bombay 400018.

M. M. Poonjiajee & Co., 42, First Marine St., Bombay 400002.

Poona Food Canning Pvt. Ltd., 685/2-C, Poona-Satara Rd., Pune 411019.

Pure Food Products, 41, Nav Nandanvan Ind. Estate, Agra Rd., Bombay 400080.

Pure Products & Madhu Canning Ltd., Sion-Trombay Rd., Bombay 400088.

Ratnakar Canning Ind., Shivajinagar, Pune 411005.

Sunshine Seafoods Co. Pvt. Ltd., Sangli Bank Bldg., Homji St., Bombay 400001.

Tim Tom Food Products, Shantinagar, Vakola, Bombay 400055.

Weikfield Products Co. (I), 116, Koregaon Park, Pune 411001.

Orissa

Orissa Fruit Products Ltd., Ind. Estate, Cuttack 753001.

Punjab

Food Specialities Ltd., Ludhiana-Ferozpur Rd., Moga 142001.

Jullundur Co-op. Canneries Ltd., Jullundur 144001.

Markfed Canneries, P.B. No. 122, Jullundur 144001.

Rajasthan

Khunteta Products, Bazaza Bazar, Alwar 301001. (Rajasthan).

Tamil Nadu

Delican Pvt. Ltd., 100, P. High Rd., Madras 600010.

Dollar Food Corpn., 42, Mount Rd., Guindy, Madras 600032.

Favourite Food Products, 27/3–28, R. Pillai St., Ramavarmapuram, Nagarcoil 629001.

Kodai Fruit Products Co., Indira Anandgiri, Kodaikanal 624102.

Madras Food Products Co. Pvt. Ltd., Ambattur, Madras 600053.

Sri Ganeshram & Co., 46, T. Chetty St., Madras 600001.

Venkatachalam Condiments, 1-2, Pophams, Broadway, Madras 600001.

Uttar Pradesh

A.B.C. Foods, Dr. Sarkar Compound, Delhi Gate, Agra 282002.

Allahabad Canning Co., Bamrauli, Allahabad 211001.

Canners (India) Ltd., A-7, Nirala Nagar, Lucknow 226007.

G. G. Ind., Belanganj, Agra 282001.

Healthways Food Products Co., 86, Factory Area, Kanpur 208001.

Kissan Products Ltd., Rural Indl. Estate, Bhojeepatra, Bareilly 243001.

Mohan Meakin Breweries Ltd., Mohan Nagar, Ghaziabad 201001.

Spencer & Co. Ltd., G.T. Rd., Kanpur 208001.

Tata Oil Mills Co. Ltd., Ghaziabad 201007.

U.P. Fruit Products Pvt. Ltd., Bara Bazar, Bareilly 243001.

U.P. State Agro-Indl. Corpn. Ltd., Processed Foods Div., 22, Vidhan Sabha Marg, Lucknow 226003.

West Bengal

Alpha Food & Chemical Pvt. Ltd., 142, B. Shah Rd., Calcutta 700053.

Amjadia Food Products Ltd., 7/2, Amratola Lane, Calcutta 700001.

Atlantis (East) Ltd., 41, Chowringhee Rd., Calcutta 700016.

Daw Sen & Co. Pvt. Ltd., 29, S. Sarkar Rd., Calcutta 700014.

Farm & Fruit Products Pvt. Ltd., 71/A, Chakraberia Rd., Calcutta 700020.

Frank Ross & Co. Ltd., Chowringhee, Calcutta 700013.

Imperial Fruit Preserving Co., 35/A, Muraripukur Rd., Calcutta 700004.

I.T.C. Ltd. (Foods Div.), 37, Chowringhee, Calcutta 700016.

Jedys Fruit Preserving Co., 144, Collin St., Calcutta 700016.

Kalyanpur Canning Corpn., C/3, Gillander House, N. Subhas Rd., Calcutta 700001.

Krishna Chandra Dutta Pvt. Ltd., 38, K. K. Tagore St., Calcutta 700070.

Lilly Barley Mills Pvt. Ltd., 19, Muraripukur Rd., Calcutta 700004.

Mays Fruit Ind., 36, Mott Lane, Calcutta 700013.

Mida & Co. Pvt. Ltd., 33, Canning St., Calcutta 700001.

Mitter Sircar & Co., 68, Serpentine Lane, Calcutta 700014.

Reckitt & Colman of India Ltd., B. Roy Rd., Behala, Calcutta 700008.

Sunpick Food Products, 196/C, Ch. Ave., Calcutta 700007.

Tims Products Ltd., Nimta Rd., Belgharia, Calcutta 700056.

Tulip Products Co., 37, Imdadali Lane, Calcutta 700016.

United Chemical Ind., M. N. Kumar Rd., Calcutta 700036.

United Fruit Preserving Co., 31, Mott Lane, Calcutta 700013.

FOODS — PROCESSED

Andhra Pradesh

RTE Processed Food Factory, Nacharam Indl. Area, Hyderabad 501507.

Assam

Fruto's & Co., G.S. Rd., Khanapara, Gauhati 781022.

Delhi

Pure Drinks (New Delhi) Pvt. Ltd., Connaught Lane, New Delhi 110001.

Gujarat

Saras Foods, P. Box No. 25, Nadiad 387001.

Vafa Products, 44, Bombay Shipping Centre, Vadodara 390005.

Himachal Pradesh

Solan Food Products Ltd., Solan Rajgarh Rd., Solan 173212.

IVP LIMITED

Manufacturers of :

Vanaspati, Margarine, Refined Oils, Industrial Hard Oils, Epoxy Plasticizers, Organic Chemicals, Foundry Chemicals, Spark Plugs, Industrial Ceramics and Rental Business.

Board of Directors :

G. Khandwala, Esq. (*Chairman*), M. D. Madhowji, Esq., R. J. Taraporevala, Esq., K. S. Hinge, Esq., N. A. Soonawala, Esq., D. M. Ghia, Esq., D. J. Madan, Esq., T. Ranganathan, Esq., W. A. Miller, Esq., A. B. K. Dubash, Esq.

President : R. K. Marphatia, Esq.

Vice-President—Finance, Accounts & Secretary: M. D. Kale, Esq.

Registered Office :
Forbes Building, Charanjit Rai Marg, Fort,
Bombay 400 001.

Factories :
(1) *Bombay :* **Arch Bungalow Road, Ghorupdeo, Bombay 400 033.**
(2) *Jamshedpur :* **P. O. Golmuri, Jamshedpur 831 003.**
(3) *Bangalore :* **77, Koramangala Industrial Layout, Bangalore 560 034.**
(4) *Aurangabad :* **A-7, M.I.D.C. Area, Chikalthana, Aurangabad 431 210.**

Telegraphic Address : " IVAPLEX ".
Bombay Factory Phones : 379611-2-3-4 & 371374.
Bombay Office Phones : 268081 (20 lines).

Karnataka

Bolsts Indian Condiments Pvt. Ltd., 9, Ashley Park Rd., Bangalore 560001.

Karnataka Agro Inds. Corpn. Ltd., P.O. Box No. 2478, Hebbal, Bangalore 560024.

Maharashtra

Allied Fruit Products, Unit 102, Allied Ind. Estate, M. C. Cross Rd., Mahim, Bombay 400016.

Cadbury Fry (I) Pvt. Ltd., Cadbury House, B. Desai Rd., Bombay 400026.

Dee Bright & Co., 56, Rukiyabai Mansion, St. Mary's Rd., Bombay 400010.

Dr. Writer's Chocolates & Canning Co., Bhavani Shankar Rd., Bombay 400028.

Duke & Sons Pvt. Ltd., 2-A, Khetwadi Main Rd., Bombay 400004.

Herbertsons Ltd., Ewart House, Homi Mody St., Bombay 400023.

Indian Vegetable Products Ltd., Forbes Bldg., C. Rai Marg, Bombay 400001.

K. T. Kubal & Co. Pvt. Ltd., 50, Nimbkar Marg, Bombay 400008.

Ketkar Brothers, D. Harganga Mahal, Khodadad Circle, Bombay 400014.

Merwanjee Poonjiajee & Sons Pvt. Ltd., Poonjiaji Bldg., Princess Dock, Frere Rd., Bombay 400009.

Pure Food Products, 43, Navandawan Ind. Estate, Mulund West, Bombay 400080.

Robert Walter & Co., 85, Motishah Rd., Bombay 400010.

Rogers & Co. Pvt. Ltd., 18, Clare Rd., Bombay 400008.

Shingole Processed Foods Pvt. Ltd., 636/6, Vijayanagar Colony, Pune 411030.

Taj Fruit Products Co., 14/16, M. Ali St., Bombay 400009.

Union Trdg. Co. (Bombay) Pvt. Ltd., 5, Graham Rd., Ballard Estate, Bombay 400038.

United Trdg. Corpn., 141-43, M. Phule Market, Bombay 400001.

V. P. Bedekar & Sons Pvt. Ltd., Mugbhat Lane, Bombay 400004.

FOODS — PROTEIN

Andhra Pradesh

Modern Proteins Ltd., Plots 1-12, Ind. Estate, Kurnool 518003.

Delhi

Hindustan Milkfood Manufrs. Ltd., Himalaya House, 23, K. Gandhi Marg, New Delhi 110001.

Modern Bakeries (I) Ltd., Vasant Vihar, C-8, Paschim Marg, New Delhi 110022.

Nestle's Products (I) Ltd., Link House, M-5A, Connaught Place, New Delhi 110001.

Gujarat

Kaira Dist. Co-op. Milk Producers' Union Ltd., Anand 388001.

Karnataka

Mysore Snacks Foods Ltd., 19, Platform Rd., Bangalore 560023.

Maharashtra

Britannia Inds. Ltd., Nirmal, Nariman Point, Bombay 400021.

Cadbury Fry (I) Ltd., Cadbury House, B. Desai Rd., Bombay 400026.

Corn Products Co. (I) Pvt. Ltd., Shreeniwas House, Waudby Rd., Bombay 400001.

Parle Products Mfg. Co. Pvt. Ltd., North Level Crossing, Vile Parle, Bombay 400057.

Punjab

Jagatjit Ind. Ltd., P.O. Jagatjit Nagar 144802. Kapurthala Dist.

Tamil Nadu

Raptakos Brdt. & Co. Pvt. Ltd., 27/39, Velacheri Rd., Madras 600020.

Spencer & Co. Ltd., 153, Mount Rd., Madras 600002.

West Bengal

Brooke Bond (I) Ltd., 9 Shakespeare Sarani, Calcutta 700016.

Lipton (I) Ltd., 9, Western St., Calcutta 700013.

Reckitt & Colman of India Ltd., 41, Chowringhee Rd., Calcutta 700016.

FOOTWEAR — LEATHER

Haryana

Liberty Footwear Co., Karnal 132001.

Maharashtra

Ameeta Arts International, Rawji Sojpal Bldg., S. K. Bole Rd., Bombay 400028.

Camy Leather Inds., 289, Ebrahim Rahimtoola Rd., Bombay 400009.

Carona Sahu Co. Ltd., 221, Dr. D. Naoroji Rd., Bombay 400001.

Dawood Co., Kerawala Mansion, Carnac Rd., Bombay 400002.

Goldwyn Leather Works, Sitaram Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Libra Footwears Pvt. Ltd., 2-F, Court Chambers, 35, New Marine Lines, Bombay 400020.

S. Parkash & Bros., R. No. 18, 1st Flr., 27, Jamboolwadi, Bombay 400002.

Sarvodaya Women's Indl. Co-op. Soc. Ltd., Amin Nursery, Arthur Rd., Bombay 400034.

Punjab

Bagarian Shoes Ltd., SCO Nos. 117-118, Sector 17-B, Chandigarh 160017.

Tamil Nadu

Chrome Leather Co. Pvt. Ltd., P.O. Chromepet 600044. Chingleput Dist.

New Great Shoe Co., 1-C, Naval Hospital Rd., Periamet, Madras 600003.

South East Footwear Pvt. Ltd., 5-C, Naval Hospital Rd., Madras 600003.

United India Shoe Corpn., 18/A, Vepery High Rd., Madras 600003.

Uttar Pradesh

Agra Footwear Co-op. Syndicate, Hing ki Mandi, Agra 282001.

Baluja Footwear Co., Tikonia Bazar, Agra 282003.

Caxton Footwear Co., Shoe Market, Agra 282003.

Premier Shoe Co., Sadar Bhatti, Agra 282001.

West Bengal

Bata Shoe Co. Pvt. Ltd., Batanagar 743313.

Bensen Ind., 96, Sri Aurobindo Rd., Salkia, Howrah 711106.

Glace Kid (India) Ltd., 22-1, Gorachand Rd., Calcutta 700001.

P. Bask & Co., 9, Chidam Mudi Lane, Calcutta 700006.

Trot Shoe Co. Pvt. Ltd., 19/4, A, Munshiganj Rd., Calcutta 700023.

FOOTWEAR — PLASTIC

Delhi

Avon Footwear Ind. Pvt. Ltd., 93-B, Mayapuri Phase I, New Delhi 110027.

Goel Plastics Pvt. Ltd., 2, Ind. Area, Kirti Nagar, New Delhi 110015.

Mohan Enterprises, 1, Ind. Area, Tilak Nagar, New Delhi 110018.

Saco Rubbers Pvt. Ltd., 10, West Ave. Rd., Punjabi Bagh, New Delhi 110026.

SVIK (India), Plot 45/3, Indl. Area Site IV, Sahibabad, New Delhi 110024.

Gujarat

Hindustan Polymers Corpn., C/39/B, Shri Sardar Co-op. Ind. Est., Ajwa Rd., Vadodara 390001.

Maharashtra

Bharat Swiss Footwear Co. Pvt. Ltd., Merchant Chambers, 41, New Marine Lines, Bombay 400020.

Carona Sahu Co. Ltd., 221, Dr. D. Naoroji Rd., Bombay 400001.

Chowdhary Enterprises, 203, A to Z Ind. Estate, Fergusson Rd., Lower Parel, Bombay 400013.

Mercantile Plastics Pvt. Ltd., 38, Nandanvan Ind. Estate, Agra Rd., Mulund, Bombay 400080.

Pilky Footwear Co., Pvt. Ltd., Churchgate Chambers, New Marine Lines, Bombay 400020.

Swastik Inds., Ram Baug, S. Vivekanand Rd., Malad, Bombay 400064.

Swastik Rubber Products Ind., Swastik House, Behind Khadki Rly. Stn., Pune 411003.

Uttar Pradesh

Foreign Exporters & Manufrs., A/3, Ind. Estate, Loni Rd., No. 2, Opp. Mohan Nagar, Ghaziabad 201001.

FOOTWEAR — RUBBER

Ahuja Rubber Works, 17/13, Guru G. S. Marg, N. Rohtak Rd., New Delhi 110005.

Associated Rubber Ind. Ltd., Bhavnagar 364001.

Bata Shoe Co. Pvt. Ltd., 30, Shakespeare Sarani, Calcutta 700017.

Bhattacharya Rubber Works Pvt. Ltd., Jessore Rd., Calcutta 700055.

British India Corpn. Ltd., Sutherland House, Kanpur 208001.

Carona Sahu Co. Ltd., 221, Dr. D. Naoroji Rd., Bombay 400001.

Dynamic Rubber & Plastic Pvt. Ltd., Whitefield Rd., Mahadevapura, Bangalore 560048.

Enkay India Rubber Co., 156-D, Kamala Nagar, Delhi 110007.

Godavari Rubber Inds. Ltd., P. Box 52, Rajahmundry 533101 (A.P.).

Grover Rubber Ind. Pvt. Ltd., Kottayam 686001 (Kerala).

Lotus Rubber Ind., Marve Rd., Malad, Bombay 400064.

Oriental Rubber Works Ltd., 171-A, M. Gandhi Rd., Calcutta 700007.

FORGINGS & STAMPINGS

Associated Manufacturer & Industries Corpn., 3A, Garstin Place, Calcutta 700001.

Bharat Forge Co. Ltd., Mundhwa, Pune 411036.

Bombay Forgings Pvt. Ltd., Vidyanagri Marg, Kalina, Bombay 400029.

Bombay Metal Forging Works, 5, Udyognagar, S. V. Rd., Goregaon West, Bombay 400062.

Damehra Steels & Forgings Pvt. Ltd., 95, Memonwada Rd., Bombay 400003.

Chaudhry & Sons (Forgings) Pvt. Ltd., Lal Kuen, G. T. Rd., Ghaziabad 201001. U.P.

Dynamatic Forgings Pvt. Ltd., A-1/3, Ajit Indl. Estate, Rajkot 360003.

Echjay Inds. Pvt. Ltd., Kanjur Marg, Bombay 400078.

EL Forge Ltd., 1, Ramachandra Rao Rd., Madras 600004.

Ellore Engg. Co. Ltd., Thiruneermala Rd., Chromepet, Madras 600044.

Forge & Forge Pvt. Ltd., Ahmedabad Rd., Rajkot 360003.

Forgings Products of India, L. B. S. Mrg., Vikhroli, Bombay 400083.

Golden Iron & Steel Works, 7/19, Kirtinagar Ind. Area, New Delhi 110015.

Hakimrai Jaichand Forgings Pvt. Ltd., LBS Mrg., Bhandup, Bombay 400078.

Hanuman Forging Inds., 134/1, M. Gandhi Rd., Calcutta 700007.

Hind Forgings Pvt. Ltd., 53, Netaji Subhas Rd., Calcutta 700001.

HS Engg. & Marketing Services, 607, Raheja Centre, 213, N. Point, Bombay 400021.

India Forgings Co., 4, Black Burn Le., Calcutta 700012.

Indian Metal Forgings, P. Box No. 7148, Wadala, Bombay 400031.

Kalyani Steels Ltd., Mundhwa, Pune 411036.

Madras Forgings & Allied Inds. (Coimbatore) Ltd., Mettupalayam Rd., Karamadai 641104. Coimbatore Dist., T. Nadu.

Mechano Forgings, 273/75, Gorapdeo Rd., Mazagaon, Bombay 400010.

Metal Forgings Pvt. Ltd., B-1, Mayapuri Indl. Area, New Delhi 110064.

Monji Shamji & Sons, Tokershi Jivraj Rd., Bombay 400015.

N. Ratilal & Co., Darukhana, Oza Market, Mazagaon, Bombay 400010.

National Fasteners Pvt. Ltd., Developed Plot S-19, Indl. Estate, Guindy, Madras 600032.

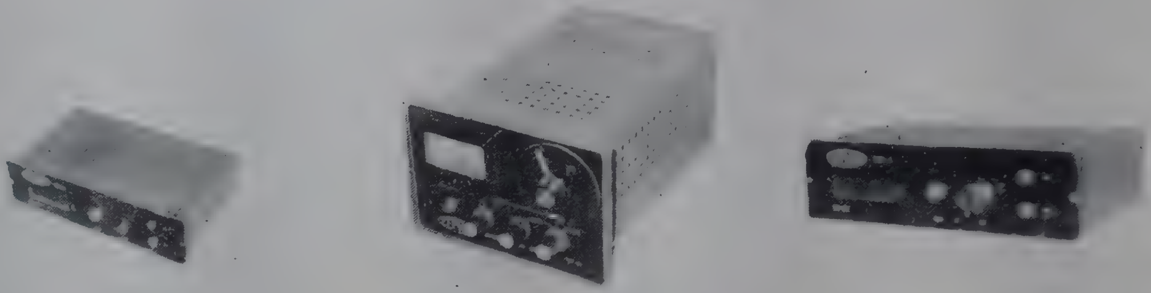
Nayar Forgings Pvt. Ltd., 57-A, Main Rd., Whitefield, Bangalore 560060.

Padmyth Forge, B-7, HMT Indl. Estate, Kalamassery 683003. Kerala State.

Punjab United Forge Ltd., 324, Sector 9-D, Chandigarh 160009.

ZEPHYR ELECTRONICS

Presenting A New Series of Digital Thermometers & Controllers For The First Time



*** OUTSTANDING PERFORMANCE** *** CLASSIC SIMPLICITY**

ZEPHYR ELECTRONICS OFFER YOU EVERYTHING NEEDED FOR PRECISE THERMOMETRY AND CONTROL, WHEREVER YOU NEED IT.

INTRODUCES FOR THE FIRST TIME IN INDIA

SERIES OF COMPENSATED RADIATION PYROMETRIC DETECTORS FOR HIGH TEMPERATURE NON CONTACT THERMOMETRY/CONTROL APPLICATIONS.

The ranges offered are upto 2000° C. as standard & upto 6000° C. as special cases.

ZEPHYR ELECTRONICS TAKES OVER, WHERE OTHERS STOP !!

ZEPHYR IS BIG IN SENSORS TOO

Also introduces for the first time in India

LEKTROGAUGE series of FOIL THICKNESS DEVIATION GAUGES for NON-FERROUS METAL ROLLING MILLS.

Zephyr Electronics

PIONEERS IN TEMPERATURE INDICATION / CONTROL

WORKS :
4/299, Old Belapur Road,
Ganapati Pada, Vitawa,
Near Indal Colony, Thane 4.

CORRESPONDENCE :
D-59, 4th Floor,
Hemraj Wadi, Thakurdwar,
BOMBAY – 400 002.

We are dedicated to cater your requirements relating to

MARBLE

Processing Machinery

Our Prestigeous Products :—

DIAMOND GANG SAW MACHINES
MARBLE SAW MACHINES
EDGE CUTTING MACHINES
TABLE POLISHING MACHINES
CRANES (Hand/Electrically operated)

Manufacturers :—

ARUNODAYA FOUNDRIES

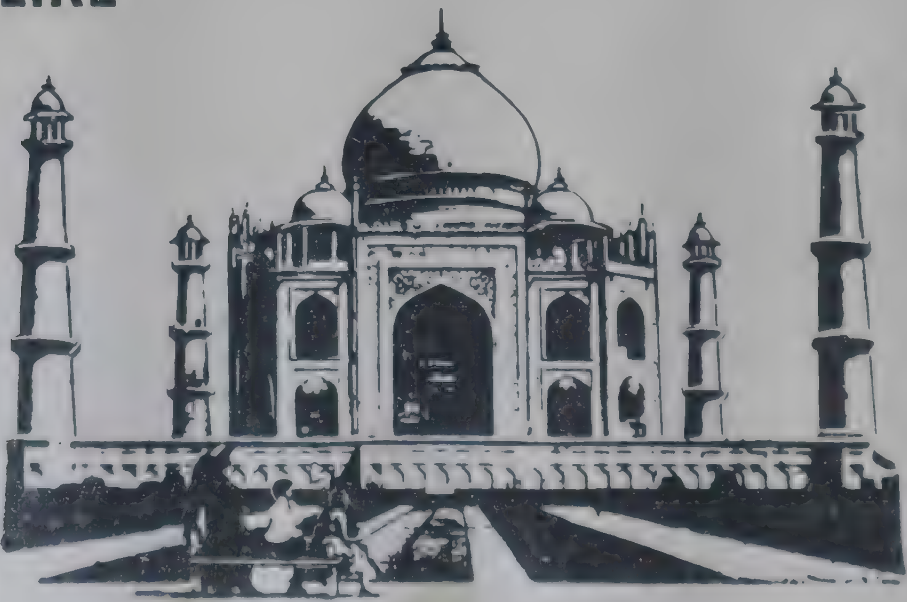
Works : E/248, Vishvakarma Ind. Area, JAIPUR. (302013)
Office : Near Khetan Bhawan, M. I. Road, JAIPUR. (302001)
PHONES : FACTORY-842749 OFFICE-62111-62155

BHOOMICA

WE
OFFER
MARBLE
Processing Machinery

DIAMOND GANG SAW MACHINES
MARBLE SAW MACHINES
EDGE CUTTING MACHINES
TABLE POLISHING MACHINES
CRANES (JIB TYPE)

TO CONSTRUCT
MANY MORE MONUMENTS
LIKE



BHOOMICA

ARUNODAYA FOUNDRIES PRIVATE LIMITED
Works : E/222 Road No. 10, Vishwakarma Industrial Area, Jaipur-302 013
Office : Guttan House Near Khaitan Bhawan M I Road, Jaipur-302 001
PHONES
OFF: 62111-62155

Ramnath Metal Forgings, S-29, Ind. Estate, Guindy, Madras 600032.

Renault Forging & Metal Inds., 180, Reay St., Darukhana, Bombay 400010.

Shardlow India Ltd., Huzur Gardens, Sembiam, Madras 600011.

Techno-Forge Co. Pvt. Ltd., 98, Surat St., Bombay 400009.

Telac Plants & Equipments Pvt. Ltd., Mount Poonamallee Rd., Ramapuram, Madras 600089.

Trinity Forge Pvt. Ltd., 108/H, Bharati Niwas Colony, Erandwana, Pune 411004.

Viscorts Forge Ltd., Plot No. 67, MIDC Estate, Satpur, Nasik 422007.

FORK LIFT TRUCKS

(See under Material Handling Equipment).

FOUNDRY EQUIPMENT & MATERIALS

Bharat Techno Mechanical Industries Pvt. Ltd., Maneklal Rd., Navsari 396445, Valsad Dist.

Eltron India, B-18, 13 St., No. 9, MIDC, Bombay 400093.

Fateh Industries & Stores, 5, New Marine Lines, Bombay 400020.

FMC Engg. Works Pvt. Ltd., Sonal Ind. Estate, Off Saki Vihar Rd., Bombay 400072.

Foundry Accessories, 7. Hem Prakash, 90/92. Kazi Syed St., Bombay 400003.

Gargi Industries, 2, Mercantile Apartments, Opp. Basant Studio, Chembur, Bombay 400074.

Inductocast Steel Foundries, 14, K. M., Old Madras Rd., Bangalore 560049.

FOUNDERS AND ENGINEERS:

Manufacturers of sectional Warping machines, Cone creels, Textile machinery parts, other machinery parts, Foot-valves, Sluice valves, all types of gears, Rotary Oil Mill spares, Structural works and all types of heavy & light casting.

Also other small & big jobs undertaken for customers.

Send your enquiries to :

THE BHARAT TECHNO MECHANICAL INDUSTRIES (PRIVATE) LIMITED

Maneklal Road, Navsari, District Bulsar,
Western Railway (Gujarat State), (India).

Telephones : *Office : 376 ; Residence : 427.*

Navin Corpn., 258, Peri Nariman St., 1st Floor, Fort, Bombay 400001.

New Standard Engg. Co. Ltd., Mewar, 40-A, Pedder Rd., Bombay 400026.

Pullman Engg. Co., Rattan Inds. Compd., L.B.S. Mrg., Bhandup, Bombay 400078.

Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.

Wesman Engg. Co. Ltd., Satnam Sagar, Peddar Rd., Bombay 400026.

FRANKING MACHINES

Armcess Engg. Pvt. Ltd., A-8 & 9, Ind. Est., Guindy, Madras 600032.

FUEL INJECTION EQUIPMENT

Aeicorp Pvt. Ltd., 10, Lall Bazar St., Calcutta 700001.

D'Engg. Pvt. Ltd., Gopal Bagh, Avanashi Rd., Coimbatore 641018.

Eagle Engg. Co., 35, Chittaranjan Ave., Calcutta 700012.

Fuel Injections Ltd., Chitalsara-Manpada, Thane 400601.

Ghadge Inds., 460, Ghorpade Peth, Pune 411002.

Machinery Agencies, 3, Mangoe Lane, Calcutta 700001.

Motor Industries Co., Ltd., Hosur Rd., Adugodi, Bangalore 560030.

FURNACES

Delhi

Advance Furnaces & Control, B-50, Mayapuri Phase I, New Delhi 110064.

Simplicity Engrs. Pvt. Ltd., 7, Basant Lok, Vasant Vihar, New Delhi 110057.

Gujarat

Electronic Controls System, Furnace Divn., Nirmal, 3rd flr., Opp. Dinbai Tower, Lal Darwaja, Ahmedabad 380001.

Hindustan Brown Boveri, Ltd., Furnace Dn., P. Box 124, Vadodara 390001.

Indequip Engg. Ltd., Naroda Rd., Ahmedabad 380002.

Pioneer Electric Furnace Mfrs., Post Box No. 1, Vithal Udyognagar 388121. (Gujarat).

Pioneer Marketing Services, 432, Padra Rd., Vadodara 390005.

Haryana

Acme Process Heat Furnaces Pvt. Ltd., 14/5, Mathura Rd., Faridabad 121003. (Haryana).

Karnataka

Brindavan Alloys Ltd., Peenya Indl. Area, IV Phase, Tumkur Rd., Bangalore 560058.

Precon Group of Companies, 2990-J, 12th Main Rd., HAL Second Stage, Indira Nagar, Bangalore 560038.

Southern Ind. Furnaces Pvt. Ltd., 613-4, Ohamaraja Rd., Mysore 570004.

Kerala

Elheat Furnaces Pvt. Ltd., Major Ind. Estate, Kalamassery 683004.

Kerala Electl. & Allied Engg. Co. Ltd., P.O. Mamala, Cochin 682305.

Powerkiln, Sanskrit College Rd., Tripunithura 682301.

Maharashtra

Allied Consulting Engg. Pvt. Ltd., Pokar Mansion, 3rd Floor, Near Chembur Stn., Bombay 400071.

Simplicity—AICHELIN

A Division of

SIMPLICITY ENGINEERS PVT. LTD.

7, Basant Lok, Vasant Vihar, New Delhi 110 057.
Phones : 673858, 670702. Telex : 031-4772.

Manufacturers of :

Electric, Oil Fired & Gas Fired Furnaces — Continuous Shaker Hearth Furnaces, Continuous Conveyorised/Cast Link Hardening and Tempering Furnaces, Continuous Pusher type Gas Carburising Furnaces, Continuous Roller Hearth Furnaces, Continuous Strip Hardening & Tempering Furnaces, Continuous Pusher type Furnaces, Continuous Rotary Scroll Furnaces, Continuous Pusher Plate Kilns, Patenting Furnaces, Billet Reheating Furnaces, Walking Beam Furnaces, Rotary Hearth Furnaces, Tunnel Kilns, Bell type Furnaces, Elevator Furnaces, Bogie/Car Bottom Furnaces, Shuttle Kilns, Vacuum Furnaces, Sealed Quench Furnaces, Vertical Sealed Retort/Open Bottom Retort type Gas Carburising/Gas Nitriding Furnaces, Custom built Rotary Retort Furnaces, Special Purpose Continuous/Batch type Furnaces, Sintering Furnaces, Continuous/Batch type Washing Machines, Gas Generators.

Under technical collaboration with
M/s. Aichelin Industriofenbau G m b H, Austria/ West Germany.

Andheri Metal Refinery & Foundry, Chandi Karkhana, Mogra, Andheri (E), Bombay 400069.

Bofco Furnaces Pvt. Ltd., 1-3, Nandu Ind. Estate, Mahakali Caves Rd., Bombay 400093.

Bombay Furnace Co., 1-3, Nandu Ind. Estate, Mahakali Caves Rd., Chakala, Andheri (East), Bombay 400069.

Bombay Furnaces Pvt. Ltd., Stadium House, Nariman Rd., Bombay 400020.

Ceramic Engg. Enterprises, 166, Vidyanagari Mrg., Kalina, Bombay 400098.

Demak Engg. Co., 101/102, Laxmi Indl. Estate, Off Veera Desai Rd., Andheri West, Bombay 400058.

Eltron (India) Pvt. Ltd., B-18, Giriraj Ind. Estate, Mahakali Caves Rd., Bombay 400093.

Exother Furnace Co., 23, Mohini Mansion, Colaba, Bombay 400005.

Furnace & Foundry Equipment Co., Chandivli Farm, Bombay 400072

Furnace Corpn., 45A, Kondivita Rd., Bombay 400059.

Gansons Pvt. Ltd., 207, Kakad Chambers, Dr. A. Besant Rd., Bombay 400018.

Heatreate Pvt. Ltd., 4-B, Menon Ind. Estate, S. Vivekanand Rd., Bombay 400062.

Heatrite Electricals, 59, Sindhi Socy., Chembur, Bombay 400071.

Hightemp Furnaces Pvt. Ltd., 7/226, Ram Nivas, Sion, Bombay 400022.

Hindustan Brown Boveri Ltd., Brown Boveri House, Dr. A. Besant Rd., Bombay 400018.

Ind. Engg. Works, 48, Tandel St., Bombay 400009.

Indian Furnace Co. Ltd., N.S.E. Estate, Goregaon (East), Bombay 400063.

Kalra Furnaces Complex, 6, Chandu Studio Compd., Opp. Old Kalina St., Vidyanagari, Bombay 400098.

Kanti Thermo Equipment, 16, Jain Chambers, S. V. Rd., Bandra, Bombay 400050.

Khandelwal Udyog Ltd., Kurla-Kirol Rd., Ghatkopar (W), Bombay 400086.

Killick Nixon Ltd., Furnace Dn., Indl. Estate, Baji Pasalkar Mrg., Chandivali, Bombay 400072.

Krishak-Kal Enterprises, 214, Bajsons Indl. Estate, 40, Chakala Rd., Andheri East, Bombay 400093.

La Mina Pvt. Ltd., 15, Aghadi Ind. Estate, Marol, Bombay 400059.

La Vulcan Engrs., 66-B, Collectors Colony, Mahul Rd., Chembur, Bombay 400074.

New Standard Engg. Co. Ltd., N. S. E. Estate, Goregaon, Bombay 400063.

Omega Enterprises, 506, Mohatta Mkt., Palton Rd., Bombay 400001.

R. K. Furnaces, 1-C, Colony, Borivli West, Bombay 400092.

Sahyadri Udyog, Preet Chambers, 36, Poona-Bombay Rd., Pune 411003.

Sohal Engg. Works, E. Moses Rd., Bombay 400013.

Steel Plant Pvt. Ltd., 250-C, Dr. A. Besant Rd., Bombay 400018.

Therelek Furnaces Pvt. Ltd., A/131, Wagle Ind. Estate, Thane 400604.

Thermotreat, Estate No. 3, Anupam Ind. Estate, L. B. S. Mrg., Mulund (W), Bombay 400080.

Toshniwal Bros. Pvt. Ltd., 198, J. Tata Rd., Bombay 400020.

Vidyut Agni Furnaces Pvt. Ltd., 93-B, Ashiana, St. John Baptist Rd., Bandra West, Bombay 400050.
Vidyut Engg. & Technologies Pvt. Ltd., A-12, Nand Jyot Ind. Estate, Andheri Kurla-Rd., Bombay 400072.
Vulcan Engineers Pvt. Ltd., Unique Indl. Est., Prabhadevi, Bombay 400025.
Westerwork Engineers Pvt. Ltd., Vulcan Insurance Bldg., V. Nariman Rd., Bombay 400020.
Zephyr Electronics, D-59, 4th Flr., Hemraj Wadi, Thakurdwar, Bombay 400002.

Tamil Nadu

Binny's Engg. Works Ltd., Meenambakam, Madras 600061.
Electro-Mech. Instruments, 49, T. H. Rd., Madras 600019.
Precision Controls, SIET Bldgs., 94-B, Mount Rd., Madras 600018.
Precon Group of Companies, 8A, 1 Avenue, Adyar Club Gate Rd., Madras 600028.
Southern Furnace Co., 2/130, Mount Rd., Madras 600006.
Southern Furnaces Pvt. Ltd., 642, Mount Rd., Madras 600002.
Thermal Equipments, 2, Lattice Bridge Rd., Adyar, Madras 600020.

Uttar Pradesh

E.M.A. India Induction Heating Co. Pvt. Ltd., 4, Indl. Area, Govindnagar, Kanpur 208006.

West Bengal

Associated Electrical Ind. (India) Pvt. Ltd., 6, Mission Row, Calcutta 700001.
Bengal Enamel Works Ltd., 24, C. R. Ave., Calcutta 700012.
Bengal-Linn (Industrial Furnace) Ltd., 27-B, Camac St., Calcutta 700016.
Cieco Pvt. Ltd., 2/1, B.T. Rd., Calcutta 700050.
Electric Furnace & Transformer Manufg. Pvt. Ltd., J-14, Howrah Ind. Estate, Howrah 711101.
G.W.R. & Co., 89-A, Ballygunge Place, Calcutta 700019.
General Electric Co. of India Ltd., Furnace Dn., Magnet House, 6, Chittaranjan Ave., Calcutta 700013.
Hindustan Gas & Ind. Ltd., 22, New Tangra Rd., Calcutta 700046.
Indian Furnace Co. Ltd., 27-B, Camac St., Calcutta 700016.
Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.
Kusum Engg. Co. Ltd., 25, Swallow Lane, Calcutta 700001.
Middleton Engg. Co., 12E, Park St., Queen's Mansions, Calcutta 700016.
Speeds & Feeds, 7, Lake Rd., Calcutta 700029.
Surendra Engg. Works Pvt. Ltd., 1/A, Vansittart Row, Calcutta 700001.
Wellman Incandescent India Ltd., 8, Harrington St., Calcutta 700016.
Wesman Engineering Co. Pvt. Ltd., 1-2, Allenby Rd., Calcutta 700020.

GARDENING EQUIPMENT

Marchandy Prasad Radha Krishan Prasad Pvt. Ltd., 46, D. Ghosh Lane, Howrah 711101.
Victory Iron Works Pvt. Ltd., P-26, North Banares Rd., Howrah 711101.

GARMENTS — READY-MADE

Andhra Pradesh

S. G. Dresses, R. B. Bldg., Feelkhana, Hyderabad 500001.

Delhi

Apparels (I.) Pvt. Ltd., P.B. 1668, Delhi 110006.
Brightway Neckwear Co., Prahlad Market, Karolbagh, New Delhi 110005.
Elegant Garments, 53/5, D. Gupta Rd., Near Prahlad Market, New Delhi 110005.
Exportos India, Paras Cinema Bldg., Nehru Place, New Delhi 110024.
S. C. Sharma & Co. Pvt. Ltd., 7-D, Connaught Place, New Delhi 110001.
Wings Wear Pvt. Ltd., 1/4, West Patel Nagar, New Delhi 110008.

Gujarat

Lotus Ind., Udyog Nagar, Rd. No. 3, Udhna 394210.
Mafatlal Apparel Manufg. Co., Kamlagram Rd., Nadiad 387001, Kaira Dist.

Karnataka

Bangalore Clothing Factory, 53, Nagarthpet, Bangalore 560002.
Bangalore Dress Manufg. Co. Pvt. Ltd., 12, Lalbagh Rd., Bangalore 560027.
Binny Ltd., Garment Factory, Hebbal, Bangalore 560006.
Lalitha Dress Manufg. Co., S. Jubilee Park Rd., Bangalore 560002.
Prakash Dress Manufg. Co., Kempegowda Rd., 3rd Cross, Bangalore 560009.
Swastik Dress Manufg. Co., Seshadripuram, Bangalore 560020.
Wearwell (India) Corpn., 2-B, M. Gandhi Rd., Bangalore 560001.

Maharashtra

Amalgamated Apparels, 28/29, Ideal Estate, Mathuradas Mills Compound, Delisle Rd., Bombay 400013.
Amersey Exports Pvt. Ltd., Mathuradas Mills Compound, N. M. Joshi Marg, Bombay 400013.
Associated Apparel Pvt. Ltd., Rajmahal, 84, V. Nariman Rd., Bombay 400001.
Continental Apparel Manufg. Co., Mohatta Bhavan, Haines Rd., Worli, Bombay 400018.
Fit-Well Garments, 307, Brindaban Bhavan, Dadyseth Agiary Lane, Bombay 400002.
Fortune Apparels Pvt. Ltd., 107, Adhyaru Ind. Estate, Sun Mill Comp., Lower Parel, Bombay 400013.
Garments (Export) Manufg. Co., 22C, Ghatkopar Ind. Estate, L. B. Shastri Marg, Ghatkopar, Bombay 400086.
Giriraj Textile Ind. Pvt. Ltd., 107, Churchgate Chambers, New Marine Lines Rd., Bombay 400020.
Hakoba Pvt. Ltd., 95, V. Patel Rd., C.P. Tank, Bombay 400004.
Handloom (India) & Garments Ind. Pvt. Ltd., 59, V. B. Gandhi Mrg., Bombay 400023.
International Clothing Industries, Shirt House, 87, Ind. Estate, Kandivli (West), Bombay 400067.
Kamal Brassiers Manufg. Co., 215, Falkland Rd., Bombay 400004.
Laffans (I.) Exports Pvt. Ltd., 21/23, V. Nariman Rd., Bombay 400001.
Mafatlal Apparel Manufg. Co., Mafatlal Centre, Nariman Pt., Bombay 400021.
Milton's Pvt. Ltd., Mathuradas Mills Comp., N. M. Joshi Marg, Lower Parel, Bombay 400013.
Newlook Brassier Co., 204-J, Shanker Shet Rd., Bombay 400004.

Paville Fashions Pvt. Ltd., Paville House, Veer Savarkar Marg, Bombay 400025.

Popular Dress Manufg. Co., Ashok Nivas, Ranade Rd., Bombay 400028.

R. R. Apparel Manufg. Co., 314, Hind Rajasthan Ind. Estate, Naigaum Cross Road, Wadala, Bombay 400031.

Rallis India Ltd., Ralli House, 21, Raveline St., Bombay 400001.

Swastik Manufg. Co., 453, Duncan Rd., Bombay 400004.

Tee-Nees Garments Manufg. Co., 208, Shiv Darshan Shopping Centre, M. Gandhi Rd., Santa Cruz East, Bombay 400054.

Usha Garments Manufg. Co., 306, Jolly Bhuvan, 10, New Marine Lines, Bombay 400020.

Victor Apparel Pvt. Ltd., 142-C, N. M. Joshi Marg, Parel, Bombay 400013.

Wearwell Garments, Room No. 408, 4th Fl., Hind Rajasthan Bldg., D. S. Phalke Rd., Bombay 400014.

Western Garments Manufg. Co., 308/312, Hind Rajasthan Ind. Estate, Naigaum Cross Rd., Bombay 400031.

Wings Wear Pvt. Ltd., 7-A, Ramachandra Bldg., 280, Carnac Rd., Opp. G. T. Hospital, Bombay 400002.

Tamil Nadu

Chellaram Garments Pvt. Ltd., 181/182, Mount Rd., Madras 600002.

Coromandel Garments Ltd., Ind. Estate, Plot No. 21, Ambattur, Madras 600058.

Madras Clothing Co., No. 21, Bobegan Sahib St., Mount Rd., Madras 600002.

Zoro Garments Pvt. Ltd., 1/43, Broadway, Madras 600001.

Uttar Pradesh

Acme Wears Pvt. Ltd., C-94/1, Ind. Area, Bulandshahr Rd., Ghaziabad 201001.

West Bengal

Bagrees Pvt. Ltd., 201-B, M. Gandhi Rd., Calcutta 700007.

Kamlalaya Exports Pvt. Ltd., 14, Ballygunge Station Rd., Calcutta 700019.

Poddar Dress Manufg. Co., 154, J. Bajaj St., Calcutta 700007.

GAS CYLINDERS

Acetylene & Industrial Gas Cylinders Ltd., 4, Saradambal St., Gokulam Colony, Madras 600017.

Bharat Eng. Works (India), 10, Marine Chambers, 43, New Marine Lines, Bombay 400020.

Everest Kanto Cylinders Pvt. Ltd., 10, Marine Chambers, 43, New Marine Lines, Bombay 400020.

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

GAS FITTINGS & WELDING RODS

Durga Gas Appliances, 11, Second St., Nehru Nagar, Adyar, Madras 600020.

Escee Kitchenaid, Shreenivas House, 98, Dattaram Lad Marg, Kalachowki, Bombay 400033.

Maheshwari Indl. Corpn., Sarafa, Meerut City 250001.

Natural Gas Co. Pvt. Ltd., Mehta Chambers, 13, Mathew Rd., Bombay 400004.

GAS LAMPS, LIGHTERS, MANTLES, LANTERNS

Fargo Mantle Works Pvt. Ltd., Ramchandra Lane, Malad West, Bombay 400064.

Optimohur Ind. Pvt. Ltd., Manu Mansion, 16, S. B. Singh Rd., Bombay 400023.

Utilitronix Pvt. Ltd., B-4, Electronics Complex, Kushaiguda, Hyderabad 500762.

(See 'Lantern & Stoves' in this list).

GAS PLANTS

Burn & Co. Ltd., Howrah Iron Works, Howrah 711101.

Indigenous Engg. Co. Pvt. Ltd., 89-B, Shakespeare Sarani, Calcutta 700017.

Industrial Cryogenic & Chemical Plants, 15, G.C. Ave., Calcutta 700013.

Mansfield Oil Gas Ltd., 16, R. Chowdhury Rd., Calcutta 700015.

Mechanical Machinery Makers Pvt. Ltd., 67, Ekdalia Rd., Calcutta 700019.

Octagon Inds., Govt. Indl. Estate, Corlim, Ilhas, Goa, 403110.

Otto India Pvt. Ltd., 10, Middleton Row, Calcutta 700071.

SF India Ltd., 46C, Chowringhee Rd., Calcutta 700016.

GASES

Ammonia Supply Co., 22B, Apollo St., Bombay 400023.

Andhra Pradesh Indl. Gases Ltd., Flat 26, 5-9-250, Abid Rd., Hyderabad 500001.

Asiatic Oxygen Ltd., 8, B. B. D. Bag East, Calcutta 700001.

Bombay Gas Co. Ltd., Empire House, 214, Dr. D. Naoroji Rd., Bombay 400001.

Bombay Oxygen Corpn. Ltd., 5, Convent St., Bombay 400039.

Cryogenics India Ltd., 7A, Indl. Area, Site 4, Sahibabad, New Delhi 110024.

G. S. Industrial Gases Pvt. Ltd., 8-2-628, Rd. No. 13, Banjara Hills, Hyderabad 500034.

Hindustan Gas & Ind. Ltd., 10, Camac St., Calcutta 700017.

Hindustan Oxygen & Acetylene Co., G.T. Rd., Giani Border, New Delhi 110032.

Hindustan Oxygen Gas Co. Ltd., Narayan Bhuvan, Waghela Marg, Khanpur, Ahmedabad 380001.

Indian Oxygen Ltd., Oxygen House, P-34, Taratalla Rd., Calcutta 700053.

Industrial Oxygen Co. Pvt. Ltd., 68B, Jolly Maker Chambers II, Nariman Pt., Bombay 400021.

Industrial Oxygen Co. Pvt. Ltd., A/6 & A/41, Connaught Place, New Delhi 110001.

Karnataka Oxygen Ltd., Whitefield Rd., Bangalore 560048.

Kolhapur Oxygen & Acetylene Pvt. Ltd., 2095, 'E' Ward, Near Tembalai Hill, Kolhapur 416005.

Meena Air Products Ltd., 129, Jolly Maker Chambers No. II, Nariman Point, Bombay 400021.

Northern India Gas Co. Ltd., Flat No. 6, 2nd Flr., Naveen Mkt., Kanpur 208001.

Powergas India Ltd., 254-D, Dr. A. Besant Rd., Worli, Bombay 400025.

Rathi Gases Ltd., 3-A, Vandhana, 11, Tolstoy Marg, New Delhi 110001.

Sirdar Carbonic Gas Co. Ltd., Connaught Rd., Bombay 400033.

Southern Gas Ltd., Govind Poy House, Margao (Goa) 403601.

Sri Ramakrishna Oxygen Ltd., Karamadai, Coimbatore 641104.

GASKETS

Allied Hydro Pneumatic Equipment, 2A, Banaji St., Bombay 400001.

Ambika Traders, 43, Nagdevi X Lane, Bombay 400003.

Asbestos Gaskets & Jointings Co., "JK" Chambers, 77/83, Nagdevi St., Bombay 400003.

Automat Inds., 62, Adarsh Estate, Rakhial, Ahmedabad 380021.

Bharat Auto & Oil Inds., 10, Proctor Rd., Bombay 400007.

Coronet Manufg. Co., 111A, Moreland Rd., Bombay 400008.

Cypher Engg. Co., 19AB, Nandanvan Ind. Est., Thane 400601.

Dikson & Co., 8, Bharat House, Apollo St., Bombay 400023.

East India Gasket Co., 107-D, Lenin Sarani, Calcutta 700013.

Fluorocarbon Processing Industries, 218, New Indl. Estate, Udhna 394210 (Surat Dist.).

Gaskets & Radiators Pvt. Ltd., Tamarind House, Tamarind St., Bombay 400023.

Hardcastle & Waud Mfg. Co. Ltd., 87, V. Nariman Rd., Bombay 400020.

IGP Engineers Pvt. Ltd., 134, Angappa Naicken St., Madras 600001.

Indl. & General Products, 134, Angappa Naicken St., Madras 600001.

Intech Engrs. Pvt. Ltd., 16, Hindustan Park, Calcutta 700029.

Machino Components, 231, Dr. D. N. Rd., Bombay 400001.

Modern Gasket Mfrs., 13, Tandel St., Dongri, Bombay 400009.

Manufacturers of :
GASKETS
of all types & description
in
NEOPRENE, RUBBER
ASBESTOS
COPPER
C.A.F. JOINTING SHEETS
SPIRAL WOUND GASKETS
Manufactured
as per Customers' specifications.
ASBESTOS GASKETS & JOINTINGS CO.
"JK" Chambers, 77/83, Nagdevi Street,
Bombay 400 003.
Telephones : 321954 & 324312

FLEXIBLE HOSES
PRESSURE: High, Medium & Low
TEMPERATURE: Upto 300°C.
MATERIAL : Teflon, Copper, S.S. Synthetic Rubber, G. I.
BRAIDING: Asbestos, Copper, S.S. HTS. G. I.
"GASKETS"
any type & specifications
• High temp. & pressure gaskets & sealing
• For Chemical, Power Plants, Engines, Ships, Railways, Trucks. etc.
• From C. A. F., Cork, Asbestos, Vulcanised fiber felt, Hylam Packings, Acid resistant Jointings etc.
SHAH ENGINEERS (INDIA)
(Gasket Division)
Regd. off. : P. B. 13021, 43, Nagdevi X Lane
Bombay-400 003
Factory B-23, Giriraj Ind. Estate Mahakali Caves Rd.,
Andheri (E) Bombay-400 093
TEL: 333634 342694 GRAM: TUBEFLEX

Payen Talbros Ltd., 16, Shivaji Marg, New Delhi 110015.

Royal Gasket Co., 5/1, Clive Row, Calcutta 700001.

Southern Equipment Corpn., 22, Purushothama Mudaliar Rd., Madras 600034.

Super Gasket Inds., Dada Manzil, 67-69, Mohamedali Rd., Bombay 400003.

Talbros Automotive Components Ltd., 13-D, Sagar Apartments, 6, Tilak Mrg., New Delhi 110001.

Victor Gaskets (I) Ltd., Agra Rd., Mulund (W), Bombay 400080.

GASKETS — BOILER

Industrial Minerals and Mill Stores, Mercantile Bldgs., Lall Bazar, Calcutta 700001.

GEARS, GEAR BOXES, GEAR PUMPS & GEARED MOTORS, ETC.

Delhi

Bajrang Engg. Works, B-51, Ind. Area, G. T. Karnal Rd., Delhi 110033.

Cutler-Hammer India Ltd., 801, Akash Deep, Connaught Lane, New Delhi 110001.

D. D. Gears Pvt. Ltd., 28, Motiakhan, Jhandewalan Rd., New Delhi 110055.

Flender Macneill Gears Ltd., E Block, Connaught House, Conn. Place, New Delhi 110001.

Gear Reduktor Pvt. Ltd., 253, Okhla Ind. Estate, New Delhi 110020.

Gopal Engg. Works, 76A, Rani Jhansi Rd., New Delhi 110055.

Krishna Engg. Works, 8712-13, Aram Ganj, Roshanara Rd., Delhi 110007

Modern Gears (Regd.), 76, G. B. Rd., Delhi 110006.

Prem Engg. Works, 22, Okhla Indl. Estate, New Delhi 110020.

Summit Engg. Corpn., A-131/5, Wazirpur Indl. Area, Phase I, New Delhi 110064.

Gujarat

Climax Ind., Gondal Rd., Rajkot 360002.

Elecon Engg. Co. Ltd., Vallabh Vidyanagar 388120.

Gyrox Gears P. Ltd., 254, New Cloth Mkt., Ahmedabad 380002.

Indequip Ltd., Reid Rd., Ahmedabad 380002.

Power Build Pvt. Ltd., Vallabh Vidyanagar 388120.

Techdrive Engg., G/33, Harsiddha Chambers, Ashram Rd., Ahmedabad 380014.

Tikelon India, 2, Hashiddha Chambers, Ashram Rd., Ahmedabad 380014.

Haryana

New Allenberry Works, 14/7, Mathura Rd., Faridabad 121001.

Karnataka

Craft Tools Pvt. Ltd., B1/2, Ind. Estate, Harihar 577601.

Madhya Pradesh

Gajra Gears, Dewas 455001.

S. & H. Gears Pvt. Ltd., Stn. Rd., Dewas 455001.

Maharashtra

Afco Ltd., A to Z Ind. Estate, Bombay 400013.

Associated Engg. Works, A/7A, Ghatkopar Ind. Estate, L.B.S. Mrg., Bombay 400086.

Auto Mughals Pvt. Ltd., Jolly Maker Chamber No. 1, Nariman Pt., Bombay 400021.

Bharat Gears Ltd., Express Towers, Nariman Point, Bombay 400021.

Bright Power Drives Corpn., 121, M. Gandhi Rd., Bombay 400023.

Britex Ind., 11, Noble Chambers, Ghogha St., Bombay 400001.

C. K. P. Engg. Works, 111, Ardeshir Dady St., Bombay 400004.

Communications & Power Equipment Co. Ltd., Ind. Estate, Lalbagh, Bombay 400012.

Concord Steel Works Ltd., 507, Kakad Chambers, 32, Dr. A. B. Rd., Bombay 400018.

David Brown Greaves Ltd., Chinchwad, Pune 411019.

Dee-Kay Gears, Lake Rd., Bhandup, Bombay 400078.

Emvee Engg. Works, 384, V. Savarkar Marg, Bombay 400025.

Franco-India, A-308, Rd. No. 21, Wagle Estate, Thane 400604.

Gajra Bevel Gears Ltd., Elve Chambers, Green St., Bombay 400023.

Gala Gears, 238, Nandanvan Ind. Est., Shastri Marg, Thane 400604.

Gears Mfrs., P. O. Gholvad 401702. Thane Dist. (W. Rly.).

Ghatge Patil Ind. Pvt. Ltd., Uchagaon, Kolhapur 416002.

Greaves Cotton & Co. Ltd., David Brown Dn., 1, Dr. V. B. Gandhi Mrg., Bombay 400023.

Indian Standard Metal Co. Ltd., Rahimtoola House, Homji St., Bombay 400001.

Kala Silk Engg. Pvt. Ltd., Veena Dalwai Indl. Estate, Vivekanand Rd., Jogeshwari, Bombay 400060.

Kirloskar Pneumatic Co. Ltd., Hadaspar Ind. Estate, Pune 411013.

Marshall Engg. Works, Marol M.I.D.C., Plot No. 94, St. No. 16, Mahakali Rd., Andheri East, Bombay 400093.

Meccano Machinery Mfg. Co., 19, Arun Chambers, Tardeo Rd., Bombay 400034.

Menon & Menon Pvt. Ltd., Vikramnagar, Kolhapur 416005.

Modern Gear Mfrs., 26, Nanik Nivas, Benham Hall Lane, Bombay 400004.

Moulds & Dies Pvt. Ltd., Sunderbaug Estate, Agra Rd., Bombay 400070.

Nu-Teck Engg. Corpn., Bhosari Indl. Estate, Pune 411026.

Perfection Gear Mfg. Co., A-46, Royal Optical Indl. Estate, Naigaum X Rd., Bombay 400031.

Popular Industries, A-40, Wagle Indl. Estate, Thane 400604.

Precision Gears Pvt. Ltd., Tiecicon House, Haines Rd., Bombay 400011.

Premier Engg. Corpn., 265, Shahid Bhagatsingh Rd., Bombay 400023.

Prime Engg. Works, A-13, Road 22, Wagle Ind. Estate, Thane 400604.

Ramon & Demm Ltd., S. Vivekanand Rd., Thane 400607.

Remi Group, 14, Shah Ind. Estate, V. Desai Rd., Andheri West, Bombay 400058.

Standard Materials Agencies, 45/46, Podar Chambers, S. A. Brelvi Rd., Bombay 400023.

Supreme Ind. Works, 196-K, Gaiwadi, Girgaum Rd., Bombay 400004.

Teknoworks (India), L. B. Shastri Marg, Bhandup, Bombay 400078.

Vijay Engg. Corpn., Chandra Nivas, Andheri Police Line, Bombay 400069.

Walchandnagar Ind. Ltd., Walchandnagar 413114.

Manufacturers of

WORM REDUCTION GEAR UNITS AND GEAR MOTORS

Horizontal & Vertical Type in various ratios & sizes

We Specialize in

All Types of Gears

SPUR-HELICAL (Internal & External)
WORM, WORM - WHEEL - CHAIN
SPROCKETS ETC. on

Gear Hobbing Machine & Gear Shaper

SUPREME INDUSTRIAL WORKS

Office : 196-K, Gaiwadi, Girgaum,
Bombay 400 004.

Factory : Laghu Udyog, Unit No. A6 & A7, I. B.
Patel Road, Goregaon (East),
Bombay 400 063.

Phones : *Office* : 355189 ; *Factory* : 696270.

PIONEERS OF INDUSTRIAL GEARS

KRISHNA

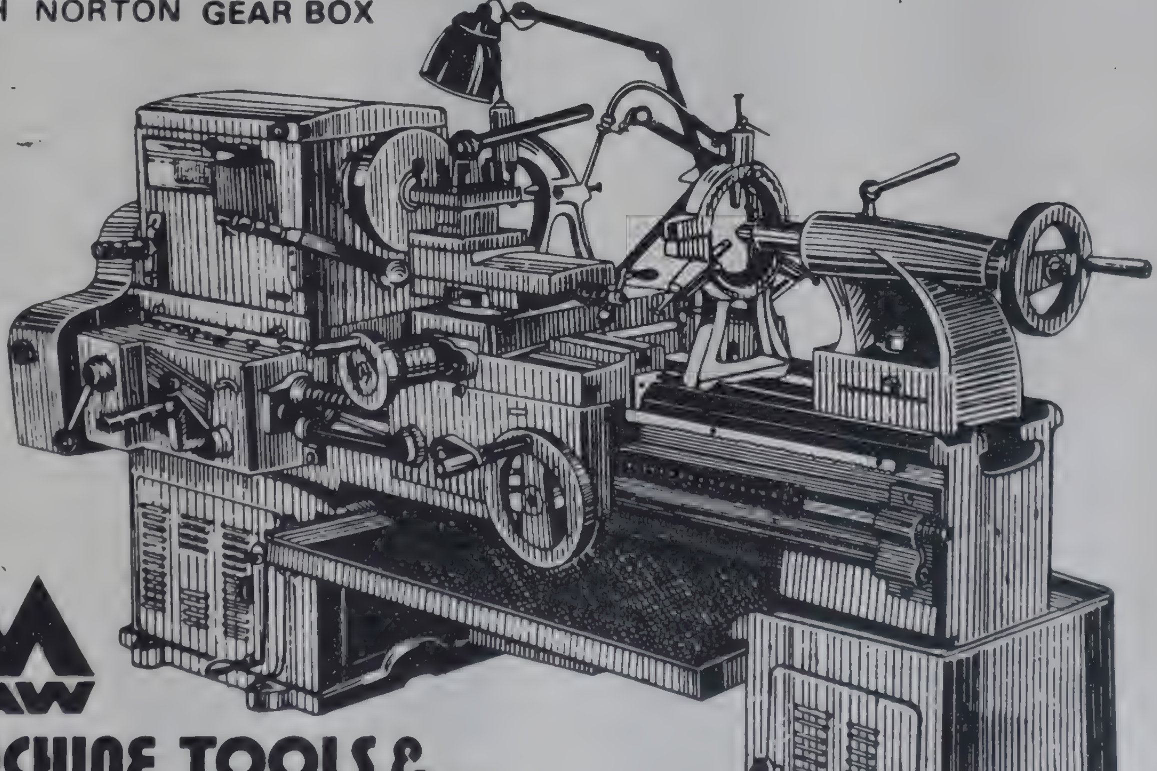
now introduce their new innovation...

KRISHNA

PRECISION LATHES

Krishna Lathes have resulted from our research, expertise & precision over the years.

FITTED WITH SLIDING SURFACING AND SCREW CUTTING VEE BED GAP LATHE WITH NORTON GEAR BOX



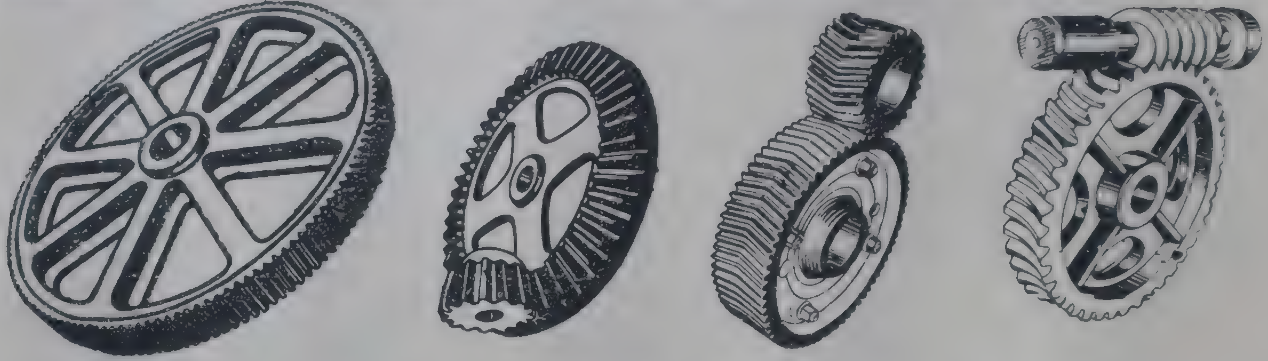
TAW

MACHINE TOOLS & AUTOMOBILE WORKS

(Subsidiary of Krishna Engg. Works)
H.O.: 8712-13, Aram Ganj, Roshanara Road,
Delhi-110007 Telephone : 256680 & 255048
Telex : 031-4230 KRISHNA Phone Res : 742080
2nd Factory : A-107, Wazirpur Industrial Area, Delhi-110052
Phone : 712810

Jupiter

PLANT & MACHINERY PARTS



WE MANUFACTURE HEAVY GEARS, PINIONS, WORMS, WHEELS, SHAFTS, BUSHES IMPELLERS, BOILER SPARE PARTS ETC. ETC. AS PER DRAWING OR SAMPLE IN FERROUS & NON-FERROUS METALS, SPECIALIST IN BIG PRECISION JOBS.

NAV BHARAT INDUSTRIES

62 B, NETAJI SUBHAS ROAD, CALCUTTA-1 INDIA

PHONE: 34-4788, 33-3956, 54-1042

Punjab

Majestic Gears Ltd., C-48/51, Focal Point, Ludhiana 141010.

Sethi Industries, Tanda Rd., Jullundur 140004.

Tamil Nadu

Earnest Engg. Ind., 2/124, P. N. Palayam, Coimbatore 641018

Gears India (Madras) Pvt. Ltd., B-1, Ind. Estate, Guindy, Madras 600032

West Bengal

Arthur Bagree & Co. (India) 40, Strand Rd., Calcutta 700001

Bose Ind. Pvt. Ltd., 32, S. C. Chatterjee St., Belurmath 711202

Calient Engg. Works, 26A, Camac St., Calcutta 700016.

Deepak Ind. Ltd., 16, Hare St., Calcutta 700001

Elecon Engg. Co. Ltd., 24, R. N. Mukherjee Rd., Calcutta 700001

Flender Macneill Gears Ltd., 2, Fairlie Place, Calcutta 700001

Indian Switchgear Corpn., Post Box 9022, Calcutta 700016.

Nav Bharat Inds., 52B, N. Subhas Rd., Calcutta 700001

New Allenberry Works, 62, Hazra Rd., Calcutta 700019

Universal Gears & Mfg. Co., 16, N. Subhas Rd., Calcutta 700001

GENERATORS

Delhi

Bharat Heavy Electricals Ltd., Hindustan Times House, 18-20, K. Gandhi Marg, New Delhi 110001.

General Commercial Corpn. (Delhi), 3575, N.S. Marg, Darya Ganj, New Delhi 110002.

Kinetics Technology India Ltd., Meghdoot, 5th Floor, Nehru Place, New Delhi 110024.

Trading Engineers (International) Pvt. Ltd., C-42, Wazirpur Ind. Area, Delhi 110052.

Vijaypower Generators Pvt. Ltd., 83, Shraddhanand Mrg., Delhi 110006

Gujarat

Jyoti Ltd., Ind. Area, Vadodara 390003

Karnataka

Kirloskar Electric Co. Ltd., Ind. Suburb, Rajaji Nagar, Bangalore 560010.

Madhya Pradesh

Heavy Electricals India Ltd., P.O. Piplani, Bhopal 462021.

Maharashtra

Asea Ltd., Asea House, Goa St., Bombay 400001.

Elmot Engg. Co. Pvt. Ltd., 2, Udyognagar, S. V. Rd., Goregaon West, Bombay 400062

Emco Electric (Pvt.) Ltd., 94, Medows St., Bombay 400023

Khandelwal Udyog Ltd., Kurla–Kirol Rd., Ghatkopar (W), Bombay 400086.

National Electrical Ind. Ltd., Ind. Estate, Lalbaugh, Bombay 400012

Sonata Indl. Electronics, 7-C, Favourite Indl. Estate Masrani Lane, Kurla, Bombay 400070

Punjab

Beegee Corpn., 25, Factory Area, Patiala 147002

Lal-King Generators (India), 854, Pratapnagar Ludhiana 141003

Tamil Nadu

Power Centre Pvt. Ltd., 150-B, Mount Rd., Madras 600002.

Southern Powersystem Pvt. Ltd., 5, Smith Rd., Madras 600002.

Uttar Pradesh

Rajasthan Engine & Pump Inds., 6/321, Belanganj, Agra 282004.

West Bengal

Beni Ltd., 1, Crooked Lane, Calcutta 700001.

Eastern Electronics & Electricals Inds., Presidency Court, Flat No. 8, 55, Gariahat Rd., Calcutta 700019.

Electrons & Lesser Pvt. Ltd., 18, G. C. Avenue, Calcutta 700013.

Incon Electronics, 17/28, J. L. Nehru Rd., Calcutta 700013.

Indian National Diesel Engine Co. Ltd., 6, Little Russell St., Calcutta 700071.

J. Stone & Co. (I) Pvt. Ltd., 16, New Taratolla Rd., Calcutta 700027.

Kundan Electronics (India) Pvt. Ltd., 24A, Shakespeare Sarani, Calcutta 700017.

Motor & Machinery Manufrs. Ltd., 10, Jawpur Rd., Calcutta 700030.

Rajkissen Radhakissen Mitter & Co., 22, Chittaranjan Avenue, Calcutta 700072.

Triple Star Electronics, 11/1, B. T. Rd., Calcutta 700056.

GLASS, GLASS APPARATUS, AMPOULES & VIALS

Andhra Pradesh

Associated Glass Industries Ltd., Varadanagar, Kukatpally, Hyderabad 500018.

Mahalakshmi Glass Works Pvt. Ltd., Sanatnagar, Hyderabad 500018.

Bihar

Seraikella Glass Works Pvt. Ltd., Kandra 832402, Singhbhum Dist.

Delhi

Amar Glass Works, 473, Rampura Marg, New Delhi 110035.

Atul Glass Inds. Pvt. Ltd., 3/9, D. B. Gupta Rd., New Delhi 110055.

Bawa Glass Co., Fatehpuri, Delhi 110006.

Hindustan Safety Glass Works Pvt. Ltd., 6511, Fatehpuri, Delhi 110006.

National Glass Factory, Indl. Area, Shivaji Marg, New Delhi 110015.

Sylvania & Laxman Ltd., 68/2, Najafgarh Rd., New Delhi 110015.

Gujarat

Alembic Glass Industries Ltd., Alembic Rd., Vadodara 390003.

Durga Glass Works, Durga Estate, N. H. No. 8, Chhani, Vadodara 390002.

Sarabhai Glass, P. B. 144, Subhanpura, Vadodara 390001.

Shree Vallabh Glass Works Ltd., Anand-Sojitra Rd., Vallabh Vidyanagar 388120.

Haryana

Hindustan National Glass & Industries Ltd., Bahadurgarh 124507.

Hindustan Vacuum Glass Ltd., Faridabad 121001.

Karnataka

Alembic Glass Industries Ltd., Whitefield 562136, Bangalore Dist.

Bengal Electric Lamp Works Ltd., Old Madras Rd., (13th Mile), Bangalore 560049.

Mysore Crystal Glass Industries, Tannery Rd., Nagavara, Bangalore 560006.

Mysore Glass & Enamel Works Ltd., Science Institute, Bangalore 560012.

Kerala

Travancore Ogale Glass Manufg. Co. Ltd., Kalamassery, Alwaye 683104.

Maharashtra

Ajay Glassware Pvt. Ltd., Mehra Estate, LBS Marg, Vikhroli, Bombay 400079.

Ajit Glass Works Pvt. Ltd., S. Vivekananda Rd., Jogeshwari, Bombay 400060.

All India Glass Works Pvt. Ltd., 111, Bhandari St., Bombay 400003.

Ambika Glass Works, Opp. Electric Sub-Station, Kolshet Rd., Thane 400601.

Asha Glass Works, New Anant Bhuvan, 257/265, N. Natha St., Bombay 400009.

Bharat Glass Works, Chembur, Bombay 400071.

Bombay Glass Works Pvt. Ltd., Manmala Tank Rd., Mahim, Bombay 400016.

Borosil Glass Works Ltd., 44, Maulana Abdul Gaffar Rd., Bombay 400018.

Crystal Glass Works Pvt. Ltd., Ghodbunder Rd., Bombay 400060.

Eagle Vacuum Bottle Manufg. Co. Pvt. Ltd., 144/46, S. Devji St., Bombay 400003.

Empire Dyeing & Manufg. Co. Ltd., Vitrum Glass Division, Bombay-Agra Rd., Vikhroli, Bombay 400083.

Fibreglass Pilkington Ltd., 9, Wallace St., Bombay 400001.

Furnace Corpn., Empire Estate, Kondivita Rd., Off Andheri-Kurla Rd., Bombay 400059.

Glass Containers Pvt. Ltd., Saki Vihar Rd., Saki Naka, Bombay 400072.

Haldyn Glass Works Pvt. Ltd., Off Western Express Highway, Goregaon East, Bombay 400063.

Hargovind Dharamsi & Co., 344, New Nagpada Rd., Bombay 400008.

Jg Glass Industries Pvt. Ltd., Bombay-Agra Rd., Pimpri, Pune 411018.

Kangan Pvt. Ltd., Kanchwadi, Govandi, Bombay 400071.

Kapoor Industries, Old Pokhran Rd., Thane 400601.

Kishore Industries, 174, Dr. D. N. Rd., Bombay 400001.

Mahalakshmi Glass Works Pvt. Ltd., Dr. E. Moses Rd., Jacob Circle, Bombay 400011.

Ogale Glass Works Ltd., Ogalewadi 415001, Satara Dist.

Ogale Glass Works Ltd., Pimpri, Pune 411018.

Paisa Fund Glass Works, Telegaon-Dabhade 410506, Pune Dist.

Paramount Trdg. Syndicate Pvt. Ltd., 183, Bazargate St., Bombay 400001.

Patanwala Glass Works Pvt. Ltd., L.B. Shastri Marg, Ghatkopar (West), Bombay 400077.

R. D. Ashar Engg. Division, 10, Homi Mody St., Bombay 400023.

Ranjan Enterprises Pvt. Ltd., 6A, Sukhniwas, 3rd Pasta Lane, Colaba, Bombay 400005.

Safeglass Corpn. Pvt. Ltd., 10-12, Gowalia Chawl Lane, Near Prakash Cotton Mills, Worli, Bombay 400018.

Silica Ware Pvt. Ltd., 54C, Chotani Estate, Proctor Rd., Bombay 400007

Star Glass Works, 299, Kurla-Andheri Rd., Bombay 400072.

T. D. Glass Inds., Seksaria Compd., Chincholi, Malad West, Bombay 400064.

Talwalker Bros. Pvt. Ltd., W.R. 74, Sherif House, S. Bhagatsingh Rd., Bombay 400023.

Topaz Glass Pvt. Ltd., Eagle Estate, Talegaon 410506. Pune Dist.

Vazir Glass Works Ltd., J. B. Nagar, M. Vasanji Rd., Bombay 400059.

Western India Glass Works Ltd., Dr. E. Moses Rd., Jacob Circle, Bombay 400011.

Tamil Nadu

Attur Glass Industries Pvt. Ltd., Attur 636102. Salem Dist.

Central Glass Factory, 403, Mint St., Madras 600001.

Nathany Inds., 80, Govindappa Naicken St., Madras 600001.

Piloo Mirror Industries, C-14, Ind. Estate, Guindy, Madras 600032.

South India Glass & Enamel Works Ltd., 172, Cherry Rd., Salem 636007.

Vir Glass Works, 183, Madhavaram High Rd., Madhavaram, Madras 600060.

Uttar Pradesh

Allahabad Glass Works Pvt. Ltd., Naini 211008. Allahabad Dist.

Ashok Glass Works, Sarojini Marg, Firozabad 283203.

C.B. Glass Works, Etmadpur, Agra 282001.

Hind Lamps Ltd., Shikohabad 205135.

Khandelwal Glass Works, Sasni 204216. Aligarh Dist.

Mohan Crystal Glass Works, Mohan Nagar, Ghaziabad 201007.

Paliwal Glass Works, Shikohabad 205135.

U. P. Glass Works Ltd., Bahjoi 202410, Moradabad Dist.

West Bengal

Annapurna Glass Works Pvt. Ltd., Raja S. C. Mallick St., Calcutta 700032.

Ashoke Glass Works, 9, Ezra St., Calcutta 700001.

Bengal Electric Lamp Works Ltd., 4, Fairlie Place, Calcutta 700001.

Central Glass Inds. Pvt. Ltd., 7, Swallow Lane, Calcutta 700001.

Electric Lamp Manufrs. (India) Pvt. Ltd., 1, Taratolla Rd., Garden Reach, Calcutta 700024.

Hindustan National Glass & Industries Ltd., 2, Wellesley Place, Calcutta 700001.

Hindusthan Safety Glass Works Ltd., 2, St. Georges Gate Rd., Calcutta 700022.

Krishna Silicate & Glass Works Ltd., R. S. Mullick Rd., Calcutta 700032.

New Indian Glass Works (Cal.) Ltd., 2, Church Rd., Calcutta 700028.

Scientific India Glass Co. Ltd., 11, Pollock St., Calcutta 700001.

Shiva Glass Works Co. Ltd., 27, Brabourne Rd., Calcutta 700001.

GLASS BOTTLES

Ajit Glass Works Pvt. Ltd., S. Vivekananda Rd., Bombay 400060.

Associated Glass Ind. Ltd., Varadanagar, Sanatnagar, Hyderabad 500018.

Grams : "MYCRYSTAL"
Telex : 845-760

Mysore Crystal Glass Industries

TANNERY ROAD, NAGAVARA,
BANGALORE 560 045

◎

Manufacturers of :
Quality Glass Bottles in White & Amber Colours and "CRYSTAL" Brand Tumblers

Phones :
50770
54550
579470

Leaders in glazing of building in the country

DIADEM MIRROR

SHEET & PLATE GLASS • FIGURED & WIRED GLASS
TOUGHENED & LAMINATED SAFETY GLASS
LIGHT & SIGHT GLASS • GLASS CUTTERS
DECORATIVE LAMINATES AND SLIC-SHINE TISSUES

M. A. KACHWALLA & SONS

Manufacturers : **DIADEM COPPERED-BACK MIRRORS**
97-99, Dhanji St., Bombay 400 003
Gram: DIADEM. Phones: 324395, 326247
Telex : 011-5827 (GLAS-IN).

Also available at: **MAKS**
287, "Safalya", S. K. Bole Road, Dadar, Bombay 400 028.
Phone: 4229033.

ON LIST OF GOVT. & SEMI-GOVT. DEPARTMENTS AND RAILWAYS

India's leading exporters of all kinds of glass

Bombay Glass Works Pvt. Ltd., Manmala Tank Rd., Mahim, Bombay 400016.

Delhi Bottling Co. Pvt. Ltd., 60, Shivaji Marg, Najafgath Ind. Area, New Delhi 110015.

Excel Glasses Ltd., Post Box 181, Alleppey 688001 (Kerala).

Haldyn Glass Works Pvt. Ltd., Off Western Express Highway, Goregaon East, Bombay 400063.

Janta Glass Works, Kanji Khatau Bldg., M. G. Rd., Ghatkopar East, Bombay 400077.

Mahalakshmi Glass Works Pvt. Ltd., Sanatnagar, Hyderabad 500018.

Maharashtra Safety Glass Works Pvt. Ltd., 7-94, Bhosari, M.I.D.C., Pune 411026.

Mysore Crystal Glass Industries, Tannery Rd., Bangalore 560045.

National Glass Bottle Co., 4, 'Ararat', 89, Medows St., Bombay 400023.

R. G. Glass Inds., 244, M. Azad Rd., Opp. Urdu Times, Bombay 400008.

Shree Gobinddeo Glass Works Ltd., 9, Ezra St., Calcutta 700001.

Standard Bottles Supply Co., 88, Ragipet, Bangalore 560002.

United Glass Works Pvt. Ltd., 111, Bhandari St., Bombay 400003.

GLASS — COLOURED, WIRED AND FIGURED

Billor Colour Glass Pvt. Ltd., 19, Kala Udyog Premises Co-op. Socy. Ltd., Bhandup, Bombay 400078.

Hindustan Pilkington Glass Works Ltd., Hindustan Bldg., 4, Chittaranjan Ave., Calcutta 700001.

Shree Vallabh Glass Works Pvt. Ltd., Sylvester Bldg., 20, S. Bhagat Singh Rd., Bombay 400001.

Window Glass Ltd., 15, Brabourne Rd., Calcutta 700001.

GLASS — CURVED, SAFETY GLASS & MIRRORS

Atul Glass Ind., 3/9, D. B. Gupta Rd., New Delhi 110055.

Deccan Safety Glass Works Pvt. Ltd., Athipet, Madras 600053.

Globe Mirror Industries, B-11, Indl. Estate, Guindy, Madras 600032.

Hindustan Safety Glass Works Pvt. Ltd., 2, St. George's Gate Rd., Hastings, Calcutta 700022.

Krishna Glass Works, 26, Venkatachala Mudali Lane, Madras 600003.

M. A. Kachwalla & Sons, 97-99, Dhanji St., Bombay 400003.

Maharashtra Safety Glass Works Pvt. Ltd., T-94, Bhosari, M.I.D.C., Pune 411026.

Mulla Musaji Mulla Adamji Arsiwalla, 138, Abdul Rehman St., Bombay 400003.

Pilco Glass Inds., A-143, Indl. Estate, Peenya, Bangalore 562140.

Shree Vallabh Glass Works Pvt. Ltd., 20, S. Bhagatsingh Rd., Sylvester Bldg., Bombay 400001.

Sunlight Glass Works, 142, Barkatali Virani Mrg., Near J. J. Hospital Naka, Bombay 400008.

Tass Mirror Inds., 138, Abdul Rehman St., Bombay 400003.

GLYOXAL

Rajasthan Glyoxal Ltd., 199, F Rd., Mewar Indl. Area, Udaipur 313001.

GLASSES & MIRRORS

ALL KINDS
AVAILABLE FOR
EXPORT

Sunlight Glass Works

Regd. Office : 142, Barkatali Virani Marg,
Near J. J. Hospital Naka,
Bombay 400 008, INDIA.
Phone : 869455.

Manufacturers of :

Sunlight® Brand Glass Mirror Sheets in various thicknesses; Bathroom, Wall, Framed (wooden & metal) & Dressing Mirrors, Decorative & Texture Mirrors etc.

Dealers in :

Glass : Sheet, Figured (plain & coloured), Wired & Safety Glasses etc.

GOBAR GAS PLANT

Bharat Laboratory & Biological House for Agriculture, Pandurang Smiti, Dhule 424001.

Khadi & Village Ind. Commission, Irla, Bombay 400058.

GRAMOPHONE RECORDS

Gramophone Co. of India Ltd., 33, Jessore Rd., Dum Dum, Calcutta 700028.

Hindustan Musical Products Ltd., 6/1, A. Dutt Lane, Calcutta 700012.

Polydor of India Ltd., Ashok Nagar Rd., Kandivli East, Bombay 400067.

GRAPHITE PRODUCTS

Aroon Mills, H-3, Cama Indl. Estate, Walbhat Rd., Goregaon (E), Bombay 400063.

Carbon Corpn. Ltd., Bakhtawar, 2nd Flr., Nariman Point, Bombay 400021.

Graphite India Ltd., 31, J. L. Nehru Rd., Calcutta 700016.

Hindustan Electro-Graphites Ltd., 10, Comm. Centre, East of Kailash, New Delhi 110065.

Modchem Inds., Mustafa Bldg., Sir P. M. Rd., Bombay 400001.

Navbharat Carbon Co., 43, Popatwadi, Bombay 400002.

Rockfield Inds. Corpn., 5, Bawali Mondal Rd., Calcutta 700026.

GREETING CARDS

Lucky Trading Corporation, 272, Abdul Rehman Street, Bombay 400003

Vakil's Card Dept., Vakil's House, Sprott Rd., 18, Ballard Estate, Bombay 400038.

GUM

Anand Gum Inds., 31, Kapadia Chambers, 51, Broach St., Bombay 400009.

Ashish Gums (India), Post Box 9421, Bombay 400093.

Balaji Chemical Works, A.P.I.E., 5th Rd., Balanagar, Hyderabad 500037.

Bhagawati Chemical Industries, Amar House, Kadia Kui, Relief Rd., Ahmedabad 380001.

Calica Chemical Inds., Sardarnagar, P.O. Sindhi Colony, Hansol, Ahmedabad 380012.

General Mills, C/1, 283, GIDC Indl. Estate, Naroda, Ahmedabad 382330.

I.P. Chemicals, 13, P.A. Indl. Estate, Behind Sukhramnagar, Ahmedabad 380021.

Indian Gum Inds. Ltd., Shroff Bhavan, 157, P. D'Mello Rd., Bombay 400038.

Indo-Gum Products, Khandsa Rd., Gurgaon (Haryana) 122001.

Kiron & Co., 73/75, Shamset St., Bombay 400002.

Shree Sonal Gum Inds., 9, G.I.D.C., Vatva 382445. Ahmedabad Dist.

Standard Gum & Inds. Ltd., Bajaj Bhavan, Nariman Point, Bombay 400021.

Vivekanand Mills, Off Saki-Vihar Rd., Bombay 400072.

GUNNY BAG CLEANER

Modern Nutrition Co. (Machinery Divn.), B-3 Unit, Chandulal Baradari Ind. Estate, Hyderabad 500002.

HANDLOOMS & HANDICRAFTS

Delhi

Datta Cottage Ind. of India, F-23, D. B. Gupta Market, Karol Bagh, New Delhi 110005.

Eastern Linkers Pvt. Ltd., Odeon Bldg., Connaught Place, New Delhi 110001.

N. K. Overseas Traders, M830A, Greater Kailash I, New Delhi 110048.

Paramount Traders, 4/47, W.E. Area, Karol Bagh, New Delhi 110005.

Pratibha Exports, 7/6, Daryaganj, Ansari Rd., New Delhi 110002.

R. D. Ramnath Co., Jama Masjid, Delhi 110006.

S. Nath Kakar & Son, 41, Hanuman Rd., New Delhi 110001.

S. Ram Singh & Sons, 119, New Qutab Rd. Market, Delhi 110006.

Maharashtra

Bharat Inds. Corpn., 31, Fort St., Bombay 400001.

C. Ramon & Co., Pvt. Ltd., Ramon House, 169, Backbay Recl., Bombay 400020.

E. Peerbhoy & Sons, 64, Mohamedali Rd., Shahru Castle, Bombay 400003.

Narang (Overseas) Co. Pvt. Ltd., 93, B. Desai Rd., Bombay 400026.

Tamil Nadu

Lotus Ind. Ltd., "Burma House", 16, Coral Merchant St., Madras 600001.

West Bengal

East India Trdg. Co., 2, Church Lane, Calcutta 700001.

HEAT EXCHANGERS

Air Coils Mfg. Co. Pvt. Ltd., 326/328, Hind Rajasthan Bldg., D. Phalke Rd., Dadar, Bombay 400014.

Anand Engg. Pvt. Ltd., 66, M.I.D.C., Andheri East, Bombay 400093.

Anup Engg. Ltd., Post Box 1164, Ahmedabad 380002.

Apex Radiators Pvt. Ltd., 18/2, Coal Bunder, Darukhana, Bombay 400010.

B. R. Inds., Plot No. 14, St. No. 10, MIDC., Andheri East, Bombay 400093.

Bakubhai Ambalal, Kaiser-I-Hind Bldg., Currimbhoy Rd., Ballard Estate, Bombay 400038.

Bharat Radiators Pvt. Ltd., Bajaj Bhavan, N. Point, Bombay 400021.

Dalfab Engineers, 284, GIDC Industrial Estate, Makarpura, Vadodara 390001.

Everest Engg. Works, Crosscut Rd., Coimbatore 641012.

Falls Industries In-Corporation, 502, Jolly Bhavan No. 1, 10, New Marine Lines, Bombay 400020.

Flowlink Inds. Pvt. Ltd., 62, Najafgarh Rd., New Delhi 110015.

Heatreaters & Engineers, Ashok Silk Mills Lane, Off L. B. Shastri Mrg., Ghatkopar, Bombay 400086.

Industrial Marketing Services, Jiji House, 1st Flr., Ravelin St., Bombay 400001.

J. S. Chemiequipment Pvt. Ltd., A/7, M.I.D.C., Meera Ind. Area, Meera 401104 (Thane Dist.).

Kanara Engg. Co. Pvt. Ltd., Melville House, Mazagaon, Bombay 400010.

Kaveri Structurals, Sire Mansion, 123, Mount Rd., Madras 600006.

Lamda Inds., 201, Neelam, 108, Worli Sea Face, Bombay 400018.

Manik Radiators Pvt. Ltd., 122/124A, Jolly Maker Chambers No. 2, Nariman Point, Bombay 400021.

Manish Engg. Co., 88/89, Surat St., Bombay 400009.

Mirch Mirex Ltd., Delstar, Hughes Rd., Bombay 400036.

Nigasu Engg. Co., 12th Rd., Santa Cruz East, Bombay 400055.

Pace Equipment Pvt. Ltd., M.I.D.C. Rd. No. 7, St. No. 17, Marol, Andheri East, Bombay 400069.

Patels Airtemp Pvt. Ltd., 61-A, G.I.D.C., Indl. Township, Vatva, Ahmedabad 382445.

Premier Economisers Pvt. Ltd., 254, Dr. A. B. Rd., Bombay 400025.

Premier Radiators, Jawahar Autonagar, Vijayawada 520007. A.P.

Rajendra Mechanical Ind. Pvt. Ltd., 9, Shah Ind. Estate, Veera Desai Rd., Andheri (W.), Bombay 400058.

Reliance Heat Transfer Pvt. Ltd., 46, V. Nariman Rd., Bombay 400023.

Sanvitech Inds., B–3/6, Kanaya Nagar, Thane 400603.

Sherai Engg. Works, Great Western Bldg., N. Master Rd., Bombay 400023.

Simplex Udyog, 65, Ind. Est., Bhilai 490001 (M.P.).

Steam Radiators Corpn., 3–A, Madan Mohan Silk Mills Compound, Sonawala Cross Rd., Bombay 400063.

Thermo Transfer Engrs., Suren Rd., Andheri East, Bombay 400093.

Venus Engg. Service, 127, Kewal Estate, S. Bapat Mrg., Bombay 400013.

Westerwork Engineers Ltd., 5-D, Vulcan Insce. Bldg., Veer Nariman Rd., Bombay 400020.

HEATERS (INDUSTRIAL) & HEATING APPLIANCES & ELEMENTS — INDUSTRIAL OVENS, INCUBATORS ETC.

Andhra Pradesh

Cenco Electricals Appliances & Equipments, C-32, Sanatnagar, Hyderabad 500018.

Scientific Electricals Sales Pvt. Ltd., Shalibanda, Hyderabad 500002.

Vishal Inds., 14-10-745, Jumerat Bazar, Hyderabad 500006.

Delhi

Alphine Agencies, 10, Subhas Mrg., Daryaganj, New Delhi 110002.

C.P.N. Industries, 18, Najafgarh Rd., New Delhi 110015

Ghaziabad Engg. Co. Pvt. Ltd., 42, Janpath, New Delhi 110002.

Narang Scientific Works Pvt. Ltd., C-255, Mayapuri Indl. Area, Phase II, New Delhi 110064.

Remson Elect. Inds., 10072, Gali Zamir Wali, Nawabganj, Pul Bangash, Delhi 110006.

Telelec Corpn. (India), N-29, Lane No. 4, Anand Parbat, Rohtak Rd., New Delhi 110005.

Theetha Indl. Heating Equipments Pvt. Ltd., 5, Comm. Centre, Naraina Ind. Area, Phase I, New Delhi 110028.

Timex Agencies, 84, Basti H. Singh, Delhi 110006.

Gujarat

Kantilal Chunilal & Sons Appliances Pvt. Ltd., 3, Jawahar Rd., Udyognagar, Udhna 394210. Surat Dist.

Panchal Engg. Works, Dariapur, Char Rasta, Ahmedabad 380001.

Karnataka

Mysore Electrical Appliances & Canteen Equipments Mfg. Co., D-25, Ind. Estate, Mysore 570002.

Radio & Electrical Manufg. Co. Ltd., Mysore Rd., Bangalore 560026.

Shyamal Engg. Co., 960, V Block, Rajajinagar, Bangalore 560010.

Swarna Electricals, 14, S. Chetty Rd., Bangalore 560004.

Universal Instruments Co.,137, Rly. Parallel Rd., Kumara Park (W), Bangalore 560020.

Maharashtra

Akamsha Engg. Co., 17-A, Shalimar Ind. Est., Matunga, Bombay 400019.

B. R. Hermann & Mohatta (India) Pvt. Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

B. R. Inds., Plot 14, St. No. 10, MIDC., Andheri East, Bombay 400093.

Bakubhai Ambalal, Kaiser-I-Hind Bldg., B. Estate, Bombay 400038.

Bharat Heaters, 19, Tardeo Bridge, Diana Cinema Lane, Bombay 400034.

Chetan Electric Ind., Allied Ind. Estate, Unit No. 125, M. M. Chhotani Rd., Mahim (West), Bombay 400016

Commonwealth Electrical Ind., 72, Mangaldas Rd., Lohar Chawl, Bombay 400002.

Control Instruments, G-25, Shalimar Ind. Estate, Matunga, Bombay 400019.

Economic Electric Co. Pvt. Ltd., Jail Rd., East, Dongri, Bombay 400009.

Economy Engg. Corpn., 24, Shah Indl. Est., Bombay 400088.

Encee Electric Heat Corpn., 416, Commerce House, Medows St., Bombay 400023

Escee Kitchenaid, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

Giri Industries, Empire Ind. Estate, 18, Kondivita Rd., J. B. Nagar, Andheri (East), Bombay 400069.

Girish Electl. Inds., Tavawala Bldg., 147, Lohar Chawl, Bombay 400002.

Hazari Trdg. Co., 129, Modi St., Bombay 400001.

Heatem Engg. Co., P-30A, C. I. T. Rd., Scheme 52, Calcutta 700014.

Indian Equipment Corpn., D/20, MIDC, Udyog Sadan No. 2, Andheri, Bombay 400093.

Indrajit Industries, 10, Kurla Indl. Estate, Ghatkopar, Bombay 400086.

Inductothem Inds. Inc., Aktar Manzil, 8, Umarkhadi Crosslane, Bombay 400009.

Industrial & Agricultural Engg. Co. (Bombay) Pvt. Ltd., 43, Dr. V. B. Gandhi Marg, Bombay 400023.

Industrial Controls & Appliances Pvt. Ltd., 47–49, Chakala Rd., Andheri, Bombay 400069.

International General Electric Co. India Ltd., Nirmal, Nariman Point, Bombay 400021.

Intervest Process-Flow Controls, 114, Churchgate Chambers, New Marine Lines, Bombay 400020.

Janata Works Pvt. Ltd., 162, Tulsi Pipe Rd., Bombay 400013.

Japsin Instrumentation, 40, Picket Rd., Kalbadevi, Bombay 400002.

Kailash Scientific Corpn., D-4, Laghu Udyog Kendra, I. B. Patel Rd., Goregaon East, Bombay 400063.

Kantilal Chunilal & Sons, 80/82, Vithalwadi, Bombay 400002.

Kesbo Pvt. Ltd., Bombay Mutual Terrace, 534, Sandhurst Bridge, Bombay 400007.

Kosha Engg. Works, 7, Udyog Nagar, Goregaon West, Bombay 400062.

Lamda Industries, 201, Neelam, 108, Worli Seaface Rd. Bombay 400018.

Navbharat Electrical Ind., 'Premji Chambers', Hospital Lane, Nr. Bombay Hospital, Bombay 400020.

Nestler Boilers Pvt. Ltd., Dalamal Chambers, Marine Lines, Bombay 400020.

Nika Inds., Aarey Rd., Goregaon East, Bombay 400063.

P. Khabardar Electric Works, 191, Dr. Ambedkar Rd., Opp. Chitra Cinema, Dadar, Bombay 400014.

Parkeen Bros., 24, N. Master Rd., Bombay 400023.

Pratik Heat Products, 11, National Takiwala Indl. Est., Bombay 400059.

Primco Pvt. Ltd., 384, Dr. Bhadkamkar Mrg., Bombay 400004.

R. Electrical Inds., E-9, MIDC., Udyog Sadan, 2, Mahakali Rd., Chakala, Andheri East, Bombay 400093.

Racold Appliance Pvt. Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Reliance Heat Transfer Pvt. Ltd., 46, Vir Nariman Rd., Bombay 400023.

Rishba Industries, 76, Kakad Ind. Estate, Off L. J. Rd., Mahim, Bombay 400016.

S. V. Enterprises, Unit No. 122, S. V. Rd., Jogeshwari, Oshiwara, Bombay 400060.

Sishra & Co., 76, Kakad Indl. Estate, Off L. J. Rd., Mahim, Bombay 400016.

Suresh Engg. Works, Bombay Cotton Mills Estate, Kalachowki Rd., Bombay 400033.

Sushra & Co., 17-B, Ghatkopar Ind. Estate, Bombay 400086.

Tempo Ind. Corpn., 1, Lamington Chambers, 394, Dr. Bhadkamkar Marg, Bombay 400004.

V. Natverlal & Co., 133, S. Gandhi Marg, Bombay 400002.

Vidyut Engg. & Technology Pvt. Ltd., A-12, Nand Jyot Ind. Estate, Andheri-Kurla Rd., Bombay 400072.

Vikas Electrics Pvt. Ltd., Govandi Station Rd., Bombay 400071.

Wanson India Pvt. Ltd., Chinchwad, Pune 411019.

Wima (India), 505, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Punjab

Pioneer Enamelling Works, G. T. Rd., Cheharta 143105.

Sembhi Inds. (Regd.), 117, Aman Nagar, Jullundur 144004.

Tamil Nadu

Ashok Engg. Inds., 24, Thambu Chetty St., Madras 600001.

Electro-Mech. Instruments, 49, T. H. Rd., Madras 600019.

Gambaks Instruments Co., 113, Choolamedu High Rd., Madras 600094.

Hygrodyn Pvt. Ltd., 1/155, Mount Rd., Madras 600002.

Murugan Electricals, 4, Brunton Cotton Press Rd., Madras 600013.

Power Control & Appliances, F-11, Ind. Estate, Madras 600058.

Tosni-Tek International, 267, Kilpauk Garden Rd., Madras 600010.

Uttar Pradesh

Ema India Ltd., 4, Indl. Area, Govindnagar, P.O. Udyognagar, Kanpur 208022.

Jai Hind Trading Corpn., G.T. Rd., Sahibabad, Ghaziabad 201001.

West Bengal

ACC-Vickers-Babcock Ltd., Durgapur 713201.

Adair Dutt & Co. (India) Ltd., 5, Dalhousie Sq. (East), Calcutta 700001.

Beni Ltd., 1, Crooked Lane, Calcutta 700001.

Bharat Sheet Metal Industries Ltd., 22, Beerpara Lane, Calcutta 700030.

General Electric Co. of India Pvt. Ltd., Magnet House, 6, Chittaranjan Ave., Calcutta 700013.

Getz Bros. & Co., Inc., 9, Brabourne Rd., Calcutta 700001.

Heat Treater Industries (India) Pvt. Ltd., 135, B. R. B. Bose Rd., Calcutta 700001.

Heatem Engg. Co., P.-30A, CIT, Scheme 52, Calcutta 700014.

Jay Engg. Works Ltd., 225C, A. J. Bose Rd., Calcutta 700020.

Middleton Engg. Co., 12E, Park St., Calcutta 700071.

National Electronic Co., 96, Beleghata Main Rd., Calcutta 700010.

Rexon Inds., 5-B, Clive Ghat St., Calcutta 700001.

S. Sircar & Co. Pvt. Ltd., 10, Phears Lane, Calcutta 700012.

Sur Industries Pvt. Ltd., 163, Acharya J. B. Rd., Calcutta 700014.

Tarif Appliances & Equipments Pvt. Ltd., 34, C. N. Roy Rd., Calcutta 700039.

Technotrade Engg. Co., 285-E, B. B. Ganguly St., Calcutta 700012.

Wesman Combustion Equipment Co. Pvt. Ltd., Allenby Court, 1/2 Allenby Rd., Calcutta 700020.

HOSIERY

Andhra Pradesh

Hyderabad Hosiery Ltd., Indl. Area, Azamabad, Hyderabad 500001.

Bihar

Muzzafarpur Hosiery Mills Pvt. Ltd., Club Rd., Muzafarpur 842001.

Shree Bhagwati Hosiery Mills Pvt. Ltd., Central Jail Rd., Bhagalpur 812001.

Delhi

Hindustan Knitting & Finishing Mills, 16-A, Najafgarh Rd., New Delhi 110015.
Jainco Hosiery Mills, 5633, Qutab Rd., New Delhi 110001.
Nehru Hosiery Mills, 5509, Basti Harphool Singh, New Delhi 110006.

Gujarat

Ambica Hosiery Works, 14/15, Muni Ind. Est., Ahmedabad 380021.
Buytex Knitting Inds., 1, Kamal Sahakari Oudhyogik Vasahat Ltd., Rakhial, Ahmedabad 380023.
Fine Knitting Co. Ltd., Asarwa, Ahmedabad 380016.
Ilao Ltd., Industrial Mills Compound, Ahmedabad 380021.
Uday Hosiery Works, Rajkot 360001.

Jammu & Kashmir

Kashmir Knitting Co., Parade Ground, Jammu Tawi 180001.

Karnataka

Karnatak Hosiery Sahakari Sangh Ltd., Shahpur, Belgaum 590002.

Kerala

Aysha Hosiery Factory Pvt. Ltd., Palaparamba, Cannanore Dist.
Commonwealth Trust Ltd., Calicut 673001.
Kunnath Textiles, Ayyanthole, Trichur 680003.
Malabar & Pioneer Hosiery Pvt. Ltd., 16-505, Kallai Rd., Calicut 673002.

Maharashtra

Advance Inds., 28, Shamsheth St. (Chippy Chawl), Bombay 400002.
Allied Inds., 396, Cadell Rd., Prabhadevi, Bombay 400025.
Ashok Products, 86/87, J. K. Ind. Estate, Moosa Kiledar St., Jacob Circle, Bombay 400011.
Bombay Knitwear, 6, Shanti Bldg., Moghul Lane, Mahim, Bombay 400016.
Dawn Mills Co. Ltd., Fergusson Rd., Bombay 400013.
EKD Wearall Knitting Works, 12/12A, Indl. Estate, Fergusson Rd., Lower Parel, Bombay 400013.
Fine Hosiery Inds., 98-B, L. H. Rd., Mahim, Bombay 400016.
Great Eastern Hosiery Works Pvt. Ltd., 7, Chowpatty Rd., Bombay 400007.
Green Hosiery Factory, 39, Wadhani Indl. Estate, L. B. S. Mrg., Ghatkopar, Bombay 400089.
Mayfair Hosiery Works, Shree Laxmi Woollen Mills Compound, Haines Rd., Bombay 400011.
Menora Hosiery Works Pvt. Ltd., 75, Nehru Rd., Bombay 400057.
National Hosiery Factory, Near Paradise Cinema, Mahim, Bombay 400016.
Omtex Hosiery Mills, 45, J. Wadia Rd., Bombay 400012.
Rolex Hosiery Pvt. Ltd., 142-C, Delisle Rd., Bombay 400013.
Romo Hosiery Works Pvt. Ltd., Bombay Mutual Terrace, 834, Sandhurst Bridge, Bombay 400007.
Shree Jam Hosiery Works Pvt. Ltd., 2, Old Hanuman 2nd Cross Lane, Bombay 400002.

Punjab

Advance Hosiery Mills, Advance St., Ludhiana 141001.
Amber Inds. Pvt. Ltd., The Mall, Ludhiana 141001.
Angoora Hosiery Mills, P.B. No. 80, Ludhiana 141001.
Bajaj Hosiery Factory, Madhopuri No. 1, Ludhiana 141001.
Camel Knitting & Textile Mills, Subhas Market, Ludhiana 141001.
Hind Woollen & Hosiery Mills Pvt. Ltd., Ludhiana 141003.
Minerva Hosiery Mills Pvt. Ltd., Civil Lines, Ludhiana 141001.
Pearl Hosiery Mills, Gopal Rd., Karimpura, Ludhiana 141008.
S. D. Hosiery Mills, Purani Kotwali, Chaura Bazar, Ludhiana 141001.
Sutlej Hosiery Mills, 228, Ind. Area A, Ludhiana 141001.
Wazir Hosiery Works, Indl. Area 'A', Ludhiana 141001.
York Hosiery Mills Pvt. Ltd., York House, Civil Lines, Ludhiana 141001.

Rajasthan

Jaipur Hosiery Mills Pvt. Ltd., 13, Adarsh Nagar, Ind. Area, Jaipur 302001.
Syntex Fabrics Ltd., Kota 324003.

Tamil Nadu

Anand Hosieries, 19–B, Avanashi Rd., Tirupur 638603.
Bhagvathi Knitting Co., Kongunagar Main Rd., Tirupur 638602.
Haroon Knitting Co., P.B. No. 372, Tirupur 638604.
Lotus Industries Ltd., No. 16, Coral Merchant St., Madras 600001.
Mohan Knitting Co., Kamaraj Rd., Tirupur 638604.
Premson Hosiery Mills, Kongunagar Main Rd., Tirupur 638602.
Sri Lakshmi Hosiery Mfrs., No. 10/5, Duraiswamypuram 2nd St., Tirupur 638602.
Tirupur Knitting Co., No. 75, Kumaran Rd., Tirupur 638601.
Titoni Knitting Co., Mangalam Rd., Tirupur 638604.
Travancore Knitting Co., Palladam Rd., Tirupur 638601.

Uttar Pradesh

Benares Hosiery Ltd., Thatheri Bazar, Varanasi 221001.
Dayalbagh Textile Factory Pvt. Ltd., Dayalbagh, Agra 282006.
Eagle Hosiery Works, 62, Chepal St., Meerut 250001.
Prajah Textile Mills, Chhoti Bajaria, Ghaziabad 201001.

West Bengal

Amiya Hosiery Mills Pvt. Ltd., 4, Mahendra Goswami Lane, Calcutta 700006.
Ashoka Hosiery Mills, 5, S. Johuri Lane, Calcutta 700007.
Asia Hosiery Mills Pvt. Ltd., 73/8, Grey St., Calcutta 700006.
Banga Luxmi Hosiery Mills Pvt. Ltd., 1/4-C, Khagendra Chatterji Rd., Calcutta 700002.
East-End Hosiery Mills Pvt. Ltd., 100, Raja Dinendra St., Calcutta 700006.
Hind Hosiery Mills Pvt. Ltd., 161/A, M. Gandhi Rd., Calcutta 700007.
India Hosiery Mills Pvt. Ltd., 223, Manicktolla Main Rd., Calcutta 700011.
Pioneer Knitting Mills Ltd., Pioneer Bldg., 6/1A, P. Soor Lane, Calcutta 700002.
Vinar Ltd., 2A, Shakespeare Sarani, Calcutta 700016.

HOSPITAL EQUIPMENT

(See under Medical Equipment).

HOUSEHOLD WARES

Balsara Hygiene Products, 43, Nagindas Master Rd., Bombay 400023.

Bellaire Houseware Mfrs., 605, Gorakhpurwala Bldg., J. Shanker Seth Rd., Bombay 400002.

Swastik Household & Industrial Products Ltd., 16, Walchand Hirachand Mrg., Bombay 400038.

HURRICANE LANTERNS

India Industrial Works Pvt. Ltd., 55/1, Dharamtalla Rd., Howrah 711101.

Ogale Glass Works Ltd., Ogalewadi 415105. Satara Dist.

Oriental Metal Ind. Pvt. Ltd., Agarpara 743177. 24 Parganas.

Queen's Sales Corpn., 223, Lohia Palace, Opp. Hotel Caeser Palace, 373, Linking Rd., Khar, Bombay 400052.

Universal Lamp Manufg. Co. Pvt. Ltd., 93-B, Ripon Rd., Calcutta 700001.

HYDRAULIC EQUIPMENT, PRESSES, HOSES, ETC.

Aeroflex Hose Inds., 305, Sharada Chambers, 15, New Marine Lines, Bombay 400020.

Aerolex Hose Inds., Ramaiah Indl. Estate, Bangalore 560054.

Alfomega Hydroworks Pvt. Ltd., 143, Lattice Bridge Rd., Madras 600043.

Allied Hydro-Pneumatic, 2/A, Banaji St., Off Cawasji Patel St., Bombay 400001.

Anchor Hydraulics, Kambata House, Kambata Lane, Opp. Byculla Rly. Stn. (E), Bombay 400027.

Apcotex, 36, Palani Rd., Dindigul 624008. (Tamil Nadu).

Artic Industries, Madanzampa Rd., Vadodara 390001.

Bemco Hydraulics Ltd., P. O. Udyambag, Belgaum 590008.

Bengal Inds., 56C-1/9, Indl. Estate, NIT, Faridabad 121001. (Haryana).

Bharat Motors, 35, Mount Rd., Madras 600002.

Davy Ashmore India Ltd., 6A, Middleton St., Calcutta 700071.

Denison Hydraulics India Ltd., Patancherlu 502319. (A.P.).

Dynamatic Hydraulics Ltd., 11, Peenyal Indl. Estate II, Tumkur Rd., Bangalore 560058.

Escorts Transmissions Ltd., 45, Indl. Area, Faridabad 121001, (Haryana).

Fluid Power Pvt. Ltd., 11, Rock House, Worli Hill Rd., Bombay 400018.

G. D. I. Engg. Pvt. Ltd., 136-A, B. R. B. Rd., Calcutta 700001.

Gautam Trading Co., 184, Nagdevi St., Bombay 400003.

Hariss Engrs., A-38/1, Mayapuri Ind. Area, New Delhi 110064.

Heatley & Gresham (India) Pvt. Ltd., 28, Barakhamba Rd., New Delhi 110001.

Hind Equipment Corpn. Pvt. Ltd., 24B, Hamam St., Bombay 400001.

Hindustan Hydraulics, Suranussi, Jullundur 144027.

Hindustan Machine Tools Ltd., Bangalore 560052.

Hydraulic & Engg. Inds., 10066, D. B. Gupta Rd., Paharganj, New Delhi 110055.

Hydro Control Pvt. Ltd., 49/B, 2nd Phase, Peenya Ind. Estate, Bangalore 560022.

Hydromatic Engg. Pvt. Ltd., P-3, Suhrawardy Ave., Calcutta 700017.

Hyguri Hydraulik (India) Pvt. Ltd., 701, Khanapur Rd., Belgaum 590008.

Indian Hydraulic Inds., 70, Najafgarh Rd., New Delhi 110015.

Indian Splicing (Mechanical) & Accessories Pvt. Ltd., Post Box 74, Ranchi 834001. (Bihar).

Indu Mechanical Works, 26, Prasanna Kumar Tagore St., Calcutta 700006.

Indudyog Co. Pvt. Ltd., 40, Okhla Ind. Estate, New Delhi 110020.

Instrumentation & Controls, Post Box 2726, Kalbadevi, Bombay 400002.

International Sales (India), Unique Ind. Estate, V. Savarkar Mrg., Prabhadevi, Bombay 400025.

J. Rosales Pvt. Ltd., Venkatesh Chambers, Prescot Rd., Bombay 400001.

Kazaf Engg. Co., 191, Nagdevi St., Bombay 400003.

Khimline Pumps Pvt. Ltd., 28, Mittal Chambers, Nariman Point, Bombay 400021.

Krampe Hydraulik (India), Kotkar Indl. Estate, Off Aarey Rd., Bombay 400063.

Larsen & Toubro Ltd., L & T House, N. Morarji Mrg., Bombay 400038.

Laxmi Inds., 22A, Dr. A. Nair Rd., Bombay 400011.

Liberty Hydraulic Presses, Bhayandar West 401101. (Thane Dist.)

Mangla Udyoga Pvt. Ltd., 62/2, Mathura Rd., Palwal 121102. (Haryana).

Marsan Machinex, 76, Erla Bridge, Andheri (W), Bombay 400058.

Modern Engg. Works, 310, Jogani Ind. Estate, 541, S. Bapat Mrg., Bombay 400028.

Modern Engrs. Co., Dapodi, Pune 411012.

Nandy & Co., 125, Bellilious Rd., Howrah 711106.

New Bemco Engg. Products Ltd., Udyambag, Belgaum 590008.

Nigam Bros. (Sales) Pvt. Ltd., 150, Dharamtalla St., Calcutta 700013.

Oilcaval Corpn., 412, G.I.D.C. Estate, Vadodara 390010.

Omega Engg. Co., 149, Devipada, Off Gamdevi Rd., Bhandup, Bombay 400078.

ONYX Inds., 21·6 K.M., Mathura Rd., Faridabad 121003.

Oriental Engineering Works Pvt. Ltd., Ind. Area, Yamuna Nagar 135001. Ambala Dist., Haryana.

Oriental Trading Corpn., 135, B.R.B.B. Rd., Calcutta 700001.

Payen Talbros Ltd., 4, Indl. Estate, Gurgaon 122001.

Peeco Hydraulic Pvt. Ltd., Ambica Kundu Lane, Howrah 711104.

Power Hydraulics, 3/11, 7th Flr., Navjeevan Socy., Lamington Rd., Bombay 400008.

Perfect Tubes, 4/2, Kirtinagar Ind. Area, New Delhi 110015.

Pressweld Engineers, 20, Lokamanya Tilak Rd., Near Carnac Bridge, Bombay 400003.

R. B. Engg. Pvt. Ltd., Army & Navy Bldg., M. Gandhi Rd., Bombay 400023.

Richardson & Cruddas (1972) Ltd., L. B. S. Mrg., Mulund West, Bombay 400080.

Sadhana Engg. Co., 220-G, Khadilkar Rd., Bombay 400004.

Schrader-Scovill Duncan Ltd., Mulund, Bombay 400080.

WIRE BRAIDED HIGH PRESSURE
HYDRAULIC HOSES
GREASE HOSES STEAM HOSES
TEFLON HOSES
MANUFACTURED
IN LONG LENGTHS AS PER SAE SPECIFICATIONS
TRADE ENQUIRIES SOLICITED
Perfect Tubes
1/2, KIRTI NAGAR INDUSTRIAL AREA, NEW DELHI
PHONES : 583500 & 668700

Sohal Engg. Works, Sohal Indl. Estate, L. B. S. Mrg., Bhandup, Bombay 400078.

Shapotools, 107 & 108, Bajsons Indl. Estate, Chakala Rd., Andheri East, Bombay 400099.

Standard Hydraulik (India), C-9/10, Indl. Estate, Udyambag, Belgaum 590008.

Star Industrial House Divn., Star House, Naya Bans, Delhi 110006.

Sterling Hydraulic Co., 142, S. Vivekanand Rd., Bombay 400060.

Super Seals (India) Pvt. Ltd., Mathura Rd., Faridabad 121003.

Taurian Tubes, 44, Ramdulal Sarkar St., Calcutta 700006.

Technical Auto Welding Works, 362, V. P. Rd., Bombay 400004.

Tractel Tirfor (India) Pvt. Ltd., 30, Altamount Rd., Bombay 400026.

Vankos & Co., 13/2, Indl. Estate, Patna 800013.

Veljan-Hydrair Pvt. Ltd., Balanagar, Hyderabad 500037.

Vickers Sperry of India Ltd., Akurli Rd., Kandivli East, Bombay 400067.

Victory Pumps & Engs. Mfg. Co., 69, Kandivli Indl. Estate, Kandivli West, Bombay 400067.

Yuken India Ltd., 41-43, Lavelle Rd., Bangalore 560001.

ICE PLANTS

Blue Star Ltd., Kasturi Bldg., J. Tata Rd., Bombay 400020.

Bombay Ammonia Pvt. Ltd., 298, P. Nariman St., Bombay 400001.

Frick (India) Ltd., Jeevan Vihar Bldg., Parliament St., New Delhi 110001.

Kirloskar Bros. Ltd., Kirloskarwadi 416308.

Kirloskar Pneumatic Co. Ltd., Hadaspar Ind. Est., Pune 411013.

Larsen & Toubro Ltd., L. T. House, N. Morarji Marg, Bombay 400038.

Tropical Refrigeration Industries, Kangra Bhavan No. 2, Dr. A. Besant Rd., Bombay 400025.

IMITATION JEWELLERY

Ashley Corpn., Causeway House, Colaba, Bombay 400005.

Aurobrite (I) Pvt. Ltd., Evergreen Indl. Estate, Off Haines Rd., Bombay 400011.

Chatons Pvt. Ltd., Jolly Maker Chambers No. 1, R. No. 23, Nariman Point, Bombay 400021.

Empire Machine Tools, Gondal Rd., Rajkot 360002.

Goldfield Mercantile Co., 24, Chakala Rd., Andheri East, Bombay 400069.

Indian Arts & Crafts Syndicate, 2666, Ballimaran, Delhi 110006.

Jewel Art Inds., Shriram Indl. Estate, Wadala, Bombay 400031.

Leather Goods House, 524-A, S. Bapat Marg, Bombay 400028.

Mehta Bros., 299, A. Rehman St., Bombay 400003.

New India Industries, 23/24, Singh Ind. Estate, Bldg. No. 2, Ram Mandir Rd., Goregaon West, Bombay 400062.

Oriental Mfg., Co., 114, 3rd Bhoiwada, Bhuleshwar, Bombay 400002.

Sharda Manufrs., 32, 3rd Bhoiwada, Bhuleshwar, Bombay 400002.

Skeleton Arts, 44, Agiary Lane, Bombay 400001.

INK MAKING MACHINERY

Doshi Engg. Works, Village Rd., Andheri (E), Bombay 400069.

Pioneer Engg. Co., 57, Apollo St., Bombay 400023.

INSTRUMENTS — SCIENTIFIC

Andhra Pradesh

Andhra Scientific Co. Ltd., R. Tagore Rd., Machilipatnam 521001.

Bio-Visual Products, 1-5-7/2, Musheerabad, Hyderabad 500020.

Electronics Corporation of India Ltd., Ind. Devpt. Area, Cherlapalli, Hyderabad 500062.

Elico Pvt. Ltd., B-17, Ind. Estate, Sanatnagar, Hyderabad 500018.

Instrument Techniques Laboratory, B-2, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Vijay Scientific Equipment, P.O. Buckinghampet, Vijayawada 520002.

Bihar

Bihar Scientific Corpn., P.B. 34, Patna 800004.

Delhi

Allied Scientific Engg. Corpn., 10/15, Dakhshni Marg, Rajendra Nagar, New Delhi 110005.

Associated Instrument Manufrs. (I) Pvt. Ltd., 26/27, A. Ali Rd., New Delhi 110002.

Atlantis (India) Applications Engg. Pvt. Ltd., 4E/3, Jhandewalan Extn., New Delhi 110055.

Capital Scientific Instruments Co. Pvt. Ltd., 6, N. Subhas Marg, Daryaganj, New Delhi 110002.

Dutta Scientific Works, 3, Shri Ram Bldg., Jawahar Nagar, Delhi 110007.

Hindustan Scientific Instruments Co., J-114-A, Kirti Nagar Ind. Area, New Delhi 110015.

Hydraulic & Engg. Instruments, 59/4-B, Phase II, Naraina Indl Area, New Delhi 110028.

Macro Scientific Works, 10 A/U.A., Jawahar Nagar, Delhi 110007.

Narang Scientific Instruments Co., 9/7, Vijay Nagar, New Delhi 110003.

National Scientific Instruments Co., 37/38, U.B. Block, Jawahar Nagar, Delhi 110007.

Optical Instrumentation (India), 21, Beadon Pura, Karol Bagh, New Delhi 110005.

Salooja Bros. Pvt. Ltd., 8/34, Kirti Nagar Ind. Area, New Delhi 110015.

Scientific Equipment Works, 1/777, Nicholson Rd., Delhi 110006.

Scientific Instruments Co. Ltd., B/7, Ajmeri Gate Ext., New Delhi 110001.

Scientific Refrigeration Enterprise, K-106, Kirti Nagar, New Delhi 110015.

Stead Electronics Ind., 17 U.A., Jawahar Nagar, Delhi 110007.

Toshniwal Bros. Pvt. Ltd., 3/E/8, Jhandewalan Extn., Link Rd., New Delhi 110055.

Towa Optics (I) Pvt. Ltd., 4, Daryaganj, New Delhi 110002.

Widson Scientific Works, 10, West Sadar Thana Rd., Delhi 110006.

York Scientific Inds., 1325, Hira Lal Bldg., Fasil Rd., Ajmeri Extn., Delhi 110006.

Gujarat

Atlas Radio & Electronic Ind. Pvt. Ltd., 57, G.I.D.C. Ind. Estate, Naroda, Ahmedabad 382330.

Jintan Clinical Thermometers Co. (I) Pvt. Ltd., Surendranagar 363001.

Systronics, Div. of Sarabhai Sons Pvt. Ltd., 899/92, Ind. Area, Naroda, Ahmedabad 382330.

Haryana

Continental Device India Ltd., 14/5, Mathura Rd., Faridabad 121003.

Eastern Electronics (Delhi) Pvt. Ltd., 1-2, Ind. Estate Township, Faridabad 121001.

Instruments & Chemicals Ltd., Model Town, Ambala City 133003.

Jain Scientific Glass Works, Ambala Cantt. 133001.

Laboratory Equipment Traders, Timber Market, Ambala 133001.

Oriental Science Apparatus Workshop, Alexandra Rd., Ambala Cantt. 133001.

Taylor Instrument Co. (India) Ltd., 14, Delhi-Mathura Rd., P.O. Amarnagar, Faridabad 121003.

Western Electric & Scientific Works, Nicholson Rd., Ambala Cantt. 133001.

Karnataka

Bharat Electronics Ltd., P.O. Jalahalli, Bangalore 560013.

British Physical Labs. (I) Pvt. Ltd., Bangalore 560027.

Hind High Vacuum Co., A-92, Indl. Estate, Rajaji Nagar, Bangalore 560044.

Kerala

Instrumentation Ltd., Kanjikode (W), Palghat 678623.

Kerala State Electronics Development Corpn. Ltd., Keltron House, Vellayambalam, Trivandrum 695001.

Madhya Pradesh

Scientific Instruments (Indore) Pvt. Ltd., B-14, Ind. Estate, Indore 452003.

Maharashtra

Advance Scientific Co., Diamond Jubilee Comp., 285, Thakurdwar Rd., Bombay 400002.

Allied Instruments Pvt. Ltd., 30-B, Govt. Indl. Estate, Kandivli, Bombay 400067.

Ama Pvt. Ltd., Canada Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Ampoules & Vials Manufg. Co., 139, Marol-Maroshi Rd., Bombay 400059.

Applied Electronics Pvt. Ltd., A-5, Wagle Estate, Thane 400604.

Asha Scientific Co., 503, J. Shanker Shet Rd., Bombay 400002.

Asian Electronics Ltd., Handloom House, 224, Dr. D. Naoroji Rd., Bombay 400001.

Asian Surgical Co., Alkarim Manzil, 15, Palton Rd., Bombay 400001.

Associated Dental Medical Supply Co., Yusuf Bldg., V. Nariman Rd., Bombay 400001.

Associated Instrument Manufrs. (I) Pvt. Ltd., India House, Fort St., P.B. 119, Bombay 400001.

Automatic Electric Pvt. Ltd., Rectifier House, Naigaum Cross Rd., P.B. 7103, Wadala, Bombay 400031.

Bajaj Electricals Ltd., 45/47, V. Nariman Rd., Bombay 400001.

Batliboi & Co. Pvt. Ltd., Appeejay House, Forbes St., Bombay 400023.

Blue Star Ltd., Band Box House, Prabhadevi, Bombay 400025.

Bombay Burmah Trading Corpn. Ltd. (Electronics Divn.), Plot No. 2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

Bombay Scientific Equipment Corpn., 41, Sion (West), Bombay 400022

Bombay Surgical Co., Opp. H. N. Hospital, Bombay 400004.

C. Z. Instruments India Pvt. Ltd., Court Chambers, 35, Sir V. Thackersey Mrg., Bombay 400020.

Chemech Instruments, Bhaveswar Vijay, Wadala (N), Bombay 400031.

Consolidated Electronics, 2, Sripat Bhuvan, Wadia St., Bombay 400034.

Deo Surgical & Scientific Co., 9, Dalal St., Bombay 400023.

Digital Electronics Ltd., 74/II Marol Indl. Area, MIDC, Andheri (E), Bombay 400093.

Divyesh Scientific Co., Sita Kunj, 4th Rd., Dadar, Bombay 400014.

Educational Scientific Stores, 110/113, Himalaya House, Palton Rd., Bombay 400001.

Elico Pvt. Ltd., 95, D. Phalke Rd., Dadar, Bombay 400014.

Fairdeal Surgical Corpn., 105, Bank of Baroda Bldg., Palton Rd., Bombay 400001.

Gannon Dunkerley & Co. Ltd., Chartered Bank Bldg., M. Gandhi Rd., Bombay 400023.

Gansons Pvt. Ltd., 207, Kakad Chambers, Dr. A. B. Rd., Bombay 400018.

Garg Scientific Glass Ind., 26/28, Dr. M. B. Velkar St., 1st Kolbhat Cross Lane, Bombay 400002.

Gordhandas Desai Pvt. Ltd., Kermani Bldg., Sir P. M. Rd., Bombay 400001.

Greaves Cotton & Co. Ltd., Forbes St., Bombay 400023.

Gyro Laboratories Pvt. Ltd., 8, Gazdar St., Thakurdwar, Bombay 400002.

Hakotronics Pvt. Ltd., Sussex Rd., Bombay 400027.

Hardcastle Waud & Co., Ltd., 87, V. Nariman Rd., Bombay 400020.

Heatex Products Pvt. Ltd., 11, Bank St., Bombay 400023.

Hinditron Services Pvt. Ltd., 69/A, Nepean Sea Rd., Bombay 400006.

Imperial Surgical Co. Pvt. Ltd., 4, India House, Fort St., Bombay 400001.

Indian Electronics, Asha Studio, Chembur, Bombay 400071.

Indo-Burma Petroleum Co. Ltd. (Electronics Manfg. Div.), Allahabad Bank Bldg., Apollo St., Bombay 400023.

Indo-German Surgical Corpn., Purshottam Bldg., Opera House, Bombay 400004.

Industrial Controls & Appliances Pvt. Ltd., 47, Chakala Rd., Bombay 400069.

Industrial & Research Instruments Co., D/2, Commerce Centre, 74, Tardeo Rd., Bombay 400034.

Industrial Instruments & Controls, 308, Neelam, 108, Worli Sea Face Rd., Worli, Bombay 400018.

Industrial Meters Pvt. Ltd., Advent, 12-A, Foreshore Rd., Bombay 400021.

Instrumentation Service, 19-C, Shalimar Ind. Estate, Matunga, Bombay 400019.

J. N. Marshall & Co., 210, Dr. D. N. Rd., Bombay 400001.

Jayant Medical & Surgical Co., 52/58, New Hanuman Lane, Bombay 400002.

Jayant Scientific Industries, 19-B, Jambool Wadi, Kalbadevi Rd., Bombay 400002.

Kalekar Surgical Ind., 305, Princess St., Bombay 400002.

Khandelwal Chemo-Lab. Equipments, Bhangwadi, Kalbadevi Rd., Bombay 400002.

Khandelwal Herrmann Electronics Pvt. Ltd., Bhandup Village Rd., Bombay 400078.

Krishna Instruments & Appliances Co., 230, Arun Chambers, Tardeo Rd., Bombay 400034.

Larsen & Toubro Ltd., L & T House, Dougall Rd., Ballard Estate, Bombay 400038.

Lektrolab Equipment Co., 8, Shivaji Park, Bombay 400028.

Mahlo-Star Electronic Equipment Pvt. Ltd., Shri Lakshmi Woollen Mills Estate, Dr. E. Moses Rd., Bombay 400011.

Marshall Sons & Co. India Ltd., Marshalls Bldg., Shoorji Vallabhdas Mrg., B. Estate, Bombay 400038.

Martin & Harris Pvt. Ltd., Scientific Dn., Apeejay Chambers, Wallace St., Bombay 400001.

Meco Instruments Pvt. Ltd., 310-311, Bharat Indl. Estate, T. J. Rd., Sewree, Bombay 400015.

Medica Instruments Mfg. Co., S. Bapat Mrg., Opp. Phoenix Mills, Bombay 400013.

Metzer (I) Optical Instrument Co., 110-113, Himalaya House, Palton Rd., Bombay 400001.

Modern Scientific Instruments Co., 48A/B, Sadashiv Cross Lane, Bombay 400004.

National Radio & Electronics Co. Ltd., 8, Unity House, Mama Parmanand Marg, Bombay 400004.

National Scientific Instruments Co., 19, Bank St., Bombay 400023

National Surgical Instrument Co., Haines Rd., Worli, Bombay 400018.

Orient Scientific & Chemical Co., 20, Kitchen Garden Lane, Bombay 400002.

Philips India Ltd., Shivsagar Estate, Block A, Dr. A. Besant Rd., Worli, Bombay 400018.

Pioneer Equipment Co. Pvt. Ltd., 139, N. Master Rd., Bombay 400023.

Pla Electro Appliances, Thaker Estate, Vidyavihar (W), Bombay 400086.

Polydor of India Ltd., A. Chakravarti Rd., Ashok Nagar, Kandivli East, Bombay 400067.

Polytronic Corpn., 7, Sainath Ind. Estate, Babasaheb Kotkar Rd., Goregaon, Bombay 400062.

Remi Udyog, 49C/D, Govt. Indl. Estate, Kandivli (W), Bombay 400067.

Ruttonsha Pvt. Ltd., E. International House, Shastri Mrg., Bombay 400079.

Saples Scales Manufg. Co. Pvt. Ltd., Prospect House, Off Gunbow St., Bombay 400001.

Scientific Apparatus Manufg. Co., 225-C, Mangaldas Bldg., Mangaldas Rd., Bombay 400002.

Scientific Equipment Manufg. Co., 17-A, Jakaria Ind. Estate, Bombay 400011.

Scientific Instrument Co. Ltd., 240, Dr. D. Naoroji Rd., Bombay 400001.

Scientific Instrument Mfg. Co., 5, Parvati Indl. Estate, Sun Mill Compd., L. Parel, Bombay 400013.

Scientific Requisites Supplies, 37, Western India House, Sir P. Mehta Rd., Bombay 400001.

Shanti Electric Instruments, Green House, Green St., Bombay 400023.

South India Surgical Co., 57, K. M. Sharma Rd., Bombay 400002.

Specialised Instruments Manufg. Co., Neelam Bldg., Worli Seaface, Bombay 400018.

Standard Surgical & Dressing Works, 28, B. Genu Rd., Bombay 400002.

Star Electronics Pvt. Ltd., Dhanraj Mahal, Apollo Bunder Rd., Bombay 400039.

Techno-Electro Pvt. Ltd., 83, Jolly Maker Chambers II, 8th Floor, Nariman Pt., Bombay 400021.

Tempo Ind. Corpn., 1, Lamington Chambers, 394, Lamington Rd., Bombay 400004.

Toshniwal Bros. Pvt. Ltd., 198, J. Tata Rd., Bombay 400020.

Twandsven Electronic & Engg. Service, Sind Chambers, Colaba Causeway, Bombay 400005.

Udeyraj & Sons, Readymoney Terrace, Dr. A. B. Rd., Bombay 400018.

Universal Scientific Glass Apparatus Mfg. Industry, 603, J. S. Rd., Bombay 400002.

Vibronics Pvt. Ltd., 4, Kurla Ind. Estate, Agra Rd., Ghatkopar, Bombay 400086.

Warden Surgical Co. Pvt. Ltd., Mapla Mahal, Thakurdwar, Bombay 400004.

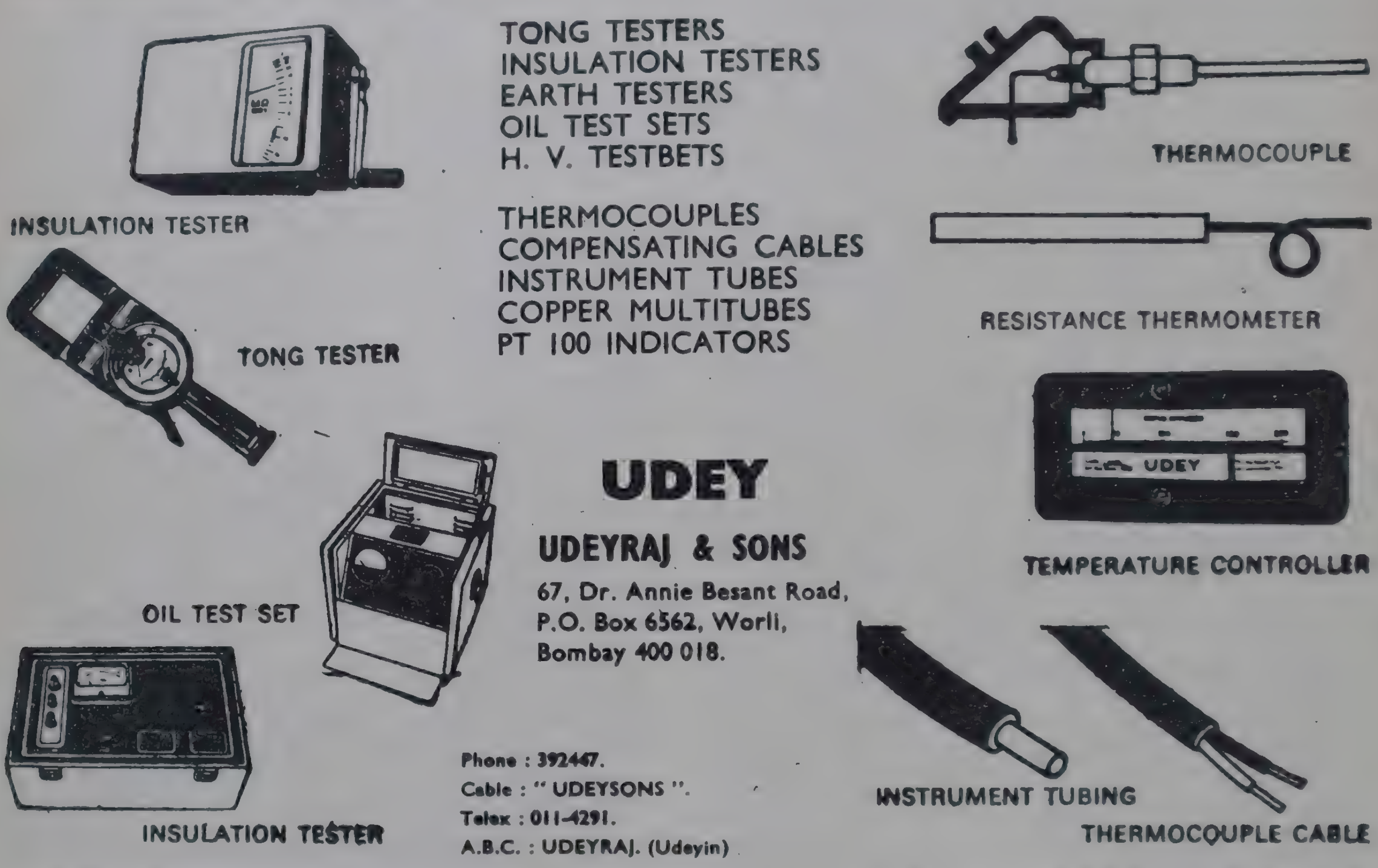
X-ray & Electro Medicals (I) Co., Malabar View, Chowpatty Seaface, Bombay 400007.

Zenith Electro Systems Pvt. Ltd., 541, Panchratna, Mama Parmanand Marg, Bombay 400004.

Zenith Surgical Co., 206, Mangaldas Bldg., Mangaldas Rd., Bombay 400002.

Punjab

Hans Raj Nayyar (Surgical) Co. Pvt. Ltd., Hall Bazar, P.B. 38, Amritsar 143001.



TONG TESTERS
INSULATION TESTERS
EARTH TESTERS
OIL TEST SETS
H. V. TESTBETS

THERMOCOUPLES
COMPENSATING CABLES
INSTRUMENT TUBES
COPPER MULTITUBES
PT 100 INDICATORS

UDEY

UDEYRAJ & SONS
67, Dr. Annie Besant Road,
P.O. Box 6562, Worli,
Bombay 400 018.

Phone : 392447.
Cable : " UDEYSONS ".
Telex : 011-4291.
A.B.C. : UDEYRAJ. (Udeyin)

Rajasthan

Photo Electric Instruments, Diwan House, Mehta Market, Jodhpur 342001.

Tamil Nadu

Dev's Electronics Pvt. Ltd., 11-1, Instronics Estate, Madras 600041.

Gansons Pvt. Ltd., 131, Mount Rd., Madras 600006.

Nandini Precision Works, Shree Seva Mandir, Saligramam, Madras 600093.

Scientific Instruments Co. Ltd., 30, Mount Rd., Madras 600002.

Scientific Products, C-42, Ind. Estate, Guindy, Madras 600032.

Seshasayee Bros. Pvt. Ltd., 9-A, Nungambakkam High Rd., Madras 600034.

Toshniwal Bros. Pvt. Ltd., Round Tana, Mount Rd., Madras 600002.

Uttar Pradesh

Agarwal Scientific Glass Industries, 46, Ind. Estate, Nanhai, Agra 282006.

Central Scientific Instrument Corpn., 5-A, M. Gandhi Rd., Agra 282001.

Newton Scientific Products Co., P.B. 193, Lucknow 282001.

Scientific Corporation, 10, Bhopal House, Lalbagh, Lucknow 282001.

Scientific Instruments Co. Ltd., 6, T.B. Sapru Rd., Allahabad 211001.

West Bengal

Arora Wetzler Optical (India), Bow Bazar St., Calcutta 700012.

Bharat Ophthalmic Glass Ltd., Durgapur 713210.

Geologists Syndicate Pvt. Ltd., 137, B.R. Basu Rd., Calcutta 700001.

H. Guru Instruments Pvt. Ltd., 2A, Shakespeare Sarani, Calcutta 700016.

J. R. Mullick & Co. Pvt. Ltd., 6/J, Keyatala Rd., Calcutta 700029.

Lawrence & Mayo (I) Pvt. Ltd., 11, Govt. Place Rd., Calcutta 700069.

National Instruments Ltd., 1/1, R.S.C. Mullick Rd., Calcutta 700032.

Scientific Instruments Co. Ltd., 11, Esplanade East, Calcutta 700001.

Toshniwal Bros. Pvt. Ltd., 85-A, S. Bose Rd., Calcutta 700026.

Villait Electronic Ind. Pvt. Ltd., 33/34, Sankaritolla St., Calcutta 700014.

INSULATORS & INSULATION MATERIALS

A. N. Bhaskar Sons, Amarnagar, Faridabad 121003.

Aarson Insulators, 9-UB, Jawaharnagar, Delhi 110007.

Ahmedabad Porcelain Inds., Plot No. 303, GIDC Estate, Behind Calama, Naroda, Ahmedabad 382330.

Anudyog, 2, G. C. Ave., Calcutta 700013.

Arco Inds., 100/104, N. Master Rd., Bombay 400023.

house of SICO

Makers of quality laboratory equipment

- SICOSPEC-100 Solid State, Direct Reading Spectrophotometer for the visible range
- SICODIGISPEC-110 Solid State, Digital Spectrophotometer for the visible range
- SICOCOL-Single Cell Photoelectric Colorimeter
- SICO-Double Cell Photoelectric Colorimeter
- SICO Electronic pH meter Model EM-3
- SICO Electronic Digital pH Meter Model EM-5
- SICOFRAC Automatic Fraction Collector. Designed primarily for collecting effluents from Chromatographic or Electrophoretic columns
- SICOVAC High Vacuum Pumps—Single and Double stage rotary oil-sealed pumps
- SICO Compressovac—Lubricated Compressor-cum-Vacuum Pump
- SICO Multivac Non-lubricated Air Sampling pump (Suction pump) for low vacuum and low pressure applications
- SICO Kleenivac-I Pump—Suction apparatus for Clinics and Hospitals
- SICO Vacuum Systems-for Degassing, Plotting, Impregnation, Encapsulation of Electric motors, Transformers, Capacitors and Modules
- SICO Lyophilab-80 (Lyophiliser). A laboratory Freeze Drying Equipment
- SICO High volume Sampler. Used for measurement of mass concentration of suspended particles in Ambient Air
- SICO B.O.D. Incubator. A low temperature Incubator having a working range of 5°C to 50°C
- SICO Humidity Cabinet. Intended for all tests where both temperature and humidity are to be controlled upto 50°C and 95% relative humidity
- SICO TV Deflection Components

SICO MICROWAVE COMPONENTS & EQUIPMENT

- J, K, Ku, S and X-Band Microwave Components
- Gunn Oscillators
- Pin Modulators
- Gunn Oscillator & Pin Modulator Power Supplies
- Universal & Low Voltage Klystron Power Supplies
- Solid State & Valve type VSWR Meters

SICO
Estd. 1911

The Scientific Instrument Co. Ltd.
Head Office 6, Tej Bahadur Sapru Road Allahabad-211001
Gram SICO □ Phone 51434 52594 □ Telex 0540-219 SICO IN
Allahabad Bombay Calcutta Madras New Delhi
Ahmedabad Bangalore Bhopal Gauhati Hyderabad Kanpur Lucknow
Works Allahabad & Ghaziabad

Emerald/S/Spl/161

Artec Products, 55, Sidhpura Indl. Estate, Bombay 400062.

Ashwin Kumar & Co., Shreeji Bhavan, 49, Mangaldas Rd., Bombay 400002.

B. B. Chatterjee & Co. Pvt. Ltd., 22, Rajawoodmunt St., Calcutta 700001.

Bhor Industries Ltd., 392, V. Savarkar Mrg., Bombay 400025.

Commonwealth Insulations, Chemicals & Fertilizers Ltd., 38, Nariman Rd., Bombay 400001.

Dr. Beck & Co. (India) Ltd., Pimpri, Pune 411018.

Eastern Insulations, Sambava Chambers, Sir P. M. Rd., Bombay 400001.

Esarbi Enterprises, 12-A, N. Subhas Rd., Calcutta 700001.

Fibreglass Pilkington Ltd., 9, Wallace St., Bombay 400001.

Fibretex Inds. (India), 89, Sector 6, Faridabad 121002.

Fibro Products, 33A, Apurva Industrial Estate, Makwana Rd., Andheri (East), Bombay 400059.

H. R. C. W., Post Bag No. 5, Tripunithura 682301. (Kerala State).

High Insulation Inds., Mahimwala Compd., 12th Khetwadi Main Rd., Bombay 400004.

Indian Mica Produce Co., 40, Strand Rd., Calcutta 700001.

Industrial Insulation Corpn., 104, Arun Chambers, Tardeo, Bombay 400034.

Industrial Minerals & Chemical Co. Pvt. Ltd., 125, N. Dhuru St., Bombay 400003.

Industrial Minerals & Mill Stores, Mercantile Bldg., Lall Bazar, Calcutta 700001.

Insap Flexibles & Engrs. Pvt. Ltd., 134, Angappa Naicken St., Madras 600001.

Insuglass Inds., Pvt. Ltd., 17/12, The Mall Rd., Calcutta 700028.

J. D. Jones & Co. Ltd., C-5, Gillander House, Calcutta 700001.

Jaipur Glass & Potteries Works Ltd., Tonk Rd., Jaipur 302004.

Jaya Shree Insulators, Rishra 712248. (Hooghly Dist.).

Jayant Inds., 33, Naik Nivas, 30, Benham Hall Lane, Bombay 400004.

Kinson Ind., 33, Anand Ind. Estate, Ghaziabad 201001.

Lloyd Insulations India Pvt. Ltd., 6, Middleton St., Calcutta 700016.

Luster Ceramics Pvt. Ltd., 4/19, Industrial Estate, Gorwa Rd., Vadodara 390003.

M. D. Tolia Corpn., 6/105-E, Mount Rd., Madras 600018.

M. S. Insulator Corp. of Maharashtra, 31, Old Post Office Lane, Kalbadevi Rd., Bombay 400002.

Madras Gauge Room Equipment Pvt. Ltd., 150-B, Mount Rd., Madras 600002.

Mahavir Insulation Pvt. Ltd., 731, Tulsiani Chambers, N. Point, Bombay 400021.

Mascot Insulations, 99/5/8A, Ballygunge Place, Calcutta 700019.

Mercury Marine Insulations, 206, Arun Chambers, Tardeo, Bombay 400034.

Mettur Beardsell Ltd., 12 3, Dickenson Rd., Bangalore 560001.

Mineral Wool Manufg. Co., Jugsalai, Jamshedpur 831001.

Montex Fibre Glass Ind. Pvt. Ltd., 2/18, Bombay Mutual Annexe, Rustom Shidhwa Marg, Bombay 400001.

Newkem Insulations (Calcutta), 4, Chandni Chowk St., Calcutta 700013.

Phoenix Paper Products Pvt. Ltd., 6, Nagdevi X Lane, Bombay 400003.

Phoenix Paper Products Pvt. Ltd., 6, Nagdevi St., Bombay 400003.

Plasticables Pvt. Ltd., Lentin Chambers, 36, Dalal St., Bombay 400023.

Sampat Ceramics Pvt. Ltd., 16, Pollock St., Calcutta 700001.

Shanti Electric Instruments, Green House, Green St., Bombay 400023.

Shramik Winding Wires Pvt. Ltd., D-46, Sardar Udyognagar, Ajwa Rd., Vadodara 390001.

Synthetic Foams Ltd., 306, Bhandari House, 91, Nehru Place, New Delhi 110019.

Thermofriz Insulations Pvt. Ltd., 5, Synagogue St., Calcutta 700001.

Transelektra, 22, Oasis Indl. Estate, Vakola Masjid, Santacruz East, Bombay 400055.

Tubros (Sales) Corpn., A-124, Inderpuri, New Delhi 110012.

Union Asbestos & Allied Products, 40, Strand Rd., Calcutta 700001.

Vidyut Udyog, 5, Fancy Lane, Calcutta 700001.

Vijayant Insulations Pvt. Ltd., City Mill Compd., Kankaria Rd., Ahmedabad 380022.

Vitro Ceramics, 157, Vithal Udyog Nagar, Vallabh Vidyanagar 388120 (Gujarat).

W. S. Insulators of India Ltd., 175/1, Mount Rd., Madras 600002.

INTERCOM SYSTEMS

Communication Services (India), B-26, Sagar Apartments, Tilak Mrg., New Delhi 110001.

Consolidated Components, Ashok Silk Mills Compd., 202, LBS Marg, Ghatkopar, Bombay 400086.

Demit Systems (India), Shivalaya Bldg., 4th Flr., Commander-in-Chief Rd., Madras 600008.

Dynamic Services (India) Pvt., Ltd., Rohit House, 3, Tolstoy Mrg., New Delhi 110001.

Dynamic Systems Pvt. Ltd., 11A, Cuffe Parade, Bombay 400005.

Industrial Marketing Services, Rita Bldg., 51A, Sonapur St., Bombay 400002.

Instant Communications, 804, Madhuban, 55, Nehru Place, New Delhi 110024.

Model Provident Co. Ltd., 15, Noble Chambers, Parsi Bazar St., Bombay 400001.

Mohns Electronics, Mohans House, Plot 81, MIDC Ind. Area, Andheri East, Bombay 400093.

Monarch Enterprises, 51/3, New Mkt., New Rohtak Rd., New Delhi 110005.

Pan Services Pvt. Ltd., 9/C, Lord Sinha Rd., Calcutta 700071.

Sai Enterprises, 6-B, Arcadia, 2nd Flr., N. Point, Bombay 400021.

Sarda Electronics, Sard Lane, Ahmednagar 414001.

Superphone Services (India), 18, New Queen's Rd., Bombay 400004.

Supreme Intercom Services, B-5, 55-E., M. Vasanji Rd., Andheri East, Bombay 400069.

System Manufacturing Pvt. Ltd., 1-A, Peenya Ind. Area, Off Tumkur Rd., Bangalore 560022.

Systems Communications, 101, Bajaj Bhavan, 10th Floor, Nariman Point, Bombay 400021.

Telecommunication Engrs., 6/20, Tardeo Air-Conditioned Mkt., Bombay 400034.

VIP Electronic Services, 63, G. D. Ambekar Mrg., Parel, Bombay 400012.

IRRIGATION SYSTEMS

Dattatraya Ind. Pvt. Ltd., 691A, Pune-Satara Rd., Pune 411009.

Premier Irrigation Equipment Pvt. Ltd., 17/1C, Alipore Rd., Calcutta 700027.

JUTE GOODS

Alliance Mills (Lessees) Pvt. Ltd., 18, N. Subhas Rd., Calcutta 700001.

Birla Jute Manufg. Co. Ltd., Birlapur 743318. 24 Parganas, W. Bengal.

General Industrial Society Ltd., 8, India Exchange Place, Calcutta 700001.

Gungadhar Bannerjee & Co. Pvt. Ltd., Bakulia House, Kidderpore, Calcutta 700023.

Java Trading Co., 14-A, Clive Row, Calcutta 700001.

Mohan Jute Bags Mfg. Co., 5/1, Clive Row, Calcutta 700001.

JUTE MILL MACHINERY

Britannia Engg. Co., Titaghur 743188. 24 Parganas.

Fort Gloster Inds. Pvt. Ltd., 21, Strand Rd., Calcutta 700001.

Free India Iron & Steel Works, 155, B. Roy Rd., Calcutta 700041.

G. & H. Shaw Pvt. Ltd., 40, Strand Rd., Calcutta 700001.

J. J. Ind., 45, Shiv Takur Le., Calcutta 700007.

Lagan Jute Machinery Co., Pvt. Ltd., 24-B, Park St., Calcutta 700016.

Machine & Mill Stores Corpn. Pvt. Ltd., 76/19, Benares Rd., Howrah 700001.

Nipha Machinery Manufrs. Pvt. Ltd., 25, N. Subhas Rd., Calcutta 700001.

Oriental Electric & Engg. Co., National Tobacco Bldg., 1, Old Court House Corner, Calcutta 700001.

Sandev & Co., 16, G. C. Avenue, Calcutta 700013.

Spin-Well Pvt. Ltd., 6, Dilarjang Rd., Cossipore, Calcutta 700002.

Star Textile Engg. Works Ltd., Dhanraj Mahal, Apollo Bunder, Bombay 400039.

Texwell Pvt. Ltd., 23A, N. Subhas Rd., Calcutta 700001.

Usha Enterprises, 3A, Chowringhee Place, Calcutta 700013.

KITCHEN AIDS & EQUIPMENT

ARV Inds., 533, Poonamallee High Rd., Madras 600084.

Ashok Metal Works, G/83, Sarvodayanagar, 1st Panjrapole Lane, Bombay 400004.

Balsara Hygiene Products, 43, Nagindas Master Rd., Bombay 400023.

Domestic Appliances, Post Box No. 3330, New Delhi 110014.

Elma Industries, C/46, Aaram Society, Vakola, Santacruz East, Bombay 400055.

Escee Kitchenaid, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

Gajanan Canteen Equipment Co., A-25, Laghu Udyog Kendra, I. B. Patel Rd., Goregaon East, Bombay 500063.

Gas & Chemical Inds. Pvt. Ltd., 14/1, Mathura Rd., Faridabad 123001. (Haryana).

Globe Super Parts, 14/1, Mathura Rd., Faridabad 121001.

Guru Nanak Anodising Works, Patel Chowk, Jullundur 144001.

India Metal Inds., 139/141, C. P. Tank Rd., Bombay 400004.

Indoair Ind., 48/49, Mun.-Ind. Estate, Off E. Moses Rd., Worli, Bombay 400018.

Industrial Kitchen Equipment & Allied Agencies, Babulnath Trust Bldg. No. 2, Block 30, Chowpatty, Bombay 400007.

Kitchen King, 240/9382, Kannamwar Nagar, Vikhroli East, Bombay 400083.

Mahavir Bros., Triveni House, Opp. 13th Lane, Bombay 400004.

Mazda Mfg. Co., 6, Datta Mandir Rd., Bhandup, Bombay 400078.

Nahata Co., 17, Narasingapuram St., Mount Rd., Madras 600002.

Naik Bros., 358, Mint St., Madras 600001.

Nat Steel Equipment Pvt. Ltd., 9, Ambekar Marg, Dadar, Bombay 400014.

Natural Gas Co. Pvt. Ltd., 53/57, Laxmi Bldg., Sir P. Mehta Rd., Bombay 400001.

Peeco Enterprises, 8, Wazirpur Indl. Complex, Delhi 110052.

Queen's Sales Corpn., Shop No. 2A & 3, Lohia Palace, Opp. Hotel Caesers Palace, 373, Linking Rd., Khar, Bombay 400052.

Shree Shakti Mfg. & Mktg. Co., 11/145, Sastry Rd., Ramnagar, Coimbatore 641009.

Silver Light Nirlepware Inds. Pvt. Ltd., 1178, Narayan Cottage, G. D. Ambekar Mrg., Parel, Bombay 400012.

Sri Raja Lakshmi Indl. Agency, 30/1, S. J. Park Rd.' Bangalore 560002.

Sushima Inds., 3, Vaibhav Indl. Estate, Sion-Trombay Rd., Deonar, Bombay 400088.

Thakar Equipment Co., 66, Okhla Ind. Estate, New Delhi 110020.

Trupti Ind., Roxy Chambers, New Queen's Rd., Bombay 400004.

Veekay Enterprises, 107, Owners' Indl. Estate, Pitamber Lane, Mahim, Bombay 400016.

LABELS (METAL)

Bharat Industrial Arts, B-11, H.M.T. Ind. Estate, Bangalore 560031.

Bieri Pvt. Ltd., Bieri Estate, Sion, Bombay 400022.

Calcutta Label Works, 35, J. Bajaj St., Calcutta 700007.

Delux Meta Print Inds., 10-2-347/A, Asifnagar, Hyderabad 500028.

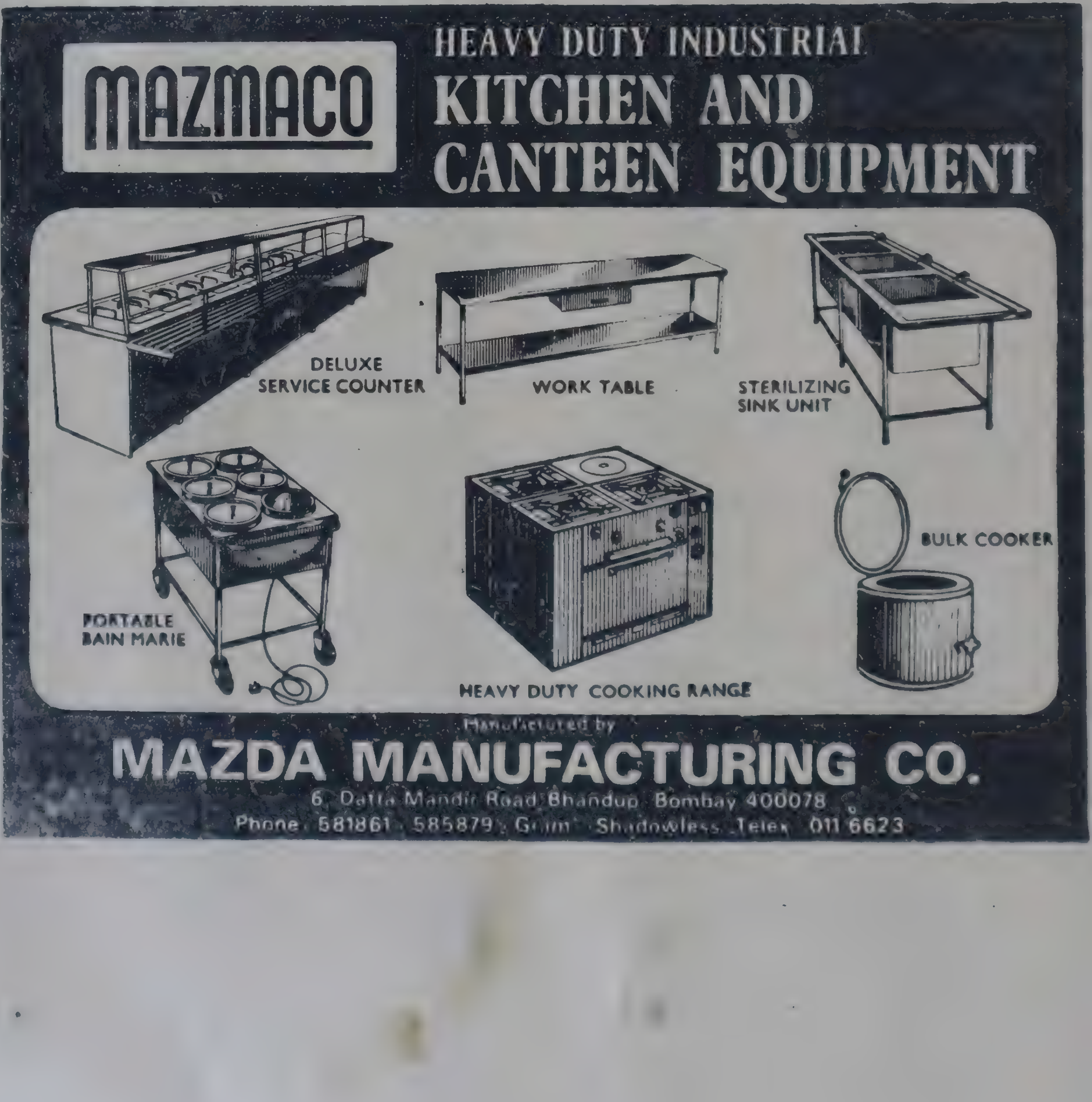
Excel Process Pvt. Ltd., 22-D, S. A. Brelvi Rd., Bombay 400023.

Falgoon Process, 36, Nandanvan, Opp. Ralliwolf, Agra Rd., Mulund, Bombay 400080.

Ilka Metal Labels Mfg. Co., 1, British Indian St., Calcutta 700001.

Kshirod Mohan Mullick & Sons, 48, M. G. Rd., Calcutta 700009.

Mark-O-Prints (India), 51, Ideal Ind. Estate, Mathuradas Mill Compd., Bombay 400013.


MAZMACO
DELUXE SERVICE COUNTER
WORK TABLE
STERILIZING SINK UNIT
PORTABLE BAIN MARIE
HEAVY DUTY COOKING RANGE
BULK COOKER

HEAVY DUTY INDUSTRIAL

KITCHEN AND CANTEEN EQUIPMENT

Manufactured by

MAZDA MANUFACTURING CO.

6, Datta Mandir Road, Bhandup, Bombay 400078
Phone: 581861 · 585879, Gram: Shadowless, Telex: 011 6623

TO IDENTIFY YOUR PRODUCT
★ Anodised Metal Lables
★ Self Sticking Stickers &
★ Transfer Lables
in Various Finishes
GAGUES DIALES BADGES
Rick Mack
Associates India
C 85/9, Noida Industrial Complex
DECORATION FOR
TV - TAPE RECORDER - PANEL
AMPLIFIER & CALCULATOR
MANY NOVELTIES FOR EXPORT
★ ★ ★
2824 Peepal Mahadev, Hauz Qazi
Delhi-110006 Tele : 267335

Metacarv, 40, Mun. Ind. Estate, K. Khadye Mrg., Bombay 400011.

Metagraphs Pvt. Ltd., 164, Senapati Bapat Mrg., Bombay 400016.

Metal & Transfer Labels Mfg. Co., 13/21, Panjrapole 3rd Le., Bombay 400004.

Mragna Metal Label Mfg. Co., 8-A, Parvati Ind. Estate, Sun Mill Le., Bombay 400013.

New Krishna Metal Arts, 6A, Parekh Ind. Estate, S. V. Rd., Kandivli, Bombay 400067.

Print-O-Graph, 30-AB, Piramal Ind. Estate, S. V. Rd., Goregaon (W.), Bombay 400062.

Pune Petagraph, M.I.D.C., Plot No. T113, Bhosari B Block, Pimpri Ind. Area, Village Bhosari 411026, Pune Dist.

Rick Mack Associates India, 2824, Peepal Mahadev, Hauz Qazi, Delhi 110006.

Sridevi Inds., 219, G. Naick St., Madras 600001.

Surendra Process Works, 1, Shantinagar Indl. Estate, Santacruz East, Vakola, Bombay 400055.

LABORATORY CHEMICALS

Amrut Industrial Products, Chemical House, Agra Rd., Thane 400601.

Belani Fine Chemicals Pvt. Ltd., Kasturi Bldg., Popatwadi, Kalbadevi Rd., Bombay 400002.

Laboratory Chemical Co., 55-114, B.R.B.B. Rd., Calcutta 700001.

National Chemical Corpn., B. No. 9, Devkaran Mansion, Princess St., Bombay 400002.

Prakash Chemical Industries, 31, Duncan Causeway, Bombay 400022.

Roman Inds., A-1, Inds. Compd., J. B. Nagar, M. Vasanji Rd., Andheri East, Bombay 400059.

S. D's Lab.-Chem. Industry, Mehta House, Mathew Rd., Bombay 400004.

LABORATORY EQUIPMENT — SURVEY ANALYTICAL, METEOROLOGICAL AND EDUCATIONAL LABS.

Andhra Pradesh

Andhra Scientific Co. Ltd., Cantt. Rd., Machilipatnam 521001.

Scientific Engg. House Pvt. Ltd., C-7, Indl. Estate, Kachiguda, Hyderabad 500027.

Delhi

Apothecaries' Sundries Manufg. Co., 19, Amrit Kaur Market, New Delhi 110055.

Ashoka Scientific Ind., 4, New Lajpat Rd., Market, Delhi 110006.

Asian Scientific Instruments Co., 12, S. Basti Harphool Singh, Sadar Thana, Delhi 110006.

Batra & Co., A-136, Defence Colony, New Delhi 110024.

Chhabra Scientific Ind., 1928, Malka Ganj Rd., Delhi 110007.

Continental Sales Syndicate, T-715, D.C.M. Rd., Delhi 110006.

Delhi Scientific Works, Ajmeri Gate, Delhi 110006.

Emkay Scientific Corpn., 36, U. B. Jawahar Nagar, Delhi 110007.

K.L.K. Scientific Ind., 313, Dhir Pur, Nirankari Colony, Delhi 110009.

National Instruments Ltd., 603, Ansal Bhawan, K. Gandhi Marg., New Delhi 110001.

Neulite Engg. Corpn. 63, Hari Nagar Ashram, Mathura Rd., New Delhi 110014.

Optical Instrumentation (India), 21, Deshmesh Pura, Karol Bagh, New Delhi 110005.

P.S.R. Chemical Inds., 302, Tilak Bazar, Delhi 110006.

Precision Scientific Equipment Corpn., 16, Patel Rd., S. Patel Nagar, New Delhi 110008.

Rashtriya Optical Traders, 4, Darya Ganj, New Delhi 110002.

Salooja Brothers Pvt. Ltd., 8/34, Kirtinagar Indl. Area, New Delhi 110015.

Towa Optics (India) Pvt. Ltd., 4, Darya Ganj, New Delhi 110002.

Up-to-date Optical Works, 21, Deshmesh Pura, Karol Bagh, New Delhi 110005.

Gujarat

Hindustan Ophthalmic Lens Manufrs., Opp. Kothi Bus Stand, Vadodara 390001.

Quality Engg. Works, Behind Vadi Vegetable Market, Pratapnagar Rd., Vadodara 390004.

Surgical Equipment Manufg. Co., 1 B. Kalpana Bhoomi Estate, Dhudeshwar Rd., Ahmedabad 380001.

Systronics, 89-92, Ind. Area, Naroda, Ahmedabad 382330.

Vitro Ceramics, 157, Vithal Udyog Nagar, Vallabh Vidyanagar 388120.

Karnataka

British Physical Labs. India Ltd., M. G. Rd., Bangalore 560001.

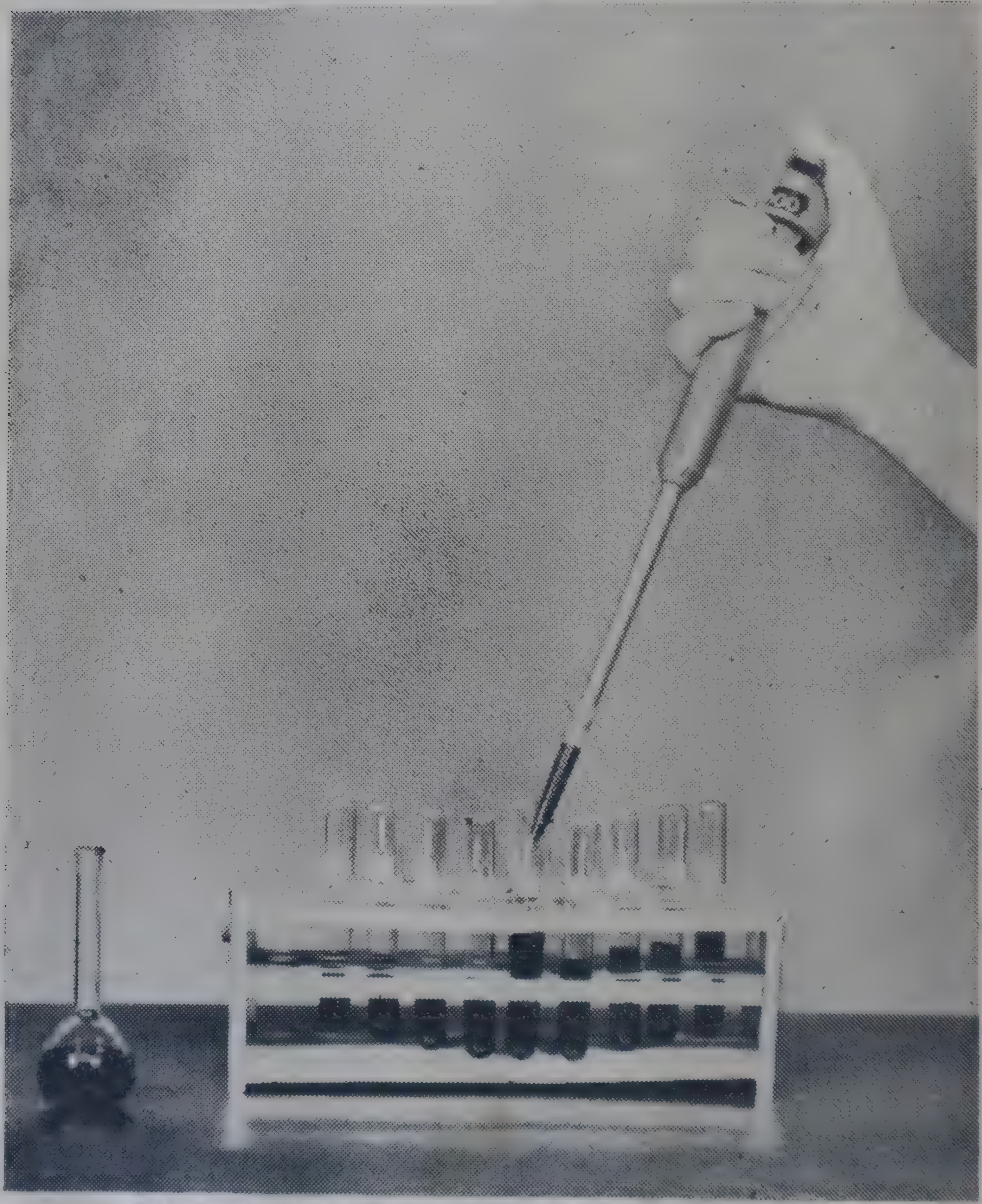
Govt. Electric Factory, Mysore Rd., Bangalore 560001.

Maharashtra

Amar Engg. Co., 6, Parmar Indl. Estate, Bail Bazar, Kurla-Andheri Rd., Kurla, Bombay 400070.

MICROLITRE PUSHBUTTON PIPETTES with DISPOSABLE TIPS

for ACCURACY, REPRODUCIBILITY, CONVENIENCE & SAFETY
NO WASHING, NO BREAKAGE, NO CONTAMINATION



BIOSCIENCE CORPORATION

Office : 6/67, Hanuman Society, Paranjape 'B' Scheme Road No. 1,
Vile Parle (East), Bombay 400 057. Phone : **570371.**

Factory : Plot 46, Sector II, Bassein Taluka Co-op. Industrial Estate Ltd., Post
Gohkivare, Bassein, Dist. Thane (Maharashtra).

Associated Instruments Manufrs. (India) Pvt. Ltd., India House, W. Hirachand Marg, Bombay 400001.

Bioscience Corpn., 67, Hanuman, P. Box 6884, Vile Parle (East), Bombay 400057.

Blue Steel Engrs. Pvt. Ltd., A to Z, Indl. Estate, Fergusson Rd., Bombay 400013.

Borosil Glass Works Ltd., 44, Khanna Construction House, M. A. Gaffar Rd., Worli, Bombay 400018.

Cintex Ind. Corpn., 237, Jaigopal Ind. Estate, Bhavanishanker Cross Rd., Dadar, Bombay 400028.

Control Dynamics, 3, Shyama, Uttam Socy., Bombay 400071.

Delhi Scientific Works, 12, J. B. Nagar, Andheri, Bombay 400059.

Dubash Freres & Co., Victoria Bldg., Parsee Bazar St., Bombay 400001.

Eltron India, 13, St. No. 9, MIDC, Bombay 400093.

Indian Equipment Corpn., D-20, Udyog Sadan No. 2, MIDC. Andheri East, Bombay 400093.

Kailash Scientific Corpn., D-4, Laghu Udyog Kendra, I. B. Patel Rd., Goregaon East, Bombay 400063.

Kumar & Co., 31, Old Post Office Lane, Kalbadevi Rd., Bombay 400002.

Labequip Corpn., 15, Gulbahar, Barrack Rd., Bombay 400002.

Lab-Hosp. Corpn., C/9, Laghu Udyog Kendra, I. B. Patel Rd., Goregaon East, Bombay 400063.

Lawrence & Mayo (India) Pvt. Ltd., 274, Dr. D. Naoroji Rd., Bombay 400001.

M. Shah & Co., Kanji Mansion, 311, S. Patel Rd., Bombay 400004.

Meco Instruments Pvt. Ltd., Bharat Indl. Estate, T. J. Rd., Bombay 400015.

Metzer (India) Optical Instruments Co., Himalaya House, Palton Rd., Bombay 400001.

Micromac Instruments, 39/5, Khamosh Shah Durga, Near Ghas Bazar, Kalyan 421301 (Thane Dist.).

Modern Scientific Ind., 58-C, Govt. Ind. Estate, Kandivli West, Bombay 400067.

National Instruments Ltd., K. Parikh House, 47, P. D'Mello Rd., Bombay 400009.

Plasticables Pvt. Ltd., Lentin Chambers, 36, Dalal St., Bombay 400023.

Platinum Lab-ware Pvt. Ltd., 405, Kaliandas Udyog Bhavan, Near Century Bazar, Bombay 400025.

Polar Ind. Corpn., Devkaran Mansions, 43, Princess St., Bombay 400002.

Raj-Der-Kar & Co., Bhau S. Desai Wadi, Masjid Lane, Bombay 400028.

Ravindra Heraeus Pvt. Ltd., Poonam Chambers, Block 601/A, B. Shivsagar Estate, Worli, Bombay 400018.

Remi Udyog, 325, Kalbadevi Rd., Bombay 400002.

Rolla Ind. Corpn., Sainath Ind. Estate, Shed "E", Off Aarey Rd., Goregaon East, Bombay 400063.

Scientific & Technical Home, 443, Bhadkamkar Marg, Bombay 400004.

Scientific Indian Glass Co. Ltd., 11, Pollock St., Calcutta 700001.

Scientific Sales Corpn., 453-455, Kalbadevi Rd., Bombay 400002.

Shital Scientific Inds., 85–87, Nagdevi St., Bombay 400003.

Shivani Scientific Inds., O-16, Bhola Bhagwan Indl. Estate, I. B. Patel Rd., Goregaon East, Bombay 400063.

Silica Ware Pvt. Ltd., 54, C. Chotani Estate, Proctor Rd., Bombay 400007.

Star Scientific, Raut Ind. Estate, 424A, S. Bapat Mrg., Bombay 400016.

Sushima Inds., 3, Vaibhav Ind. Estate, Near Telecom Factory, Sion-Trombay Rd., Deonar, Bombay 400088.

Technical Instruments Manufrs. (India) Pvt. Ltd., Plot 6A, Shanti Nagar, Santacruz East, Bombay 400055.

Tempo Ind. Corpn., 1, Lamington Chambers, 394, Dr. Badkamkar Marg, Bombay 400004.

Thermex Indl. & Laboratory Instruments Co., 107-B, Satyam Ind. Estate, Govandi Stn. Rd., Bombay 400088.

Thermolab Equipment Co., K. Guruprasad Soc., Hanuman Rd., Bombay 400057.

Udeyraj & Sons, 158, K. M. Sharma Marg, Bombay 400002.

Unique Trdg. Corpn., 221, S. Devji St., Bombay 400003.

Universal Scientific Glass Apparatus Manufg. Ind., 603, J. Shanker Sheth Rd., Bombay 400002.

Vibronics Pvt. Ltd., Kurla Indl. Estate, Shastri Rd., Bombay 400086.

Vikas Glass Apparatus Co., 113, Shivam Ind. Estate, Deonar, Bombay 400088.

Tamil Nadu

Altech Industries, 471, P. N. Palayan Rd., P. O. Ganapathy, Coimbatore 641006.

Gambaks Instruments Co., 113, Choolamedu High Rd., Madras 600094.

Instruments & Apparatus Pvt. Ltd., D-20, Indl. Estate, Madras 600058.

Instruments & Chemicals Pvt. Ltd., 334, Thambu Chetty St., Madras 600001.

National Instruments Ltd., 150A/3, Anna Salai, Madras 600002.

West Bengal

Arora Mathey Ltd., 166, N. Subhas Bose Rd., Tollygunj, Calcutta 700040.

Ascu Hickson Ltd., 7-A, Elgin Rd., Calcutta 700020.

Atlas Industrial Stores, 89, N. Subhas Rd., Calcutta 700001.

Darbara Singh & Sons, 14, Bow Bazar St., Calcutta 700012.

East End Engineers, 52, B. Bose Ave., Calcutta 700004.

Eastern Ind. Trdg. Corpn., 92, B. Chittaranjan Ave., Calcutta 700012.

Eastern Scientific Co., 4, College St., Calcutta 700012.

Geologists' Syndicate Pvt. Ltd., 137, B. R. Basu Rd., Calcutta 700001.

Killearn & Co., 106/C, Raja Dinendra St., Calcutta 700004.

National Instruments Ltd., 1/1, Raja S. C. Mullick Rd., Jadavpur, Calcutta 700032.

Overseas Trade Corpn., 133, Canning St., Calcutta 700001.

Premier Scientific Glass Co., 26/2A, P. K. Tagore St., Calcutta 700006.

Scientific Glass Works, 35, G. Chatterji Rd., Calcutta 700002.

Scientific Industries, 51/1, Raja Dinendra St., Calcutta 700009.

Scientific Repairs & Trdg. Co. Pvt. Ltd., 13, Canal St., Calcutta 700014.

Scientific Supplies, 55, Canning St., Calcutta 700001.

Scientific Syndicate, 172, B. P. Ganguly St., Calcutta 700012.

Steelsworth Ltd., 17, G. C. Avenue, Calcutta 700013.

LADDERS

Eshak Dada Bamboowala, 72, I. M. Merchant Rd., Khadak, Bombay 400009.

Famous Ladders Mfg. Co., 128–130, Victoria Rd., Byculla, Bombay 400027.

General Aluminium Corpn., 10, Tumkur Rd., Bangalore 560022.

Jeewanlal (1929) Ltd., 127, Mint St., Madras 600001.

King Ladders Mfg. Co., 5-C, Sonal Indl. Estate, off Saki-Vihar Rd., Bombay 400072.

Parekh Corpn., 59, I. M. Merchant Rd., Bombay 400009.

Simplex Timber Mart, 51, Panchratna, Next to Roxy Cinema, Bombay 400004.

Trinity Agencies, 51, Pancharatna, Next to Roxy Cinema, Bombay 400004.

LAMINATED PRODUCTS

Bakelite Hylam Ltd., Sanatnagar, Hyderabad 500018.

Bengal Engg. Co. Pvt. Ltd., 12, Dalhousie Sq. East, Calcutta 700001.

Caprihans (I) Ltd., Block D, Shiv Sagar Estate, Dr. A. Besant Rd., Bombay 400018.

Decorative Laminates (India) Pvt. Ltd., Yelval Rd., P.O. Belvadi, Mysore 570005.

Diamond Plastic Co., 108/109, Devaraja Mudali St., Madras 600003.

Fitwel Fabricators, Plot B-1/1, MIDC Indl. Area, Mira 401104. (Thane Dist.).

Formica India Ltd., Sambhaji Mansion, 1260/A, Jangli Maharaj Rd., Pune 411004.

Guardian Plasticote Ltd., 12, Ho Chi Minh Sarani, Calcutta 700016.

Indecor Laminates Pvt. Ltd., B-45, Ind. Estate, Sanatnagar, Hyderabad 500018.

Indo Sack Inds., 7, M. C. Rd., Madras 600021.

Industrial Stores Trading Co., 150, Thambu Chetty St., Madras 600001.

Novopan India Ltd., 106, Chandralok Bldgs., 111, Sarojini Devi Rd., Secunderabad 500003.

Paradise Electronic Inds., 29, Mahendra Ind. Estate, Sion East, Bombay 400022.

Phenoweld Polymer Pvt. Ltd., Saki-Vihar Lake Rd., Bombay 400072.

Ranvir & Co., 262, B. B. Ganguly St., Calcutta 700012.

Shiv Laminating & Coating Pvt. Ltd., Jolly Bhavan No. 2, New Marine Lines, Bombay 400020.

V-Arts, 3–A, Sunmill Compd., Lower Parel, Bombay 400013.

Veneers & Laminations (India) Ltd., M. G. Rd., P. Box No. 1009, Ernakulam, Cochin 682011.

Viral Laminates Pvt. Ltd., 45/46, GIDC Ind. Estate, Odhav, Ahmedabad 382415.

Weldekor Laminates Pvt. Ltd., 95, A. Rehman St., Bombay 400003.

Wood Polymers Ltd., 59, Bombay Samachar Marg, Bombay 400023.

Wudlam, Nemani Bldg., Opp. Rly. Stn., Santacruz West, Bombay 400054.

LAMPS & ACCESSORIES

(See Electrical Lamps and Accessories in this list.)

LANTERNS & STOVES

Bangalore Chemical & Manufg. Co. Pvt. Ltd., Ind. Estate, Rajajinagar, Bangalore 560044.

India Ind. Works Pvt. Ltd., 100/1, Brindaban Mullick Lane, Howrah 711101.

J. K. Dey & Sons, 13, Old China Bazar St., Calcutta 700001.

Metal Stamping Co., Plot A-35. Road 10, Wagle Ind. Estate, Thane 400604.

Optimohar Inds. Pvt. Ltd., Manu Mansion, 16, S. Bhagat Singh Rd., Bombay 400023.

Pitambardas Lallubhai & Co., 86, Kansara Chawl, Kalbadevi Rd., Bombay 400002.

Reliable Metal Works, 43, R. S. Nimbkar Mrg., Bombay 400008.

Shah Bros., Shirin Mansion, 14, Kolsha Lane, Bombay 400003.

Sri Ambica Metal Works, 17, Tarak Pramanick Rd., Calcutta 700006.

Umrao Industries, 32/B, Balaram St., Bombay 400007.

LATHES

Delhi

Chanana Bros., 26, Okhla Indl. Estate, New Delhi 110020.

Machine Tools & Automobile Works, 8712, Aramganj, Roshanara Rd., Delhi 110007.

United Machine Tools Corpn., 18, D. L. F. Indl. Area, Najafgarh Rd., New Delhi 110015.

Gujarat

Ashok Machine Tools Mfg. Co., Cross Rd., Rakhial, Ahmedabad 380021.

Batliboi & Co., P.O. Baroda Rayon 394220. Surat Dist.

Hind Mechanical Corpn., New Market, Surendranagar 363001.

New Bharat Engg. Works (Jam.) Ltd., Jamnagar 361002.

Karnataka

Alfred Herbert (India) Ltd., 13/23, Grant Rd., Bangalore 560001.

Mysore Kirloskar Ltd., P.O. Yantrapur 577602.

Prakash Home Industries, 6, Independence Rd., Belgaum 590002.

Kerala

H. M. T., Kalamassori 683104. (Via Alwaye).

Maharashtra

Alex Machine Tools, 16, Sidhpura Indl. Estate, Bombay 400062.

Bakubhai Ambalal, Kaiser-I-Hind Bldg., B. Estate, Bombay 400038.

Bharat Imports & Exports, 6, Oak Lane, Machine House, Bombay 400001.

Cooper Engg. Ltd., Machine Tools Dn., Chinchwad, Pune 411019.

Jayems Engg. Co., Great Western Bldg., Apollo St., Bombay 400023.

K. M. Engineering Syndicate, 105, Apollo St., Bombay 400023.

Kirloskar Bros. Ltd., Udyog Bhavan, Tilak Rd., Pune 411002.

Machinery Mfg. Corpn., 68, Nagindas Master Rd., Bombay 400001.

Machines & Tools Corpn. of India, Lentin Chambers, Dalal St., Bombay 400023.

Popular Machinery Corpn., Agra Bldg., Oak Lane, Bombay 400023.

Sami Inds., 16-B, Girikunj Ind. Estate, Mahakali Rd., Andheri East, Bombay 400093.

Shubh Machinery (Sales) Corpn., 15, Bank St., Bombay 400023.

Tata Engg. & Locomotive Co. Ltd., Chinchwad, Pune 411019.

Traub India Pvt. Ltd., Pimpri P.F., Post Bag 2, Pune 411018.

Punjab

Accurate Engg. Works, Dugri Rd., Ludhiana 141002.

Alfa Machinery Makers, G. T. Rd., Batala 143505.

Atlas Engg. Industries, G. T. Rd., Batala 143505.

Beco Engg. Co. Ltd., G.T. Rd., Batala 143505.

Indian Turn-O-Mat Industries, 22/23 R, Indl. Area B, Ludhiana 141003.

Mohindra Machinery Makers, G. T. Rd., Simble, Batala 143505.

National Brass Engg. Foundry, 35, Indl. Area, Jullundur 144005.

New Bijli Foundry (Regd.), Kashmir Rd., Batala 143505.

Prime Machine Tools, 826, Indl. Area B, Ludhiana 141003.

R. K. Machine Tools Pvt. Ltd., Indl. Area A, Ludhiana 141001.

Shakti Engg. Works, G. T. Rd., Batala 143505.

Sharda Foundry and Engg. Works, G.T. Rd., Batala 143505.

Tamil Nadu

Alfa Machine Tools, 6, Second Line Beach, Madras 600001.

Gedee Weiler Pvt. Ltd., Gopal Bagh, 317, Avanashi Rd., Coimbatore 641018.

Madras Machine Tool Mfrs. Ltd., Singanallur, Coimbatore 641005.

P. S. G. Indl. Instt., Avanashi Rd., Coimbatore 641018.

West Bengal

Textile Machinery Corpn. Ltd., P.O. Belgharia 700056. 24 Parganas.

LAUNDRY EQUIPMENT

D. Parikh Engg. Works, 115, Co-op. Indl. Estate, M. Vasanji Rd., Near Saki Naka, Bombay 400059.

Snowhite Engrs. Pvt. Ltd., Guru Govind Singh Mrg., New Delhi 110005.

LEAD & LEAD PRODUCTS

A. K. Motiwala, 145, Lohar Chawl, Bombay 400002.

Gemini Corpn., 99, Surat St., Bombay 400009.

Hooseini Metal Rolling Mill Pvt. Ltd., 66–68, N. Dhuru St., Bombay 400003.

Indian Lead Pvt. Ltd., Rampart House, 6th Flr., K. Dubash Mrg., Bombay 400023.

K. K. Nag Pvt. Ltd., D-3, Bhosari Ind. Estate, Pimpri, Pune 411018.

Standard Metal Works Pvt. Ltd., 17, Tardeo Bridge, Bombay 400034.

Udyogin Metal Inds., 72/A, Kandivli Indl. Estate, Kandivli West, Bombay 400067.

LEATHER & LEATHER PRODUCTS

Andhra Pradesh

Vinyllora Ind. Pvt. Ltd., 58/3, Ranigunj Circle, M. Gandhi Rd., Secunderabad 500003.

Delhi

Eastern Leathers, Dakshineshwar, 10, Hailey Rd., New Delhi 110001.

Nava Bharat Enterprises Pvt. Ltd., 101-A, Surya Kiran K. Gandhi Marg, New Delhi 110001.

Vijaya Leather Inds. (Regd.), 142, Ghaffar Mkt., Karol Bagh, New Delhi 110005.

Gujarat

Beltex Pvt. Ltd., Naroda Back Rd., Ahmedabad 380002.

Gujarat Leather Industries Ltd., Super Mkt. Premises, Near Handloom House, Ashram Rd., Ahmedabad 380009.

International Chrome Leather Co., Santram Bldg., Nadiad 387001.

Kumar Inds., 19, Indl. Area, Naroda, Ahmedabad 382330.

Pickers Ltd., Naroda Back Rd., Ahmedabad 380002.

Tikelon India, 2, Harshid Chambers, Ashram Rd., Ahmedabad 380013.

Haryana

Bata Shoe Co. Ltd., Faridabad 121001.

Kerala

Vanjinad Leathers Ltd., Post Box 1751, Cochin 682016.

Maharashtra

Art Home, 4, Jerbai Baug, Byculla, Bombay 400027.

Artistic Leather Goods & Accessories, National House, Tulloch Rd., Bombay 400039.

Bharat Leather Works, 48, Sleater Rd., Bombay 400007.

Bombay Leather Goods Depot, 14, Shamseth St., Bombay 400002.

Bonafide Industrial Works, 71, Kambekar St., Bombay 400003.

Bright Leather Ind., 338, A. Rehman St., Bombay 400003.

Dharampur Leather Cloth Co. Ltd., 10, Chowpatty Sea Face, Bombay 400007.

Gold Filled Leather Works, 157–161, S. Gandhi Mrg., Bombay 400002.

Jayant Ind. Home, 107, Dhabbo St., Bombay 400003.

Kathiawar Inds. Ltd., 19, Bank St., Bombay 400023.

Leather Art Ind., Swadeshi Market, Bombay 400002.

Maharashtra Leather Works, 20, Nishanpada Rd., Bombay 400009.

National Leather Cloth Mfg. Co., Akurli Rd., Kandivli East, Bombay 400067.

Noble Leather Works, 82-86, A. Rehman St., Bombay 400003.

Pioneer Leather Works, Sitaram Bldg., Crawford Market, Bombay 400001.

Santosh Leather Corpn., Poonawala Chawl, Dharavi, Bombay 400017.

Sharda Manufrs., 32, 3rd Bhoiwada Lane, Bombay 400002.

Super Leather Works, 356, A. Rehman St., Bombay 400003.

Western India Tanneries Ltd., 2-A, Dharavi Rd., Bombay 400017.

Tamil Nadu

A. Abdul Shukoor & Co., 35, Broadway, Madras 600001.

Asia Finished Leather (Garment & Shoe) Pvt. Ltd., 12, Ramapillai St., Periamet, Madras 600003.

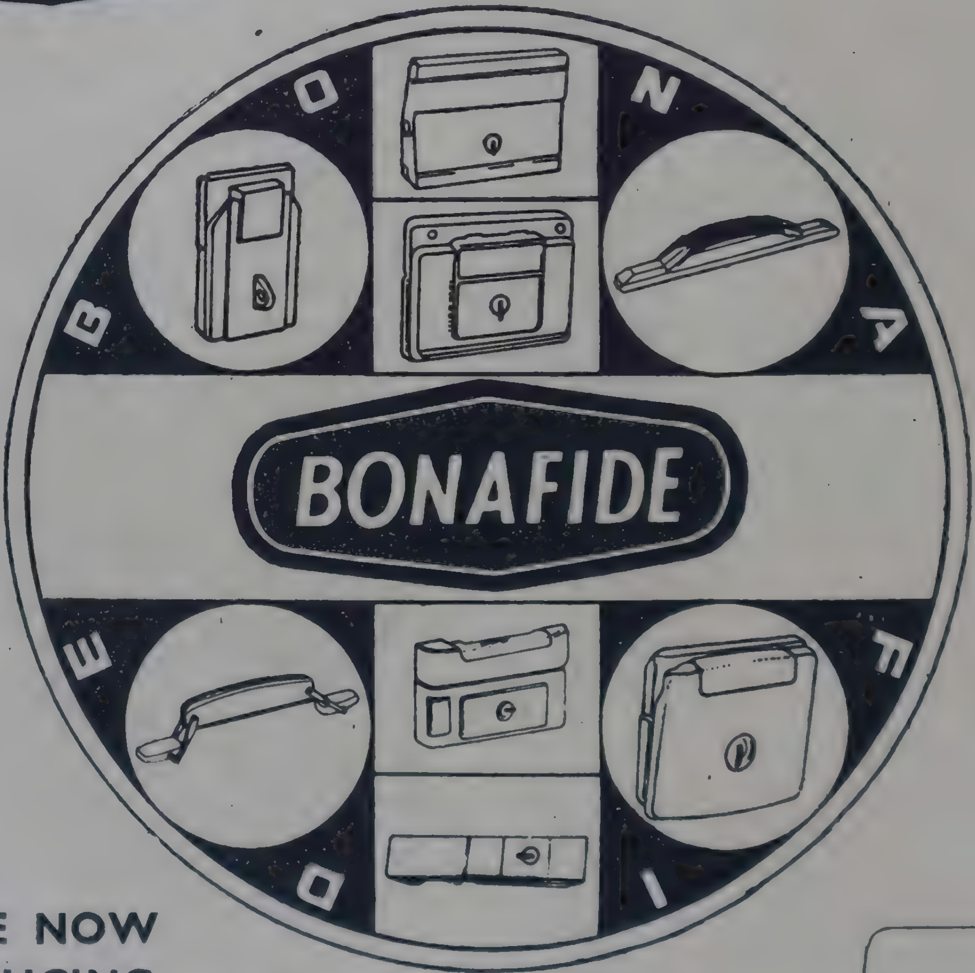
Dindigul Co-op. Leather Works Ind., Society Ltd., Dindigul 624001.

Gordon Woodroffe Leather Manufg. Co. Ltd., 1/21, North Beach Rd., Madras 600001.

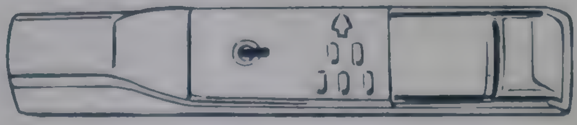
Jayam Trading Corpn., 26, K. Sadayappan St., Madras 600003.

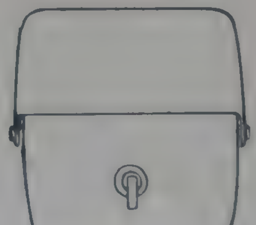
The Mark of Excellence

BONAFIDE



WE ARE NOW INTRODUCING





ECLAIR Lock
Des. Regd. No. 149545

SAHUL Lock
Des. Regd. No. 149935

Manufacturers of :
SUITCASE & BRIEFCASE ACCESSORIES.

Phones : 337759 869148

BONAFIDE INDUSTRIAL WORKS

Office : Post Box No. 13091, 71, Kambekar Street, Bombay 400 003

LEATHER BELTS

(GARUDA BRAND)

4 mm to 10 mm Full & Semi-Round Leather Cords (Belts), Leather Couplings, Leather Washers, Bucket Washers and other leather goods.

Manufactured by:

K. L. INDUSTRIES

124-B/8, Govind Nagar,
KANPUR 208 006.

K. Rajagopal & Co., 145, Patel Rd., Coimbatore 641009.

M. A. Khizar Hussain & Sons, 6, V. V. Koil St., Periamet, Madras 600003.

Maypar Leather Mfg. Co. Pvt. Ltd., 100, Poonamallee High Rd., Madras 600010.

Sreenivas & Co., 10, Sydenhams Rd., Madras 600003.

T. Abdul Wahid & Co., 18-A, Vepery H. Rd., Madras 600003.

Tiruchy Leather Goods Producers Ind. Co-op. Society, Tiruchirapalli 620001.

Usman Sharif & Co., Post Box 1926, Madras 600001.

Uttar Pradesh

Belting Corpn., 98/138, Purwa Hiraman, Kanpur 208001.

Industrial Leather Mfg. Co., 124–B/618, Govind Nagar, Kanpur 208006.

K. L. Industries, 124B/B, Govindnagar, Kanpur 208006.

Kohli Indl. Corpn. Pvt. Ltd., 13/384, Civil Lines, Kanpur 208001.

Prime Products Ltd., P. Box No. 80, Kanpur 208001.

Saddleways, 34/119, Chawal Mandi, Kanpur 208001.

Surisons & Co., Post Box No. 410, Kanpur 208001.

Tannery & Footwear Corpn. of India, 13/400, Civil Lines, Kanpur 208001.

Washer Corpn., 45, Halim Market, Chamanganj, Kanpur 208001.

Webbing & Belting Factory Ltd., G. T. Rd., Ghaziabad 201001

West Bengal

Arts & Prints Pvt. Ltd., 31, Park Mansions, Park St., Calcutta 700016.

Birkmyre Bros. Ltd., 87, Stephen House, Dalhousie Sq. East, Calcutta 700001.

Calcutta Leather & Allied Products Marketing Co-op. Society Ltd., 13-S, Tangra Rd., Calcutta 700014.

Chinese Leather Syndicate Ltd., 56, South Tangra Rd., Calcutta 700039.

East Asia Skin Corpn., 20, Tiretta Bazar St., Calcutta 700073.

Eastro Leathers, 62, Bentinck St., Calcutta 700001.

I.E.C. Ltd., 47, South Tangra Rd., Calcutta 700039.

Industrial Leather & Rubber Works, 10, Canning St., Calcutta 700001.

International Tanning Industries, 4, Ghulam Jilani Khan Rd., Calcutta 700039.

J. H. Fenner & Co. (India) Pvt. Ltd., 56-D, Free School St., Calcutta 700016.

Morrison & Cottle Pvt. Ltd., 30-G, J. Nehru Rd., Calcutta 700016.

National Tannery Co. Ltd., 1, Middleton St., Calcutta 700001.

P. Basak & Co., 9, Chidam Modi Lane, Calcutta 700006.

Tewari International, 14, Ch. Chowk St., Calcutta 700013.

LIFTS

(See under Electric Lifts in this list.)

LIME & ALLIED PRODUCTS

Avon Trading Corpn., 122, Hind Rajasthan Bldg., 95, D. Phalke Rd., Bombay 400014.

Bharat Colour Trdg. Co., 111, Kika St., Bombay 400004.

Burma Lime & Chemical Co. Ltd., 22/3, Jhama Pukur Lane, Calcutta 700009.

Dyershine & Chemicals Pvt. Ltd., 10, Alipur Rd., Delhi 110054.

Laxmi Lime Mineral Co., Hararwala Bldg., Islampura, Bombay 400004.

Light Precipitated Chemicals Ltd., Dharwar 580007.

Mahendra Bipin Chemical Industries Ltd., Bldg. No. 2, 2nd Flr., Room No. 1, 8, Horniman Circle, Bombay 400023.

Mayur Inds., 45/46, Indl. Area, Jodhpur 342003.

Uttrakhand Minerals Marketing Corpn., 62, Gandhi Rd., Dehra Dun 248001. U.P.

Vigyan Chemical Inds., 90, Raja Rd., Dehra Dun 248001.

LIME KILNS

S. N. Sunderson (India) Pvt. Ltd., 1/A, Vansittart Row, Calcutta 700001.

Westorwork Engineers Ltd., 5-D, Vulcan Ins. Bldg., Veer Nariman Rd., Bombay 400020.

LOCKS & FITTINGS

Arora Mfg. Co., E-161, Focal Point, Ludhiana 141010. (Punjab).

De's Lock Ind., 31, Haripada Dutta Lane, Calcutta 700033.

Godrej & Boyce Mfg. Co. Ltd., Godrej Bhavan, Home St., Bombay 400023.

Honlock Inds., Post Box 93, Aligarh 202001.

Locks & Padlocks (India), Chheda Engg. Works, Interlink Ind. Estate, Caves Road, Jogeshwari (East), Bombay 400060.

R. P. Locks Co., XIII/5612, Gandhi Mkt., Sadar Bazar, Delhi 110006.

Security Equipment Mfrs. Ltd., Post Box 330, Ahmedabad 380001.

Shri Krishna Ind., 4, Ind. Estate, Kanpur 208012.

Tiger Locks Ltd., Marris Rd., Aligarh 202001.

Vaultex Inds., 4/24, Indl. Estate, Gorwa Rd., Vadodara 390003.

MACHINE POLISHING CLOTH

Lotus Industries Ltd., 16, Coral Merchant St., Madras 600001

MACHINE TOOLS

(See 'Tools — Machine' in this list.)

MACHINERY

Alfred Herbert (India) Ltd., Kaiser-i-Hind Bldg., Sprott Rd., Ballard Estate, Bombay 400038.

Associated Engg. Co., Ghaswala Estate, Jogeshwari, Bombay 400060.

Balmer Lawrie & Co. Ltd., 21, Netaji Subhas Rd., Calcutta 700001.

C. Bole & Co., 61, Narayan Dhuru St., Bombay 400003.

Engg. & Industrial Foundry Co., Mettupalayam Rd., Coimbatore 641011.

Falcon Enterprises, Menon Estates, S. V. Rd., Goregaon West, Bombay 400104.

Gujarat Machinery Mfrs. Pvt. Ltd., 470, Worli Rd., Bombay 400025.

HBD Machines Mfg. Corpn., 120, Bharat Ind. Estate, Tokersi Jivraj Rd., Bombay 400015.

H. S. Sobha Singh & Sons, Nagin Mahal, 82, Veer Nariman Rd., Bombay 400020.

Hindustan Engg. Inds., 234, C. M. Azad Rd., Bombay 400008.

Indo-German Shoe Machine Co. Pvt. Ltd., 107, Govt. Indl. Estate, Bombay 400067.

Industrial Machinery Mfrs., 14-B, Kurla Industrial Estate, Near Narayan Nagar, Ghatkopar, Bombay 400086.

Industrial Machinery Mfrs. Pvt. Ltd., Near New Cotton Mills, Amraiwadi, Ahmedabad 380008.

Jamshedpur Engg. & Machinery Mfg. Co. Pvt. Ltd., Rly. Stn. Rd., Tatanagar, Jamshedpur 831004.

Lynx Machinery Ltd., 104, Ultadanga Main Rd., Calcutta 700067.

Machinery Mfg. Corpn., 68, Medows St., Bombay 400023.

Mechano International, 236, Hind Rajasthan Bldg., D. Phalke Rd., Dadar, Bombay 400014.

Meghraj Machines, 2/9, Ind. Estate, Gorwad, Vadodara 390003.

National Machinery Mfg. Ltd., P. Box 37, Vadodara 390001.

Orum Engg. Co., 104, Govt. Indl. Estate, Bombay 400067.

Patil Machines Pvt. Ltd., 107, Arun Chambers, Tardeo Rd., Bombay 400034.

Perfect Machine Tools Co. Pvt. Ltd., Bell Bldg., Sir P. M. Rd., Bombay 400001.

Pioneer Engg. Works, Naroda Rd., Ahmedabad 380002.

Popular Machinery Corpn., Agra Bldg., Oak Lane, Bombay 400023.

Prakash Fabricators, Post Box 207, Kolhapur 416001.

FLEXIBLE SHAFT GRINDERS
COMPACT & PORTABLE

FALCON ENTERPRISES
Experienced People You Can Trust.

We offer you FLEXIBLE SHAFT MACHINES from single speed to 7-speed Gear machines — manufactured in technical collaboration with OTTO SUHNER of SWITZERLAND and W. GERMANY.

Applications :

Die-Grinding, Milling, Pattern making, Rust removing, Filing, Cabinet and Furniture polishing, Chipping polishing, Buffing, Drilling, and any other mounted points or cutter operations.

Authorised Dealers: **SUHNER-INDIA**

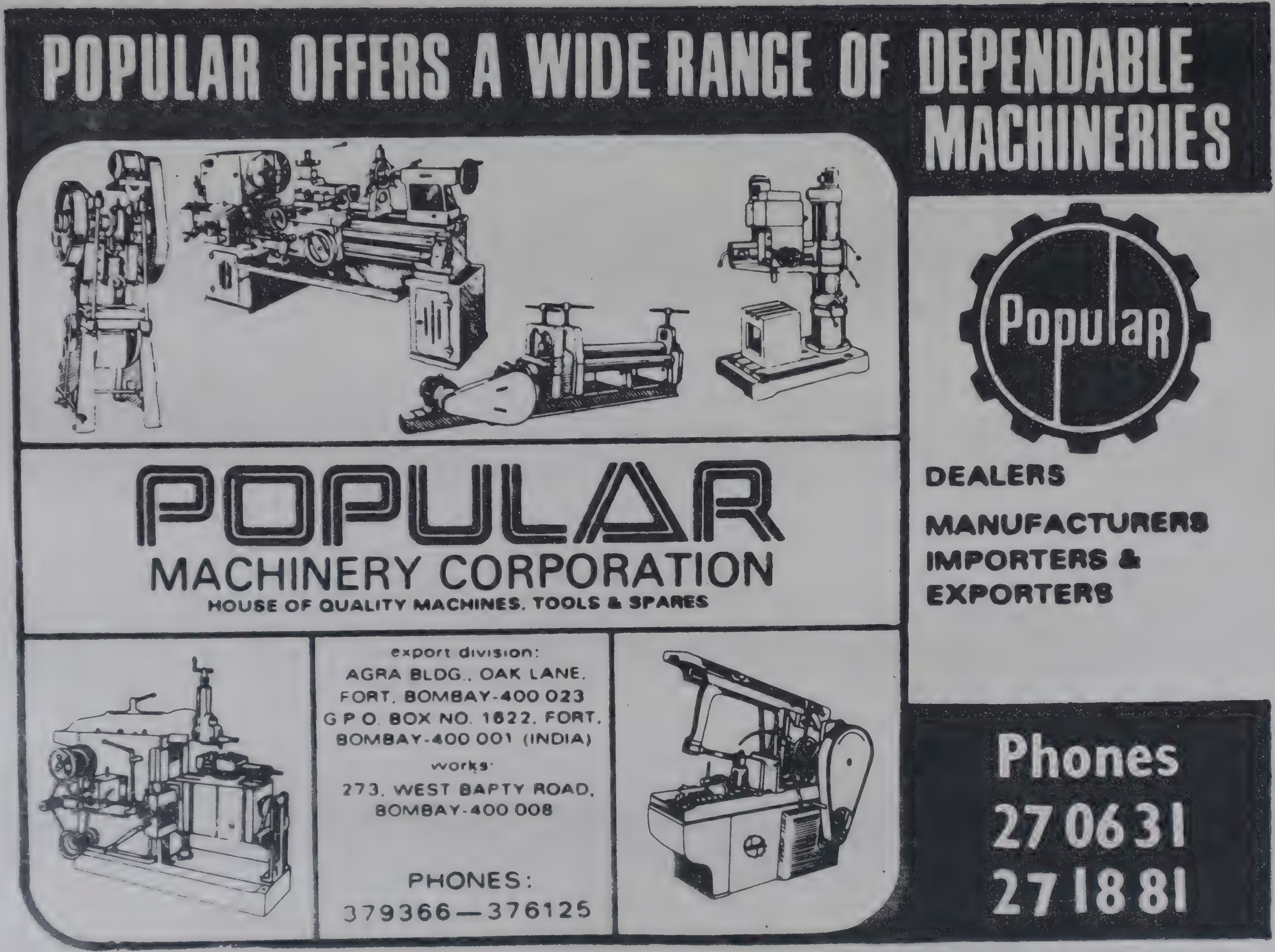
FALCON ENTERPRISES
Menon Estates, S. V. Road, Goregaon (West),
Bombay 400 104.
Phones : 692835 & 694529.

Machinery Manufacturers & Dealers

C. BOLE & CO.
61, Narayan Dhuru Street,
Bombay 400 003.

- ★ Gear Pumps, Boiler Feed Pumps—Multistage & Plunger type, Chemical Process Pumps, Centrifugal/Centripetal Pumps, Hydraulic Test Pumps.
- ★ **Industrial Blowers,** Exhaust/Blowers, Hot Air Blowers, Rotary Air Blowers, Hearths, Cupolas and Oil Firing Equipments, Burners.
- ★ **Hydraulic Equipments** such as Test Pump, Power Packs, Ram-Cylinders/Jacks, Pipe Bending Machines, Hydraulic Pressure, etc.
- ★ **Concrete Mixers,** 5/3½ Cft capacity, Hand Operated and 10/7 Cft Diesel and Power Driven and Vibrators.
- ★ **Chain Pulley Blocks,** Screw Jacks, Jim Crows.
- ★ **Jacks,** Hydraulic & Mechanical, capacity upto 100 tons and Jim Crows.

Works : Vikhroli, Bombay 400 083.
Works Phone : 583400.
Phones : 324350, 329641. Grams : "CIBOLECO."
Telex : 011-4205 BOLE



POPULAR OFFERS A WIDE RANGE OF DEPENDABLE MACHINERIES

Popular

DEALERS

MANUFACTURERS
IMPORTERS &
EXPORTERS

Phones
27 06 31
27 18 81

POPULAR
MACHINERY CORPORATION
HOUSE OF QUALITY MACHINES, TOOLS & SPARES

export division:
AGRA BLDG., OAK LANE,
FORT, BOMBAY-400 023
G.P.O. BOX NO. 1822, FORT,
BOMBAY-400 001 (INDIA)
works:
273, WEST BAPTY ROAD,
BOMBAY-400 008

PHONES:
379366—376125

Premier Machines Pvt. Ltd., 59, Najafgarh Rd., New Delhi 110015.

Rita Grinders, G.T. Rd., Kalsinagar, Ludhiana 141003.

SLM-Maneklal Inds. Ltd., Mistry Bhavan, D. Vachha Rd., Bombay 400020.

Santosh Ind., A-1, Sona Udyog, Parsi Panchayat Rd., Andheri (E), Bombay 400069.

Saraswati Indl. Syndicate Ltd., Yamunanagar 135001. Ambala Dist., Haryana.

Sardar Electric & Engg. Co., Seksaria Ind. Estate, S. V. Rd., Malad, Bombay 400064.

Teknoworks (India), L. B. Shastri Marg, Bhandup, Bombay 400078.

Triveni Engineering Works Ltd., NSIC Building, P.O. Udhyognagar, Naini 211008. Allahabad Dist.

Utkal Machinery Ltd., 41, Chowringhee Rd., Calcutta 700016.

MAGNETS & MAGNETIC APPLIANCES

Associated Magnets, 307, Embassy Centre, N. Point, Bombay 400021.

Auroville Electronics & Allied Ltd., P.O. Box 20, Pondicherry 605001.

Bengal Engg. Co. Pvt. Ltd., 12, Dalhousie Sq. East, Calcutta 700001.

East Coast Enterprises Ltd., 33, Brabourne Rd., Calcutta 700001.

Elektromag Devices, Post Box 914, Prabhadevi, Bombay 400025.

Excel Magnets Pvt. Ltd., 22D, S. A. Brelvi Rd., Bombay 400023.

Ferri-Mag India, Post Box 27, Chinchwad, Pune 411019.

Jaipur Metals & Electricals Ltd., Near Railway Station, Jaipur 302001.

Konel Corpn., 401-A, Niranjan, 99, Marine Drive, Bombay 400020.

Permanent Magnets Ltd., Dattapada Rd., Borivli East, Bombay 400066.

Southern Magnetics Pvt. Ltd., II/3, Instronics Estate, Tiruvanmiyur, Madras 600041.

Sterling Magnets Pvt. Ltd., 25, Unique Indl. Estate, Prabhadevi, Bombay 400025.

SYP Engg. Corpn., C-13/14, Ruturaj, J. B. Nagar, Borivli West, Bombay 400092.

Tempo Industrial Corpn., 394, Dr. Bhadkamkar Mrg., Bombay 400004.

Usha Telehoist Ltd., 14, Princep St., Calcutta 700072.

MARBLES & TILES

Abu Marble Mining Pvt. Ltd., 59, R. A. Kidwai Rd., Bombay 400019.

Acme Tiles Manufg. Co., 49, M. Azad Rd., Bombay 400004.

Bharat Tiles & Marble Pvt. Ltd., 32, Apollo St., Bombay 400023.

Bhor Inds. Ltd. (Bldg. Projects Divn.), 386, V. Savarkar Mrg., Bombay 400025.

Esco (Poona) Pvt. Ltd., 2432, East St., Pune 411001.

Jain Marble Factory, P. Box 20, Makrana 341505 (Rajasthan).

Mahalakshmi Inds., B-4, Mettupalayam Ind. Estate, Pondicherry 605001.

National Tiles & Ind. Pvt. Ltd., 31, Hamam St., Bombay 400001.

New India Mosaic & Marble Co. Pvt. Ltd., Ind. Estate, Lalbaugh, Bombay 400012.

Polymarble Mfg. Co. Pvt. Ltd., Sangli Bank Bldg., P. Nariman St., Bombay 400001.

Prakhasham Civil Engg. Inds., C-41, Ind. Estate, Yadavagiri, Mysore 570002.

S. K. Tile Inds., 43, Tardeo Airconditioned Mkt., Bombay 400034.

Somany Pilkingtons Ltd., 2, Red Cross Place, Calcutta 700001.

Swastik Marble Inds., Rupam, 152, Jawaharnagar, Goregaon West, Bombay 400062.

Tara Tiles, C/o Post Box 201, Shahupuri, Kolhapur 416001.

Tolia Tiles Inds., 84, Bombay Timber Mkt., Reay Rd., Bombay 400010.

MARINE CRAFTS & ENGINES

Aero Marine Inds. Pvt. Ltd., Super A-7, Guindy Ind. Estate, Madras 600032.

Andrew Yule & Co. Pvt. Ltd., 32, Nicol Rd., Ballard Estate, Bombay 400038.

Chowgule & Co. Pvt. Ltd., Chowgule House, Marmugao Harbour 403601. Goa.

Garden Reach Engineers & Shipbuilders Ltd., 43/46, Garden Reach Rd., Calcutta 700024.

MATERIAL HANDLING EQUIPMENT CONVEYORS

(See under 'Conveyors' in this list.)

FORK LIFT TRUCKS, LIFTING JACKS

Andhra Pradesh

Krishi Engines Pvt. Ltd., Sanatnagar, Hyderabad 500018.

Bihar

Tata-Robinson Fraser Ltd., 11, Station Rd., Jamshedpur 831007.

Gujarat

Gujarat Ind. Trucks Ltd., Surat Navsari Rd., P.O. Baroda Rayon 394220. Surat Dist.

Haryana

Talbros Automotive Components Ltd., 74, Sector 6, Faridabad 121006.

Maharashtra

Associated Mfrs. & Engrs., 11, Gulab Park, Borla-Koliwada Rd., Chembur, Bombay 400074.

Brady & Morris Engg. Co., Ltd., 12, V. Nariman Rd., Bombay 400001.

Fibro Indl. Trading Co., Kurla-Andheri Rd., Sakinaka, Bombay 400072.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Godrej Bhavan, Home St., Bombay 400023.

Hoist-O-Mech Ltd., Industry Manor, Opp. Bengal Chemicals, Bombay 400025.

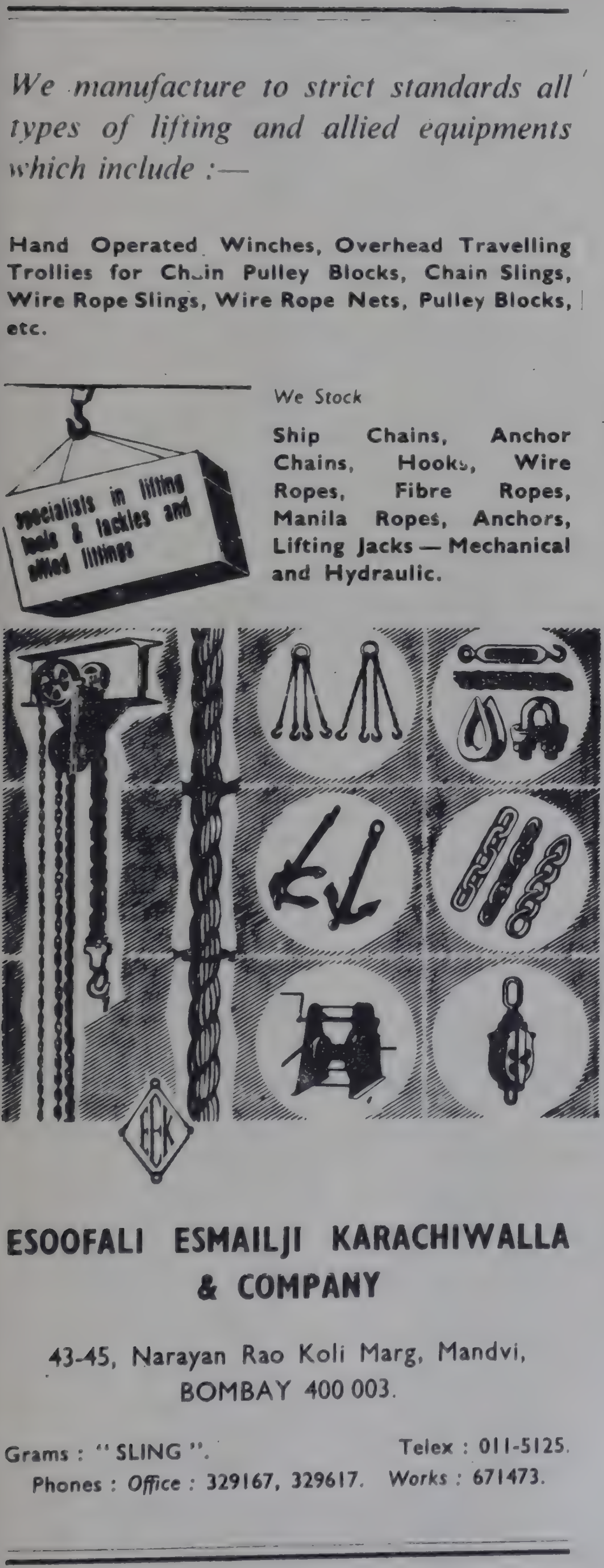
Ingersoll-Rand (India) Ltd., Maybaker House, S. K. Ahire Marg, Bombay 400025.

Jost's Engg. Co. Ltd., Great Social Bldg., Sir P. Mehta Rd., Bombay 400001.

Kanubhai Engineers Pvt. Ltd., 117, Bajaj Bhavan, N. Point, Bombay 400021.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Laser Electronics, 70, Ambedkar Rd., Opp. Aurora Cinema, Bombay 400019.


specialists in lifting tools & tackles and allied fittings

We manufacture to strict standards all types of lifting and allied equipments which include :—

Hand Operated Winches, Overhead Travelling Trollies for Chain Pulley Blocks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Pulley Blocks, etc.

We Stock

Ship Chains, Anchor Chains, Hooks, Wire Ropes, Fibre Ropes, Manila Ropes, Anchors, Lifting Jacks — Mechanical and Hydraulic.

ESOOFALI ESMAILJI KARACHIWALLA & COMPANY

43-45, Narayan Rao Koli Marg, Mandvi,
BOMBAY 400 003.

Grams : "SLING". Telex : 011-5125.
Phones : *Office* : 329167, 329617. *Works* : 671473.

Mahindra Owen Ltd., 148, Bombay-Pune Rd., Pimpri, Pune 411018.

Omega Engg. Co., 149, Gamdevi Rd., Bombay 400078.

Premier Automobiles Ltd., Construction House, W. Hirachand Marg, Bombay 400038.

Tata Engg. & Locomotive Co. Ltd., Bombay House, Homi Mody St., Bombay 400023.

Tractel Tirfor (India) Pvt. Ltd., 30, Altamount Rd., Bombay 400026.

V. S. Lifting Tackles, 11, Harichand Textile Mill Compd., Vikhroli, Bombay 400079.

Voltas Ltd., Volkart Bldg., Graham Rd., B. Estate, Bombay 400038.

Wood Packers, 80, Bombay Timber Mkt. Ltd., Reay Rd., Bombay 400010.

Tamil Nadu

Alfomega Hydroworks Pvt. Ltd., 146, Lattice Bridge Rd., Madras 600041.

Conveyor Equipment Co. Pvt. Ltd., 3, Race Course Rd., Guindy, Madras 600032.

Vikram & Co., No. 2, Lattice Bridge Rd., Madras 600020.

West Bengal

Arun Industries, 26, Upper Chitpur Rd., Calcutta 700001.

Carter Pooler & Co. Ltd., 1, K. N. Dutta Rd., Calcutta 700036.

Electric Construction & Equipment Co. Ltd., Parbangla, Batanagar 743313. 24-Parganas Dist.

Oriental Trading Corpn., 134, B.R.B.B. Rd., Calcutta 700001.

PULLEYS, PULLEY BLOCKS, CRANES, HOISTS, ETC.

Delhi

Amta Ind. (India), 17, DLF Ind. Area, New Delhi 110015.

Ardee Mechanical Inds. Pvt. Ltd., 28, Barakhamba Rd., New Delhi 110001.

Atlas Pulley Manufg. Co., 5392, Shradhanand Marg, Delhi 110006.

B. K. Khanna & Co. Pvt. Ltd., 14-F, Central Place, New Delhi 110001.

Benlaks (India) House, Shradhanand Marg, Delhi 110006.

Dass Hitachi Pvt. Ltd., 21-A, Janpath, New Delhi 110002.

Dehati Engg. Works, 15, Najafgarh Rd., Ind. Area, New Delhi 110015.

Goodlift (India) Inds. (Regd.), A-12, St. No. 4, Anand Parbat Ind. Area, New Rohtak Rd., New Delhi 110005.

Hindustan General Inds. Ltd., Qutab Rd., Delhi 110006.

Indudyog Co. Pvt. Ltd., 40, Ind. Estate, Okhla, New Delhi 110020.

K. G. Khosla & Co. Pvt. Ltd., 1, D. B. Gupta Rd., New Delhi 110055.

Lifting Equipment & Accessories, B-13/1, Jhilmil Indl. Area, Shahdara, Delhi 110032.

Mangla Engg. Corpn., 229, Ajmeri Gate, Delhi 110006.

Prem Nath Nanda & Sons, Hauz Qazi, Delhi 110006.

Pulling & Lifting Machines Pvt. Ltd., 12, Sriram Rd., Civil Lines, Delhi 110006.

R. D. Varma & Co. Pvt. Ltd., 28, Barakhamba Rd., New Delhi 110001.

Reva Engg. Inds. Pvt. Ltd., 1, Okhla Indl. Area, Phase II, New Delhi 110020.

Shakti Pulley Manufg. Co., 5391, Light Bldg., Shradhanand Marg, Delhi 110006.

Simplicity Cranes Pvt. Ltd., 505, Manasarovar, 90, Nehru Place, New Delhi 110019.

Tractel Tirfor India Pvt. Ltd., 302, Harsh Bhawan, 64-65, Nehru Place, New Delhi 110019.

Gujarat

Elecon Engg. Co. Ltd., Vallabh Vidyanagar 388120.

Pioneer Equipment Co. Pvt. Ltd., 432, Padra Rd., Vadodara 390005.

Sayaji Iron & Engg. Co. Ltd., Chhani Rd., Vadodara 390002.

Haryana

Escorts Ltd., 18/4, Mathura Rd., Faridabad 121001.

Karnataka

Armatic, 26, M. M. Ind. Estate, Jayanagar-West, Bangalore 560011.

Armsel (Bangalore), 25, Kormangla Indl. Layout, Hosur Rd., Bangalore 560034.

C.M.C. Works, 19/1, Platform Rd., Bangalore 560020.

Mantons (Bangalore) Pvt. Ltd., No. 3, Corpn. Bldg., Residency Rd., Bangalore 560025.

Steel Construction Co. Pvt. Ltd., 41, Hardinge Rd., Bangalore 560001.

Kerala

Kerala Electrical and Allied Engg. Co. Ltd., Mamala, Cochin 682305.

Maharashtra

Abdulhusein Peerbhoy & Sons, 66–68, Peerbhoy Bldg., Narayan Koli Mrg., Bombay 400003.

Arms Electricals & Electronics Pvt. Ltd., India Printing House, 42, G. D. Ambekar Mrg., Wadala, Bombay 400031.

Ashton Green & Co., 118. Sir Vithaldas Chambers, 16, Apollo St., Bombay 400023.

B. R. Hermann & Mohatta (I.) Pvt. Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

Bharat Textile Inds., Darukhana, Reay Rd., Bombay 400010.

BUC Mechanical Equipments Pvt. Ltd., 119 ABC, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Consolidated Hoists Pvt. Ltd., Pune 411009.

Crescent Iron & Steel Corpn. Ltd., Ind. Area, Lalbaug, Bombay 400012.

Deccan Cranes & Hoists, 4111, Hind Rajasthan Bldg., D. Phalke Rd., Bombay 400014.

Dynacraft Machine Co. Pvt. Ltd.,, C. D. Barfiwalla Marg, Bombay 400058.

Eastern Machinery & Trdg. Co., Imperial Chambers, Wilson Rd., B. Estate, Bombay 400038.

Eddycranes Engineers Pvt. Ltd., 8/C, Choksey Bldg., Gamdevi, Bombay 400007.

Electro Fabricators Pvt. Ltd., A-301, Wagle Indl. Estate, Rd. No. 32, Thane 400604.

Electromag Devices, Unique Industrial Estate, Veer Savarkar Marg, Prabhadevi, Bombay 400025.

Esoofali Esmailji Karachiwalla & Co., 43-45, N. N. Koli Mrg., Mandvi, Bombay 400003.

Fibro Industrial Trading Co., Kurla-Andheri Rd., Sakinaka, Bombay 400072.

FMC Engg. Works Pvt. Ltd., Sonal Indl. Estate, Off Saki Vihar Rd., Bombay 400072.

Garlic Engg., Garlick House, 414, S. Bapat Mrg., Bombay 400013.

Hercules Hoists Ltd., Minerva Ind. Estate, Opp. Ralliwolf, L. B. Shastri Marg, Mulund, Bombay 400080.

Hercules Mechanical Works, B-59, Wagle Ind. Estate, Thane 406004.

Hoist-O-Mech Ltd., Pokhran Rd. No. 2, Majiwada, Thane 400606.

Indmag Pvt. Ltd., 17, Off Arthur Bunder Rd., Bombay 400005.

Industrial Marketing Services, Jiji House, 1st Flr., Ravelin St., Bombay 400001.

Jashvant C. Shah & Co., Bharati Nivas, Block 6, 1st Flr., Besant Rd., Santacruz West, Bombay 400054.

K. T. Steel Ind. Pvt. Ltd., 21, Bharuch St., Bombay 400009.

Kalton's Engg. Works Pvt. Ltd., Jari Mari, Kurla-Andheri Rd., Bombay 400072.

Khandelwal Udyog Ltd., Kurla-Kirol Rd., Bombay 400086.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Magco Controls, Post Box No. 6666, Bombay 400050.

Materials Handling Engg. Co., 1, Sidhpura Ind. Estate, Masrani Le., Bombay 400070.

McKenzies Ltd., Donde Marg, Bombay 400015.

Mech-Electricals, 16, Kapadia Ind. Estate No. 3, 122-124, M. Vasanji Rd., Bombay 400093.

Millar's Machinery Co. Pvt. Ltd., Pokhran Rd. No. 2, Thane 400601.

New Standard Engg. Co. Ltd.. N.S.E. Estate, Goregaon (East), Bombay 400063.

Nigo's Corpn., Patel Comp., 48-B, Lamington Rd., Near Nair Hospital, Bombay 400008.

Power Gear Engg. Co., B. G. 38, Ramkrishna Mandir Rd., J. B. Nagar, Bombay 400059.

R. N. Suresh Tools Corpn., 53, Commercial Chambers, Meheralli Rd., Bombay 400003.

Radiant Electric & Machinery Co., Parekh Market, Kennedy Bridge, Bombay 400004.

Richardson & Cruddas Ltd., Byculla Iron Works, Bombay 400008.

Roberts, McLean & Co. Ltd., Ilaco House, Sir P. Mehta Rd., Bombay 400001.

Roman Inds., A-1 Inds. Annexe, J. B. Nagar, Andheri, Bombay 400059.

Shah Patel & Co., 111, Nagdevi St., Bombay 400003.

Shalimar Engg. Co., 32, Shalimar Indl. Estate, Bombay 400019.

Sharps Engg. Pvt. Ltd., Anupam Indl. Estate No. 2. LBS Mrg., Mulund, Bombay 400080.

Shotblasting & Metal Spraying Pvt. Ltd., 509, Arun Chambers, Tardeo Rd., Bombay 400034.

Standard Materials Agencies, 45/46, Podar Chambers, S. A. Brelvi Rd., Bombay 400023.

Steel-Smith, 8, Sethi Ind. Estate, Suren Rd., Andheri (East), Bombay 400093.

Supreme Hoist & Crane Mfg. Co., 26, Shivkrupa Ind. Estate, LBS Mrg., Vikhroli, Bombay 400083.

Tak Machinery Ltd., Janmabhoomi Bhavan, Ghoga St., Bombay 400001.

Tas Engg. Co. Pvt. Ltd., 333, A. Rehman St., Bombay 400003.

Todi Inds. Pvt. Ltd., Todi Estate, Lower Parel, Bombay 400013.

W. H. Brady & Co. Ltd., 12/14, Veer Nariman Rd., Bombay 400001.

Western Mechanical Ind. Pvt. Ltd., Industry Manor, Opp. Bengal Chemicals, Bombay 400025.

Westerwork Engrs. Pvt. Ltd., 15, Bhandup Village Rd., Bombay 400078.

WMI Cranes Ltd., Bhandup Village Rd., Bhandup, Bombay 400078.

Punjab

Zordor Inds., Hoshiarpur Rd., Jullundur 144001.

Tamil Nadu

Adyar Industries, Kalashetra Rd., Off Lattice Bridge Rd., Madras 600041.

Bansons Engg. Co., 61A, Seetharama Rd., Alwarpet, Madras 600018.

Chitram & Co. Pvt. Ltd., Main Rd., Royapuram, Madras 600013.

Marshall Sons & Co. (Mfg.) Ltd., 33/34, Ambattur Ind. Estate, Madras 600058.

South Coast (Hardware) Pvt. Ltd., 2/153, Broadway, Madras 600001.

Southern Structurals Ltd., 29-A, Chamier's Rd., Madras 600028.

VNR Mfg. Industries, 92–A, Indl. Estate, Madras 600058.

Uttar Pradesh

Pulling and Lifting Machines Pvt. Ltd., B-10, Ind. Area, No. 3, Meerut Rd., Ghaziabad 201001.

Saran Engg. Co. Ltd., Sutherland House, Kanpur 208001.

West Bengal

A. Stock & Co. Ltd., 8, Goragacha Rd., Calcutta 700007.

Arthur Bagree & Co. (I), 40, Strand Rd., Calcutta 700001.

Asian Marketing Co. Ltd., 38, N. Subhas Rd., Calcutta 700001.

Braithwaite & Co. (I) Ltd., Angus 712221. Hooghly Distt.

Britannia Engg. Co. Ltd., 3, N. Subhas Rd., Calcutta 700001.

Burn & Co. Ltd., Howrah 711101.

Coles Cranes of India Ltd., 517, Barrackpore Rd., Kamarhatti 700058. 24 Parganas Dist.

Construction Machinery Corpn., 32, G. Chandra Ave., Calcutta 700001.

Escal India Pvt. Ltd., P-34. C.I.T. Rd., Calcutta 700014.

Garden Reach Shipbuilders & Engrs. Ltd., 43/46, Garden Reach Rd., Calcutta 700024.

Hikks Engg. Inds., 10-A, Chandni Chowk St., Calcutta 700072.

Hindustan Motors Ltd., Uttarpara 712258. Hooghly Dist.

Indian Crane Co. Ltd., 517, B. T. Rd., Calcutta 700058.

J. K. Steel & Ind. Ltd., 7, Council House St., Calcutta 700001.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Krane & Winches, 22, Canning St., Calcutta 700001.

Kumardhubi Engg. Works, Chartered Bank Bldg., Calcutta 700001.

Lynx Machinery Ltd., 104, Ultadanga Main Rd., Calcutta 700001.

Modern India Construction Co. Ltd., 8, India Exchange Place, Calcutta 700001.

New Marine Mart, 4, Raja Woodmunt St., Calcutta 700001.

Roberts Mclean & Co. Ltd., 27–B, Camac St., Calcutta 700016.

Usha Telehoist Ltd., 14, Princep St., Calcutta 700013.

Vinar Ltd., 2-A, Shakespeare Sarani, Calcutta 700071.

TRAILERS & TROLLIES

Andhra Pradesh

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

Delhi

Delhi Engg. Works Pvt. Ltd., G.T. Rd., Azadpur, Delhi 110033.

Ghaziabad Engg. Co. Pvt. Ltd., 42, Janpath, New Delhi 110002.

Indudyog Co. Pvt. Ltd., 4C, Okhla Ind. Estate, New Delhi 110020.

New India Motors Pvt. Ltd., Scindia House, New Delhi 110001.

Gujarat

Testeels Ltd., Ashram Rd., Ahmedabad 380014.

Karnataka

CMC Works, 19/1, Platform Rd., Bangalore 560020.

Govt. Central Indl. Workshop, Mysore Rd., Bangalore 560026.

Maharashtra

BUC Mechanical Equipments Pvt. Ltd., 119, ABC Govt. Indl. Estate, Kandivli West, Bombay 400067.

Esoofali Esmailji Karachiwala & Co., 43/45, Bhandari St., Mandvi, Bombay 400003.

Ferro Process & Allied Engg., B-12, Giribuj Indl. Estate, Mahakali Rd., Andheri East, Bombay 400093.

Hemani Inds., 187, Quay St., Mazgaon, Bombay 400010,

K. T. Steel Inds. Pvt. Ltd., Broach St., Dana Bunder, Bombay 400009.

Kanara Engg. Co. Pvt. Ltd., Mascarenhas Rd., Bombay 400010.

Mahindra & Mahindra Ltd., Gateway Bldg., Apollo Bunder, Bombay 400039.

Marian Engg. Co., 710, Horniman Circle, Bombay 400023.

Nagori & Sons, 41, Hamam St., Bombay 400023.

Power Gear Engg. Co., Jeevan Sahakar, Sir P. M. Rd., Bombay 400001.

Raja Steel Inds., 8, Kaka Halwai Estate, Pune 411009.

Ruby Industries, 75, Dr. A. Besant Rd., Bombay 400018.

Sabas Engg. Works, 105-111, Dr. E. Moses Rd., Worli, Bombay 400018.

Special Equipment Co., Chandraprabhu Indl. Estate, 20, K. V. Bhai Bal Mukund Mrg., Next to Byculla Goods Depot, Bombay 400012.

Punjab

Aminchand Bholanath, Tanda Rd., Jullundur 144001.

Tamil Nadu

Addison & Co. Ltd., 158, Mount Rd., Madras 600002.

Simpson & Co. Ltd., 202, Mount Rd., Madras 600002.

Sreevatsa Engg. & Trading Co., 92–A, Indl. Estate, Madras 600058.

Trailers India, 1/30, Pantheon Rd., Egmore, Madras 600008.

VNR Mfg. Industries, 14/A, Mada Church St., Madras 600028.

Uttar Pradesh

Light Carts Pvt. Ltd., Cariappa St., Meerut 250001.

West Bengal

Alexander Pvt. Ltd., 26, Strand Rd., Calcutta 700001.

Amiya Corpn., 19, Abdul Hamid St., Calcutta 700001.

Associated Aesby Ind. Pvt. Ltd., 22, Strand Rd., Calcutta 700001.

Balmer Lawrie & Co. Pvt. Ltd., 21, N. Subhas Rd., Calcutta 700001.

Bengal Hardware Co., 70, N. Subhas Rd., Calcutta 700001.

C. Comens & Sons Ltd., 103/3, Diamond Harbour Rd., Calcutta 700038.

Chopra Motors, 139, Regent Park, Calcutta 700040.

Mechanical Engg. Co. Pvt. Ltd., 50/1, Tangra Rd., Calcutta 700015.

MEDICAL EQUIPMENT

HOSPITAL EQUIPMENT

Andhra Pradesh

Deccan Porcelain & Enamel Works Ltd., 2707, Bakaram, Mushirabad, Hyderabad 500048.

Delhi

Allied Surgical & Dressings, Bhagirath Palace, Chandni Chowk, Delhi 110006.

Apothecaries' Sundries Manufg. Co., P.O. Box 1, New Delhi 110001.

Bensons Surgico, 42, Indl. Area, Najafgarh Rd., New Delhi 110015.

Eastern Trdg. Corpn., 849, Lajpatrai Market, Chandni Chowk, Delhi 110006.

Enkay India Rubber Co., 156-D, Kamla Nagar, Delhi 110007.

Helix Latex Ind., C-11-6, Model Town, Delhi 110009.

Nath Bros. (Agencies), Loft No. 3, 24, Barakhamba Rd., New Delhi 110001.

National Instruments Ltd., Ansal Bhawan, K. Gandhi Mrg, New Delhi 110001.

Ocean Surgical Co., 51/2, D. B. Gupta Rd., Karol Bagh, New Delhi 110005.

Phillips India Ltd., 68, Najafgarh Rd., New Delhi 110015.

Rita Rubber and Surgical Works, 1579, Bhagirath Palace, Delhi 110006.

Swastik Thermometer Co., E–51, Krishan Nagar, New Delhi 110051.

Gujarat

Jintan Clinical Thermometer Co. (I) Pvt. Ltd., Surendranagar 363001.

Miles India Ltd., Post Bag 507, Vadodara 390001.

Shah Medical and Surgical Co. Ltd., Ajwa Rd., Vadodara 390001.

Surgical Equipment Mfg. Co., 1, B. Kalpana Bhoomi Estate, Dhudeshwar Rd., Ahmedabad 380001.

Himachal Pradesh

Kumar Industries, Kandaghat 173215.

Karnataka

British Physical Laboratories India Pvt. Ltd., M. G. Rd., Bangalore 560001.

Chamundi Metal Ind., 80, Rajaji Nagar Ind. Suburb, Bangalore 560022.

Maharashtra

Bio-Care Equipment. 702, Vaishali Apartments. Janki Kutir, Juhu. Vile Parle West. Bombay 400056

Bombay Oxygen Corpn. Ltd., 5, Convent St., Bombay 400039.

Dial Rubber Works, Sonawala Cross Rd., Goregaon East, Bombay 400063.

Elphinstone Metal Rolling Mills P. Ltd., 154, Bapu Khote St., Bombay 400003.

Elpro Intnl. Ltd., Chinchwad Gaon, Pune 411033.

Harshadray Pvt. Ltd., Jiji House, Raveline St., Bombay 400001.

Hindustan Trading Co., 91, Princess St., Bombay 400002.

Indian Dental Traders, 3, Warden Court, Gowalia Tank, Bombay 400025.

Indian Oxygen Ltd., L. B. Shastri Marg, Ghatkopar West, Bombay 400086.

Isomed Ind. Pvt. Ltd., Shastri Marg., Bombay 400080.

Janak Mfg. Works, Antop Hill, Wadala East, Bombay 400037.

Japsin Instrumentation, 40, Picket Rd., Kalbadevi, Bombay 400002.

Johnson & Johnson Ltd., Spencer's Bldg., 30, Forjett St., Bombay 400036.

Kalelkar Surgical Ind., 305, S. Gandhi Marg, Bombay 400002.

Kanti Impex Trdg. Co., 125, N. Master Rd., Bombay 400023.

Krishna Instruments & Appliances Co., 230, Arun Chambers, Tardeo, Bombay 400034.

M. Shah & Co., Kanji Mansion, 311, S. Patel Rd., Bombay 400004.

Macphil & Co. Pvt. Ltd., B-3, Wagle Estate, Panchpakhadi, Thane 400604.

Mazda Mfg. Co., 6, Datta Mandir Rd., Bhandup, Bombay 400078.

Nat Steel Equipment Pvt. Ltd., 9, Ambekar Marg, Bombay 400014.

National Instruments Ltd., K. Parikh House, 47, P. D'Mello Rd., Bombay 400009.

Oriental Metal Pressing Works Pvt. Ltd., 131, Worli, Bombay 400018.

Scientific Sales Corpn., 70/72, S. Devji St., Bombay 400003.

Star Scientific, Raut Ind. Estate, 424-A, S. Bapat Mrg., Bombay 400016.

Swivel Castors Engg. Co., 2, Sidhpura Ind. Estate, Masrani Lane, Kurla, Bombay 400070.

Taap Maan Kendra, 281, P. D'Mello Rd., Bombay 400001.

Vijay Lakshmi Electric Co., Sitaram Bldg., 37, Dr. D. N. Rd., Bombay 400001.

Orissa

National Instruments Ltd., Coll. Square, Cuttack 753003.

Punjab

Punjab Bio-Medical Equipments Ltd., Bank of India Bldg., Sector 17-B, Chandigarh 160017.

Tamil Nadu

National Instruments Ltd., 150A/3, Anna Salai, Madras 600002.

Omega Surgical Ind., 19, Riverside Rd. II, Agraharam, Salem 636001.

Tablets Ltd., 107, N. S. C. Bose Rd., Madras 600001.

Uttar Pradesh

Hicks Thermometers (India) Ltd., Indl. Estate, Aligarh 202001.

Lucknow Surgical Co., 30, M. G. Rd., Lucknow 226001.

West Bengal

Asiatic Oxygen Ltd., 8, B.B.D. Bagh East, Calcutta 700001.

National Instruments Ltd., 1/1, Raja S. C. Mullick Rd., Jadavpur, Calcutta 700032.

HOSPITAL FURNITURE

Delhi

Capital Surgical Co. Pvt. Ltd., 7-B, N. Subash Marg, Daryaganj, New Delhi 110002.

Maharashtra

Godrej & Boyce Manufg. Co. Pvt. Ltd., Lalbaug, Parel, Bombay 400012.

Hitra Equipments, Khambata Lane, Opp. Victoria Gardens, Bombay 400027.

Janak Mfg. Works, Antop Hill, Wadala East, Bombay 400037.

Tamil Nadu

Pikays Medico Surgicals, 199, Mount Rd., Madras 600002.

Medical Equipment Co., 48/1, R.H. Rd., Madras 600004.

West Bengal

Ashok Metal Inds. Ltd., 157, N. S. Rd., Calcutta 700001.

Bharat Tin & Enamel Co. Pvt. Ltd., 2–A, Shakespeare Sarani, Calcutta 700016.

H. Mukerji & Bannerjee Surgical Pvt. Ltd., 39/1, College St., Calcutta 700012.

ORTHOPAEDIC EQUIPMENT

Delhi

Delhi Surgical & Dressings, Bhagirath Palace, Delhi 110006.

India Medico Instruments, 14, Angoori Bagh Mkt., Delhi 110006.

International Surgical Works Pvt. Ltd., 8–B, UO/3, Kartar Niwas, Jawahar Nagar, Delhi 110007.

West Bengal

H. Mukerji & Bannerjee Surgical Pvt. Ltd., 39/1, College St., Calcutta 700012.

PHYSIOTHERAPY EQUIPMENT

Maharashtra

Electro Medical Apparatus Co., 3, Tandel St., South Dongri, Bombay 400009.

Hitra Equipments, Khambata Lane, Opp. Victoria Garden P.O., Bombay 400027.

Karnataka

Kamal Industries, 2-F, M. Gandhi Rd., Bangalore 560001.

SURGICAL DRESSINGS

Delhi

Allied Surgical Dressings, Bhagirath Palace, Chandni Chowk, Delhi 110006.

Eagle Surgical Dressing Manufg. Co., 202, Lajpatrai Market, Delhi 110006.

Goa

Leukoplast (India) Pvt. Ltd., Rua de Curem, Panaji 403001.

Maharashtra

Brisk Surgical Cotton, 138, Gandhi Chowk, Thane 400601.

Diamond Surgical Dressing Works, 381, S. Guruji Marg, Bombay 400011.

Johnson & Johnson Ltd., Spencers Bldg., 30, Forjett St., Bombay 400036.

Leukoplast (India) Pvt. Ltd., Eucharistic Congress Bldg. III, 4th flr., 5, Convent St., Bombay 400039.

West Bengal

Excon Pioneer Inds., 5 & 6, Fancy Lane, 3rd flr., Calcutta 700001.

SURGICAL INSTRUMENTS

Andhra Pradesh

Jyothi Industries, C-31, Ind. Estate, Sanatnagar, Hyderabad 500018.

Delhi

Allied Surgical & Dressings, Bhagirath Palace, Chandni Chowk, Delhi 110006.

Capital Surgical Co. Pvt. Ltd., 7-B, N. Subash Marg, Daryaganj, New Delhi 110002.

Evershine Surgical Co., Mahalaxmi Market, Bhagirath Palace, Delhi 110006.

Supreme Surgical Co., 3057, Hardhyan Singh, Karol Bagh, New Delhi 110005.

Gujarat

Safe Guard Surgicals, Maninagar East, Ahmedabad 380008.

Shah Medical & Surgical Co. Ltd., Ajwa Rd., Vadodara 390001.

Karnataka

British Physical Labs. India Pvt. Ltd., 28, K. Hanumanthiah Rd., Bangalore 560027.

Paxal Corpn., 13, Sri Krishnarajendran Rd., Bangalore 560002.

South India Surgical Co., 71/1 & 2 A, Srinivasachar St., Bangalore 560002.

Maharashtra

Alfa Surgical & Engg. Co., 97, A.B. Udyog Bhavan, Old Prabhadevi Rd., Bombay 400025.

All India Surgical Mfg. Co., 146, Princess St., Bombay 400002.

Andhra Scientific Co. Ltd., Janmabhoomi Chambers, Ballard Estate, Bombay 400038.

Asian Surgical Co., Alkarim Manzil, 15, Palton Rd., Bombay 400001.

Bhatia Surgical Works, 78, Govt. Indl. Estate, Bombay 400067.

Bombay Surgical Co., Opp. H. N. Hospital, Sandhurst Rd., Bombay 400004.

Deo Surgical & Scientific Co., 95, Amersey Rd., Bombay 400064.

Fairdeal Surgical Corpn., 106, Bank of Baroda Bldg., Palton Rd., Bombay 400001.

Ideal Surgical Corpn., Mansoor Bldg., Princess St., Bombay 400002.

Imperial Surgical Co. Pvt. Ltd., India House, Opp. G.P.O., Bombay 400001.

Kalelkar Surgical Ind., 305, Princess St., Bombay 400002.

National Surgical Instrument Co., 301, Haines Rd., Worli, Bombay 400018.

Standard Surgical & Dressing Works, 28, B. Genu Rd., Bombay 400002.

Sudhir Surgical Co., 46, Old Hanuman Lane, Bombay 400002.

Vijaya Scientific & Surgical Co., 16, Shreyas, 180, Backbay Reclamation, Bombay 400020.

Warden Surgical Co. Pvt. Ltd., Mapla Mahal, Thakurdwar Rd., Bombay 400002.

Western India Surgical Co., 98, S. Gandhi Marg, Bombay 400002.

Zenith Surgical Co., 206, 3C-Mangaldas Bldg., Mangaldas Rd., Bombay 400002.

Tamil Nadu

East India Surgical Co., 809, Anna Salai, Madras 600002.

Madras Surgical Equipments Co., 6, Ritchie St., Madras 600002.

Medical Equipments Co., 48/1, R.H. Rd., Madras 600004.

Pikays Medico Surgicals, 199, Mount Rd., Madras 600002.

South India Surgical Co., 196, Mount Rd., Madras 600002.

Uttar Pradesh

Kehr Surgical & Allied Products Pvt. Ltd., C–34, Panki Indl. Estate, Kanpur 208022.

West Bengal

Calcutta Metallic Co., 11, H. Mukerjee Rd., Calcutta 700025.

H. Mukerji & Bannerjee Surgical Pvt. Ltd., 39/1, College St., Calcutta 700012.

X-RAY MACHINES

Delhi

Escorts Ltd., 11, Scindia House, Connaught Circus, New Delhi 110001.

Maharashtra

Elpro International Ltd., Chinchwad Gaon, Pune 411033.

Espi Trdg. Co., Neelkanth, 98, N. Subash Rd., Bombay 400002.

Tamil Nadu

Celmedex Pvt. Ltd., 6, Wallace Gardens, Madras 600006.

METAL POWDERS

Bronze Powder Pvt. Ltd., 606, Skylark, 60, Nehru Place, New Delhi 110019.

Flexicons Ltd., Mani Mahal, 11/21, Mathew Rd., Bombay 400004.

Indian Metal Powder Inds., Khanderao Wadi, Dadyseth Agiary Lane, Bombay 400002.

Industrial Sales Agency, 55, Canning St., Calcutta 700001.

Khosla Metal Powders Pvt. Ltd., 43, Aundh Rd., Khadki, Pune 411003.

Kumar Bronze Powders Ltd., 2/8, Ansari Rd., Daryaganj, New Delhi 110002.

Mahindra Sintered Products Ltd., Gateway Bldg., Apollo Bunder, Bombay 400039.

Metal Powder Co. Ltd., Maravarankulam, Pudunagar 626709 (Madurai Dist.), Tamil Nadu.

Nalco Metal Products Pvt. Ltd., 155A, East Veli St., Madurai 625001.

Vidarbha Ferrosinters Pvt. Ltd., 18, Vijayanagar Chhaoni, Nagpur 440013.

METAL STAMPINGS

Ideal Sheet Metal Stampings & Pressings Pvt. Ltd., Kalidas Mills Compd., Gomtipur, Ahmedabad 380021.

METALLISED MATERIALS

Chemicoat Ltd., Kalali Rd., P. O. Atladra, Vadodara 390003.

METALLO-PLASTIC YARN

Rexor India Ltd., 33, Chittaranjan Ave., Calcutta 700012.

METALS — FERROUS & NON-FERROUS

Bihar

Hindustan Copper Ltd., Ghatsila 832303.

Delhi

Alcobex Metals Pvt. Ltd., 4909, H. Qazi, Delhi 110006.

Indian Aluminium Cables Ltd., Kanchenjunga, 18, Barakhamba Rd., New Delhi 110001.

Jindal Aluminium Ltd., 1/6B, Asaf Ali Rd., New Delhi 110002.

Skytone Electricals (India), Vandhana, 11, Tolstoy Marg, New Delhi 110001.

Gujarat

Baroda Rolling Mills Ltd., Channi Rd., Vadodara 390001.

Bombay Conductors & Electricals Pvt. Ltd., Maninagar, Ahmedabad 380008.

Mahendra Electricals Ltd., Kamla Mission Rd., Nadiad 387001.

Haryana

Indian Metal Ind., Jagadhri 135003.

Vishwakarma Metal Works, Mangatpura, Jagadhri 135003.

Karnataka

Mysore Wires & Metal Ind., 13-IV, Cross, Magadi Rd., Bangalore 560023.

Kerala

Aluminium Ind. Ltd., Kundara 691501.

Cominco Binani Zinc Ltd., Binanipuram, P.O. Udyogamandal 683501.

Maharashtra

A. B. C. Metal Ind., 90, Kika St., Bombay 400004.

Agarwal Metal Co., 107, Thakurdwar Rd., Bombay 400002.

Ashok Metal Ind., 6, Sewree Cross Rd., Bombay 400015.

Asian Corpn., 91, Mohamedali Rd., Bombay 400003.

Asian Metal Industries, 91, Kika Street, Gulalwadi, Bombay 400004.

B. C. Metal Manufg. Co., 5–B, Ramesh Aptts., Narshing Lane, P.B. No. 7630, Malad (West), Bombay 400064.

Bhandary Metallurgical Corpn. Pvt. Ltd., Sion–Chembur Rd., Bombay 400070.

Bhansali Steel Corpn., 35, Bapu Khote Crosslane, Bombay 400003.

Bharat Engg. & Metal Works, 29-30, Suryodaya Mill Compound, Tardeo, Bombay 400034.

Bharat Metal Corpn., 16/18, Hira Bhavan, Thakurdwar Rd., Bombay 400002.

Bombay Metal & Alloys Manufg. Co. Pvt. Ltd., Off Magazine St., Near Reay Road Station, Bombay 400010.

Bralco Metal Ind. Pvt. Ltd., Gupta Mills Estate, Darukhana, Reay Rd., Bombay 400010.

Cominco Binani Zinc Ltd., Udyog Bhavan, W. Hirachand Mrg., Bombay 400038.

Devidayal Rolling & Refineries Pvt. Ltd., Gupta Mills Estate, Darukhana, Reay Rd., Bombay 400010.

Emmes Metals Pvt. Ltd., 147, Govt. Indl. Estate, Kandivli (West), Bombay 400067.

Heavy Metal & Tubes, 629, Panchratna, M. Parmanand Mrg., Bombay 400004.

Hindustan Metal and Engg. Co., 8/10, 2nd Carpenter St., Bombay 400004.

Hindustan Transmission Products, Kurla-Vihar Rd., Chandivali, Bombay 400070.

BRALCO METAL INDUSTRIES PVT. LTD.

Registered Office :
Gupta Mills Estate, Darukhana, Reay Road,
Post Box 6215, Bombay 400 010.
Telephones : 393851 — 393855.
Telegrams : "BRALCOMET". Telex : 3474.

Product Brand "BMI"

●

Manufacturers of:

Sheets, Sheathings, Strips, Coils of Aluminium, Brass, Copper, Phosphor Bronze & Nickel Silver.

Suppliers of Non-ferrous Rolled Strips to the following industries:

Automobile, Telephone, Pressure Stove, Bicycle, Refrigeration, Airconditioning, Umbrella Ribs, Photo-engraving and Printing, Musical Instruments, Clock, Lock, Gaskets, Pen Nibs, Collapsible Tubes, Ordnance Factories, Radio, Torch, Defence, etc.

Exporters of:

Sheets, Sheathings, Strips, etc. of Aluminium, Brass, Copper, Phosphor Bronze & Nickel Silver.

●

Associated Company :

Devidayal Aluminium Industries Private Ltd.

Manufacturers of : Pressure Cookers.

Hooseini Metal Rolling Mill Pvt. Ltd., Atlas Mill Comp. Reay Rd., Bombay 400010.

Indian Lightgauge Metal Products Pvt. Ltd., 8, Bhagwan Mansion, Cinema Rd., Bombay 400020.

Indian Smelting & Refining Co. Ltd., L. B. S. Marg, Bhandup, Bombay 400078.

Indian Standard Metal Co. Ltd., Chinchpokli Cross Lane, Bombay 400027.

Inter Sales Corpn., 7, Vardhman Bank Bldg., 3rd Panjrapole Lane, Bombay 400004.

J. B. Metal Ind., Saki Vihar Rd., Bombay 400072.

Jayant Metal Manufg. Co., 16, Sayani Rd., Bombay 400028.

Kamani Metals & Alloys Ltd., Kamani Chambers, Nicol Rd., Ballard Estate, Bombay 400070.

Kamani Tubes Pvt. Ltd., L. B. Shastri Marg, Kurla, Bombay 400070.

M. Amarchand Metal Industries, 139-43, Thakurdwar Rd., Bombay 400002.

Mahendra Metals, 29, Ardeshir Dady St., Bombay 400004.

Mardia Industries, 83, Kika St., Gulalwadi, Bombay 400004.

Metal Rolling Works Pvt. Ltd., 104, Sion-Matunga Estate, Sion, Bombay 400022.

Metallica Works Pvt. Ltd., 138-141, Govt. Ind. Estate, Kandivli (West), Bombay 400067.

Mohanlal Pratapchand & Co., 160, Kika St., Bombay 400004.

Montana Pvt. Ltd., Rahimtolla House, Homji St., Bombay 400001.

Moolchand Manmal & Co., 162, Kika St., Bombay 400004.

N. M. Metal Industries, Panandi Walbhat, Madhavji Rd., Goregaon, Bombay 400063.

National Metal Works, 156/158, C. P. Tank Rd., Ardeshir Dady X Lane, Bombay 400004.

Non Ferrous Metal Corpn., Corner of 4th Khetwadi Lane, 274, Sardar V. P. Rd., Bombay 400004.

Oriental Metal Industries, Mehta Compound, Off Foras Rd., Bombay 400008.

Pankaj Metal Corpn., 55-C, 1st Khattarali Lane, Thakurdwar Rd., Bombay 400002.

Popular Metal Works & Rolling Mills, Behind Fish Mkt., Sion, Bombay 400022.

Prakash Metal Corpn., 132, Kika St., Bombay 400004.

Premier Metals & Engg. Co., 7/9, Ardeshir Dady X Lane, C. P. Tank, Bombay 400004.

Ram Kishan Metal Works, Ashok Chambers, Broach St., Bombay 400009.

Rashtriya Metal Ind. Ltd., Andheri-Kurla Rd., J. B. Nagar, Bombay 400059.

Rasiklal Kantilal & Co., 145, Kika St., Bombay 400004.

Roshan Industries Corpn., Kikabhai Mansion, 7, Kika St., Bombay 400004.

Shanti Metal Works, Shyam, C-6, Opp. Kaveri Bldg., Dutt Mandir Rd., Kandivli (W.), Bombay 400067.

Shuja Metal Centre, 55-57, Nakhoda St., Bombay 400003.

Sonal Metal Syndicate, 53, Kika St., Bombay 400004.

Star Metal Refinery Pvt. Ltd., 361, Dr. D. Naoroji Rd., Bombay 400001.

Sudarshan Chokhani & Co., 138, Kalbadevi Rd., Bombay 400002.

Suraj Metals, 46/48, Islampura St., Bombay 400004.

Syndicate Metal, 35-57, Bapu Khote Cross Lane, Bombay 400003.

MANUFACTURERS, STOCKISTS & SUPPLIERS OF

**FERROUS
& NON-FERROUS
METALS**

**SEAMLESS & E.R.W.
PIPES & TUBES**

Tubes for mechanical, structural & general engineering applications
Tubes for automobiles
Tubes for Boiler super heaters
Tubes for heat exchanger & condenser
Tubes for water, Gas, & steam services
Tubes for refinery services
Tubes for pressure purposes ordinary & high duties
Tubes for Oil Industry.
High test line pipes
Tubes for low & high temperature services
Copper & Brass Tubes.
Tubes for water wells

Heavy Metal & Tubes

629, PANCHRATNA M. PARMANAND MARG, BOMBAY-400 004. INDIA.
Factory: 13-B-NAND BHUVAN INDUSTRIAL ESTATE, MAHAKALI CAVES ROAD,
ANDHERI (EAST) BOMBAY-400 093. INDIA.

PHONES OFF: 365253 359304, 361799
FACTORY: 564435 RESI: 355879, 366947
GRAM: KAYCEETUBE
TELEX: 11 6295 HMT IN

Universal Metal Centre, Tayeb Bldg., Dhobi Galli, Bombay 400003.
Universal Metal Corpn., Shreenathji Bldg., 3rd Bhoiwada, Bombay 400002.
Vinod Metals & Engg. Co., 126/10, Jawahar Nagar, Goregaon (West), Bombay 400062.

Rajasthan

Jaipur Metals & Electricals Ltd., Near Rly. Station, Jaipur 302002.
Jaipur Metal Inds. Ltd., Near Railway Station, Jaipur 302001.
Multimetals Ltd., Heavy Ind. Areas, Kota 324003.
Pyarelal Kiranwala, Laktan Kotri, Ajmer 305001.
Shri Mahesh Metal Works, Roopangarh Rd., Madanganj, Kishangarh 305802.

Tamil Nadu

Indian Metal & Metallurgical Corpn., 498, Mint St., Madras 600003.
Madras Aluminium Co. Ltd., Race Course, Coimbatore 641018.
Madras Electrical Conductors Pvt. Ltd., 37, Arcot Rd., Madras 600026.
Manakarmi Metal Co., 27-A, Muker Nallamuthu St., Madras 600001.
Manik Metal Distributors, 134, N.S.C. Bose Rd., Madras 600001.
Metal Distributors Ltd., 66/2, Mowbrays Rd., Madras 600018.
Mysore Premier Metal Factory, 127, Mint St., Madras 600001.

Uttar Pradesh

Century Metals Ltd., Delhi-Hapur Rd., Pilkua 245304, Meerut Dist.
Hindustan Aluminium Corpn. Ltd., Renukoot 231217, Mirzapur Dist.
Hindustan Metal Works, Hathras 204101.
Saru Smelting Pvt. Ltd., Sardhana Rd., Near Cantt. Rly. Stn., Meerut 250001.

West Bengal

A. T. Goovee & Co., 109, N. Subhas Rd., Calcutta 700001.
Aluminium Corpn. of India Ltd., 7, Council House St., Calcutta 700001.
Aluminium Manufg. Co. Ltd., 2, Jessore Rd., Dum Dum, Calcutta 700028.
Baidyanath Engg. Co. Pvt. Ltd., 37, S. N. Roy Rd., Calcutta 700038.
Bengal Ingot Co. Ltd., 5, Hide Rd., Calcutta 700043.
Basani Commercial Corpn., 115, N. Subhas Rd., Calcutta 700001.
Binani Metal Works Ltd., 38, Strand Rd., Calcutta 700001.
Castall Corpn. Pvt. Ltd., Naraimpur 731239, 24 Parganas.
Electrical Ind. Corpn., 99, M. Gupta Rd., Barisha, Calcutta 700008.
Everlite Insulating Ind. Pvt. Ltd., 137, B. Roy Rd. West, Calcutta 700008.
Eyre Smelting Pvt. Ltd., 152/115, Diamond Harbour Rd., Calcutta 700008.
Ganga Metal Refining Co. Pvt. Ltd., 43, Strand Rd., Calcutta 700007.
Hindustan Wire Products Ltd., 14, N. Subhas Rd., Calcutta 700001.
India Foils Ltd., 4, Mangoe Lane, Calcutta 700001.
Indian Aluminium Co. Ltd., 1, Middleton St., Calcutta 700016.
Indian Metals & Alloys Mfg. Co., 40, N. Subhas Rd., Calcutta 700001.
Lucky Engg. Works Pvt. Ltd., 39, Strand Rd., Calcutta 700001.
Metals & Ores Co., Transport Depot Rd., Calcutta 700027.
National Pipes & Tubes Co. Ltd., Nicco House, 1 & 2, Hare St., Calcutta 700001.
Sanjay Commercial Co., 40, Strand Rd., Calcutta 700001.
Saru Smelting Pvt. Ltd., P-35, India Exchange Place, Calcutta 700001.
Standard Metal Co., 101, N. Subhas Rd., Calcutta 700001.
Waldies Ltd., A-1, Gillander House, N. Subhas Rd., Calcutta 700001.

METALS — PERFORATED & METAL SHEETS

Globe Indl. Corpn., 109, N. Subhas Rd., Calcutta 700001.
Karfa & Co., 115, N. Subhas Rd., Calcutta 700001.
Harischandra & Co., 233, A. Rehman St., Bombay 400003.
Lokesh Iron Inds., Belanganj, Agra 282004.
Metal Perforation Pvt. Ltd., 158/160, N. Dhuru St., Bombay 400003.
Metal Perforation Pvt. Ltd., G. P. Ind. Estate, P. O. Chhani 391740, Vadodara.
Metal Perforators, 43, Abdul Rehman St., Bombay 400003.
Metal Perforators Private Ltd., Anees Chambers, Carnac Rd., Bombay 400001.
Metalcom Inds., 68, Mahant Rd., V. Parle (East), Bombay 400057.
N. J. Metal Screens Mfrs. Pvt. Ltd., 134, N. Master Rd., Bombay 400001.
Navin Inds., 180, Linghi Chetty St., Madras 600001.
Siri Ram & Co., 97, Narayan Dhuru St., Bombay 400003.
Zenith Iron Works, 46, Abdul Rehman St., Bombay 400003.

METERS & MEASURING INSTRUMENTS — ELECTRICAL

Andhra Pradesh

Andhra Pradesh Electrical Equipment Corpn., Basant Rd., Sanatnagar, Hyderabad 500018.
Instruments Technique Laboratory, B-2, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.
Vasavi Electronics, 162, Vasavi Nagar, Secunderabad 500015.

Delhi

Das Hitachi Pvt. Ltd., 21-A, Janpath (Windsor Place), New Delhi 110002.
Electrical Instruments Co., 20, Friends Colony, Grand Trunk Rd., Shahdara, Delhi 110032.
Havells Inds., 1826, Bhagirath Palace, Delhi 110006.
Meters and Instruments Pvt. Ltd., 4/90, Connaught Circus, New Delhi 110001.
Precision Instrument Manufg. Co., 1254, Kashmiri Gate, Delhi 110006.

Gujarat

Baroda Electric Meters Ltd., Vallabh Vidyanagar 388120.

Karnataka

British Physical Lab. India Pvt. Ltd., 28, K. Hanumanthiah Rd., Bangalore 560027.

Grams : "GLOHEAT". Phone : *Office* : 30537.

With Best Compliments from :

GLOHEAT INSTRUMENTS CORPORATION

Office : **418, 12th Cross, Upper Palace Orchards, Sadashivnagar, P. B. 8008,**
Bangalore 560 080.

Manufacturers of

"GLOHEAT" BRAND TEMPERATURE SENSING, MEASURING & CONTROLLING INSTRUMENTS

viz.

AUTOMATIC INDICATING TEMPERATURE CONTROLLERS 2 position & 3 position Range upto 1600°C, AUTOMATIC NON-INDICATING SOLID STATE TEMP. CONTROLLERS Range upto 1600°C, INDICATING PYROMETERS (Vertical and Edge-wise Type), MULTIPOINT TEMP. INDICATORS Range upto 1600°C Pt. resist. THERMOMETERS (Indicating & controlling type), IMMERSION PYROMETERS for molten metals for range upto 1700°C, all types of THERMOCOUPLES AND COMPENSATING CABLES, IMMERSION TYPE HEATERS, LABORATORY MUFFLE FURNACES AND OVENS, REFRACTORIES, HEATING ELEMENTS MADE OUT OF KANTHAL AND NICHROME WIRES and all types of furnace spares etc.

Gloheat Instruments Corpn., 418, 12th Cross, Upper Palace Orchards, Sadashivnagar, Bangalore 560006.

International Instruments Pvt. Ltd., 140, Hosur Rd., Bangalore 560034.

SCR Tools Pvt. Ltd., 68-A, H. Siddiah Rd., Bangalore 560002.

Maharashtra

Apex Enterprises, 79, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Bharat Electronics & Electricals, 407, Commerce House, N. Master Rd., Bombay 400023.

Electro-Equipments Corpn. Ltd., 303-304, L. B. Shastri Marg, Mulund, Bombay 400080.

Electroscope Systems, 301, Navketan, Central Ave., Chembur, Bombay 400071.

Emjay & Co., 59, V. B. Gandhi Rd., Bombay 400001.

Enlec Enterprises, Seksaria Chambers, 139, N. Master Rd., Bombay 400001.

Frank Sadhachand & Co., Sadguru, Nehru Rd., Santa Cruz (E), Bombay 400055.

Geekays India, Jalaram Nagar, Bombay 400077.

Greens (India) Corpn., 89, Bank of Baroda Bldg., Palton Rd., Bombay 400001.

Gyro Laboratories Pvt. Ltd., 8, Gazdar St., Thakurdwar, Bombay 400002.

Hindustan Instruments, 7/9, Bell Lane, Bombay 400001.

Industrial Meters Pvt. Ltd., "Advent", 12-A, Gen. J. Bhosle Mrg., Bombay 400021.

Kaycee Ind. Ltd.; 32, Nicol Rd., B. Estate, Bombay 400038.

Mahindra & Mahindra Ltd., Worli Rd. No. 13, Bombay 400018.

Meco Instruments Pvt. Ltd., 310, Bharat Ind. Estate, Tokersi Jivraj Rd., Sewri, Bombay 400015.

Mersuj Dialometrics, B-53, Coziham, Pali Hill, Bandra, Bombay 400050.

Micromac Instruments, 39/5, Khamosh Shah Durga, Near Ghas Bazar, Kalyan 421301. (Thane Dist.).

Modern Equipment Development Co. Pvt. Ltd., Ghosalkar Compd., Shivaji Udyog Nagar, Dombivli East 421201. Thane Dist.

Motwane Manufg. Co. Pvt. Ltd., 127, M. Gandhi Rd., Bombay 400023.

Mysore Electrical Measuring Instruments, Unit No. 202-C, Ind. Estate, Ghatkopar, Bombay 400086.

National Supply & Dist. Agency, 11, Picket Cross Rd., Bombay 400002.

Nippen Electrical Inst. Co., 12-A, Marol Maroshi Rd., Andheri (E), Bombay 400059.

Pla Electro Appliances, Thakor Estate, Kurla-Kirol Rd., Vidyavihar West, Bombay 400086.

PMT Metrology & Electronics Pvt. Ltd., Bell Bldg., Sir P. M. Rd., Bombay 400001.

Prinz Engrs. (India), C-3, 3rd Flr., Commerce House, N. Master Rd., Bombay 400023.

Roman Inds., A1 Inds. Annexe, J. B. Nagar, M. Vasanji Rd., Andheri East, Bombay 400059.

S. S. Inds., D-22, Udyog Sadan, M.I.D.C., Chakala, Bombay 400093.

Shanti Electric Instruments, A-54, Marol Indl. Area, M.I.D.C., Andheri East, Bombay 400093.

Udeyraj & Sons, 158, K. M. Sharma Marg, Lohar Chawl, Bombay 400002.

Punjab

Accumeasures Punjab Ltd., B-75, Phase VIII, S.A.S. Nagar, Mohali.

Meters & Instruments Pvt. Ltd., 143, Indl. Area, Chandigarh 160002.

Tamil Nadu

Electronics & Business Machines Pvt. Ltd., 11–7, Instronics Campus, Madras 600041.

Premier Instruments Coimbatore Ltd., Perianaickenpalayam, Coimbatore 641020.

Simco Meters Ltd., 109, N. H. Rd., Madras 600034.

West Bengal

A. N. Instruments Pvt. Ltd., 1B, Ashutosh Mukherjee Rd., Calcutta 700020.

Oasis Instruments Co. Ltd., 23, Canning St., Calcutta 700001.

Phillips India Ltd., 7, Justice C. M. Rd., Calcutta 700020.

Sett and De, 16, G. Chandra Ave., Calcutta 700013.

Universal Electrics Ltd., 9/1, R. N. Mukherjee Rd., Calcutta 700001.

MILK POWDER

Delhi Milk Supply Scheme, Near Patel Nagar, New Delhi 110006.

Food Specialities Ltd., G. T. Rd., Moga 142001, Punjab.

Haryana Foods Ltd., P.O. Pehowa, 132128, Karnal Dist., Haryana.

Hindustan Lever Ltd., Etah 207001, Uttar Pradesh.

Kaira Distt. Co-op. Milk Producers Union Ltd., Anand 388001, Gujarat.

Mehsana Distt. Co-op. Milk Producers Union Ltd., Mehsana 384001, Gujarat.

Milk Conservation Project, Rajkot 360001. Gujarat.

Milk Conservation Project, Vijayawada 520001, A. P.

MILLING MACHINES & CUTTERS

ACC Vickers Babcock Ltd., Durgapur 713206.

Addison & Co. Ltd., 158. Mount Rd., Madras 600002.

Armcess Gauge & Tool Co. Pvt. Ltd., A-3, Ambattur Indl. Estate, Madras 600058.

Arya Manufg. Co., 69. Shradhanand Marg, Delhi 110006.

B. S. Machine Tools Corpn., 435, Jessore Rd., Calcutta 700055.

Barmi Engg. Works, Grand Trunk Rd., Qabool Nagar, Shahdara, Delhi 110032.

Batliboi & Co. Ltd., Apeejay House, V. B. Gandhi Mrg., Bombay 400023.

Bharat Fritz Worner Pvt. Ltd., Peenya, Bangalore 560022.

Bharat Tool Mfg. Co. Pvt. Ltd., Fergusson Rd., Lower Parel, Bombay 400013.

CTR Manufg. Ind. Ltd., Nagar Rd., Pune 411014.

Calicut Engg. Works Pvt. Ltd., 26-A, Camac St., Calcutta 700016.

Capital Tool Inds., 7-A, Indl. Area, Patiala 147001.

Chopra Machines Corpn., 27/2C, Strand Rd., Calcutta 700001.

Cimotec, 44-B, Seshadripuram Main Rd., Bangalore 560020.

Dies & Tools Ltd., 11, R. N. Mukherjee Rd., Calcutta 700001.

Excell-O India Ltd., 78-B, Dr. A. Besant Rd., Bombay 400018.

Garlick Engineering, Machine Tools Dn., Empire House, 414, S. Bapat Mrg., Bombay 400013.

Guaranteed Engg. Works (Regd.), G. T. Rd., Millerganj, Ludhiana 141003. (Punjab).

H.M.T. Ltd., 36, Cunningham Rd., Bangalore 560052.

Hindustan Export & Import Corpn. Pvt. Ltd., Anand Bhavan, Dr. D. N. Rd., Bombay 400001.

International Combustion India Pvt. Ltd., 101, Park St., Calcutta 700016.

Kirloskar Bros. Ltd., Udyog Bhavan, Tilak Rd., Pune 411002.

Machinery & Spares, 30, Apollo St., Bombay 400023.

Machines & Tools Corpn., Lentin Chambers, Dalal St., Bombay 400023.

Maneklal & Sons (Calcutta), 23, G. C. Avenue, Calcutta 700013.

S. K. B. India, 5 & 6, Fancy Lane, Calcutta 700001.

Sarbjit Inds., Ram Tirath Rd., Amritsar 143001.

Sideco Tools, Umayanalloor, Quilon 691571. (Kerala State).

Steel & Allied Products Ltd., 2/1, Hossain Shah Rd., Calcutta 700023.

Uma Tools Pvt. Ltd., S-17, Parvati Ind. Estate, Pune 411009.

United Engg. Eastern Corpn., 22, B.R.B. Bose Rd., Calcutta 700001.

MINERAL BENEFICIATION MACHINERY

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Mineral Process Equipment, Opp. Borosil Glass Works, Marol-Maroshi Rd., Bombay 400059.

MINERALS

Andhra Pradesh

Andhra Pradesh Mining Corpn. Ltd., Fateh Maidan Rd., Hyderabad 500004.

Seshasayee Mining Co., Betamcherla 518599. Kurnool Dist.

Bihar

Jain China Clay Mines Pvt. Ltd., Chaibasa 833201.

Singhbhum Mineral Co., P. B. No. 24, Chaibasa 833201.

Tata Iron & Steel Co. Ltd., Jamshedpur 831001.

Delhi

National Mineral Devpt. Corpn. Ltd., 109, Surya Kiran, M. G. Rd., New Delhi 110001.

Rajrishi Mining Corpn., 4-E, Vandhna, 11, Tolstoy Marg, New Delhi 110001.

Sahu Minerals & Properties Ltd., 9th Fl., Dakshineshwar Bldg., 10, Hailey Rd., New Delhi 110001.

Goa

Chowgule & Co. Pvt. Ltd., Chowgule House, Mormugao Harbour 403803.

Damodar Mangalji & Co. Pvt. Ltd., Afonso de Albuquerque Rd., Panaji 403001.

Emco Goa Pvt. Ltd., P.O. 54, Margao 403601.

Sesa Goa Pvt. Ltd., Altinho, P.B. 125, Panaji 403001.

Shantilal Khushaldas & Bros., P.B. No. 35, Mormugao 403803.

Timblo Pvt. Ltd., Margao 403601.

V. M. Salgaocar & Bros. Pvt. Ltd., Salgaocar Bldg., P. B. No. 14, Vasco-da-Gama 403802.

V. S. Dempo & Co. Pvt. Ltd., Campal, Panaji 403001.

Vinod Kumar S. Gosalia, P.B. No. 162, Margao 403601.

Gujarat

Saurashtra Minerals Pvt. Ltd., East Kedia Plots, Porbandar 360575.

Shivrajpur Syndicate Ltd., Shivrajpur 389370. Panchmahals Dist.

Karnataka

Eastern Mining Co. (Mysore) Pvt. Ltd., Londa-Supa Rd., Londa 591301. Belgaum Dist.

Gadigi Mineral Mining Co., Gadigi Palace, Bellary 583101.

Mineral Sales Pvt. Ltd., Nehru Co-operative Colony, Hospet 583201. Bellary Dist.

P. Balasubha Setty & Sons, P.B. 3, Hospet 583201. Bellary Dist.

P. Venkanna Shetty & Bros., P. B. No. 33, Hospet 583201.

Sandur Manganese & Iron Ores Ltd., Lohadri Bhuwan, Yeshwantnagar 583124, Via Sandur, Bellary Dist.

West-end Minerals & Exports Pvt. Ltd., Madhavpur, Hubli 580020.

Madhya Pradesh

National Coal Devpt. Corpn. Ltd., P.O. Korba 495677. Bilaspur Dist.

Maharashtra

Ambica Minechem Inds., 129/131, Kazi Syed St., Bombay 400003.

Best Minerals Ltd., Saroj Bhavan, Ramdaspeth, Nagpur 440001.

Deccan Minerals Pvt. Ltd., Atlanta, 2nd flr., Nariman Pt., Bombay 400021.

Goenka Minerals Pvt. Ltd., Mineral House, Civil Lines, Nagpur 440001.

Gujarat Clay Mills, 246, Reay Rd., Bombay 400010.

Indian Clay & Mineral Co., Tarabaug, Love Lane, Mazgaon, Bombay 400010.

J. P. Mineral Corpn., 6, Nirmal Kunj, M. G. Rd., Ghatkopar East, Bombay 400077.

Kumaraswamy Mining Co., 17/4, 'Sindhu', 87, Marine Drive, Bombay 400002.

Maharashtra Inds., 175, CST Rd., Kalina, Santacruz (East), Bombay 400098.

Maharashtra Minerals Corpn. Ltd., Industrial Assurance Bldg., 5th Fl., Churchgate, Bombay 400020.

Mineral Mining Co. Pvt. Ltd., 111, Indl. Area, Bombay 400022.

Natwarlal Shamaldas & Co., 94, N. Master Rd., Bombay 400001.

New India Exports Pvt. Ltd., New India Centre, 12th Fl., 17, Cooperage Rd., Bombay 400039.

P. Manganese Ore Co. Ltd., P.O. Box No. 8, Nagpur 440001.

Polymer Mineral Inds., Next to Metro Playing Card Co., Behind Kurla Bus Depot, Bombay 400098.

Shree Satya & Co., 2, Pittaiwala Bldg., Dr. Batliwala Rd., Parel, Bombay 400012.

Rajasthan

Associated Soapstone Distributing Co. Pvt. Ltd., Johri Bazar, Jaipur 302003.

Bharat Mineral Supply Corpn., Lodha Dharamshala-Prithviraj Mrg., Ajmer 305001.

Udaipur Mineral Devpt. Syndicate Pvt. Ltd., Bhilwara 311001.

Tamil Nadu

Gimplex Minerals Pvt. Ltd., 19/20, Linghi Chetty St., Madras 600001.

West Bengal

Ajaydeep Mineral Ind. Pvt. Ltd., 5–A, S. Chatterjee St., Calcutta 700006.

Anudyog, 2, G. C. Avenue, Calcutta 700013.

Aryan Mining & Trading Corpn. Pvt. Ltd., 61, Strand Rd., Calcutta 700006.

Bird & Co., Pvt. Ltd., Chartered Bank Bldg., Calcutta 700001.

Bisra Stone Lime Co., Ltd., P.B. 46, Chartered Bank Bldgs., Calcutta 700001.

Bolani Ores Ltd., Chartered Bank Bldgs., P.B. 46, Calcutta 700001.

Ganges Manufg. Co. Ltd., 7, Council House St., Calcutta 700001.

Indian Mineral Ind. Ltd., 22/1, Dum Dum Rd., Calcutta 700002.

Karamchand Thapar & Bros. Pvt. Ltd. (Mineral Dept.), Thapar House, 25, Brabourne Rd., Calcutta 700001.

Karanpura Dev. Co. Ltd., Chartered Bank Bldgs., Calcutta 700001.

Lal Traders & Agencies Pvt. Ltd., 7, Waterloo St., Calcutta 700001.

M. S. Deb, 6/1, Lindsay St., Calcutta 700016.

Misrilall Mines Pvt. Ltd., Mineral House, 27-A, Camac St., Calcutta 700016.

Naveen Mineral Ind., 308, Gopal Lal Tagore Rd., Calcutta 700036.

Orissa Manganese & Minerals Pvt. Ltd., 207–A, R. B. Ave., P.B. 2262, Calcutta 700019.

Orissa Mineral Dev. Co. Ltd., P.B. 46, Chartered Bank Bldgs., Calcutta 700001.

Pacific Minerals Pvt. Ltd., 11, Sudder St., Calcutta 700016.

R. McDill & Co. Pvt. Ltd., Mineral House, 27-A, Camac St., Calcutta 700016.

Rungta Sons Pvt. Ltd., P-16, Kalakar St., Calcutta 700007.

S. K. Sarawagi & Co. Pvt. Ltd., 2, Digambar Jain Temple Rd., Calcutta 700007.

S. Lal & Co. Ltd., 9, Chittaranjan Ave., Calcutta 700013.

Serajuddin & Co., P-16, Bentinck St., Calcutta 700016.

Shaw Wallace & Co. Ltd., 4-Bankshall St., P. B. No. 70, Calcutta 700001.

Shree Narayan Co., 174, Mahatma Gandhi Rd., Calcutta 700007.

Swaika Group of Industries, 18-B, Brabourne Rd., Calcutta 700001.

MINING MACHINERY & EQUIPMENT

Eimco Elecon (India) Ltd., Anand Sojitra Rd., Vallabh Vidyanagar 388120. (Gujarat).

Modern Metal Moulders (Assam) Ltd., Indl. Estate, Gauhati 781021. (Assam).

Premier Machines Pvt. Ltd., 59, Najafgarh Rd., New Delhi 110015.

Sandvik Asia Ltd., Air India Bldg., N. Point, Bombay 400021.

Southern Structurals Ltd., Pattabiram, Madras 600062.

Vulcan Laval Ltd., Mustafa Bldg., 7-A, Sir P. Mehta Rd., Bombay 400001.

MOSQUITO NETTINGS

Kastur B. Ind. Pvt. Ltd., Forjett St. Cross Lane, Gowalia Tank, Bombay 400007.

Maheshwari Mills Ltd., Shahibaug Rd., Ahmedabad 380004.

MOTORS — ELECTRIC

Andhra Pradesh

Neeta Enterprises Pvt. Ltd., A-3, Co-op. Ind. Estate, Balangar, Hyderabad 500037.

Shriram Refrigeration Ind. Ltd., P.O. Balangar Township, Hyderabad 500037.

South India Motor Manufg. Co. Pvt. Ltd., Nacharam Ind. Estate, Hyderabad 500039.

Delhi

Bharat Heavy Electricals Ltd., 18/20, K. Gandhi Mrg., New Delhi 110001.

Gautam Electric Motors Pvt. Ltd., 42, Okhla Ind. Estate, New Delhi 110020.

Jay Engg. Works Ltd., 23, K. Gandhi Marg, New Delhi 110001.

Nand Kishore & Co., 42, Shradanand Mrg., Delhi 110006.

Gujarat

Alpha Dynamic Products Pvt. Ltd., Plot Nos. 5 & 6, Rd. No. 14, Udyognagar, Udhna 394210.

Bomin Pvt. Ltd., Anand Bhuvan, Relief Rd., Ahmedabad 380001.

Elecon Machines Pvt. Ltd., 12, G.I.D.C. Ind. Estate, Makarpura Rd., Vadodara 390009.

Electrical Engg. Enterprise, Plot No. 4/5, G.I.D.C. Est., Naroda 382330. Ahmedabad Dist.

Industrial Machinery Mfrs. Pvt. Ltd., Near Ahmedabad New Cotton Mills, Off Amrai Wadi Rd., Ahmedabad 380008.

J. M. Corpn., A/16–17, Jagannathji Indl. Estate, Ahmedabad 380008.

Jyoti Electric Motors Ltd., Anand 388001.

Jyoti Ltd., Ind. Area, Vadodara 390003.

Nemco Motors, Dhebarbhai Rd., Rajkot 360002.

Patel Industries, Urvashi Ind. Estate, Near Patel Wadi No. 3, Surat 395003.

Tiger Electric Tool Co., 21, Bhagat Colony, Makarpura Rd., Vadodara 390009.

Universal Electrical Corpn., Near Moti Talkies, Surat 395001.

Vidyut Engg. Works, Nari Rd., Bhavnagar 364001.

Wigman Electrical & Engg. Ind. Pvt. Ltd., 2/21, Ind. Estate, Vadodara 390003.

Haryana

American Universal Electric (I) Ltd., Model Town, Faridabad 121001.

Hindustan Brown Boveri Ltd., Ind. Area, Faridabad 121001.

Oswal Electricals, 49, Ind. Area, Faridabad 121001.

Karnataka

Allied Electricals, B-05, HMT Indl. Estate, Jalahalli, Bangalore 560031.

Kirloskar Electric Co. Ltd., Ind. Suburb, Rajaji Nagar, Bangalore 560010.

Mantons (Bangalore) Pvt. Ltd., 1, Koramangala Indl. Layout, Hosur Rd., Bangalore 560034.

NGEF Ltd., Byappanahali, Bangalore 560038.

Kerala

Kerala Electrical & Allied Engg. Co. Ltd., P.O. Mamala, Cochin 682305.

Maharashtra

Apee Electricals, 49, Kakad Indl. Estate, 111, Lady Jamshedji Rd., Mahim, Bombay 400016.

Arun Engg. Ind. Pvt. Ltd., Shantinagar Co-op. Ind. Estate, Vakola, Santa Cruz (East), Bombay 400055.

Bharat Bijlee Ltd., Electric Mansion, Nr. Century Bazar, Bombay 400025.

Bharat Electric & Engg. Corpn., 21, Dalal St., Bombay 400023.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

Electrical Mfg. Co., 120. Vasan Udyog Bhavan, Opp. Phoenix Mills, Lower Parel, Bombay 400013.

Elmot Engg. Co. Pvt. Ltd., 103/A, Kalpita Enclave, Sahar Rd., Andheri (E), Bombay 400069.

Emco Electra Pvt. Ltd., 94, Medows St., Bombay 400023.

Engineering Products Ltd., Jogeshwari Estate, S. Vivekanand Rd., Bombay 400060.

Hindustan Motor Mfg. Co., 108-A & 109-B, Tejpaul's Ind. Estate, Saki Naka, Bombay 400072.

Lawkim Ltd., 16, Horniman Circle, Bombay 400001.

M. J. Electricals, Unit No. K-38 to 41 & 62, Sonal Ind. Estate, Ramchandra Lane Extn., Malad West, Bombay 400064.

Mark Elektriks, Plot 15, Gultekdi, Indl. Estate, Pune 411009.

Matchwell Electricals (India) Ltd., Off Nagar Rd., Pune 411014.

Mather Greaves Ltd., Chinchwad, Pune 411019.

Mody Industries (FC) Pvt. Ltd., 62, Bhavani Shankar Rd., Dadar (West), Bombay 400028.

Narhari Engg. Works, Dahanukar Bldg., 480, Kalbadevi Rd., Bombay 400002.

National Electrical Inds. Ltd., Indl. Estate, Lalbaugh, Bombay 400012.

Navayug Electric Corpn., J. B. Nagar, Andheri Kurla Rd., Bombay 400059.

New India Electric Corpn., J. B. Nagar, Andheri-Kurla Rd., Bombay 400059.

Nielcon Pvt. Ltd., J. B. Nagar, Mathuradas Vasanji Rd., Bombay 400059.

Precise Engg. Works, Kotkar Ind. Estate, Bombay 400063.

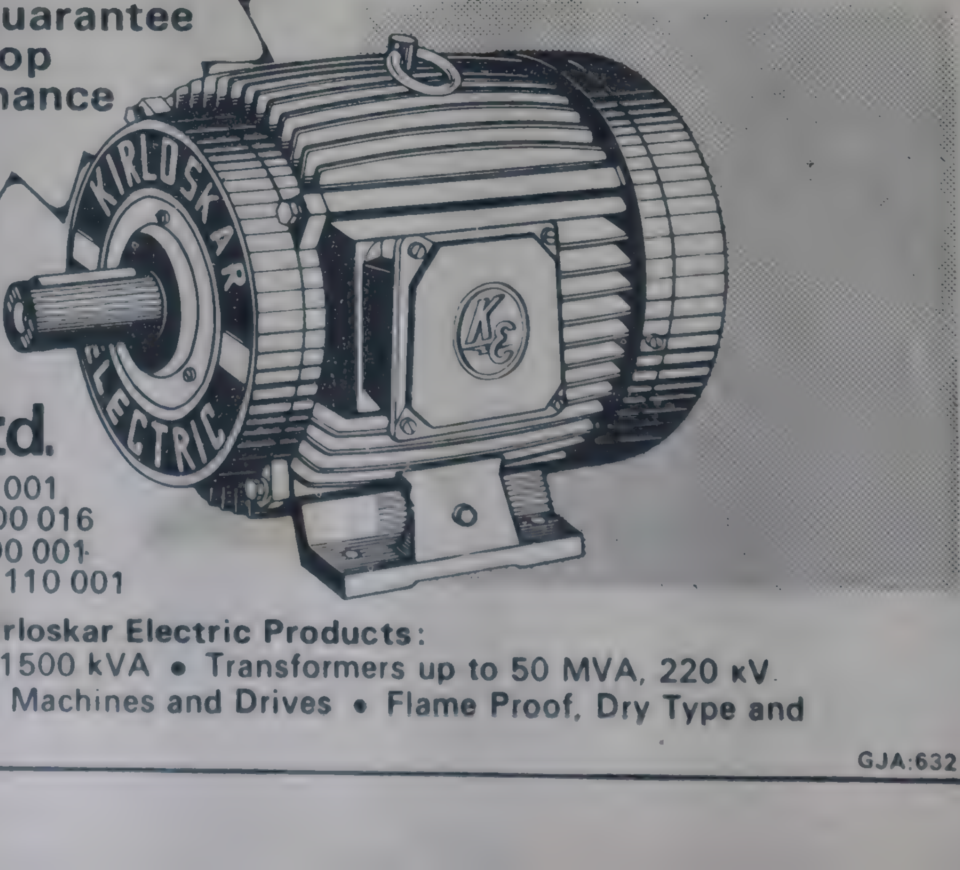
One better in technology
One better in service
KIRLOSKAR
Electric Motors

A wide range to suit every application

- A.C. 3 Phase Motors upto 800 kW Squirrel Cage and Slipring types
- High Tension Motors, 3.3 kV 6.6 kV upto 800 kW
- Flame Proof Motors
- Vertical Hollow Shaft & Vertical Solid Shaft Squirrel Cage and Slipring Motors
- Crane Duty Motors
- Dual Speed Motors
- Motors for Machine Tools
- Brake Motors

Motors up to 20 h.p. weather-proof at no extra cost

Kirloskar quality
Parry's aftersales service —your complete guarantee for top performance



Manufactured by:
Kirloskar Electric Co. Ltd.
Bangalore • Hubli.

Parry & Co. Ltd.
P.B. No. 12, Madras 600 001
P.B. No. 208, Calcutta 700 016
P.B. No. 506, Bombay 400 001
P.B. No. 172, New Delhi 110 001

Contact us for other Kirloskar Electric Products:
- A.C. Generators up to 1500 kVA
- Transformers up to 50 MVA, 220 kV
- Geared Motors
- D.C. Machines and Drives
- Flame Proof, Dry Type and Testing Transformers

GJA:632

Radalt Inds., A-14, Nandjyot Indl. Estate, Andheri-Kurla Rd., Safed Pool, Bombay 400072.

Ramson & Sons, 44, Jamnadas Ind. Estate, Dr. R. Prasad Rd., Mulund (W.), Bombay 400080.

Saga Windel Engineers Pvt. Ltd., Sheel Chambers, 10 Cawasji Patel St., Bombay 400001.

Sangam Electrical & Mechanical Ind. Pvt. Ltd., Plot Nos. 13-14, Ind. Estate, Sangli 416416.

Shembekar Industries, Bombay-Pune Rd., Chinchwad, Pune 411018.

Siemens India Ltd., 134-A, Dr. A. Besant Rd., Worli, Bombay 400018.

Pondicherry

Sri Narayana Engg. Corpn., C-9, Mettupalayam Ind. Estate, Pondicherry 605001.

Punjab

Beegee Corpn. Pvt. Ltd., 25, Factory Area, Patiala 147002.

Electricals Corporation, BS, 21, Chowk Sodal Ind. Estate, Jullundur 144004.

Golden View Electrical Ind. Pvt. Ltd., BS, 14, Chowk Sodal Ind. Estate. Jullundur 144004.

Tamil Nadu

Basic Engrs. & Traders, 40, Errabalu Chetty St., Madras 600001.

Best & Crompton Engg. Ltd., 13/15, North Beach Rd., Madras 600001.

Coimbatore Premier Corpn. Pvt. Ltd., 262, Avanashi Rd., Coimbatore 641018.

Ellen Inds., Ellaithotam Rd., Peelamedu, Coimbatore 641004.

Festo Elgi Pvt. Ltd., India House, Trichy Rd., Coimbatore 641018.

Manju Electl. Inds. Pvt. Ltd., 38, Mettupalayam Rd., Coimbatore 641011.

Navamani & Co., 4/457, Pappanickenpalayam, Coimbatore 641037.

New Era Engg. Co. (M), 1/11-D, Errabalu Chetty St., Madras 600001.

Sabari Foundry, Mettupalayam Rd., Saibaba Mission Post, Coimbatore 641011.

Whitestar Engg. Co., 271, Linghi Chetty St., Madras 600001.

Uttar Pradesh

U.P. National Manufacturers Pvt. Ltd., Ramkatora Rd., Varanasi 221001.

West Bengal

Cyma Electric Works, 35, Dent Mission Rd., Calcutta 700023.

Electric Construction & Equipment Co. Ltd., 9, K. Singhee Rd., Calcutta 700002.

General Electric Co. of India Ltd., Magnet House, 6, Chittaranjan Ave., Calcutta 700013.

J. Stone & Co. (India) Pvt. Ltd., 16, Taratalla Rd., Calcutta 700053.

Lloyds Mercantile Corpn., 51, Ezra St., Calcutta 700001.

Motor & Machinery Manufrs. Ltd., 3/1, K. B. Sen St. Calcutta 700007.

Nistarini Electric Co. Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

Orient General Ind. Ltd., 14, Radha Bazar Lane, Calcutta 700001.

MUSICAL INSTRUMENTS

Chaitsingh Gurbaxsingh & Bros., 292, Sardar V. P. Rd., Bombay 400004.

D. S. Ramsingh & Bros., Bharti Sadan, 344, Sardar V. P. Rd., Bombay 400004.

Dwarkin & Son Pvt. Ltd., 8/2, Esplanade East, Calcutta 700001.

East India Trdg. Co., 2, Church Lane, Calcutta 700001.

Kartar Music House, 364, S.V.P. Rd., Bombay 400004.

NAVIGATION AIDS

Martin Burn Ltd., 12, Mission Row, Calcutta 700001.

NEEDLES

Needle Ind. India Ltd., P.O. Ketti 643215. Nilgiris (T. Nadu).

NEEDLES — SEWING MACHINE

Jay Engg. Works Ltd., 183/A, Princess A. Shah Rd. Calcutta 700068.

Singer TVS Ltd., West Veli St., Madurai 625001.

Phone : 255531. Grams :"SAMACHAR".

The Oldest Newspaper in India
and
The 46th Oldest Newspaper of the World

THE BOMBAY SAMACHAR

(Gujarati Daily)
(Established in 1822)

"Red House",
Sayed Abdulla Brelvi Road,
(Horniman Circle),
G.P.O. Box No. 676,
Bombay 400 001.

★

Certified ABC Circulation

January-June 1981 { 'Daily' 1,43,233
'Weekly' 1,68,899

Newspaper Publishers & Printers

BENNETT, COLEMAN & CO., LTD.

The Times of India, Bombay, Delhi & Ahmedabad; The Evening News of India, Bombay; The Economic Times, Bombay, Calcutta & Delhi; Navbharat Times (Hindi), Bombay & Delhi; Maharashtra Times (Marathi), Bombay; The Illustrated Weekly of India, Bombay; Dharmayug (Hindi), Bombay; Filmfare, Bombay; Femina, Bombay; Indrajal Comics (English, Hindi, Bengali and Arabic), Bombay; Madhuri (Hindi), Bombay; Parag (Hindi), Delhi; Sarika (Hindi), Delhi; Science Today, Bombay; Dinaman (Hindi), Delhi; The Times of India Directory and Yearbook, Bombay; Maharashtra Times Annual, Bombay; Navbharat Times Annual, Delhi; Index to The Times of India, Bombay; Career & Competition Times, Delhi.

HEAD OFFICE

The Times Bldg., Dr. D. Naoroji Rd., Bombay 400001. Phone: 268271 (20 lines). Post Box 213. Telegraphic Address: "INDIANA". Telex: 2204 & 2500.

Managing Director: Dr. Ram S. Tarneja; *Executive Director:* Ramesh Chandra; *Executive Director & Secretary:* P. R. Krishnamoorthy; *Executive Director:* Samir Jain.

DAILIES

The Times of India: *Editor:* Girilal Jain; *Cartoonist:* R. K. Laxman; *Sr. Asstt. Editor:* A. S. Abraham; *Asstt. Editors:* G. M. Telang, Gautam Vohra, A. Vanaik, S. P. Sethi, Mrs. Fatima R. Zakaria; *News Editor:* Vacant; *Jt. News Editor:* K. P. Balakrishnan; *Commercial Editor:* Vacant; *Sports Editor:* K. N. Prabhu; *Chief of News Bureau:* G. K. Nair; *Chief Reporter:* B. Seshagiri Rao.

The Evening News of India: *Editor:* Girilal Jain; *Chief Sub-Editor:* K. Kittu.

The Economic Times: *Editor:* Dr. Hannan Ezekiel; *Resident Editors:* M. K. B. Nair (*Bombay*), R. K. Roy (*Delhi*); *Asstt. Editor:* P. K. Pillai; *News Editors:* A. G. Mathew (*Bombay*), R. Venkatachary (*Delhi*), B. M. Sahai (*Calcutta*); *City Editor:* P. N. Krishnaswamy; *Bureau Chiefs:* A. N. Prabhu (*Delhi*), Kunal Bose (*Calcutta*), S. Vasudevan (*Madras*); *Research Bureau Chief:* Vacant; *Dy. Chiefs:* Dr. A. D. Suklikar, Mrs. Kamla Suri; *Sr. Research Officer:* T. C. Viswanathan; *Research Officers:* Mrs. Lakshmi Roy (*Delhi*), N. V. Venkataraman, A. P. Nayar, S. Gangadharan.

Navbharat Times: *Editor:* Anand Jain; *News Editor:* V. C. Das; *Cartoonist:* D. K. Kadam; *Acc. Reporter to Govt. of Maharashtra:* S. B. Pathak.

Maharashtra Times: *Editor:* G. S. Talwalkar; *Asstt. Editors:* D. V. Gokhale, C. P. Tamhane; *News Editor:* Vacant; *Chief Reporter:* D. W. Randive.

WEEKLIES

The Illustrated Weekly of India: *Editor:* K. C. Khanna; *Asstt. Editors:* Raju Bharatan, Elizabeth Rao, Benedict Costa.

Dharmayug: *Editor:* Dr. Dharam Vir Bharati; *Asstt. Editors:* Manmohan (Khanna) Saral, Ganesh Mantri.

Indrajal Comics: *Editor:* Anand Jain; *In-Charge:* A. T. Singhvi.

BI-MONTHLIES

Femina: *Editor:* Mrs. Vimla Patil.

Filmfare: *Editor:* Bikram Singh.

FORTNIGHTLY

Madhuri: *Editor:* Vinod Tiwari.

MONTHLY

Science Today: *Editor:* Surendr Jha; *Asstt. Editor:* K. Prabhakar Nair.

ANNUALS

The Times of India Directory & Yearbook including Who's Who: *Editor:* Girilal Jain; *Ag. Directory & Yearbook In-Charge:* Mrs. Saroj Satija.

Navbharat Times Annual: *Editor:* Anand Jain.

Maharashtra Times Annual: *Editor:* G. S. Talwalkar.

Advertisement Department: *Chief Advertisement Manager:* V. S. Thirumalai; *Credit Manager:* P. S. Rao: *Advt. Managers:* N. C. Jain, R. D. Mistry, K. K. Nagarath.

Accounts Department: *Manager (Accounts):* M. B. Deshpande; *Dy. Manager (Accounts):* B. T. Kapadia; *Asstt. Manager (Accounts):* R. Thyagarajan.

Business Department: *Chief Business Manager:* T. P. Pithavala; *Project Officer:* R. T. Hingorani; *Asstt. Manager (Commercial):* K. N. Amaria.

Circulation Department: *Chief Circulation Manager:* M. Sivaraman; *Asstt. Circulation Manager:* Ujjwal Sinha; *E.D.P. Manager:* Ashok Soni; *Circulation Officers:* J. K. Shah, S. V. Shrotri; *Publicity Officer:* Ashok Bajpai; *Assistants:* S. Amrutesh, V. P. Bhalla, Shankar Bose, P. C. Jain, D. Kalro, M. S. Pradhan, K. D. Rai, G. Ramachandran, K. R. Ramesh, P. H. Ramu, A. Rodrigues, V. D. Tamhankar.

Personnel Department: *Personnel Manager:* K. A. Lalchandani; *Asstt. Personnel Manager:* Vacant; *Sr. Personnel Officer:* J. R. Rajwaday; *Personnel Officer:* K. B. Gaokar; *Establishment Officer:* T. R. Shenoy; *Labour & Welfare Officer:* S. D. Ghate.

Internal Audit Department: *Sr. Internal Auditor:* S. Y. Gupte; *Audit Officer:* A. R. Gavankar.

Newspaper Production: *Manager:* V. K. Bhasin.

News Dept.: *Superintendent:* K. A. Naik.

Photogravure Dept.: *Asst. Production Manager (Gravure):* Purnendu Sen.

Process Dept.: *Superintendent:* P. Pereira.

Rotary Dept.: *Superintendent:* Vacant.

Stores & Despatch Dept.: *Superintendent:* E. Pereira.

Art Dept.: *Art Director:* Ramesh Sanzgiri.

Engineering Dept.: *Chief Engineer:* K. N. Iyer; *Dy. Chief Engineer:* Vacant.

Reference Section: *Special Officer:* Aroon Tikekar; *Asstt. Reference Officer:* A. de Sa; *Microfilm Technician:* R. W. Jayakar; *In-charge, Index Unit:* Miss Sylvia D'Souza.

Training Dept.: *Training Officer:* P. K. Sethi.

DELHI OFFICE

'Times House', 7, Bahadur Shah Zafar Marg, New Delhi 110002. Phone: 270161 (10 lines). Telegraphic Address: "INDIANA", New Delhi. Telex: 2155 & 2502.

Executive Directors: Ramesh Chandra, Samir Jain.

DAILIES

The Times of India : *Editor* : Girilal Jain ; *Resident Editor* : Inder Malhotra ; *Sr. Asst. Editor* : Prem Shankar Jha ; *Asstt. Editors* : Dileep Padgaonkar, Anil Kumar Nauriya ; *Chief of News Bureau* : Subhash Chakravarti ; *News Editor* : Prakash Chandra ; *Chief Reporter* : Mohd. Shamim.

The Economic Times : *Editor* : Dr. Hannan Ezekiel ; *Resident Editor* : R. K. Roy ; *Chief of News Bureau* : A. N. Prabhu ; *News Editor* : R. Venkatachary.

Navbharat Times : *Editor* : Anand Jain ; *Asstt. Editors* : Rampal Singh, Vasudev Jha, Ved Pratap Vaidik ; *News Editor* : Paras Das Jain ; *Cartoonist* : T. Samuel.

WEEKLY

Dinaman : *Editor* : Raghuvir Sahay ; *Asstt. Editor* : J. K. Gupta.

BI-MONTHLY

Sarika : *Editor* : K. L. Nandan.

MONTHLIES

Parag : *Editor* : K. L. Nandan.

Career & Competition Times : *Editor* : Dr. Y. C. Halan.

Advertisement Department : *Advt. Managers* : P. S. Shetty, Lakshman Tandon ; *Devpt. Officers* : S. S. Mehta, R. D. Rastogi ; *Advt. Officers* : J. C. Bhargava, Arun Mehra, Dr. R. P. Jain.

Circulation Department : *Circulation Manager* : Baljit Kapoor ; *Asstt. Circulation Manager* : M. M. Srivastava ; *Circulation Officers* : A. C. Samtani, G. C. Kapoor, S. P. Gupta.

Personnel Department : *Administrative Manager* : K. G. Sikka ; *Personnel Officer* : B. K. Dutta ; *Labour Officer* : T. R. Chawla.

Accounts Department : *Manager* (*Accounts*), R. C. Kapoor.

Reference Section : *Reference Officer* : K. L. Sharma.

Internal Audit Dept. : *Internal Auditor* : V. K. Gambhir.

Business & Production : *Production Officer* : Sudhir Mehta ; *News Supdt.* : A. K. Chatterji ; *Rotary Supdt.* : T. S. Dhakkar ; *Engr.* : I. Unnikrishnan ; *Liaison Officer* : S. Krishnan ; *Stores Supdt.* : B. P. Jain.

National Printing Works (Job Press) : 10, Daryaganj, New Delhi 110002.

Job Press Supdt. : Yatish Chandra ; *Process Supdt.* : J. K. Beri.

AHMEDABAD OFFICE

139, Ashram Rd., Ahmedabad 380009. Phone : 77631 (3 lines). Telegraphic Address : " INDIANA ", Ahmedabad. Telex : 012–490.

Manager : A. Arora ; *Branch Executive* : Ranjan Garg.

The Times of India : *Editor* : Girilal Jain ; *News Editor* : P. G. Mahadevan.

Advertisement Department : *Advt. Officers* : A. S. Ramakrishnan, R. H. Dhanani.

Circulation Department : *Circulation-in-Charge* : A. S. Jadeja ; *Circulation Officer* : D. A. Rachh (*Vadodara*).

Personnel Department : *Establishment Officer* : R. D. Trivedi.

Accounts Department : *Accountant* : M. K. Parikh.

Press : *Technical Officer* : A. K. Ganguly ; *Supdt.*, S. D. Mehta.

CALCUTTA OFFICE

13/1 & 13/2, Govt. Place East, Calcutta 700069. *Phone* : 235711 (3 lines) ; *Telegraphic Address* : " INDIANA " ; *Telex* : 7580.

The Economic Times : 105/7A, S. N. Banerjee Rd., Calcutta 700014 ; *Phone* : 244243 (4 lines) ; *Telegraphic Address* : " ECONTIMES " ; *Telex* : 7580.

Manager : K. Pattabiraman ; *Circulation Officer* : Ritu Raj ; *Advt. Officers* : Dilip Ray, H. K. Jaiswal, C. N. Venugopal ; *Credit Officer*, T. Velayudhan; *Accountant* : P. R. Krishnamurthy ; *Personnel Officer* : N. K. Talwar.

Editorial Depts. : '*The Times of India*' *Spl. Corspdt.* : Sivadas Banerjee ; '*Navbharat Times*' *Spl. Corspdt.* : M. I. Ansari ; '*The Economic Times*' *Chief of News Bureau* : Kunal Bose ; *News Editor* : B. M. Sahai ; '*The Economic Times*' *Spl. Corspdt.*, R. N. Sinha.

Bhubaneshwar Office

Plot No. 9, Stn. Square, Unit *III*, Bhubaneswar 751009.

Gauhati Office

38T/2, Jasomonto Rd., Pan Bazar, Gauhati 781001.

Patna Office

Exhibition Rd., Patna 800001.

BRANCH OFFICES

Madras Office

63, Montieth Rd., Egmore, Madras 600008 ; Phones : 83661 (3 Lines) ; Telegraphic Address : " INDIANA ", Madras 600008.

Manager : Dr. S. K. Jain ; '*The Economic Times*' *Chief of News Bureau* : S. Vasudevan ; *Spl. Corspdts.* : P. S. Anantharaman, N. Nageswaran; '*Times of India*' *Spl. Corspdt.* : V. G. Prasad Rao ; *Circulation Officer* : K. V. Prabhakaran ; *Advt. Officer* : R. Lakshminarayanan.

Pune Office

407/1, Tirath Bhavan, Quartergate, Pune 411002. Phone : 25447 ; Telegraphic Address : " INDIANA ", Pune.

Manager : Pitambar Kumar Jain ; *Asstt.* : S. L. Narkar ; '*The Times of India*' *Corspdt.* : B. M. Purandhare ; '*Maharashtra Times*' *Corspdt.* : D. A. Sadekar ; '*Economic Times*' *Corspdt.* : S. H. Moharkar.

Baroda Office

Samar Bldg., 5th Flr., Kothi Char Rasta, Vadodara 390001.

Rajkot Office

Sterling Apartments, Jawahar Rd., Rajkot 360001.

London Office

26, Station Approach, Sudbury, Wembley, Middlesex, U.K.

Sales Manager : V. M. Berry ; '*The Times of India*' *Corspdt.* : B. K. Joshi.

Bombay Samachar, Red House, Sayed Abdulla Brelvi Rd., Bombay 400001.

Economic Times, The Times of India Press, Dr. D. Naoroji Rd., Bombay 400001.

Financial Express, Express Towers, Bombay 400021.

Free Press Journal, 21, Dalal St., Bombay 400023.

Indian Express, Express Towers, Bombay 400021.

Janmabhoomi, Janmabhoomi Bhavan, Ghoga St., Bombay 400001.

Janshakti, 21, Dalal St., Bombay 400023.

Lokasatta, Express Towers, Bombay 400021.

Maharashtra Times, The Times of India Press, Dr. D. Naoroji Rd., Bombay 400001.

Navbharat Times, The Times of India Press, Dr. D. Naoroji Rd., Bombay 400001.

Nav Shakti, 21, Dalal St., Bombay 400023.

Navakal, 13, Shenaviwadi, Khadilkar Rd., Bombay 400004.

Sakal, Sakal Press, 93A, Old Prabhadevi Rd., Bombay 400025.

Times of India, The Times of India Press, Dr. D. Naoroji Rd., Bombay 400001.

Vishvamitra, Noble Chambers, Parsi Bazar St., Bombay 400001.

Calcutta :

Amrita Bazar Patrika, 14, Ananda Chatterjee Lane, Calcutta 700003.

Azad Hind, 22A, Sagar Dutta Lane, Calcutta 700012.

Basumati, 166, Bepin Behari Gangully St., Calcutta 700012.

Hindustan Standard, 6, Prafulla Sarkar St., Calcutta 700001.

Jugantar, 14, Ananda Chatterjee Lane, Calcutta 700003.

Loksevak, 86A, Acharya Jagdish Chandra Bose Rd., Calcutta 700014.

Rozana Hind, 17, Sagar Dutta Lane, Calcutta 700002.

Sanmarg, 160-C, Chittaranjan Ave., Calcutta 700007.

Statesman, Statesman House, 4, Chowringhee Square, Calcutta 700001.

Vishwamitra, 12, Dalhousie Square, Calcutta 700001.

Delhi

Amar Bharat, B-65, Vijay Nagar, New Delhi 110009.

Hindustan, N. Block, Connaught Circus, New Delhi 110001.

Hindustan Times, Connaught Circus, New Delhi 110001.

Indian Express, Express Bldg., Bahadur Shah Zafar Marg, New Delhi 110002.

National Herald, 5A, Bahadur Shah Zafar Marg, New Delhi 110002.

Navbharat Times, 7, Bahadur Shah Zafar Marg, New Delhi 110002.

Patriot, Link House, Bahadur Shah Zafar Marg, New Delhi 110002.

Pratap, Pratap Bhavan, Mathura Rd., New Delhi 110001.

Statesman, Connaught Circus, New Delhi 110001.

Times of India, 7, Bahadur Shah Zafar Marg, New Delhi 110002.

Madras

Andhra Patrika, 7, Thambu Chetty St., Madras 600001.

Dinamani, Express Estate, Mount Rd., Madras 600002.

Hindu, Kasturi Bldgs., Mount Rd., Madras 600002.

Indian Express, Express Estate, Mount Rd., Madras 600002.

Musalman, 53, Wallajah Rd., Madras 600002.

Navamani, 4, South Bank Rd., Madras 600028.

Navasakthi, 60, Kutcheri Rd., Mylapore, Madras 600004.

Swadesamitran, 8, Mount Rd., Madras 600002.

NON-FERROUS METALS

(See under Metals, Non-Ferrous).

NUTS & BOLTS

(See under Bolts and Nuts).

NYLON PARTS

G. D. I. Engg. Pvt. Ltd., 135-A, Canning St., Calcutta 700001.

Nyloplast Inds., 2, Tarpan Ghat Rd., Calcutta 700053.

NYLON & POLYESTER FILAMENT YARN

Calico Chemicals, Plastics & Fibres Divn., Anik Chembur, Bombay 400074.

Calico Polyester Fibre Divn., P.O. Petrochemicals 391346. (Vadodara Dist.).

Century Enka Ltd., Bakhtawar, Nariman Point, Bombay 400021.

Chemicals & Fibres of India Ltd., Crescent House, 19, Walchand Hirachand Marg, Bombay 400038.

East India Syntex Ltd., 308, Dreamland, 1/18-B, Asaf Ali Rd., New Delhi 110002.

Garware Nylons Ltd., Pimpri, Pune 411018.

Indian Organic Chemicals Ltd., Mehta Mahal, 15, Mathew Rd., Bombay 400004.

J. K. Synthetics Ltd., Kamla Tower, Kanpur 208001.

Modipon Ltd., Modinagar 201204 (U.P.).

Nirlon Synthetic Fibres & Chemicals Ltd., 254-B, Dr. A. Besant Rd., Bombay 400018.

Petrofils Co-operative Ltd., P. O. Petrochemicals 391346. Vadodara Dist.

Ramgopal Textiles Pvt. Ltd., 701, Tulsani Chambers, 212, Nariman Point, Bombay 400021.

Reliance Polyester, 10th Flr., Tulsiani Chambers, Nariman Point, Bombay 400021.

Shree Synthetics Ltd., Naulakhi, Makshi Rd., Ujjain 456001.

Stretch Fibres India Ltd., 20, Dr. E. Moses Rd., Mahalakshmi, Bombay 400011.

Swadeshi Polytex Ltd., 504, Ansal Bhawan, 16, Kasturba Gandhi Marg, N. Delhi 110001.

NYLON ROPES, SHEETS, RODS, TUBES, ETC.

Garware Synthetics Pvt. Ltd., 135, Dr. A. B. Rd., Worli, Bombay 400018.

Jayanti Fibre Inds. Pvt. Ltd., 34/35, Nandjyot Ind. Estate, Andheri-Kurla Rd., Bombay 400072.

Mahendra Nylons, C-15, Ind. Estate, Miraj 416410.

Plastic Moulders Ltd., 38, Strand Rd., Calcutta 700001.

NYLON TYRE CORD

Shriram Fibres Ltd., Manali, Madras 600068.

OFFICE & BUSINESS EQUIPMENT

ADDING & CALCULATING MACHINES

(Also see Calculators—Pocket size and Table size).

Maharashtra

Bradma of India Ltd., Lakshmi Bldg., Sir P. Mehta Rd., Bombay 400001.

Remington Rand of India Ltd., Mehta Mahal, 15, Mathew Rd., Bombay 400004.

Tamil Nadu

Facit Asia Ltd., Perungudi, Madras 600041.

Indian Manufrs. (Madras) Pvt. Ltd., 1-155, Mount Rd., Madras 600002.

Rayala Corpn. Pvt. Ltd., 25A, Mount Rd., Madras 600032.

Singer & NELCO Calculators, 12, Mount Rd., Madras 600002.

West Bengal

Bhowmick Calculators, 7, K. Das Lane, Calcutta 700012.

J. K. Business Machines Ltd., 2, Mangoe Lane, Calcutta 700001.

National Cash Register Co., 4-D, Dalhousie Sq. East, Calcutta 700001.

Remington Rand of India Ltd., 3, Council House St., Calcutta 700001.

Indian Sewing Machine Co. Ltd., 29, Waterloo St., Calcutta 700001.

ADDRESSING MACHINES

Arunil Business Machines, 4, Tardeo A/C. Mkt., 5th Flr., Tardeo, Bombay 400034.

Bradma of India Ltd., 79, Dr. A. Besant Rd., Bombay 400018.

BUSINESS FORMS & CHARTS

Maharashtra

Bell Graphic Recording Charts Ltd., S-297, C. S. Track Rd., Kalina, Bombay 400029.

Blue Star Ltd., 414/4, V. Savarkar Mrg., Prabhadevi, Bombay 400025.

Business Forms Ltd., 306, Embassy Centre, Nariman Point, Bombay 400021.

West Bengal

Business Forms Ltd., 6A, Middleton St., Calcutta 700016.

COMPUTERS

Delhi

Computronics India, Data Processing Centre, 53, Lodi Estate, New Delhi 110003.

Hindustan Computers Ltd., 505–508, Siddharth, 96, Nehru Place, New Delhi 110024.

Gujarat

Digital Systems International, White House, Viswas Colony Rd., Alkapuri, Vadodara 390005.

Maharashtra

Bombay Cupter Services Pvt. Ltd., 10/20, Kailash Kunj, Wadala, Bombay 400031.

C. J. Inds. (LNL), Hampton Court, N. Parekh Mrg., Bombay 400005.

Computronics India, Data Processing Centre, 1, Mittal Chambers, Nariman Point, Bombay 400021.

Hinditron Computers Pvt. Ltd., 69/A, L. Jagmohandas Mrg., Bombay 400006.

Informatics Services Pvt. Ltd., Apsara Bldg., 6th Flr., Opp. Electric House, S. Bhagatsingh Rd., Colaba, Bombay 400039.

International Computers Indian Manufacture Ltd., Magnet House, N. Morarjee Marg, Bombay 400038.

Magna Systems, Haji Adam Mansion, Homji St., Bombay 400001.

Patni Computer Systems Pvt. Ltd., 303/304, Regent Chambers, Nariman Point, Bombay 400021.

Tamil Nadu

Case Computer Systems Pvt. Ltd., 67, Sembudoss St., Madras 600001.

K.C.P. Ltd., 38, Mount Rd., Madras 600006.

Transtech Distribution, S-8, Sastrinagar, Madras 600020.

West Bengal

Digital Instruments and Systems India, 48A, M. Nehru Rd., Calcutta 700029.

COPIERS

Ekantia Copiers Pvt. Ltd., 31, Rajpur Rd., Delhi 110054.

Electro Photomax, L-38, Connaught Place, New Delhi 110001.

Graphics India, Nariman Bhavan, N. Point, Bombay 400021.

Harish Trent Pvt. Ltd., 19, Parsi Panchayat Rd., Andheri East, Bombay 400069.

Kores (India) Ltd., Business Machines & Systems Dn., Plot 10, Off Dr. E. Moses Rd., Worli, Bombay 400018.

DRAWING OFFICE EQUIPMENT

Andhra Pradesh

Harvin Scientific Optics Pvt. Ltd., C-7, 8 & 34, Ind. Estate, Sanatnagar, Hyderabad 500018.

Maharashtra

Allied Instruments Pvt. Ltd., 30-BD, Govt. Ind. Estate, Kandivli, Bombay 400067.

Bombay Miscellanies Pvt. Ltd., Khan Manzil, 28, Calicut St., Bombay 400001.

Bombay Stationery Mart, 7A, Sir P. M. Rd., Bombay 400001.

Industrial Marketing Services, Jiji House, 1st Floor, Ravelin St., Bombay 400001.

Maharaja Trade Links, D-44, Aaram Society, Vakola, Santacruz East, Bombay 400055.

Uttar Pradesh

Drawing Instruments Mfg. Co., Behari Lal Rd., Dehra Dun 248001.

West Bengal

Das Reprographics Pvt. Ltd., Taratolla Rd., Calcutta 700053.

Simco, 2A, Kedar Dutta Lane, Calcutta 700006.

DUPLICATING MACHINES

Delhi

Roneo Vickers India Ltd., 136, Sunder Nagar, New Delhi 110003.

Shourie Duplicators Pvt. Ltd., Ind. Area, Najafgarh Rd., New Delhi 110015.

Maharashtra

Cidas Inds., 111, Prasad Chambers, Opera House, Bombay 400004.

Kesho Ram & Sons India Pvt. Ltd., 314, Commerce House, N. Master Rd., Bombay 400023.

Tapeco Music India (Cassette), Room No. 7, Bombay Mutual Annexe, Gunbow St., Bombay 400001.

Tamil Nadu

Methodex Systems Pvt. Ltd., 38/3, Mount Rd., Madras 600002.

Uttar Pradesh

Hivka Duplicators Pvt. Ltd., Aishbagh, Lucknow 226001.

West Bengal

Dass Zimmerman Pvt. Ltd., 10, Taratolla Rd., Calcutta 700053.

Gestetner Duplicators Pvt. Ltd., 18, Rabindra Sarani, Calcutta 700001.

J. K. Business Machines Ltd., 2, Mangoe Lane, Calcutta 700001.

Remington Rand of India Ltd., 3, Council House St., Calcutta 700001.

FILING SYSTEMS

Delhi

A. K. Industries, 70 Rani Jhansi Rd., New Delhi 110008.

Methodex Business Systems Pvt. Ltd., 608, Meghdoot, Nehru Place, New Delhi 110024.

Recordex Business Systems, 8/1, E. Patel Nagar, New Delhi 110008.

Roneo Vickers India Ltd., 136, Sunder Nagar, New Delhi 110003.

Maharashtra

Postalia Interfrank Pvt. Ltd., G.P.O. Box 479, Bombay 400001.

Vanguard Business Systems, 70-C, Gowalia Tank Rd., Bombay 400036.

OFFICE FURNITURE

Delhi

A. K. Industries, 70, Rani Jhansi Rd., New Delhi 110008.

Featherlite Products, 2, Timber Yard Layout, Mysore Rd., Bangalore 560026.

Recordex Business Systems, 8/1, E. Patel Nagar, New Delhi 110008.

Roneo Vickers India Ltd., 136, Sunder Nagar, New Delhi 110003.

Union Engg. Co., AA/6, Anand Parbat, St. No. 4, Guru Gobind Singh Mrg., New Delhi 110005.

Goa

Keith Abilities & Electronic Equipments Co., Post Box 292, Panaji 403001.

Gujarat

Ahmedabad Eagle Engg. Enterprises Pvt. Ltd., 410, Near Railway Crossing, Naroda Indl. Estate, Ahmedabad 382330.

Karnataka

British Physical Labs. India Pvt. Ltd., 28, K. Hanumanthiah Rd., Bangalore 560027.

Featherlite Products, 2, Timber Yard Layout, Mysore Rd., Bangalore 560026.

Maharashtra

Filex System, 172/74, Dr. D. N. Rd., Bombay 400001.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Godrej Bhavan, Home St., Bombay 400023.

Indoors, 50, S. Bhagatsingh Rd., Bombay 400001.

Kamal Steel Products, 134, C. & D. Kandivli Indl. Estate, Bombay 400067.

Noormohameds, 109, A-111/B, Mohamedali Rd., Bombay 400003.

Tamil Nadu

Volga Furnishers, 533, Mount Rd., Madras 600018.

West Bengal

Commercial Syndicate, 22, Canning St., Calcutta 700001.

OFFICE MACHINES

Delhi

Indian Communications Network Pvt. Ltd., 801, Siddharth, 96, Nehru Place, New Delhi 110019.

Maharashtra

Bradma of India Ltd., 79, Dr. A. Besant Rd., Bombay 400018.

K. L. A. Business Machines, 229, Arun Chambers, Tardeo Rd., Bombay 400034.

Nandi Business Machines, 3, J.K. Indl. Estate, Mahakali Rd., Andheri East, Bombay 400069.

Precision Typewriters Co., Dena Bank Bldg., Horniman Circle, Bombay 400023.

Remington Rand of India Ltd., Mehta Mahal, Mathew Rd., Bombay 400004.

Roneo Vickers India Ltd., 39, A. K. Naik Rd., Bombay 400001.

Vanguard Business Systems, 70-C, Gowalia Tank Rd., Bombay 400036.

Tamil Nadu

Business Machine Syndicate, 1/155, Mount Rd., Madras 600002.

Facit Asia Ltd., P.O. Perungudi, Madras 600041.

Instruments and Apparatus Pvt. Ltd., 193, Mount Rd., Madras 600002.

P. N. Ganesan Pvt. Ltd., 7, Judge Jambulinga Mudaliar Rd., Madras 600004.

OFFICE STATIONERY & REQUISITES

Delhi

Bharat Carbon and Ribbon Manufg. Co. Ltd., N-75, Connaught Circus, New Delhi 110001.

India Paper Products, 9/115, Barashabulla, Delhi 110006.

Kathuria Bros., 2097, Vir St., Sadar Bazar, Delhi 110006.

Kayvee Plastic Works, C-181, Naraina Indl. Area, Phase I, New Delhi 110028.

National Copy Manufrs., 1174, Chah Rahat, Delhi 110006.

Oxford Ind. India, 84-A, Kamla Nagar, Delhi 110007.

Palson Inds., 165, Okhla Indl. Complex, Phase I, New Delhi 110020.

Ram Nath & Sons, 2426, Chawri Bazar, Delhi 110006.

Two Brothers Pvt. Ltd., 7, Mohan Singh Place, Irwin Rd., New Delhi 110001.

Goa

Cartybon Pvt. Ltd., Chowgule House, Mormugao Harbour 403803.

Gujarat

Airawat Ind., Below Central Bank Bldg., Gandhi Rd., Ahmedabad 380001.

Jayshree Stationery Mart, Kagdi Bazar, Below Gandhi Rd., Bridge, Ahmedabad 380001.

Mariners & Co., 25, Ajay Ind. Estate, Nagerwel Hanuman Rd., Rakhial, Ahmedabad 380023.

Paramount Paper Pin Products, 13, Saurashtra Socy., Behind Hirabag, Ambawadi, Ellis Bridge, Ahmedabad 380006.

Puthawala Corpn., 2347, Moti Makeriwad, Relief Rd., Ahmedabad 380001.

Ryman Printers & Stationers, Capital Commercial Centre, Basement B-11/12, Ashram Rd., Ahmedabad 380009.

Sureshchandra & Bros., Opp. Dena Bank, Gandhi Rd., Ahmedabad 380001.

REMINGTON RAND

OFFICE MACHINES :

ENGLISH & INDIAN LANGUAGE STANDARD TYPEWRITERS, PORTABLE TYPEWRITERS, MANUAL & ELECTRIC STENCIL DUPLICATORS, ELECTRONIC CALCULATORS, IMPORTED ELECTROSTATIC COPIERS, IMPORTED ELECTRIC TYPEWRITERS.

OFFICE SUPPLIES :

TYPEWRITER & PENCIL CARBON PAPER, TYPEWRITER RIBBONS, STENCIL PAPER, DUPLICATING PAPER, TELEPRINTER PAPER ROLL, CARBON RIBBONS, CORRECTING FLUID.

OFFICE SYSTEMS :

FIRE RESISTANT FILING CABINETS, ELECTROMECHANICAL FILING SYSTEMS, KARDEX VISIBLE RECORD SYSTEMS, KARDVEYER, GRAPHDEX WALL CHARTING & LINEDEX STRIP INDEXING SYSTEMS.

Phone :
361496

Telex : 0113566

Telegrams :
" REMINGTONS "

MEHTA MAHAL, 15, MATHEW ROAD,
BOMBAY 400 004.

Karnataka

Arun Agencies, Dajiban Peth, Pendar Gali, Hubli 580020.

Khoday Industries Pvt. Ltd., No. 10, 1, Main Rd., Gandhinagar, Bangalore 560009.

Sajjan Ind., 124, Chord Rd., Rajajinagar, Bangalore 560010.

Kerala

Metropolitan Instruments Ltd., 241, Syrian Church Rd., Trivandrum 695001.

Maharashtra

Ashok File Ind., 185, Bazargate St., Bombay 400001.

Bombay Book Manufg. Co., 244, Raviwar Peth, Pune 411002.

Bombay Miscellanies Pvt. Ltd., Khan Manzil, 28, Calicut St., Bombay 400001.

Bombay Pencils Pvt. Ltd., Seksaria Indl. Estate, Malad West, Bombay 400064.

Bombay Stationery Mart, 7-A, Sir P. M. Rd., Bombay 400001.

Cartybon P. Ltd., Bakhtawar, 4th Flr., Nariman Point. Bombay 400021.

Crystal Stationery Mart, 146, A. Rehman St., Bombay 400003.

Deelip Stationery Mart, 299, A. Rehman St., Bombay 400003

Eastern Industries, Kasturchand Mills Estate, Dr. M. C. Javle Rd., Dadar West, Bombay 400028.

Express Stationery Service, 12-A, Gunbow St., Bombay 400001.

Fixoclips, Dhutpapeshwar Prasad, Mangalwadi, Bombay 400004.

Hatim & Co. (Bookwala), 154, A. Rehman St., Bombay 400003.

Hind Commercial Agency, 16, Modi St., Opp. G.P.O. Bombay 400001.

Hindustan Pencils Pvt. Ltd., 510, Himalaya House, Palton Rd., Bombay 400001.

Intermark, 211/213, Kalbadevi Rd., Bombay 400002.

Kores (I) Ltd., Plot No. 10, Off Dr. E. Moses Rd., Worli, Bombay 400018.

Lion Metal Ind., 187, A. Rehman St., Bombay 400003.

Lion Pencils Pvt. Ltd., Jolly Maker Chamber 1, Nariman Point, Bombay 400021.

Mehra Leonardt Pens Pvt. Ltd., Mehra Estate, L. B. Shastri Marg, Vikhroli, Bombay 400079

Mercantile Stationery Manufg. Co. Pvt. Ltd., Podar Chambers, S. A. Brelvi Rd., Bombay 400001.

Metrex Pvt. Ltd., Sunder Estate, Near Kamani, Kurla Bombay 400070.

Paradise Pencils, A/114, Byculla Service Inds., Sussex Rd., Byculla, Bombay 400027

Paramount Book Manufg. Co., 27, Sutar Chawl, Bombay 400002

Rockvel Corpn., Anand Bhuvan, Sir P. M. Rd., V. Parle (E), Bombay 400057

Shah Book Manufg. Depot, 199, A. Rehman St., Bombay 400003.

Staple Pins Pvt. Ltd., 293, D. Upadhyaya Marg, Mulund, Bombay 400080.

Wire Pin Ind., 40, Chakala Rd., Andheri (E), Bombay 400069.

Punjab

Aero Stationery Works (Regd.), Basti Sheikh, Jullundur 144002.

Evershine Inds., Gill Rd., Miller Ganj, Ludhiana 141003.

Tamil Nadu

Madras Pencil Factory, Stringers St., Madras 600001.

Uttar Pradesh

Raj Pencil Mfg. Factory, 6-C, Ind. Estate, Clutterbuckganj, Bareilly 243502.

West Bengal

Bharat Carbon & Ribbon Manufg. Co. Ltd., 25, Brabourne Rd., Calcutta 700001.

Ganga Saran & Sons Pvt. Ltd., 1, Gibson Lane, Calcutta 700001.

OIL EMULSION

Jaycee Chemical Inds., P. Box 164, Kukies 28/826, Trivandrum 695001. (Kerala State).

OIL ENGINES

(See 'Engines — Oil' in this list).

OIL MILL MACHINERY

Bharat Industrial Corpn., Petit Compound, Bombay 400007.

De-Smet (India) Pvt. Ltd., Shree Niketan, A. Besant Rd., Bombay 400018.

K. Sudarshan Inds., Jandiala Rd., Tarn Taran 143401, Amritsar Dist.

Krishna Engg. Workshop, Charminar Factory Rd., Azamabad, Hyderabad 500020.

Lyallpur Engg. Co., G. T. Rd., Ghaziabad 201001.

Numex Engrs., 306, Commerce House, Medows St., Bombay 400001.

Nutak Engrs., 48, Saki Vihar Rd., Saki Naka, Bombay 400072.

Omega Indl. Corpn., G-2, Paras Nagar, Majas Rd., Jogeshwari East, Bombay 400060.

S. P. Foundries, 77/156, Latouche Rd., Kanpur 208001.

Swastik Engg. Co., Mukand Nagar, Ghaziabad 201001, U.P.

Tekma Machinery Manufg. Co. Pvt. Ltd., Saki Vihar Rd., Bombay 400072.

Troika Processes Pvt. Ltd., Mani Mahal, Mathew Rd., Bombay 400004.

United Engg. (Eastern) Corpn., 22, B. R. B. B. Rd., Calcutta 700001.

United Oil Mill Machinery & Spares Pvt. Ltd., Bldg. 32, Flat 406, Nehru Place, New Delhi 110024.

Vulcan Laval Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

OIL MILLS — VEGETABLE

Andhra Pradesh

Andhra Pradesh Oil & Chemical Inds. Ltd., 5-91-29, Chandramoulinagar, Guntur 522007.

B. Rajendra Oil Mills & Refinery, Afzalganj, Hyderabad 500012.

Kedia Vanaspathi (Pvt.) Ltd., Mir Alam Tank, Hyderabad 500002.

Tungabhadra Inds. Ltd., Walker Town, Hyderabad 500025.

Gujarat

Bhavnagar Oil & Chemical Ind. Pvt. Ltd., Bunder Rd., Bhavnagar 364001.

Bhavnagar Vegetable Products Ltd., P.B. 28, Bunder Rd., Bhavnagar 364001.

Deepak Solvent Extraction Ind., Jawahar Rd., Manavadar 362630. Junagadh Dist.

Prabhat Solvent Extraction Ind. Pvt. Ltd., Rajendra Rd., Manavadar 362630. Junagadh Dist.

Kerala

Easwar Oil Inds. Pvt. Ltd., Edapal 679576, Malappuram Dist.

Maharashtra

Ahmed Oomerbhoy, Ahmed Ooomer St., Two Tanks, Bombay 400008.

Allana Oil Mills, Post Box No. 3646, Bombay 400004.

Berar Oil Industries, Vansada Peth, Akola 444001.

Bhaidas Cursondas & Co., 16, Apollo St., Bombay 400023.

Bombay Oil Industries Pvt. Ltd., Kanmoor House, 281, N. Natha St., Bombay 400009.

Daulatram Rameshwarlal Pvt. Ltd., 215/17, Kalbadevi Rd., Bombay 400002.

Hindustan Lever Ltd., Haji Bunder, Sewree, Bombay 400015.

Importers Copra Crushing Ind. Ltd., 33, Immamwada Rd., Bombay 400009.

Indian Vegetable Products Ltd., Forbes Bldg., C. Rai Marg, Bombay 400001.

Indu Oil & Soap Co., Byculla Bridge, Bombay 400027.

International Export Import Co., 65, Mody St., Bombay 400001.

Jai Hind Oil Mills Co., 153, L. B. S. Mrg., Bhandup, Bombay 400078.

Jayant Oil Mills, 13, Sitafalwadi, Mount Rd., Mazgaon, Bombay 400010.

Kamani Oil Industries, 323, Narsi Natha St., Katha Bazar, Bombay 400009.

Liberty Oil Mills, 16, L. Shastri Rd., Kurla, Bombay 400070.

Mansingka Ind. Pvt. Ltd., Maker Bhavan 1, New Marine Lines, Bombay 400020.

New India Oil Mills, 387-89, N. Natha St., Bombay 400009.

Premji Haridas & Co., Bhanushali Chambers, 166-70, Tukaram Rd., Bombay 400009.

Raj Oil Mills, 228, Bellasis Rd., Bombay 400008.

Raja Oil Mills, 88, Masjid Bunder Rd., Bombay 400009.

Sanjiv Oil Inds., Karanja 444105. Akola Dist.

Shree Jagdish Oil Inds. Pvt. Ltd., 281/87, Narshi Natha St., Bombay 400009.

Sonawala Ind. Pvt. Ltd., 137, S. Memon St., Bombay 400002.

Tata Oil Mills Co. Ltd., Bombay House, Homi Mody St., Bombay 400023.

Ulhas Oil & Chemical Ind. Pvt. Ltd., 16, Apollo St., Bombay 400023.

Vegetable Vitamin Foods Co. Ltd., 109, 29th Rd., Bombay 400022.

Vegoils Ltd., L. M. Nadkarni Mrg., Wadala, Bombay 400037.

Vishram Khimji & Sons, 111, Kazi Syed St., Bombay 400003.

Western India Vegetable Products Ltd., Bakhtawar, Backbay Reclamation, Bombay 400021.

Tamil Nadu

Nevatia Pvt. Ltd., 331/333, T. Chetty St., Madras 600001.

Yadalam & Co., 1, Thathamuthiappan St., Madras 600001.

Uttar Pradesh

Amrit Banaspati Co. Ltd., Amritnagar, Ghaziabad 201100.

Modi Oil Mills, Modinagar 201204. Meerut Dist.

Prag Vanaspati Products, Barafkhana, Aligarh 202001.

West Bengal

B. C. Paul & Sons Pvt. Ltd., 2/2, G. C. Chatterji Rd., Calcutta 700002.

Ivan Jones Ltd., P.N.B. House, 18-B, Brabourne Rd., Calcutta 700001.

Kusum Products Ltd., 9, Brabourne Rd., Calcutta 700001.

Swaika Group of Ind., P.N.B. House, 18-B, Brabourne Rd., Calcutta 700001.

OIL SEALS, 'O' RINGS

Advance Marketing Agencies (Regd.), Post Box 11, Calcutta 700001.

Allied Hydro-Pneumatic Equipments, 2A, Banaji St., Off Cawasji Patel St., Bombay 400001.

Auto Pins (India) Regd., K. Gate, Delhi 110006.

B. Boral & Co., 22, Strand Rd., Calcutta 700001.

Benz Sales Corpn., 26, Kennedy Bridge, Bombay 400004.

Bombay Oil Seals Co., Kacharpatti Rd., Ghatkopar, Bombay 400086.

Chimanlal L. Vasa, 1st Avantikabai Gokhale St., Sandhurst Rd., Bombay 400004.

Crown Inds., Patel Motor Mkt., K. Gate, Delhi 110006.

Fenner (India) Ltd., 3, Madurai Melakkal Rd., Madurai 625016.

General Mfg. Co., 92, Narkula Ganj, Bareilly 243005. (U.P.).

Ghansham & Co., 501/3, S. V. P. Rd., Bombay 400004.

Indian Engg. & Trading Co. (Calcutta), P-40, Princep St., Calcutta 700013.

International Impex Corpn., 16, Kiln Lane, Bombay 400007.

La Prenca Inds. Pvt. Ltd., Sonawala Est., Sonawala Cross Rd., Bombay 400063.

Mykoda Auto Ind., 2, Krishna Motor Mkt., K. Gate, Delhi 110006.

N. D. Brothers, B-26, G. T. Karnal Rd., Indl. Area, Delhi 110033.

Oil Seals Mfg. Co. Pvt. Ltd., 10, Veer Nariman Rd., Bombay 400023.

Perfect Circle Victor Ltd., S-305, L. B. S. Mrg., Mulund, Bombay 400080.

Peter Autokits Pvt. Ltd., Makwara Lane, Marol Naka, M. Vasanji Rd., Andheri (E), Bombay 400059.

Purohit Rubber Works, Kala Bhuvan, Mathew Rd., Bombay 400004.

Racmann Koshatkinn (Regd.), 53, Indl. Area, Najafgarh Rd., New Delhi 110015.

Southern Equipment Corpn., 22, Purushothamma Mudaliar Rd., Madras 600034.

Spare-Age (India) Ltd., 4-B, Purshottam Bldg., Tribhuvan Rd., Bombay 400004.

Super Seals India Pvt. Ltd., 1213, Kailash Bldg., New Delhi 110001.

Swastik Rubber Products Ltd., Swastik House, Pune 411003.

For Your Requirements in :

Oil Seals, O Rings, Canvas Carbon-Ebonite-Seals, Diaphragms, Hydraulic and Chevron packings and any precision item, from synthetic, silicone, viton, polyurethane, hypolan, polyacrylic and EPDM Rubber as per drawing and specification.

★

Manufacturers :

UNIVERSAL OIL SEALS
MFG. CO. PVT. LTD.

Sidhapura Industrial Estate, Masrani Lane,
Halav Pool, Kurla, Bombay 400 070.
Phones : 675268 & 673027
Grams : "UNIRINGS".

Universal Oil Seals Mfg. Co., Sidhpura Ind. Estate, Kurla West, Bombay 400070.

Vako Seals, 3/4, K. R. D. N. Estate, Goregaon East, Bombay 400063.

Vinko Industries, 2820-M, Guru Nanak Auto Mkt., K. Gate, Delhi 110006.

Westoseals Corpn., Modi Chambers, French Bridge, Bombay 400004.

Zenith Rubber Ind., 19, Chandni Chowk St., Calcutta 700013.

OPTICAL FRAMES & INSTRUMENTS

Andhra Scientific Co. Ltd., R. Tagore Rd., Machilipatnam 521001.

Bharat Ophthalmic Glass Ltd., Lenin Sarani, Durgapur 713210. (*Regnl. Offices :* K. Parikh House, 47, P. D'Mello Rd., Bombay 400009; 2/12, Meeran Sahib St., Madras 600006; 1B, Park St., Calcutta 700016.)

Himalaya Opticals, E-13, Defence Colony, New Delhi 110024.

Lawrence & Mayo (India) Pvt. Ltd., 274, Dr. D. N. Rd., Bombay 400001.

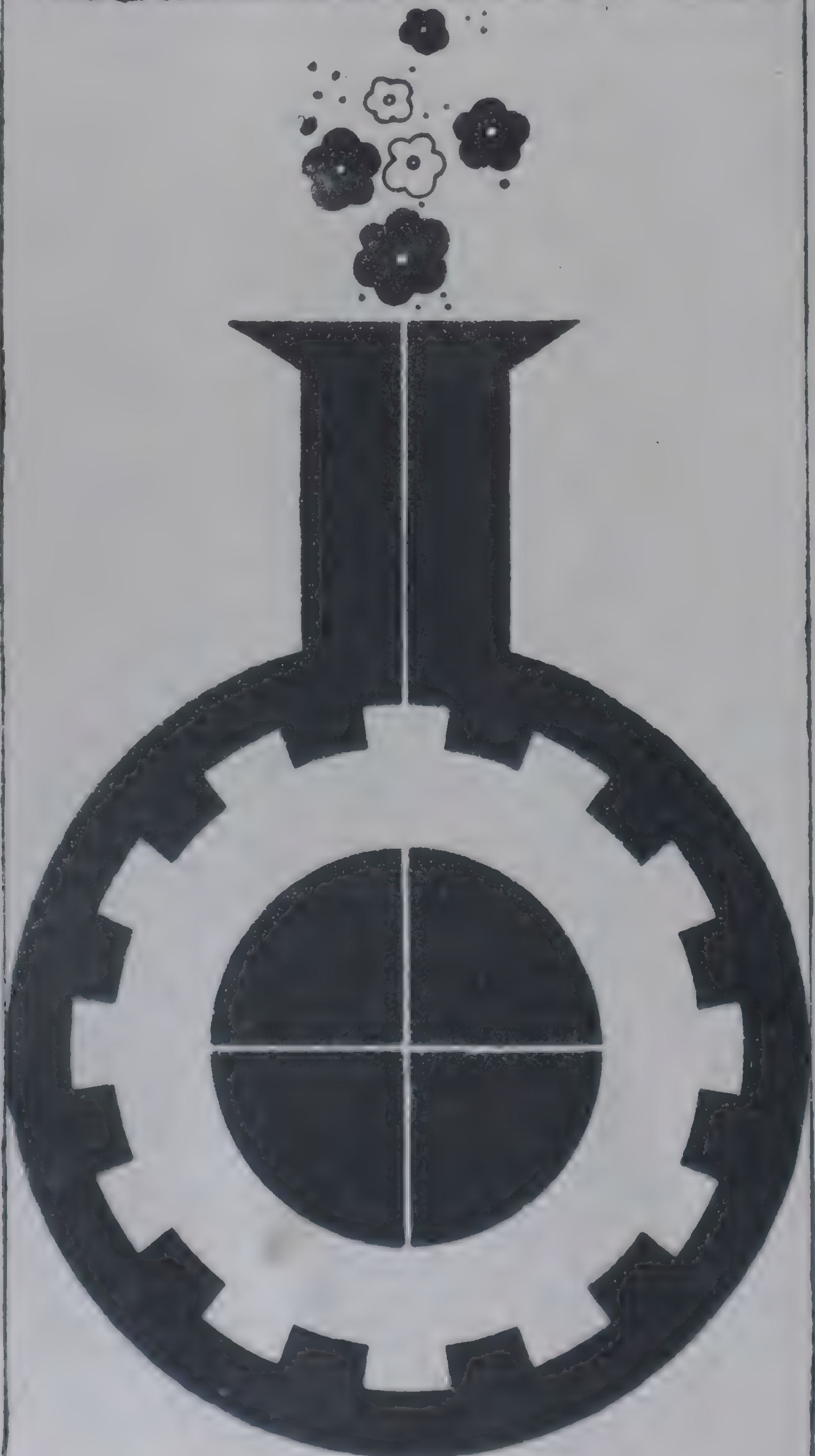
Metzer (India) Optical Instruments Co., 110, Himalaya House, Palton Rd., Bombay 400001.

Montex Corpn., Yusuf Bldg., M. Gandhi Rd., Bombay 400023.

National Instruments Ltd., 1/1, Raja S. C. Mullick Rd., Jadavpur, Calcutta 700032; Ansal Bhawan, K. Gandhi Mrg., New Delhi 110001; K. Parikh House, 47, P D'Mello Rd., Bombay 400009; 150A/3, Anna Salai Madras 600002; Coll. Square, Cuttack 753003.

There's more to us than meets
your eyes . . .

Lawrence & Mayo
also serves the nation
in the Scientific,
Engineering and
Instrumentation fields with



"LYNX"

Surveying, Hydrometeorological, Soil, Concrete Testing and a wide range of Temperature Control Equipment for Laboratory use.

VACNIK

Rotary & Diffusion pumps, Vacuum Gauges, Components and Systems.

For 50 years, we have been dedicated to expert quality and service. Through rigid quality control to meet exacting standards. And because we have an eye for detail, every product is thoroughly inspected and checked before delivery.

Avail of our services. Contact us for details.

Lawrence & Mayo (India)
Private Ltd.

Technical Development &
Vacuum Centres, Hyderabad, N. Delhi
Branches. Bombay ● Bangalore
● Calcutta ● Madras ● Secunderabad

C.L & M-1126

Oberoi Optics International Pvt. Ltd., Sultan Singh Bldg., K. Gate, Delhi 110006.

Optical Instrumentation (India), 21, Beadonpura, New Delhi 110005.

Phiroze M. Dastur & Co., 379, Dr. D. N. Rd., Bombay 400001.

Spectra Systems Pvt. Ltd., M. S. R. Indl. Estate, Bangalore 560054.

Towa Optics India Pvt. Ltd., 4-C, Ansari Rd., New Delhi 110002.

ORTHOPAEDIC EQUIPMENT

(See under Medical Equipment).

PACKAGING MACHINERY

Autobisk Plants Co., East Cross, 32, Asoka Rd., Mysore 570001.

Boolani Engg. Corpn., Prabhadevi Indl. Estate, 402, V. Savarkar Mrg., Bombay 400025.

Brooke Bond India Ltd., Development & Machine Bldg. Factory, 3, Hide Rd., Calcutta 700043.

Haiderison & Bros., 154, Bora Bazar, Bombay 400001.

Indo Europa Trdg. Co. Pvt. Ltd., 1390, Chandni Chowk, Delhi 110006.

J. Mahabeer & Co. Pvt. Ltd., 3620–21, Netaji Subhas Mrg., New Delhi 110002.

Kinetics Technology India Ltd., 73/74, Nehru Place, New Delhi 110019.

Kishore Trdg. Corpn., 204, A. Rehman St., Bombay 400003.

Master Mechanical Works, Pushpanjali, S. V. Rd., Santacruz West, Bombay 400054.

Metal Box Co. of India Ltd., Barlow House, 59-C, Chowringhee, Calcutta 700020.

Micro Mechanical Works, LBS Mrg., Vikhroli, Bombay 400083.

Modern India Machine Tools Pvt. Ltd., 18/1/6, Canal West Rd., Calcutta 700009.

Nichrome Metal Works, 46, Dr. Ambedkar Rd., Pune 411001.

Prakash Engg. Works. MIDC Tech. Scheme Phase I, Plot No. 7, Dombivli 421203. (Thane Dist.).

Quality Machinery Pvt. Ltd., Sector 6, Faridabad 121001.

Shah & Co., 161/63, Charni Rd., Bombay 400004.

Shaw Engg. Works, 227, Manicktolla Main Rd., Calcutta 700054.

Standard Type Foundry Pvt. Ltd., 4 & 5. Himalaya House, Palton Rd., Bombay 400001.

Technopak Engg. Co., C-105, Indl. Estate, Bangalore 560044.

Vulcan Laval Ltd., Mustafa Bldg., 7-A, Sir P. Mehta Rd., Bombay 400001.

XL Equipments Pvt. Ltd., 13/A, Rasulpura, Secunderabad 500003.

Yve Ind. & Trdg. Co., Steelmade Ind. Estate, Marol-Maroshi Rd., Bombay 400059.

PACKING & PACKAGING MATERIALS

Andhra Pradesh

East Coast Packaging Ltd., A-11, Ind. Estate. Visakhapatnam 530007.

Progressive Packaging Pvt. Ltd., Lux-2, Ind. Estate. Sanatnagar, Hyderabad 500018.

Sri Balaji Waterproof & Packing Material Co., B-1, Ind. Estate. Moula Ali. Hyderabad 500040.

Techno Pack Pvt. Ltd., Manchukonda Gardens, Visakhapatnam 530001.

Delhi

Minerva Packaging Pvt. Ltd., Plot No, 5, Furniture Block. Kirtinagar Extn. Area, New Delhi 110015.

Peters India Pvt. Ltd., 5/26, Ind. Area, New Delhi 110015.

Rohtas Industries Ltd., PNB Bldg., Parliament St., New Delhi 110001.

Sarawati Paper Converting Co-op. Ind. Soc. Ltd., 13A, Najafgarh Rd., New Delhi 110015.

Gujarat

Akshay Trading Co., C/B, Plot No. 414, G.I.D.C., Makarpura, Vadodara 390009.

Crown Containers, 167, Gujarat Vepari Mahamandal Indl. Complex, Odhav Rd., Ahmedabad 382410.

Lamicoat Pvt. Ltd., 1299-B/1, Lal Darwaja, Nr. Dinbai Tower, Ahmedabad 380001.

Shakti Packaging Ind., 215, Ind. Estate, Vadodara 390003.

Karnataka

Cardboard & Packaging Co. Mysore Pvt. Ltd., Bank of India Bldg., 10, Kempegowda Rd., Bangalore 560000.

Industrial Packaging Products, C-32, Ind. Estate, Bangalore 560044.

Jaabeety Enterprises, 130/2, Indl. Suburb, Barappan Palaya, Yeshwantpur, Bangalore 560022.

Khoday Industries Pvt. Ltd., No. 10, Main Rd., Gandhinagar, Bangalore 560009.

Mysore Paper Products, 146, 6th Cross, Wilson Gardens, Bangalore 560027.

Nandi Packaging Pvt. Ltd., 148, Indl. Est., Peenya, Bangalore 560022.

Pratiba Inds., 2/11, Gokula Extn., Bangalore 560054.

Kerala

United Timber Inds., Ind. Estate Rd., Ollur 680306. Trichur Dist.

Madhya Pradesh

Shelley Products, 45, H. E. Ancillary Ind. Estate, Bhopal 462024.

Maharashtra

Adathakkar Bags Manufg. Corpn., 422, Bharat Ind Estates, T. Jivraj Rd., Sewri, Bombay 400015.

Alpack Pvt. Ltd., 120, Wodehouse Rd., Bombay 400005.

Amartara Rondo Packaging Ind. Pvt. Ltd., Saki Vihar Rd., Powai, Bombay 400072.

Artytoys, Sir Ratan Tata Welfare Centre, Sir R. Tata Rd., Tardeo, Bombay 400034.

Associated Packaging Pvt. Ltd., Aararat, Medows St., Bombay 400023.

Baker & Co. Pvt. Ltd., Oomrigar Bldg., Opp. Crawford Market, Bombay 400003.

Bharat Corrugating Inds., Dalmia Estate, Opp. Ralli Wolf, LBS Mrg., Mulund, Bombay 400080.

Bhawani Packaging Pvt. Ltd., A-4, Girikunj Ind. Estate, M. Caves Rd., Andheri East, Bombay 400093

Box Well (India) Pvt. Ltd., Old Ashram, Andheri-Kurla Rd., Bombay 400069

Boxpack Paper Ind. Pvt. Ltd., 81/83. Mint Rd., Bombay 400001.

Boxrite Pvt. Ltd., A-14, MIDC Estate, Mahakali Rd., Bombay 400093

Colour Cartons Ltd., Tiecicon House, Dr E. Moses Rd., Bombay 400011.

Creative Packaging Pvt. Ltd., 215/17, Kalbadevi Rd., Bombay 400002

E. Leslie & Co., Botawala Bldg., Horniman Circle, Bombay 400001.

Economic Packaging Corpn., Elve Chambers, Fort, Bombay 400001.

Extrusion Processes Pvt. Ltd., Patel Estate, W. Express Highway, Goregaon East, Bombay 400063.

Fibre Foils Pvt. Ltd., M.I.D.C. Plot A-6, Marol Ind. Area, Andheri East, Bombay 400093.

Fidvi Printing Press, 179, A. Rehman St., Bombay 400003.

Hindustan Paper Box Mfg. Factory, Kurla-Andheri Rd., Near Safed Bridge, Bombay 400072.

International Packers & Movers, 42, A-Z Ind. Estate, Fergusson Rd., Bombay 400013.

Jayant Paper Box Factory, 205, Kakad Chambers, 232, Dr. Annie Besant Rd., Worli, Bombay 400018.

Kiv Group Ind., Sun Mill Comp., Lower Parel, Bombay 400013.

Kohinoor Paper Box Factory, Mogra West, Andheri, Bombay 400069.

Laxmi Paper Box Works, 49, Krishna Nagar, Parel, Bombay 400012.

Leader Packaging Inds. Pvt. Ltd., Maharsingh Bldg., Ram Mandir Rd., Bombay 400062.

Modern Packaging Ltd., Tiecicon House, Dr. E. Moses Rd., Bombay 400011.

National Cardware Manufg. Co., 55, Gamdevi Rd., Bombay 400007.

National Packaging Inds., 341, Birla Bldg., Tardeo, Bombay 400034.

National Paper Bag Co., 168, Bhimpura, Bombay 400009.

Noble Packaging, 2, Mittal Estate, 84, M. Vasanji Rd., Andheri East, Bombay 400059.

Oriental Containers Ltd., 1076, Dr. E. Moses Rd., Worli, Bombay 400018.

Overseas Packaging Ind. Pvt. Ltd., 49, Bajaj Bhawan, Nariman Point, Bombay 400021.

Pack In Plastics, 40-B, Clerk Rd., Bombay 400011.

Packaids Paper Inds., Metalage Compd., Subhash Rd., Jogeshwari East, Bombay 400060.

Packing Paper Products, MIDC Area, 'B' Cross Rd., Chakala, Andheri East, Bombay 400093.

Packme Industries, Mangal Chayya, Plot No. 113, Sion, Bombay 400022.

Paper Box Co. of India, Paper Box House, Mahakali Caves Rd., Bombay 400093.

Paper Packs Pvt. Ltd., 6, Bell Lane, Bombay 400001.

Paper Products Ltd., Vaswani Mansions, 120, D. Wachha Rd., Bombay 400020.

Papercoat & Print Pvt. Ltd., 203, Neelkanth, 98, N. Subhas Rd., Bombay 400002.

Polychem Agencies, 94, Kazi Syed St., Bombay 400003.

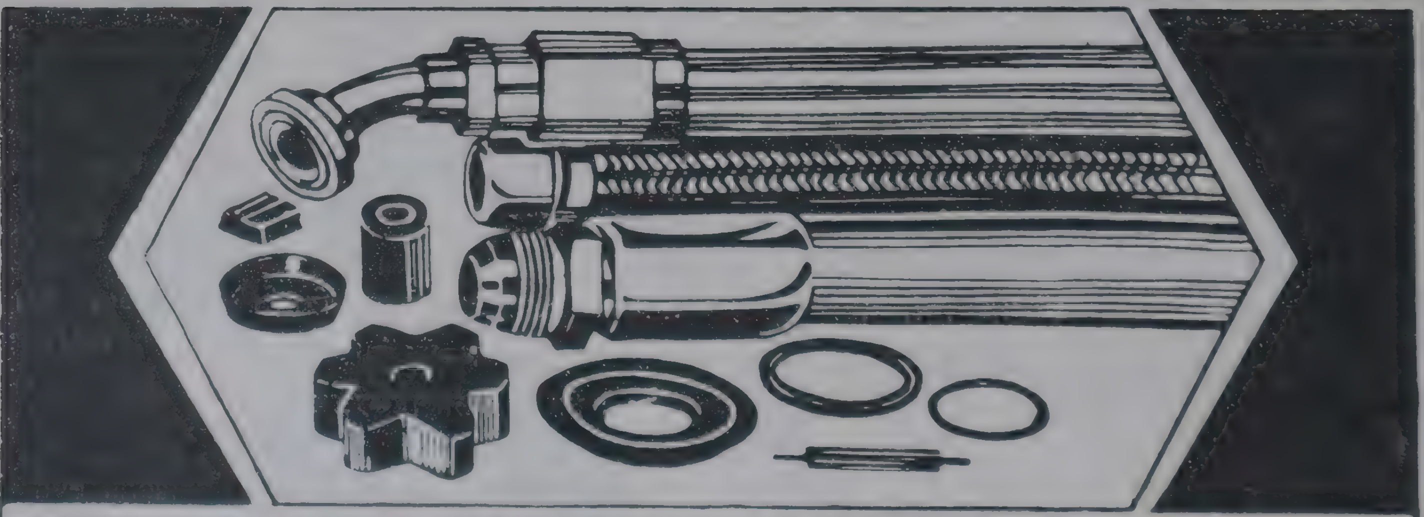
Polyfabric, 6, Khetani Ind. Est., 106, Bazar Ward, Kurla, Bombay 400070.

Premier Paper Products, 605, Churchgate Chambers, New Marine Lines, Bombay 400020.

Prestige Paper Box Inds., Darshan Udyog Bhavan, Unit Nos. 8, 10, 11, Safed Pool, Kurla Andheri Rd., Bombay 400072.

Progressive Ind., 36, Sutar Chawl, Bombay 400002.

Quality Cartons, 120, Champaklal Indl. Est., Sion (E), Bombay 400022.



COMMONWEALTH PACKAGING INDUSTRIES
152, THAMBU CHETTY ST SECOND FLOOR MADRAS-600 001

Mfrs of Quality Industrial Moulded and Extruded Rubber Components, Rubberised Rollers, High, Medium and Low Pressure Hydraulic Hoses with end fittings to clients' requirements for oil, Air, Gas, water, etc. and all types of Industrial Hoses.

Member FLUID POWER SOCIETY OF INDIA

Bangalore Branch: Sri Nataraja Buildings,
Hanumantha Nagar, BANGALORE-560 019.

PHONE: 30571
27187

Solid Containers Ltd., Tiecicon House, Dr. E. Moses Rd., Bombay 400011.

Stylo-Pack Inds., Post Box 7246, Chembur, Bombay 400071.

Vijay Flexible Containers Pvt. Ltd., Rohit Chambers, Ghogha St., Bombay 400001.

Vora Bros., 115, S. Devji St., Bombay 400003.

Warden & Co. India Pvt. Ltd., 340, J. J. Rd., Byculla, Bombay 400008.

Web Convertors of India, F-10, Vaishali, V. Mehta Mrg., J. V. P. D. Scheme, Bombay 400049.

Wood Packers, 80, Bombay Timber Mkt. Ltd., Reay Rd., Bombay 400010.

Zenith Tin Works Pvt. Ltd., Clerk Rd., off Race Course, Bombay 400034.

Punjab

Jain Box Factory, Guru Bazar, Jullundur 144001.

Leader Paper Processing Pvt. Ltd., E-11, Indl. Town, Jullundur 144001.

Tamil Nadu

Cartons & Containers, F-A/1, Ambattur Ind. Estate, Madras 600058.

Commonwealth Packing Industries, 152, Thambu Chetty St., Madras 600001.

East India Ind. (Madras) Pvt. Ltd., 498, Mint St., Madras 600003.

I. T. C. Ltd., Printing & Packaging Dn., Post Box 277, Madras 600019.

International Packers & Movers, 3, East Cooum Rd., Madras 600002.

Jayant Packaging Pvt. Ltd., Super Ind. Estate, Madras 600032.

Laminated Packagings Pvt. Ltd., Bombay Mutual Bldgs., Madras 600001.

Overseas Packers & Movers, 156, Jani Jan Khan Rd., Royapettah, Madras 600014.

Packwell Ind. Pvt. Ltd., Chromepet, Madras 600044.

Premier Paper Products, 23, Venkataswamy Rd., P.O. R. S. Puram, Coimbatore 641002.

Standard Packagings, 151, Broadway, Madras 600001.

Travancore Rayons Ltd., 151, Mount Rd., Madras 600002.

Uttar Pradesh

Goel Packaging Inds., B-5, Indl. Est., Aligarh 202001.

Metal & Board Containers, 5-B, Loni Rd., Mohan Nagar, Ghaziabad 201001.

Paramount Corrugators & Laminators (I), C-1/226, Peepal Mandi, Agra 282003.

Premier Packagings Pvt. Ltd., G. T. Rd., Mohan Nagar, Ghaziabad 201007.

Suraj Ind. Packing Ltd., Sriniketan, Gurudwara Rd., Lucknow 226001.

Uttar Pradesh Straw & Agro Products Ltd., Post Box 81, Moradabad 244001.

West Bengal

Arun Corrugating & Packaging Ind., 36, Brabourne Rd., Calcutta 700001.

Associated Packaging Ind., 37, B.R.B. Bose Rd., Calcutta 700001.

Cardboard Box Co. of Calcutta Pvt. Ltd., 79/17, L. G. Rd., Calcutta 700014.

Cardboard Materials & Printing Co. Pvt. Ltd., 7, Convent Rd., Calcutta 700014.

Containers & Closures Ltd., 19, N. S. Rd., Calcutta 700001.

Corrugating & Paper Processing Co. Pvt. Ltd., 243, B. T. Rd., Calcutta 700036.

Crosley & Towers Pvt. Ltd., 7A, Lower Circular Rd., Calcutta 700017.

Impex Corpn., 235, R. M. Dutta Garden Rd., Calcutta 700010.

India Foils Ltd., 4, Mangoe Lane, Calcutta 700001.

Kajaria Chemipaper Pvt. Ltd., 28, Amratolla St., Calcutta 700001.

Kanoria Packaging Pvt. Ltd., 8, Lyons Range, Calcutta 700001.

Metal Box Manufg. Co. of India Ltd., Barlow House, 59-C, Chowringhee, Calcutta 700020.

Packaging & Printing Ind., 1, British Indian St., Calcutta 700001.

S. Antool & Co. Pvt. Ltd., 91, A. P. Chandra Rd., Calcutta 700009.

Swastik Box Manufg. Co., 36, G. Sitalatala Lane, Calcutta 700011.

PAINTS, ENAMELS & VARNISHES

Andhra Pradesh

Andhra Paint & Chemical Inds., C-54, Indl. Est., Balanagar, Hyderabad 500037.

Deccan Porcelain & Enamel Works Ltd., 2707, Bakaram, P.B. 1801, Mushirabad, Hyderabad 500020.

Nellore Enamels, Ind. Estate, Nellore 524001.

Paints & General Equipment Co., Opp. Ashok Talkies, Hyderabad 500001.

Prakash Paints, B-9, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Assam

Assam Paints & Chemical Works, Tinsukia 786125.

Delhi

Anglo Dutch Paint, Colour & Varnish Works Pvt. Ltd., 50, Najafgarh Rd., New Delhi 110015.

Bhagsons Paint Ind. (I.), 16-A, DLF Ind. Area, Najafgarh Rd., New Delhi 110015.

Deena Paints Pvt. Ltd., 42, Rani Jhansi Rd., New Delhi 110055.

Delhi Paints Corpn., M-51, Con. Circus, New Delhi 110001.

Hansa Paints & Chemicals, 1/21, Asaf Ali Rd., New 100002.

International Paint Ind., 2/21, Roop Nagar, Delhi 110007.

Kohinoor Paint Colour & Varnish Works, 155, Katra Baryan, Fatehpuri, Delhi 110006.

Mera Chemicals, Ajit Mansion, A. Gate, Delhi 110006.

Metro Paint Ind., 260, Kamla Market, New Delhi 110001.

Polly Paints, 156, Katra Baryan, Delhi 110006

Saluja & Son, 192, Katra Baryan, Fatehpuri, Delhi 110006

Singal Paint Inds., 4834, Deputyganj, Delhi 110006

Spraylac Paints Corpn., 9, N. Subash Marg, Darya Ganj New Delhi 110002.

U. K. Paint Industries, Sultanpur, Mehrauli Gurgaon Rd., New Delhi 110030.

Uppal Paint Ind., 11/24, East Patel Nagar, New Delhi 110008.

Goa

Goa Paints & Allied Products, Dempo House, Campal Panaji 403001.

Gujarat

Anchor Paint Manufg. Co., 959, Chandra Chambers, Raipur Chakla, Ahmedabad 380001.

Comet Paints Pvt. Ltd., A. Sojitra Rd., Vallabh Vidyanagar 388120.

Goodluck Oil & Paints, Pratap Nagar, Vadodara 390001.

Home Products (India), C/1, Patel Indl. Estate, Yamuna Mill Rd., Vadodara 390004.

Lead Slips Products Pvt. Ltd., Odhav Rd., Ahmedabad 380021.

Paradise Oil & Paints Products, N. I. Muni Ind. Estate, Bapunagar, Ahmedabad 380023.

Saurashtra Paints Pvt. Ltd., Vatva, Ahmedabad 382440.

Valian Paints Pvt. Ltd., 38, Madhubhai Mills Comp., Ahmedabad 380018.

Haryana

Kohinoor Paints Pvt. Ltd., 23/5 Km., Mathura Rd., Faridabad 121001.

Karnataka

Amar Paints & Allied Ind., M. M. Ind. Estate, Yediyur, Bangalore 560041.

Bangalore Enamels, Paints & Chemicals Ltd., XI Main Rd., Malleswaram, Bangalore 560003.

Gemini Paint & Varnish Co., 15, Banswadi Rd., Bangalore 560005.

Mysore Lac & Paint Works Ltd., Edigara Extn., Mysore 570007.

Mysore Paint & Waterproof Ltd., Myrtle Villa, H-A-2, Bangalore 560017.

Kerala

Decor Paints, MAS Bldgs., Cochin 682018.

Rainbow Paint Inds., Calicut 673003.

Madhya Pradesh

Commercial Paint & Chemicals Works, Laxmibhai Nagar Ind. Estate, Indore 452002.

Synpro Ind., 50-51, Ind. Estate, Indore 452003.

Maharashtra

Advance Paints Pvt. Ltd., 125, N. Master Rd., Bombay 400023.

Anand Chemicals, 8, Horniman Circle, Bombay 400023.

Asian Paints (India) Pvt. Ltd., 'Nirmal', Nariman Point, Bombay 400021.

Atomic Paint Ind., Sonawala Estate, Goregaon (East), Bombay 400063.

Auxiliaries & Chemicals, 12–B, Dean Lane, Bombay 400001.

Bharat Varnish Manufg. Co., L. B. Shastri Marg, Ghatkopar, Bombay 400086.

Blundell Eomite Paints Ltd., Marine Chambers, New Marine Lines, Bombay 400020.

Bombay Paints & Allied Products Ltd., Oricon House, 7, Rampart Row, Bombay 400023.

Bright & Co. Pvt. Ltd., Saki-Vihar Rd., Sakinaka, Bombay 400072.

Carbon Dry Colour Works, 115, Nagdevi St., Bombay 400003.

Chemipaint Inds., 16, Sagar, 327, Narsi Natha St., Bombay 400009.

Chemo Age Ind., Rambaug, Chincholi, S. Vivekanand Rd., Malad (West), Bombay 400064.

Chowgule & Co. (Hind) Pvt. Ltd., India House, Bombay 400001.

Colour Chem Ltd., 194, Churchgate Reclamation, Bombay 400020.

Cosmos Paint Ind., Narayan Nagar, Shastri Marg, Bombay 400077.

Crystal Paints, Seksaria Silk Mills Comp., Chincholi, S. Vivekanand Rd., Malad (West), Bombay 400064.

D. D. Shah & Co., Akurli Rd., Kandivli (East), Bombay 400067.

Dr. Beck & Co. (I) Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Dujodwala Ind., Prasad Chambers, Near Roxy Cinema, Bombay 400004.

Dura Chemical Corpn. Pvt. Ltd., Wakefield House, 11, Sprott Rd., Ballard Estate, Bombay 400038.

Elphinstone Paint & Colour Manufg. Co., 50, Elphinstone Rd., Bombay 400013.

Esdee Paints, Near Power House, Kolshet Rd., Thane 400601.

F. Victor & Co. (India), Veera Desai Rd., Andheri West, Bombay 400058.

Firoz Colour Ind., 66, A. Umer St., Bombay 400003.

Forage & Co., 48, S. Patkar Marg, Bombay 400007.

General Pigment & Chem. Prod. Pvt. Ltd., Saki-Vihar Rd., Saki Naka, Bombay 400072.

Goodlass Nerolac Paints Ltd., Forbes Bldg., Charanjit Rai Mrg., Bombay 400001.

Indofil Chemicals Ltd., Nirlon House, Dr. A. Besant Rd., Worli, Bombay 400025.

Industrial Coatings Corpn., T. K. Ind. Estate, Off Acharya Donde Marg, Sewri, Bombay 400015.

Industrial Minerals & Chemicals Co., 125, N. Dhuru St., Bombay 400003.

Jayant Colour & Chemical Ind., Gupta Mill Estate, Darukhana, Reay Rd., Bombay 400010.

Jyoti Oil & Paint Co., Morarji Velji Estate, Gorai Rd., Borivli (West), Bombay 400092.

Kamal Paint Ind., Ram Mandir Ind. Premises, Ram Mandir Rd., Goregaon East, Bombay 400063.

Khurana & Sons, I. B. Patel Rd., Goregaon (East), Bombay 400063.

Mercury Paint & Varnish Pvt. Ltd., Agar Bazar, Off Cadell Rd., Dadar, Prabhadevi, Bombay 400028.

Metalex Ind., Junction Tata-Agra Rd., Bhandup, Bombay 400078.

Midland Ind., 47, Great Nag Rd., Nagpur 440003.

Modern Allied Paints & Chemical Co., 155, Jawahar Nagar, No. 2, Goregaon West, Bombay 400062.

National Paint Manufg. Co., Commercial Chambers, Masjid Bunder Rd., Bombay 400003.

Navyug Colour & Chemical Inds., Dhanwant Singh Indl. Estate, Datta Mandir Rd., Bombay 400078.

Noble Paint & Varnish Co. Pvt. Ltd., Fergusson Rd., Bombay 400013.

Panama Paint Ind., J. B. Nagar, M. V. Rd., Kondivita Lane, Andheri (East), Bombay 400058.

Pidilite Ind. Pvt. Ltd., Mafatlal House, Backbay Recl., Bombay 400020.

Pioneer Enamelling Works, Lakshmi Bldg., Sir P. Mehta Rd., Bombay 400001.

Polymer Finishes, 8, T. Jivaraj Wadi, Off King Edward Rd., Sewree, Bombay 400015.

Poysha Ind. Co. Ltd., Messant Rd., Bombay 400033.

R. R. Paint Ind. (I) Pvt. Ltd., L. B. Shastri Mrg., Bhandup, Bombay 400078.

R. T. Mehta & Co., Saki-Vihar Rd., Bombay 400072.

Rainbow Colour Works, I. B. Patel Rd., Goregaon (East), Bombay 400063.

Ranbir Paint & Varnish Co. Pvt. Ltd., 126, D. Phalke Rd., Bombay 400014.

Raymond (India) Paint Mfg. Co., Gajanan Smriti Bldg., Near Natraj Talkies, Chembur, Bombay 400071.

Reliable Colour Works, 61, Jail Rd. (North), Bombay 400009.

Sarang Paint & Varnish Ind., Masoli, Dahanu Rd. 401602. (W. Rly.).

Saurashtra Paints Pvt. Ltd., Court Chambers, New Marine Lines, Bombay 400020.

Savlar Paint & Varnish Works Pvt. Ltd., Saki-Vihar Rd., Saki Naka, Bombay 400072.

Sigma Paints Ltd., 221, Dr. D. Naoroji Rd., Bombay 400001.

Snehadeep Paints, 354, Great Nag Rd., Utkhana Layout, Nagpur 440009.

Snowcem India Ltd., 31, Murzban Rd., Bombay 400001.

Star Paint & Oil Ind., Crescent Chambers, Tamarind Lane, Bombay 400023.

Sudarshan Chemical Ind. Pvt. Ltd., 162, Wellesley Rd. Pune 411002.

Superior Paint Industries, Irani Wadi, Kandivli, Bombay 400067.

Union Paint & Chemical Co., 1, Indian Metal Rolling Mill Compound, L. B. S. Marg, Vikhroli, Bombay 400083.

United Colour Co., 26-A, A. R. Rangnekar Marg, French Bridge, Bombay 400007.

Universal Paint Corpn. Pvt. Ltd., Morashi Rd., Bombay 400059.

Urvashi Ind., Block No. 16/A, Bombay Cotton Mills Estate, Kalachowki Rd., Bombay 400033.

Wakefield Paint Pvt. Ltd., 80, S. Vivekanand Rd., Jogeshwari. Bombay 400060.

Rajasthan

Alwar Paint, Colour & Varnish Works Ltd., Indl. Area, Alwar 301001.

Tamil Nadu

Addisons Paints & Chemicals Ltd., Huzur Gardens, Sembiam, Madras 600011.

Anuradha Paints, 149/1, Ramapuram, Mt. Poonamallee High Rd., Madras 600089.

British Paints India Ltd., 69, Peters Rd., Madras 600006.

Gasar Bros., Tuticorin 628003.

Madras Enamel Works Ltd., 65, Sydenham Rd., Madras 600003.

Ravi Paints & Chemicals Ltd., 85-87, Armenian St., Madras 600001.

Shalimar Paints Ltd., 11/12, Second Line Beach, Madras 600001.

Snow White Indl. Corpn., 368, T. H. Rd., Madras 600021.

Uttar Pradesh

Bansilal & Sons, Sahibabad, Ghaziabad 201001.

Chemi Chrome Ind. Pvt. Ltd., 84/79, G. T. Rd., Kanpur 208001.

Eagle Paint & Pigment Inds. Pvt. Ltd., Rampur Village, Beohra, Mirzapur Rd., Naini 211008.

J. M. Inds. Pvt. Ltd., Chakraba Rd., Saharanpur 247001.

Modi Paint & Varnish Works, Modinagar 201204.

Nagrath Paints Pvt. Ltd., 46, Fazalganj, Kanpur 208001.

National Chemical Works, P. B. No. 90, Varanasi 221001.

Punjab Paint Colour & Varnish Works, 123/529, Fazalganj, Kanpur 208001.

Reko Mercantile Traders, 28, Blunt Square, Lucknow 226001.

West Bengal

Alkali & Chemical Corpn. of India Ltd., 18, Strand Rd., Calcutta 700001.

Asiatic Paints & Chemicals, 3, Commercial Bldg., N. Subhas Rd., Calcutta 700001.

Associated Pigments Ltd., 14, N. Subhas Rd., Calcutta 700001.

Belur Paint & Colour Co., 2, Mullick St., Calcutta 700007.

Bengal Enamel Works Ltd., 24, Chittaranjan Ave., Calcutta 700012.

Bharat Tin & Enamel Co. Pvt. Ltd., 2-A, Shakespeare Sarani, Calcutta 700016.

Blue Star Enamelware Co. Pvt. Ltd., 4, Dalhousie Sq. East, Calcutta 700001.

British Paints (I.) Ltd., 32, Chowringhee Rd., Calcutta 700071.

Calcutta Paint Colour & Varnish Works, 8, Chunapukur Lane, Calcutta 700012.

Containers & Closures Ltd., 2, Fairlie Place, Calcutta 700001.

Eagle Paint & Pigment Ind. Pvt. Ltd., 135, B. R. B. B. Rd., Calcutta 700001

East India Paint & Chemical Works Ltd., 21, G. C. Bose Lane, Calcutta 700050.

Empire Chemical Co., 5, Kustia Rd., Calcutta 700039.

Ferro Coatings & Colours Ltd., P.O. Joka. 24 Parganas.

General Paint Co. of India, G.P.O. Box 2673, Calcutta 700001.

Hoyle's Paints Ltd., 2, Mangoe Lane, Calcutta 700001.

Indian Paint Colour & Varnish Co. Ltd., 14, N. Subhas Rd., Calcutta 700001.

Jenson & Nicholson (I.) Ltd., 225, A. J. Bose Rd., Calcutta 700020.

Kem Ind. Products Pvt. Ltd., 40, Tangra Rd., Calcutta 700015.

Lakshmi Paint Works, 14/2, Old China Bazar St., Calcutta 700001.

M. L. Day & Co., 36, G. C. Ave., Calcutta 700013.

Macfarlane Paints, 18, R. N. Chowdhury Rd., Calcutta 700015.

Murarka Paint & Varnish Works Pvt. Ltd., 4E, Dalhousie Square East, Calcutta 700001.

N. Haldar & Co. Pvt. Ltd., 21/D, S. Chatterjee St., Calcutta 700006.

Napier Paint Works Pvt. Ltd., 1/2, Moti Sil St., Calcutta 700013.

Narayan Chowdhury Bros. Pvt. Ltd., 2, B.B.D. Bag East, Calcutta 700001.

Paints & Chemicals Co., 10, Govt. Place East, Calcutta 700069.

Paints & Lacquers, 3/A, Kabir Rd., Calcutta 700026.

P. C. Chanda & Co. Pvt. Ltd., P-15/1, Chowringhee Sqr., Calcutta 700069.

Ruby Paint & Varnish Works Pvt. Ltd., 96, M. Gandhi Rd., Calcutta 700007.

Shalimar Paints Ltd., 13, Camac St., Calcutta 700017.

Solar Paints Pvt. Ltd., 14, Barrackpore Trunk Rd., Calcutta 700056.

Superlite Paints Corpn., 28, A. T. Mukherji Rd., Calcutta 700020.

Sur Enamel & Stamping Works Ltd., 24, Dr. L. M. Bhattacharya Rd., Calcutta 700014.

Technico Enterprises Pvt. Ltd., 592, Block 'O', New Alipore, Calcutta 700053.

United Paint Ind., 40/1, Strand Rd., Calcutta 700001.

Usasoke, 3, Portuguese Church St., Calcutta 700001.

Waldies Ltd., Gillander House, 8, N. Subhas Rd., Calcutta 700001.

PAPER & BOARD MILLS

Arvind Boards & Paper Products Ltd., Bilimora 396321.

Bhadrachalam Paperboards Ltd., Post Box No. 4, Bhadrachalam 507111. (A.P.).

Bombay Board & Paper Mills Pvt. Ltd., Hamam House, Hamam St., Bombay 400001.

Gupta Paper Board Mills, Talab Bazar, Ludhiana 141001.

Handmade Paper Directorate, Khadi & Village Ind. Commission, Bombay 400056.

Jayant Paper Mills Ltd., 132, Dr. A. Besant Rd., Bombay 400018.

Nath Pulp & Paper Mills Ltd., Adalat Rd., Aurangabad 431001.

Nizam Paper & Board Mills Ltd., Old Palace Bldg., Pudukottai 622001. (Tamil Nadu).

Om Prakash Jitendra Kumar & Co., 63, Daryaganj, New Delhi 110002.

Parashuram Paper & Board Mfg. Co. Ltd., Subhash Temblo Bhavan, Margao 403601. (Goa).

Pudumjee Pulp & Paper Mills Ltd., Thergaon, Chinchwad, Pune 411033.

Seshasayee Paper & Boards Ltd., Erode 638007.

Sugam Paper & Board Mills Pvt. Ltd., Ninat, Surat Dist.

Surat Paper & Board Mills, 7, Tank St., Surti Mohalla, Off Nagpada, Bombay 400008.

Swastik Paper Ind., Sewree Cross Rd., Bombay 400015.

Tamilnadu Cardboards & Paper Mills Ltd., 6, Cathedral Rd., Madras 600086.

Tungabhadra Pulp & Board Mills, Munirabad 583234 (Raichur Dist.).

PAPER — GUMMED TAPE & CELLULOSE ADHESIVE TAPE

Amartara Ind., Saki-Vihar Rd., Bombay 400072.

Anu Inds., 2, Masrani Lane, Kurla, Bombay 400070.

Business Forms Ltd., 6/A, Middleton St., Calcutta 700016.

Diamond Products Ltd., 4, Clive Row, Calcutta 700001.

Natraj Paper Ind., 38/46, Nagdevi St., Bombay 400003.

New Field Paper Inds. & Paper Convertors, Ravi Uday Press Compd., Tilak Rd., Ghatkopar East, Bombay 400077.

Pai Paper & Allied Ind. Pvt. Ltd., Khorshed Bldg., Sir P. M. Rd., Bombay 400001.

Strawboard Manufg. Co. Ltd., Saharanpur 247001, U.P.

PAPER — HANDMADE

Jayant Paper Mills Ltd., Utran 394105, Surat Dist.

Khadi & Village Industries Commission, Irla Rd., Vile Parle (W), Bombay 400056.

Handmade Paper Research Centre, Agricultural College Compound, Pune 411005.

PAPER — MARBLE, CARBONLESS, FANCY LEATHERITE & EMBOSSED

Paper Products Ltd., Vaswani Mansions, D. Vachha Rd., Bombay 400020.

Sehgal Papers Ltd., 55, Nehru Place, New Delhi 110024.

Siddhomal Paper Conversion Co., Chawri Bazar, Delhi 110006.

PAPER CONES & TUBES

Eastern Paper Tube Factory, Ashok Nagar, Chakravarti Ashok Rd., Kandivli East, Bombay 400067.

Fibre Foils Pvt. Ltd., A-6, MIDC Ind. Area, Andheri East, Bombay 400093.

Perfect Paper Cone & Tube Pvt. Ltd., 47-A, Virwani Ind. Estate, Goregaon (E), Bombay 400063.

Poly-Cone Paper Pvt. Ltd., 213, Udyog Mandir Bldg. No. 1, 7/C, Pitamber Lane, Mahim, Bombay 400016.

Super Pre-Fab. Systems Pvt. Ltd., 4, Readymoney Terrace, 167, Dr. A. Besant Rd., Bombay 400018.

Textile Paper Tubes (India), Jolly Bhuvan, 10, New Marine Lines, Bombay 400020.

Tungabhadra Pulp & Board Mills, Munirabad 583234 (Karnataka).

Universal Paper Tube Co., Rajgopal Bldgs., Variety Hall Rd., Coimbatore 641001.

PAPER CONVERTERS

National Cardware Mfg. Co., Victoria Mills Compd., 55, Gamdevi, Bombay 400007.

PAPER MACHINERY

Acme Machinery Co., 81-A, Dhanji St., Bombay 400003.

Bramson Enterprises, E-55, Indl. Area, Yamuna Nagar 135001. (Haryana).

Unique gifts of

Handmade Papers

Elegant and exquisite surface for writing. Indestructibility and superb strength for permanence. Unmatched texture for drawings by artists and engineers. Countless personalised varieties for stationery, greetings. Industrial papers like filter paper, insulation paper, jacquard board

Enquiries are welcome at :

HANDMADE PAPER DIRECTORATE

Khadi & V. I. Commission,
Bombay 400 056.

Phone : Office . 571323.

Phone : Mahalaxmi Sales Office : 371839.

'BRAMSON'

a reliable source for
PULP & PAPER MACHINERY

Designers & Suppliers of :—

★ Rag & Straw Cutting Machines. Capacity 1 to 3 ton/Hr.

★ Dust Extraction units for Rag/Straw Cutting Plants.

★ Pneumatic Conveying of Rags/Straw, Belt conveyors, Elevators, Screw conveyors.

★ Rag/Straw cutter knives, Beater bars, Refiner bars, Chipper and Rechipper knives.

★ Handmade Paper Plants, Paper coating plants on turn key basis.

★ Spares for Rag Cutter, Straw Cutter, Beater, Refiners, Paper m/c.

Your valued enquiries are solicited :

M/s. BRAMSON ENTERPRISES
E-55, Industrial Area, YAMUNA NAGAR (Haryana)
Phone : 1631.

Eastern Paper Mills Ltd., Engg. Dn. for Pulp & Paper Machinery, 2, Dakshindari Rd. Calcutta 700048.

H. R. (Paper) Machinery Pvt. Ltd., Acharya Commercial & Shopping Centre, Gala No. 116, Dr. Choitram Gidwani Rd., Wadhavli, Chembur, Bombay 400074.

Industrial Paper Machine Pvt. Ltd., 29, Sona Udyog Ind. Estate. P. P. Rd., Andheri (E), Bombay 400069.

Paper Mill Plant and Machinery Manfrs. Ltd., 181, Vivekanand Rd., Bombay 400060.

Servall, 10-Z. Krishnaswamy Naidu Layout, Coimbatore 641011.

Victor Machine Tools, 18. Kamruddin Ind. Estate, Kurla-Andheri Rd., Bombay 400072.

PAPER PLANT & MILLS

(See also chapter on Paper Industry.)

Acme Papers, Herald House, B. Shah Zafar Mrg., New Delhi 110002.

Airfoil Papers Ltd., Sweet Cottage, Jayaji Chowk, Gwalior 474001.

Ajanta Paper & General Products Pvt. Ltd., Aban House, 5th Fl., Rope Walk Lane, Bombay 400001.

Amaravathi Sri Venkatesa Paper Mills Ltd., Palani Rd., Madathukulam 642113 (T. Nadu).

Andhra Pradesh Paper, Rajahmundry 533101. (A.P.).

Andrew Yule & Co. Ltd., 32. Nicol Rd.. Ballard Estate, Bombay 400038.

Ashok Paper Mills Ltd., P. O. Ashok Paper Mills 783388. Goalpara Dist. (Assam).

Aurangabad Paper Mills Ltd., Lentin Chambers, Dalal St., Bombay 400023.

Ballarpur Inds. Ltd., Ballarpur 442901 (Chandrapur Dist.). Maharashtra.

Bansal Paper Mills, Khatri Bhawan, 4830/24, Prahlad Lane, Ansari Rd., Daryaganj, New Delhi 110002.

Basant Paper Mills Ltd., 8, Camac St., Calcutta 700017.

Bengal Paper Mills Co. Ltd., Raniganj 713347. (Burdwan Dist.), W. Bengal.

Bertams Scott India Ltd., 1/1, Kimber St., Calcutta 700017.

Bombay Paper Manufg. Co., 109, Sheikh Memon St., Bombay 400002.

Continental Paper Mills (India), P.O. Mayithara Market 688539 (Kerala State).

Delta Paper Mills Ltd., Sriramapuram, Bhimavaram 534202. (W. Godavari Dist.), A.P.

East Coast Paper & Products Pvt. Ltd., 20, British Indian St., Calcutta 700069.

Eastern Paper Mills Ltd., 2, Dakshindari Rd., Calcutta 700048.

Gangappa Paper Mills Ltd., 61, Moore St., Madras 600001.

Ganpati Pulp & Paper Mills Ltd., Municipal Bldg., Patharkuva, Relief Rd., Ahmedabad 380001.

India Paper & Pulp Co. Ltd., Hazinagar 743135 (24 Parganas Dist.).

Ipco Paper Mills Ltd., Elphinstone Mills Compd., N. M. Joshi Mrg., Bombay 400013.

Jayakwadi Pulp & Paper Mills Ltd., Bank of Maharashtra Bldg., 2nd Flr., Sitabuldi, Nagpur 440012.

Jayant Paper Mills Ltd., 132, Dr. A. Besant Rd., Worli, Bombay 400018.

Kabini Papers Ltd., No. 3969, Mysore Nilgiri Highway, Nanjangud 571301. (Karnataka State).

Kolleru Papers Ltd., Marellavari St., Bhimavaram 534201, A.P.

Mandya National Paper Mills Ltd., Belagula 571606 (Karnataka).

Mukerian Papers Ltd., SCO 817–18, Sector 22/A, Chandigarh 160022.

Mysore Paper Mills Ltd., Bhadravati 577301.

New Field Paper Industries, 48, 2nd Carpenter St., Khetwadi Main Rd., Bombay 400004.

Orient Paper Mills Ltd., Brajrajnagar 768216, Sambalpur Dist., Orissa.

Pai Paper & Allied Inds. Pvt. Ltd., Khorshed Bldg., Sir P. Mehta Rd., Bombay 400001.

Paper Mill Plant and Machinery Mfrs., 181, S. V. Rd., Jogeshwari, Bombay 400060.

Paper & Pulp Conversion Ltd., 376, Shukrawar Peth, Pune 411002.

Papyrus Papers Ltd., 4, India Exchange Place, Calcutta 700001.

Pondicherry Paper Mills Ltd., Pilliarkuppam, Bahour Commune, Pondicherry 607402.

Pravara Pulp & Paper Mill, Pravaranagar 413712. Ahmednagar Dist.

Punalur Paper Mills Ltd., Punalur 691305. (Kerala State)

Ramgopal Paper Mills Pvt. Ltd., No. 18, IV Cross, Gandhinagar, Bangalore 560009.

Rohit Pulp & Paper Mills Ltd., Rohit Chambers, Ghoga St., Bombay 400001.

Rohtas Industries Ltd., P.O. Dalmianagar 821305. Bihar.

Sardar Sahakari Paper Mill Ltd., Gangadhara 394310 Surat Dist.

MPM is committed to paper. And meets the challenge.

MPM's Rs. 140 crore expansion now forging into reality

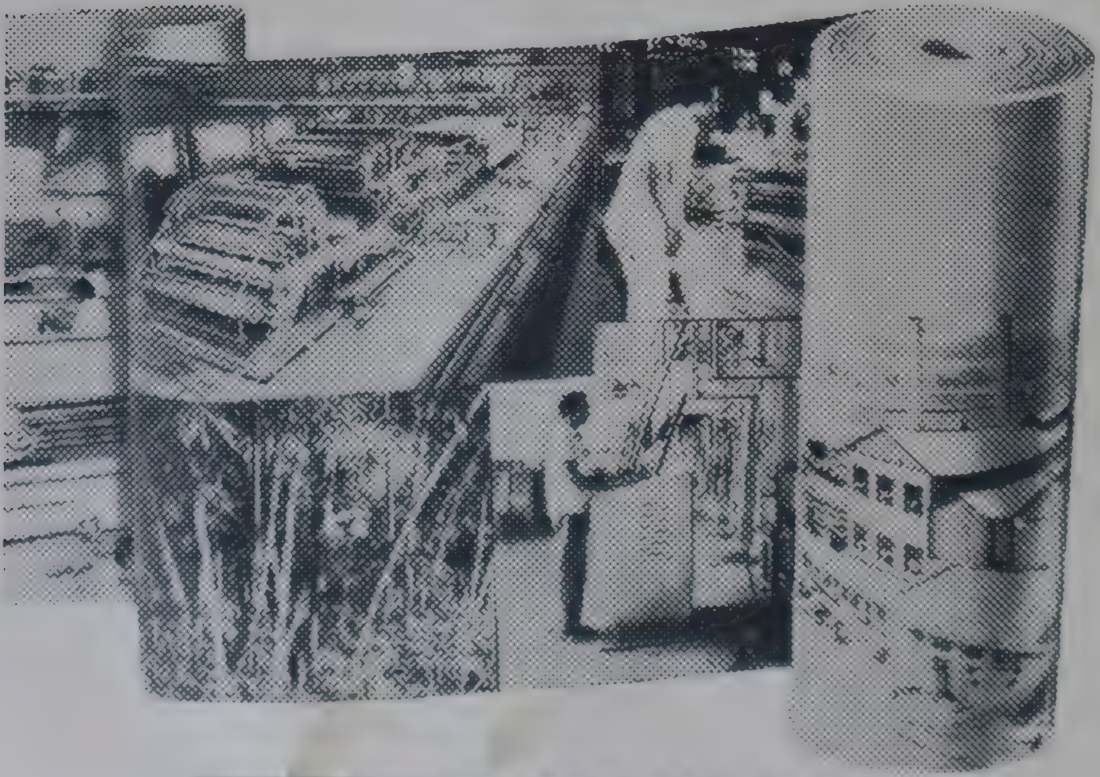
MPM, one of the oldest paper mills is fast becoming the largest—in one location, in the country. Nearing completion is its ambitious venture on paper, the Rs. 140 crore expansion programme.

Bhadravati has just now witnessed the high pitch activity of the erection and installation of the newsprint machinery. Best of brains from India and abroad are at work here, with technology from Finland and equipment from world leaders.

Right now hundreds of MPM men are at work to complete the most modern Chipper House, Pulp Mill, Coal Handling system, Electrical Distribution system and a variety of intricate and sophisticated networks. Forestry development in 75,000 acres in a phased plan is another challenge at hand.

All to ensure that MPM will soon reel out the story of newsprint, writing, printing and packing paper. Adding, annually, to the national resources 75,000 tonnes of newsprint and 37,000 tonnes of other varieties. Helping to narrow the supply-demand gap.

Progress-the medium is paper



THE MYSORE PAPER MILLS LIMITED

Registered Office : 16/4 Ali Asker Road, Bangalore 560 052.

Creamwove, azurelaids, duplicating, bonds, printings, krafts, manilla, pulp boards and now—newsprint.

CAS MPM 80110

Sarvodaya Paper Mills Ltd., 705, Akash Deep, 26A, Barakhamba Rd., New Delhi 110001.
Shirke Paper Mills Pvt. Ltd., 72–76, Indl. Estate, Mundhwa, Pune 411036.
Shiva Paper Mills Ltd., 1703-4, Nirmal Tower, 26, Barakhamba Rd., New Delhi 110001.
Shree Rayalaseema Paper Mills Ltd., TGL Bldgs., Adoni 518301, A.P.
Shree Vindhya Paper Mills Ltd., Empire House, 214, Dr. D. Naoroji Rd., Bombay 400001.
Sivalik Cellulose Ltd., Dakshineshwar, 10, Hailey Rd., New Delhi 110001.
South India Paper Mills Pvt. Ltd., Nanjangud 571301. (Karnataka).
Standard Paper Ind. Corpn., 151, Broadway, Madras 600001.
Star Paper Mills Ltd., 27, Brabourne Rd., Calcutta 700001.
Supreme Paper Mills Ltd., 8, Camac St., Calcutta 700017.
Titaghur Paper Mills Co. Ltd., 95, Park St., Calcutta 700016.
Tribeni Tissues Ltd., 3, Middleton St., Calcutta 700007.
Udaipur Paper Mills Ltd., Sonkia Bhawan, SMS Highway, Jaipur 302003.
Union Paper & Board Mills Ltd., 18, N. Subhas Rd., Calcutta 700001.
Universal Paper Mills Ltd., 75C, Park St., Calcutta 700016.
Vapi Paper Mills Ltd., G.I.D.C., Vapi 396191. (Gujarat).
Vidarbha Paper Mills Ltd., Bank of Maharashtra Bldg., Sitabuldi, Nagpur 440012.
West Coast Paper Mills, Shreeniwas House, H. Somani Marg, Bombay 400001.
Western India Paper & Board Mills Pvt. Ltd., L. B. S. Mrg., Vikhroli, Bombay 400083.

PATTERN CUTTING MACHINES

John T. Hardaker India Pvt. Ltd., Fergusson Rd., Lower Parel, Bombay 400013.

PATTERNS — WOODEN & METAL

Kulkarni Patterns Pvt. Ltd., 22/6, Hadapsar Ind. Estate, Pune 411013.

PENS — BALL POINT & FOUNTAIN, SKETCH, REFILLS, ETC.

(See also Ball Point Pens & Refills)

Delhi

Hindustan Plastic Corpn., C–239, Mayapuri Indl. Area, Phase II, New Delhi 110027.
Luxor Metaltec (India) Pvt. Ltd., 236, Okhla Indl. Estate, New Delhi 110020.

Maharashtra

Asian Art Ind., 30, Govt. Ind. Estate, Kandivli West, Bombay 400067.
Asian Pen & Plastic Inds., 424-A, Raut Ind. Estate, S. B. Mrg., Mahim, Bombay 400016.
Associated Pen Inds., Udyognagar, S. V. Rd., Bombay 400062.
Balkrishna Pen Pvt. Ltd., Nagardas Rd., Andheri (E), Bombay 400069.
Bombay Fountainpen Depot, 262, A. Rehman St., Bombay 400003.
Chandra Industries, Old Nagardas Rd., Andheri (E), Bombay 400069.
Cruiser Pen Inds., 20, Hare Rama Hare Krishna Indl Estate, I. B. Patel Rd., Goregaon East, Bombay 400063.
Dhiraj Pen Manufg. Co. Pvt. Ltd., 58/59, Kurla-Andheri Rd., Bombay 400069.
Exen Inds., Parekh Nagar, S. Vivekanand Rd., Bombay 400067.
Kingson Pen & Plastic Inds., 12, Deven Indl. Estate, I. B. Patel Rd., Goregaon East, Bombay 400063.
Lion Pencils Pvt. Ltd., 95, Parijat, Marine Drive, Bombay 400002.
M. S. M. Refills Mfrs., 308/310, Udyog Mandir No. 1, 7-C, Pitamber Lane, Mahim, Bombay 400016.
Mhatre Pen and Plastic Ind. Ltd., Tulsi Pipe Rd., Dadar, Bombay 400028.
National Plastic Inds., 5, Rewa Chambers, New Marine Lines, Bombay 400020.
Nibs India, Nagardas Rd., Andheri, Bombay 400069.
Pankaj Pen Ind., I. B. Patel Rd., Goregaon East, Bombay 400063.
Perfect Distributors Services, 286, Jolly Centre, Tilak Rd., Santacruz West, Bombay 400054.
Premier Products, Anuj Plastic, New Bldg., G. B. Rd., Dahisar, Bombay 400068.
Thakkar Pen Mart, 220A, Janjikar St., Bombay 400003.
Triplex Products, Agarwal Est., 139, G. S. Vivekanand Rd., Jogeshwari West, Bombay 400060.
Watumull Ind. Pvt. Ltd., Delstar, 9-9A, S. Patkar Rd., Bombay 400026.
Wimco Pen Co., Mehta Indl. Estate, B. Patel Rd., Bombay 400063.

Tamil Nadu

Nurit Inks Pvt. Ltd., Post Box 2925, Madras 600004.
Pilot Pen Co. (I) Ltd., 6, Armenian St., Madras 600001.

PERFORATED METALS

(See under Metals—Perforated in this list)

PERFUMES & AGARBATTI

Delhi

Bombay Perfumery Co., 1997, Gali Nilawali, Sitaram Bazar, Delhi 110006.
Calcutta Perfumery Co., Behind Mahalaxmi Market, Chandni Chowk, Delhi 110006.
Gogia Chemical Ind., G-1/4, Model Town, Delhi 110009.
Gulab Singh Johri Mal, 320, D. Kalan, Delhi 110006.
Gupta & Co., Sadar Bazar, Delhi 110006.
J. K. Ind. Perfumers, 7, Shankar Market, 1430, Chitli Qubar, Delhi 110006.
Madras Chemical Works, Tilak Bazar, Delhi 110006.
Mohanlal Pyarelal, 5594/91, Gandhi Market, Sadar Bazar, Delhi 110006.
Navin Bharat Mfrs., D-373, Defence Colony, New Delhi 110024.
Sohan Singh Attarwala & Son, 6484, Katra Baryan, Fatehpuri, Delhi 110006.
Sunder Chemicals & Aggarbatti Works, 1716/21, Behind Pili Kothi, S. P. Mukherjee Marg, Delhi 110006.

Gujarat

Gujarat Aromatics Ltd., Haribhakti House, Opp. Kala Ghoda, Sayaji Baug, Vadodara 390005.
J. B. Shah & Co., Pankaj Society, Sarkhej Rd., Ahmedabad 380007.
M. L. Rathod & Co., Opp. Gaisford Talkies, Rajkot 360001.
National Agarbatti Works, Station Rd., Nadiad 387001.
Neepo Aromatics, Opp. Central Bus Stn., Dhebarbhai Rd., Rajkot 360001.

Basanti
INCENSE STICKS
LIBERTY
Basanti

Basanti

Begins an Agarbathi Revolution

From Incense sticks to Home Fresheners—That is what BASANTI Agarbathis do. A stick is a home freshener for a whole day—with the most pleasing of perfumes.

BASANTI is the result of over forty years of research and has found unanimous popular acceptance.

BASANTI comes to you packed in printed aluminium foil packings to permanently retain its freshness.

BASANTI makes happy homes

Sri Vijayalakshmi Agarbathi Works

POST BOX. 7102. BANGALORE-560 053

R. V. Dodia & Co., Dodia Mansion, M. Gandhi Rd., Rajkot 360001.

Vala & Co., Nanbhawadi, Bhavnagar 364002.

Karnataka

Ananth Agarbathi Co., 11, Stores St., Kalasipalayam, Bangalore 560002.

Aravinda Parimala Works, Mysore 570004.

Aromatik (I) Pvt. Ltd., 38, Link Rd., Malleswaram, Bangalore 560003.

Aswathiah & Bros., B. V. (Regd.), 183, Nagarthpet, Bangalore 560002.

Bharani Agencies, "Keshava Nivas", First Main, Gandhi Nagar, Bangalore 560009.

Bharat Ind. Corpn., 67, Third Cross Rd., Srirampuram, Bangalore 560021.

Gayathri Perfumery Works, 27, Kalasipalayam New Extn., Bangalore 560002

Goodwill Agencies, "Keshava Nivas", First Main, Gandhi Nagar, Bangalore 560009.

Manohara Perfumery Works, 24, Sowrashtra Peth, Bangalore 560002.

Modern India Trading Co., 5, Park Rd., Bangalore 560002.

Mysore Agarbatti Co., 1, Madarsab St., Bangalore 560053.

Mysore G. S. Sugandha Works, Benkey Navab St., Bangalore 560002.

Mysore Sugandhi Dhoop Factory Pvt. Ltd., No. 1, G-13 14, Cottonpet, Bangalore 560002

N. Rangarao & Sons, 100 ft. Rd., Mysore 570001.

Onam Agarbathi Co., 156, III Main Rd., Chamarajpet, Bangalore 560018.

Padma Perfumery Works, Post Box 7826, Bangalore 560053.

Saibaba Sugandhi Bhandar, 30/6, Church St., Shanti Nagar, Bangalore 560027.

Sankranti Agarbatti Co., 33, Pillappa Lane, Nagarthpet Cross, Bangalore 560002.

Sarathi Perfumery Works, Ganigarpet, Bangalore 560002.

Sri Satyanarayana Parimala Factory, Mysore 570001.

Sri Vijayalaxmi Agarbathi Works, P. Box 7102, Bangalore 560053.

Sunanda Aromatic Ind., D-14, Sayyaji Rao Rd., Mysore 570001.

Super Perfumery Works No. 7, 1st Cross, Police Rd., Ramsinghpet, Bangalore 560053.

Y. Basappa, 206, Avenue Rd., Bangalore 560002.

Maharashtra

A. A. Attarwala & Co., Commercial Chambers, Opp. Zakaria Masjid, Bombay 400003.

A. Hami Bros., 8, Patka Manzil, E. Rahimtoolla Rd., Bombay 400003.

A. J. Patwa & Co., 86, Sutar Chawl, Bombay 400002.

Acharya Products, 6, Sangeet Sagar, Laxminarayan Lane, Bombay 400019.

Amba Perfumery Works, 37/38, Lokmanya Tilak (V.G.) Mkt., Grant Rd., Bombay 400007.

Aromatic & Ind. Chemicals Pvt. Ltd., Mulji Jetha Bldg., 12, Champa Galli Cross Lane, Bombay 400002.

Aromatic Products & Chemicals Pvt. Ltd., 42, Prospect Chambers, Dr. D. Naoroji Rd., Bombay 400001.

Attar Md. Dawood & Bros., 43, Old Bengalipura St., Bombay 400003.

Attari Bros., 3, Commercial Chambers, Masjid Bunder Rd., Bombay 400003.

Bay Keris Inds., 825, S. K. Bhole Rd., Bombay 400002.

Calcutta Essence Supply Co., Mulchand Mansion, Shamaldas Gandhi Mrg., Bombay 400002.

Camphor & Allied Products Ltd., Jehangir Bldg., 133, M. Gandhi Rd., Bombay 400023.

D. D. Shah & Co., Damodar Bldg., 105, S. Gandhi Marg, Bombay 400002.

Dujodwala Ind., 1401, Prasad Chambers, Near Roxy Cinema, Bombay 400004.

Eastern Aromatics Pvt. Ltd., Datta Mandir Rd., Bhandup, Bombay 400078.

Enamdar Trading Co., Devkaran Mansion, 63, S. Gandhi Marg, Bombay 400002.

Ethical Products (I) Pvt. Ltd., Advani Chambers, Sir P. Mehta Rd., Bombay 400001.

Foreign Scent Supplying Syndicate, Station Rd., Goregaon West, Bombay 400062.

Fragrance and Flavour Corpn., C-11, Udyog Sadan, Marol Ind. Area, Andheri East, Bombay 400059.

Golax Ind. Perfumers, A-4, Shivaji Service Ind., Taikalwadi Rd., Bombay 400016.

Goldensun Mfg. Co., 4B, Ranvir Bldg., 70, Princess St., Bombay 400002.

Gosha Kemo (I), Magan Bldg., C. Patel Rd., Bombay 400067.

Gupta & Co., Saraf Mansion, S. Gandhi Marg, Bombay 400002.

H. M. Zakaria & Bros., 299, V. Patel Rd., East, Bhendi Bazar, Bombay 400003.

96
ATTAR
MAJMUA
HAMI
ECO
JUMA
MASJID
HAMI & CO. BOMBAY-2

The Wonderful Perfume
of the East
Exported
throughout the World

★

Manufacturers :

HAMI
&
COMPANY

Devkaran Mansion
43, Princess Street
BOMBAY 400 002

Phone :
319816

Grams :
ATARNASEEM

Thank you for selecting us FIRST

MYSORE SUGANDHI strikes FIRST TOP AWARD for 1979/80 too !

Capture the sweet fragrance of "Orient" outstanding incense sticks and cones products exported since 35 years to Africa, Europe, America Central & South and others.

909 Three Roses, 511 Gateway of India Chandan Dhoop, Laxmi Dhoop New varieties—Garden of Eden, Krishna Leela and 999 Lord Krishna.

Manufacturers & Exporters

MYSORE SUGANDHI DHOOP FACTORY PRIVATE LIMITED

Recognised Export House

P. O. Box 3178, Bombay 400 003. Phone : 324584.

Export Division :

Embassy Centre, Nariman Point, Bombay 400 021.
Phone : **233858.** Telex : 11-6288 MSOF.

Ask for catalogue.

Hami & Co., Devkaran Mansion, 43, Princess St., Bombay 400002.

Hemani Aromatics, Minerva Movietone Compound, Bunder Rd., Sewri, Bombay 400015.

Ina Trading Co., 107, S. Gandhi Marg, Bombay 400002.

Industrial Perfumes Ltd., Hay Bunder Rd., Bombay 400033.

J. D. Savant & Co., Gordhandas Khimji Bldg., 35, Vithaldas Rd., Bombay 400002.

Kanta Flavouring Industries, A-15, Royal Indl. Estate, Naigaum Cross Rd., Bombay 400031.

Kausar Perfumers, 325, Sheikh Memon St., Bombay 400002.

Lana Floressens, 178, C.S.T. Rd., Kalina, Bombay 400029.

M. M. Khambatwala, 440, Kalbadevi Rd., Bombay 400002.

Manila Incorporation, 159/3, Cavel Cross Lane, 6, Kalbadevi Rd., Bombay 400002.

Mody & Co., Engineer Bldg., 265, S. Gandhi Marg, Bombay 400002.

Mukesh Industries, 7, Anjirwadi, Champsi Bhimji Rd., Mazgaon, Bombay 400010.

Mysore Dhoop & Agarbatti Works, E-2/2, Bharat Nagar, Grant Rd., Bombay 400007.

Mysore Fine Agarbatti Factory, Shop No. 50, M.M.C. Market, Grant Rd., Bombay 400007.

Mysore Sugandhi Dhoop Factory P. Ltd., 13, Commercial Chambers, Near Jakaria Masjid, Bombay 400003.

Mysore Y. S. Agarbatti Works, 6, Arab Lane, Byculla, Bombay 400008.

Naarden Chemical Works (I) Ltd., Sakinaka, 6, Saki Vihar Rd., Bombay 400072.

National Essence Supply Co., Tanksal Bhavan, 191, Kalbadevi Rd., Bombay 400002.

National Trading Co., 190-91, Mangaldas Rd., Bombay 400002.

New India Aromatics Co., Devkaran Mansion No. 3, 45/47, S. Gandhi Marg, Bombay 400002.

Oriental Aromatics, Saraf Mansion, 32, S. Gandhi Marg, Bombay 400002.

P. M. Rathod & Co. Pvt. Ltd., 453, Kalbadevi Rd., Bombay 400002.

Pearline Paris Pvt. Ltd., Rehman Bldg., 24, V. Nariman Rd., Bombay 400001.

Quality Exports, Manu Mansion, 16, Shahid Bhagat Singh Rd., Bombay 400023.

R. C. Aromatics & Chemicals, 139, Vivekananda Rd., Bombay 400060.

Rayon Ind., Navyug Mansion, N. Barucha Rd., Grant Rd., Bombay 400007.

S. H. Kelkar & Co., Pvt. Ltd., 36, Mangaldas Rd., Bombay 400002.

Saiba Ind. Pvt. Ltd., 129/31, K. Syed St., Bombay 400002.

Satish Perfumers, 12–B, Shalimar Indl. Estate, Bombay 400019.

Shah Agarbatti Co., 66, Kalyan St., Bombay 400009.

Spac Aromas, Planet Indl. Estate, Subhash Rd., Bombay 400057.

Synoflor Co., Saraf Mansion, 32 S. Gandhi Marg, Bombay 400002.

Synthetics & Aromatics, 1/C, Kulsum Terrace, Walton Rd., Colaba, Bombay 400039.

Western India Chemical Co., Anand Nivas, Srikrishna Nagar, Bombay 400066.

Pondicherry

Flavours India Pvt. Ltd., Shed Nos. 5 & 14, Type C. Mettupalayam Ind. Estate, Pondicherry 605001.

Tamil Nadu

Devi Industries, 19/20, Azad St., Gandhi Nagar, Madurai 625020.

K. B. Perfumeries, 25, Rasappa Chetty St., Madras 600003.

Maschmeijer Aromatics (India) Pvt. Ltd., G. S. T. Rd., Madras 600044.

Mercantile Corn., 21, Third St., Gopalapuram, Madras 600086.

Millet Rochas Pvt. Ltd., 5, Tank Bund Rd., Madras 600034.

Robin Chemicals Pvt. Ltd., 1A/4, N. M. M. Rd., Aminjikarai, Madras 600029.

West Bengal

Calcutta Essence Supply Co., 41, Ezra St., Calcutta 700001.

Jamnadas & Brothers Pvt. Ltd., 1, Bonfield Lane, Calcutta 700001.

Moolraj & Co., 33, Brabourne Rd., Calcutta 700001.

Mukti Agencies, 69-B, Salimpur Rd., Calcutta 700031.

National Aromatic Co., 70, B. R. B. B. Rd., Calcutta 700001.

National Perfumery House, 44/45, Ezra St., Calcutta 700001.

Pushpa Perfumery Products, 17, Lower Chitpur Rd., Calcutta 700001.

United Trades Agency (Calcutta), 34, Armenian St., Calcutta 700001.

Vesco Products Co., 66, Ezra St., Calcutta 700001.

PESTICIDES

Andhra Pradesh

Hyderabad Chemical Supplies Pvt. Ltd., Bank St., Hyderabad 500001.

Vayaz Indian Pesticides Pvt. Ltd., 16-B, Moula Ali Ind. Estate, Hyderabad 500040.

Volhro Ltd., 115, Park Lane, Secunderabad 500003.

Delhi

Dow Chemicals N.V., 14, Golf Links, New Delhi 110003.

Grain Conservation & Warehousing Ind. Pvt. Ltd., 16-B, Gangaram Hospital Marg, New Delhi 110060.

Hindustan Insecticides Ltd., E-3, Defence Colony, New Delhi 110024.

Industrial & Allied Sales Pvt. Ltd., Surya Kiran, 19, K. Gandhi Marg, New Delhi 110001.

Industrial Chemicals & Minerals, 4/5-B, A. Ali Rd., New Delhi 110002.

Jaipal Udyog, 604, Akash Deep, 26-A, Barakhamba Rd., Connaught Lane, New Delhi 110001.

Monsanto Chemicals of India Pvt. Ltd., 3/8, A. Ali Rd., New Delhi 110002.

Northern Minerals Pvt. Ltd., 138, Kamla Market, New Delhi 110001.

Goa

Ciba-Geigy of India Ltd., Santa Monica Plant, Corlim, Ilhas 403110.

Goa Pesticides Pvt. Ltd., Chowgule House, Margao 403601.

Gujarat

Alembic Chemical Works Co. Ltd., Alembic Rd., Vadodara 390003.

Cropmore Pvt. Ltd., C-5 Naroda Ind. Estate, P.O. Naroda 382330. Ahmedabad Dist.

Paushak Ltd., Alembic Rd., Vadodara 390003.

Selective Chemicals Pvt. Ltd., Ruvapari Rd., Bhavnagar 364001.

Haryana

Jai Chemicals, 14/1, Mathura Rd., Faridabad 121003.

Karnataka

Agromore Ltd., Mysore Rd., Bangalore 560026.

Bangalore Pesticides Ltd., 33, Abshot Rd., Sankey Rd., Cross, Bangalore 560052.

Krishichemin Products, Jayanagar, Bangalore 560011.

United India Fertilisers Co., Chengamaraju Complex, 5/1, Second Flr., J. C. Rd., Bangalore 560002.

Kerala

Aspinwall and Co. Ltd., Calvethy, Cochin 682001.

Entoma Insecticides & Agro Chemicals, "Ram Kripa", Yakkara Rd., Palghat 678001.

Travancore Chemical Manufg. Co. Ltd., Alwaye 683101.

Madhya Pradesh

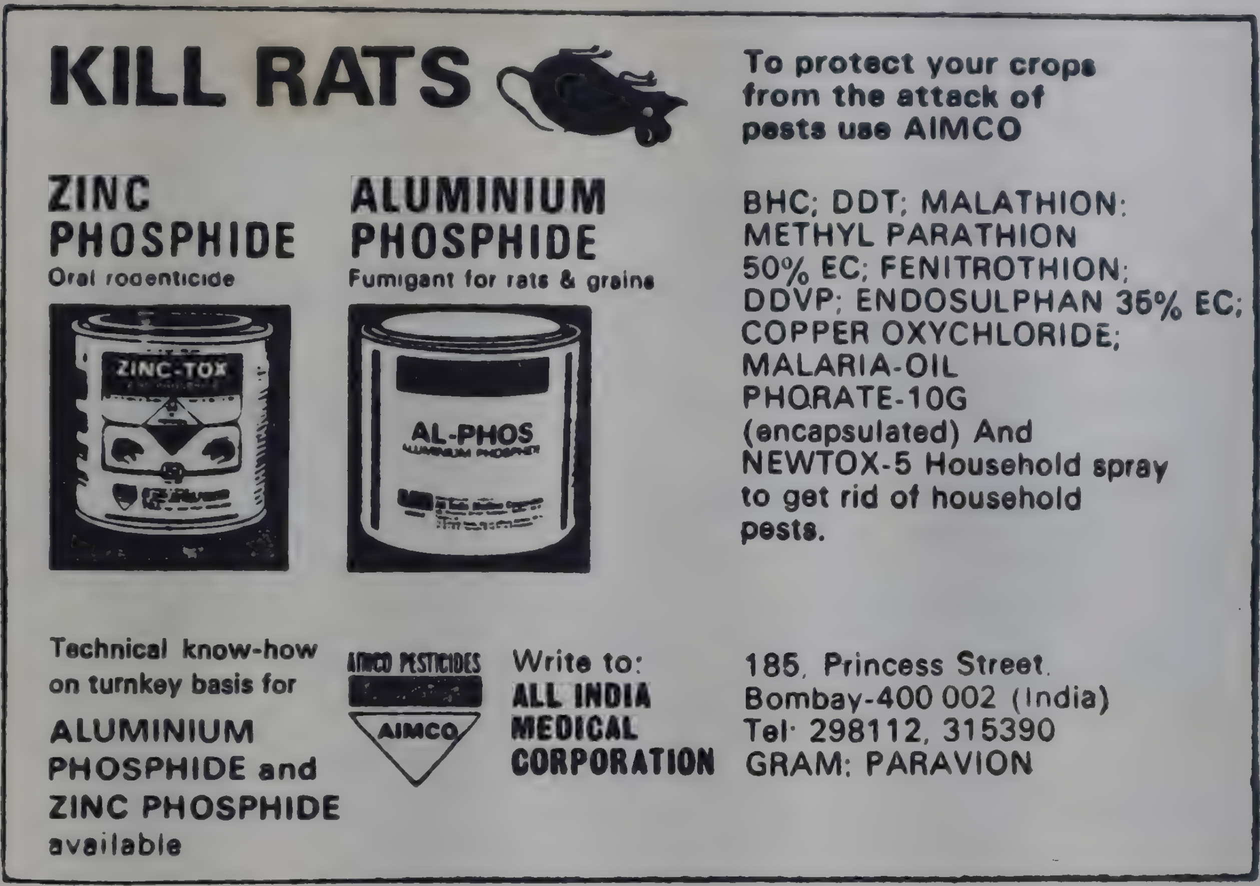
National Pesticides, 5, Ind. Area, Vidisha 464001.

Maharashtra

All India Medical Corpn., 185, Princess St., Bombay 400002.

Ashok Traders, 129-C, Govt. Ind. Estate, Kandivli, Bombay 400067.

Bayer (India) Ltd., Express Towers, Nariman Point, Bombay 400021.



KILL RATS

To protect your crops from the attack of pests use AIMCO

ZINC PHOSPHIDE
Oral rodenticide

ALUMINIUM PHOSPHIDE
Fumigant for rats & grains

BHC; DDT; MALATHION: METHYL PARATHION 50% EC; FENITROTHION; DDVP; ENDOSULPHAN 35% EC; COPPER OXYCHLORIDE; MALARIA-OIL PHORATE-10G (encapsulated) And NEWTOX-5 Household spray to get rid of household pests.

Technical know-how on turnkey basis for ALUMINIUM PHOSPHIDE and ZINC PHOSPHIDE available

Write to:
ALL INDIA MEDICAL CORPORATION

185, Princess Street.
Bombay-400 002 (India)
Tel: 298112, 315390
GRAM: PARAVION

Bharat Pulverising Mills Pvt. Ltd., Hexamar House, 28, Sayani Rd., Bombay 400025.

Bombay Chemicals Pvt. Ltd., 129, M. Gandhi Rd., Bombay 400023.

Bombay Fumigation Co. Pvt. Ltd., 93, Bazargate St., Bombay 400001.

Camphor & Allied Products Ltd., Jehangir Bldg., 133, M. Gandhi Rd., Bombay 400023.

Central Insecticides & Fertilizers, Vihar Lake Rd., Saki Naka, Bombay 400072.

Dai-Ichi Karkaria Pvt. Ltd., Liberty Bldg., New Marine Lines, Bombay 400020.

Excel Ind. Ltd., 184-87, S. Vivekanand Rd., Jogeshwari, Bombay 400060.

Farm Chemicals Ltd., Advani Chambers, Sir P. Mehta Rd., Bombay 400001.

Hico Products Pvt. Ltd., Mogal Lane, Mahim, Bombay 400016.

Hyleg Comfry Health Products Pvt. Ltd., Clark House, 8, Wodehouse Rd., Bombay 400039.

Indofil Chemicals Ltd., Nirlon House, Dr. A. Besant Rd., Bombay 400025.

Industrial Minerals & Chemical Co., 125, N. Dhuru St., Nagdevi, Bombay 400003

Khandelwal Mineral & Pesticides, 'Shriji', 10-A, Bhagwaghar Layout, Dharampeth, Nagpur 440010.

Khandesh Pesticides Pvt. Ltd., Jolly Maker Chambers II, Room No. 97, Nariman Point, Bombay 400021.

National Organic Chemical Inds. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

New Chemi-Mineral Mills Pvt. Ltd., Ashok Nagar Cross Rd. No. 1, Kandivli (East), Bombay 400067.

Pest Control (India) Pvt. Ltd., Yusuf Bldg., M. Gandhi Rd., Bombay 400023.

Pestokem Ind. Pvt. Ltd., 40/3, Shankar Vihar, 17th Rd., Chembur, Bombay 400071.

Rallis India Ltd., Ralli House, 21, Ravelin St., Bombay 400001.

Sai-Chemie International, 203, Pushpa Bhavan, Opp. Telephone Bhavan, Colaba, Bombay 400005.

Sandoz (India) Ltd., Sandoz House, Dr. A. Besant Rd., Worli, Bombay 400018.

Saromal Products, Jehangir Villa, 107, Wodehouse Rd., Colaba, Bombay 400005.

Shroff's Indl. Chemicals Pvt. Ltd., 167, Dr. A. B. Rd., Bombay 400018.

Star Chemicals (Bombay) Pvt. Ltd., 21, Noble Chambers, Parsi Bazar St., Bombay 400001.

Sudhir Chemical Co., 524, Sayani Rd., Bombay 400025.

Sviluppo Attivita Industrialie Commercialie, S.P.A., Saheb Bldg., 195, Dr. D. Naoroji Rd., Bombay 400001.

Tata Fison Ind. Ltd., 21, Ravelin St., Bombay 400001

United Pestichem & Nonionics Pvt. Ltd., 23, Sir P. M. Rd., Bombay 400001.

Punjab

Punjab Saltpetre Refinery Ltd., Ind. Estate, Ferozepur City 152001.

Punjab United Pesticides & Chemicals Ltd., 76, Sector 8-A, Chandigarh 160018.

Tamil Nadu

Bharat Pulverising Mills Pvt. Ltd., 589, Tiruvottiyur High Rd., Madras 600019.

E.I.D. Parry (India) Ltd., Dare House, Madras 600001.

QuickPhos
Zinc Phosphide
Billy

Save Food Grains
from
Grain Insects and Rodents

USE
QUICKPHOS
For fumigation of stored grain and also Rat burrows.

ZINC PHOSPHIDE
Single dose rat poison for use in baits.

Shroffs Industrial Chemicals Pvt. Ltd.
167, Dr. Annie Besant Road, Worli, Bombay 400 018.
Telex : 011-5074 UFOS IN. Gram : 'UNIPHOS'

Geo Ind. & Insecticides (I.) Pvt. Ltd., Tiruvottiyur, Madras 600019.

Mettur Chemicals & Ind. Corpn. Ltd., Mettur Dam R.S., 636402. Salem Dist.

Mysore Insecticides Co. Pvt. Ltd., Andhra Bank Bldg., No. 6, Linghi Chetty St., Madras 600001.

Uttar Pradesh

Shivalik Rasayan Ltd., 140, Vasant Vihar, P. O. New Forest, Dehra Dun 248006.

West Bengal

Alkali & Chemical Corpn. of India Ltd., 18, Strand Rd., Calcutta 700001.

Croplife Chemicals Pvt. Ltd., 27, Bentinck St., Calcutta 700013.

India Alkalies Ltd., 5, Garstin Place, Calcutta 700001.

Kanoria Chemicals & Ind. Ltd., 9, Brabourne Rd., Calcutta 700001.

Metropole Chemical Ind., 73, N. Subhas Rd., Calcutta 700001.

Rajda Pesticides & Pest Control Corpn., 1, Portuguese Church St., Calcutta 700001.

Shaw Wallace & Co. Ltd., 4, Bankshall St., Calcutta 700001.

PETROLEUM PRODUCTS

Chemoleums Pvt. Ltd., Tiruneermalai Rd., Madras 600044.

Goa Carbon Ltd., Dempo House, Campal, Panaji 403001.

M. Oilfields Pvt. Ltd., 84-A, S. V. Rd., Vijaykar Wadi, Malad West, Bombay 400064.

Madras Petro-Chem Ltd., Manali, Madras 600068.

RAJ LUBRICANTS

Manufacturers of :
PETROLEUM PRODUCTS

Specialists :
Manufacturers of Transformer Oils as per ISI, IS : 335 Specification

●

Office : Mahesh Chambers, 1st Floor,
391, Narsi Natha Street,
Bombay 400 009.

Phones : 322962 & 336249.

Head Office & Factory :
Tondiarpet, Madras 600 081.
Phones : 554311 & 552484.

SAVITA CHEMICALS PVT. LTD.

Products :

'TRANSOL' Transformer Oil, White Oils, Liquid Paraffin, Petroleum Jellies, Mineral Jellies, Sodium Calcium, and Barium Petroleum Sulfonates, Oil Mineral Hydraulic Buffer, Oil OM13, Oil OM16, Copper & Aluminium Rolling Oil, Secondary Plasticizers, Dibenzyl Di sulphide, Cable Compound (Non-draining Type), Cable Oil (Draining Type), Cable Jelly for Telephone Cables. Moisture Proof Special Compound.

Agricultural Spray Oils, Ink Oils, Emulsifiers, Soluble Cutting Oils and other speciality oils.

Nariman Bhavan, 6th Floor, Nariman Point,
Bombay 400 021.

Phones : 233241, 233790 & 233389.
Grams : "SOLVO". Telex: SCPL 011-3829.

Mysore Petrochemicals Ltd., P. Box 34, Raichur 584101. (Karnataka).

National Organic Chemical Industries Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Peddington Chemical Inds. (India), Wakefield House, Sprott Rd., B. Estate, Bombay 400038.

Petrosil Oil Co. Ltd., Apeejay House, 3, Dinsha Wachha Rd., Bombay 400020.

Raj Lubricants, Mahesh Chambers, 391, Narsi Natha St., Bombay 400009.

Ruiki Petrochem Pvt. Ltd., 67, Race Course Rd., Vadodara 390007.

Savita Chemicals Pvt. Ltd., Nariman Bhavan, 6th Flr., Nariman Point, Bombay 400021.

Sharavati Petro-Chemicals Pvt. Ltd., 9th Mile, Old Madras Rd., Virgonagar, Bangalore 560049.

Shri Ambuja Petrochemicals Ltd., 1-11-252/13, Jabbar Bldg., Begumpet, Hyderabad 500016.

Starline Oil Co. (India), 123, E. M. Church Rd., Madras 600013.

Tashkent Oil Co., Behind Jubilee Baug, Modikhana Rd., Vadodara 390001.

Tide Water Oil Co. (India) Ltd., 32, Nicol Rd., B. Estate, Bombay 400038.

Universal Petro-Chemicals Ltd., P-34, India Exchange Place, Calcutta 700001

Wax Oils Pvt. Ltd., 8, Bharuch Ind. Estate, National Highway No. 8, Bharuch 392002. (Gujarat).

(Also see under Dealers and the chapter on 'Petroleum Industry').

PHARMACEUTICAL MACHINERY

Associated Engg. Co., Geethmala Bldg., Central Avenue Rd., Chembur, Bombay 400071.

Cadmach Machinery Co. Pvt. Ltd., Ghodasar, Ahmedabad 380008.

Campbell Electronics, Prabhadevi Indl. Estate, V. Savarkar Mrg., Bombay 400025.

Frigmaires Engrs., Bharat House, 104B, Bombay Samachar Mrg., Bombay 400023.

Metadie Engg. Pvt. Ltd., 2 & 3, Vijay Indl. Estate, I. B. Patel Rd., Goregaon East, Bombay 400063.

P + AM Pharmaceutical & Allied Machinery Co. Pvt Ltd., 131, Kandivli Ind. Estate, Bombay 400067.

United Engg. Co., Ashok Villa, Vallabhbhai Rd., Vile Parle West, Bombay 400056.

PHARMACEUTICALS

(See under Drugs and Pharmaceuticals).

PHOTO GOODS

Agfa-Gevaert India Ltd., 41, New Marine Lines, Bombay 400020.

Camera Works Pvt. Ltd., C/o Chowgule & Co. Hind Pvt. Ltd., India House, Fort St., Bombay 400001.

Capital Photo Services Pvt. Ltd., 40, Lenin Sarani, Calcutta 700013.

Chemical Moulding Manufg. Co. Pvt. Ltd., Shapoor Baug, Marol, M. Vassanji Rd., Bombay 400059.

Ensign India Pvt. Ltd., P. O. Box 2459, Calcutta 700001.

Gansons Ltd., 131, Mount Rd., Madras 600006.

Great India Trdg. Co., 8, Beaumon Chambers, 27/33, N. Master Rd., Bombay 400001.

India Photographic Co., 222, Dr. D. N. Rd., Bombay 400001.

Kesho Ram & Sons India Pvt. Ltd., Opp. Dariba, Chandni Chowk, Delhi 110006.

Kodak Ltd., Kodak House, Dr. D. Naoroji Rd., Bombay 400001.

Patel India Pvt. Ltd., 190, Dr. D. Naoroji Rd., Bombay 400001.

Pharmalab Inds., Star Metal Compd., Agra Rd., Vikhroli, Bombay 400083.

Photophone Ltd., 7, Saki Vihar Rd., Bombay 400072.

Vacuum India, A-12/13, Naraina Indl. Area, Phase I, New Delhi 110028.

PHOTOGRAPHIC EQUIPMENT

Andhra Pradesh

Foto India, 97, Sardar Patel Rd., Secunderabad 500003.

Delhi

Color Crafts, 63 Panchkuin Rd., New Delhi 110055.

Electro Photomax, M-26, Connaught Place, New Delhi 110001.

National Instruments Ltd., Ansal Bhawan, K. Gandhi Mrg., New Delhi 110001.

Gujarat

Modern Photo Traders, 10, Jairaj Plot, Rajkot 360001.

Karnataka

Monotype Corpn. Ltd., 27th Cross, Banshankari, II Stage, Bangalore 560011.

Photo Craft, C-30, Ind. Estate, Rajajinagar, Bangalore 560010.

Maharashtra

Central Camera Works Pvt. Ltd., 195, Dr. D. Naoroji Rd., Bombay 400001.

Comet Ind. Corpn., Laxmi Woollen Mills Estate, Jagtap Marg, Mahalaxmi, Bombay 400011.

Kamal Process Studio, 219, B. Jayakar Marg, Bombay 400002.

National Instruments Ltd., K. Parikh House, 47, P. D'Mello Rd., Bombay 400009.

Photoray Ind., Gala Ind. Est., Mulund (W), Bombay 400080.

Rathod Brothers, Rambaug, Vivekanand Rd., Malad (West), Bombay 400064.

Orissa

National Instruments Ltd., Coll. Square, Cuttack 753004.

Tamil Nadu

Amco Engg. Corpn., G-10 & 11, Ind. Estate, Guindy, Madras 600032.

Devi Cine Projector Mfg. Co., B-7, Ind. Estate, Guindy. Madras 600032.

National Instruments Ltd., 150A/3, Anna Salai, Madras 600002.

Pandyan Studio, 29, Pycrofts Rd., Madras 600005.

Visual Education Aids, Old Pykara Bldg., Avanashi Rd., Coimbatore 641018.

West Bengal

National Instruments Ltd., 1/1, Raja S. C. Mullick Rd., Jadavpur, Calcutta 700032.

Photo Optical Pvt. Ltd., 44C, Indian Mirror St., Calcutta 700013.

Venus Industries (India), 121, New Santoshpur Ave., Calcutta 700032.

PHYSIOTHERAPY EQUIPMENT

(See under Medical Equipment).

PINE OIL

Dujodwala Inds., 812/815, Tulsiani Chambers, 8th Flr., W. Wing, 212, N. Point. Bombay 400021.

PIPES & FITTINGS

A. N. Bhaskar Sons, Ishwar Nagar, New Delhi 110020.

Allied Piping Products India Pvt. Ltd., 31, Sipcot Indl. Complex, Hosur 635126. (T. Nadu).

Doneria Pvt. Ltd., 10/4, Hathras Rd., Agra 282006.

Eastern Equipment Co., 5/1, Clive Row, Calcutta 700001.

India Electric Poles Mfg. Co., 2nd Lane, Darukhana, Bombay 400010.

Indian Hume Pipe Co. Ltd., Construction House, W. Hirachand Mrg., Bombay 400038.

Jain Pipe Mfg. Co., Post Box No. 20, Jalgaon 425001.

Jindal Pipes Pvt. Ltd., 1/23-B, Asaf Ali Rd., New Delhi 110002.

M. J. Patel & Co. Pvt. Ltd., 116, P. D'Mello Rd., Bombay 400009.

Madras Engg. Works, 1, Kika St., Gulalwadi, Bombay 400004.

Madras Metals, 7, Kika St., Gulalwadi, Bombay 400004.

National Casting Co., 103, Foreshore Rd., Howrah 711103.

Pipe Supports (Indo British) Pvt. Ltd., 24, Stephen Court, 18, Park St., Calcutta 700016.

Progressive Fittings Pvt. Ltd., Taj Bldg., 3rd Flr., Dr. D. N. Rd., Bombay 400001.

Raj Iron Foundry, Sultanganj, Agra 282004.

Sakhi Engrs., 99/A, Mittal Chambers, Nariman Point, Bombay 400021.

Sandeep Inds., 25, N. Subhas Rd., Jullundur 144004. (Punjab).

Sementex Spun Pipes Pvt. Ltd., Mira, Thane 401104.

SHI Engineers, 46, SIDCO Indl. Estate, Coimbatore 641021.

Sivanandha Pipe Fittings Ltd., 13/240, Dewan Bahadur Rd., R. S. Puram, Coimbatore 641002.

Stewarts & Lloyds of India Ltd., 41, Chowringhee, Calcutta 700071.

Subedar Inds., 48-A, Magazine St., Mazgaon, Bombay 400010.

Teekay Tubes Pvt. Ltd., 315/317, Navrattan, P. D'Mello Rd., Bombay 400009.

(Also see, 'Tubes, Pipes and Fittings' in this list.)

PLASTER OF PARIS

Kalabhai Karson & Sons, 256, Sardar V. P. Rd., Bombay 400004.

Laxmi Lime Mineral Co., Hararwala Bldgs., Islampura, Bombay 400004.

Plaster Kala Kendra, 176, 3rd Kumbharwada, Bombay 400004.

PLASTICS

CELLULOSE ACETATE

Karnataka

Mysore Acetate & Chemicals Co. Ltd., Sir J. Wadiyar Rd., Bangalore 560002.

West Bengal

East Anglia Plastics (Ind.) Ltd., 3, Camac St., Calcutta 700016.

P.F. MOULDING POWDER/RESINS

Bakelite Hylam Ltd., Tiecicon House, 18, Dr. E. Moses Rd., Bombay 400011.

Plastic Resins & Chemicals Ltd., Sahupuram, Arumuganeri 628202 (Tirunelveli Dist.), Tamil Nadu.

PLASTIC BANGLES

Gujarat

Vishal Malleables Ltd., 8, Kailash Society, Ashram Rd., Ahmedabad 380009.

Karnataka

Bangle Industries & Trading Co., 43-44, Balapeth, Bangalore 560001.

Mysore Bangle Works, S-80-1, Balapeth, Bangalore 560001.

Maharashtra

Alka Industries, Padia Comp., Irani Wadi, Hemukalani Rd., Kandivli (West), Bombay 400067.

Ambika Celluloid Industries, Simpovli, S. Vivekanand Rd., Borivli (West), Bombay 400092.

Arco Bangle Works, Sonawala Estate, Goregaon (East), Bombay 400063.

Bharat Bangle Industries, Hakoba, I. B. Patel Rd., Ind. Estate, Goregaon (East), Bombay 400063.

Bombay Bangle Works, Samson Comp., Goregaon (East), Bombay 400063.

Celluloid Bangle Works, Vijaykar Wadi, S. Vivekanand Rd., Malad (West), Bombay 400064.

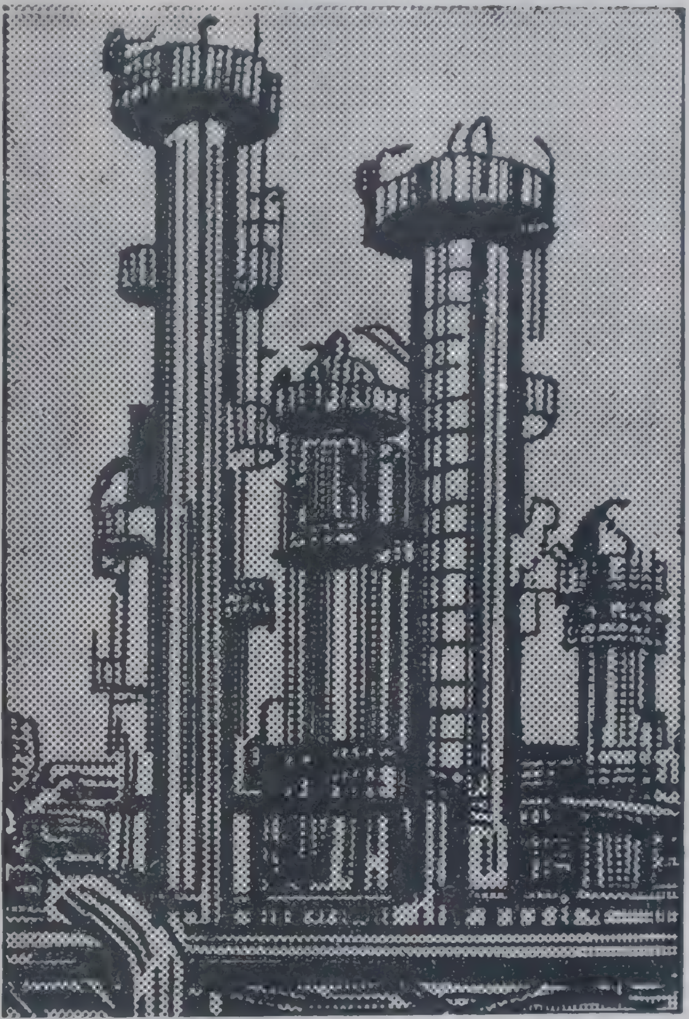
Diamond Industries, Keshar Ind. Estate, Perubaug, Goregaon (East), Bombay 400063.

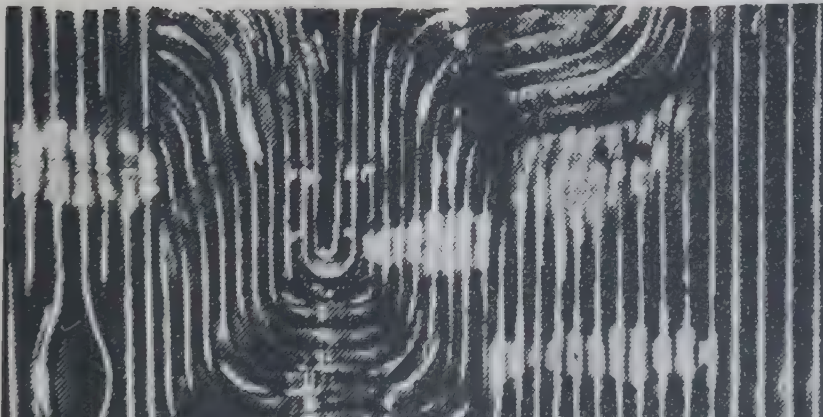
M.J.PATEL & C.O.PVT.LTD.

Mfgs & Fabricators
SEAMLESS PIPES & FITTINGS
BOILER TUBES
VALVES.

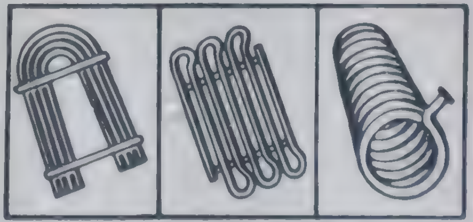
Available in Sizes:
6 mm to 600 mm.
in various thicknesses

116, P.D'Mello Road,
(Frere Road)
Near Carnac Bunder
Bombay 400 009
TELEX: "TUBES 011-3358"
Phone: 322114 (4 Lines)
Grams: REDTEE.





FABRICATOR OF BOILER COMPONENTS



tube weld

TUBE WELD ENGG.WORKS PVT.LTD.
118 P.D'Mello Road,
Near Carnac Bridge, Bombay-400 009.
Phone: 322114/15/16/17
Grams: "TUBEWELD"
Telex: TUBES 011-3358

APEX. TW/1/75

Ganesh Bangle Works, Churiwadi, Goregaon (East), Bombay 400063.

Gemini Industries, Churiwadi, Aarey Rd., Goregaon (East), Bombay 400063.

Indian Celluloid Industry, Churiwadi, Goregaon (East), Bombay 400063.

International Art Industries, Carter Rd., 6th Lane, Borivli (East), Bombay 400092.

J. M. I. Bangle Ind., Bliss Compound, Nivetia Rd., Malad (E), Bombay 400064.

Kirti Bangle Industries, Churiwadi, Goregaon (East), Bombay 400063.

Laxmi Bangle Industries, Carter Rd., 6th Lane, Borivli (East), Bombay 400066.

Metro Bangle Works, 73-D, Govt. Ind. Estate, Kandivli (West), Bombay 400067.

Nityanand Bangle Works, 104/P, Gauthan Rd., Bhandarwada, Malad (West), Bombay 400064.

Raj Bangle Industries, Samson Compound, Goregaon (East), Bombay 400063.

Sarvoday Bangle Works, Adarsh Comp., Marve Rd., Malad (West), Bombay 400064.

Suman Industries, Sampson Comp., Goregaon (East), Bombay 400063.

Teeka Industries, 84, Vijaykarwadi, S. Vivekanand Rd., Malad (West), Bombay 400064.

Universal Bangle Works, Churiwadi, Goregaon (East), Bombay 400063.

Rajasthan

Modern Celluloid Bangle Inds., Pall House, Jodhpur 342001.

Uttar Pradesh

Shri Krishna Plastic Industries, Behind Bus Stop, Ferozabad 283203. Agra Dist.

PLASTIC BLOW MOULDING

Bihar

R. B. Plastic & Metal Ind., P.O. Jharia 828111. Dhanbad Dist.

Delhi

B. K. Plastic Pvt. Ltd., A207, Defence Colony, New Delhi 110003.

India Plastics, 15-A, Sabharwal Market, New Delhi 110006.

Maidan Brothers, 277, Sadar Bazar, Delhi 110006.

Gujarat

Elite Plastic Co., 12A, Bharatkhand Cotton Mills Comp., Naroda Rd., Ahmedabad 380001.

Hindustan Polythene & Plastic Works, Ind. Area, Yamuna Mill Rd., Vadodara 390004.

Vora Plastics Manufg. Co., Vora Baug, Ghuntu Rd., P.B. 54, Morvi 363641.

Kerala

Modern Plastic Ind., Neerkunnam, Alleppey 688005.

Maharashtra

Arun Plastics, 74A, Govt. Kandivli Ind. Estate, M. Gandhi Rd., Kandivli West, Bombay 400067.

Ashok Plastics, 511, Arun Chambers, Tardeo, Bombay 400034.

Ashok Traders, 129-C, Govt. Indl. Est., Kandivli (W), Bombay 400067.

Blow Plast Pvt. Ltd., Gauthan Rd., Off Bombay-Agra Rd., Bhandup, Bombay 400078.

Bright Bros. Ltd., 156A, J. Dadajee Rd., Bombay 400034.

Central Machinery & Plastic Products, 11, Tarun Indl. Estate, Mogra Rd., Andheri East, Bombay 400069.

Everest Indl. Corpn., 102, Sona Udyog Bhavan, Parsi Panchayat Rd., Andheri (E), Bombay 400069.

Garware Plastics Pvt. Ltd., Western Express Highway, Vile Parle, Bombay 400057.

General Plastics, 8, Tamarind Lane, Bombay 400023.

Indian Plastics Ltd., Poisar Bridge, Ghodbunder Rd., Kandivli, Bombay 400067.

Industrial Tube Container Manufg. Co., C/o Rainbow Products, Ind. Assurance Bldg., Churchgate, Bombay 400020.

Kalpana Plastic Ind., 20/3, Hadapsar Ind. Estate, Pune 411013.

Kosmek Plastic Manufg. Ltd., Old B.P.T. Rd., Mahul, Chembur, Bombay 400074.

Model Containers, C/o H. P. Shah & Company, 689, Govind Chowk, M. J. Market, Bombay 400002.

PVD Plast Mould Ind., 43, Forbes St., Bombay 400023.

Shree Kailash Texplabo Ind. & Agencies Pvt. Ltd., Prabhadevi Ind. Estate, Cadell Rd., Bombay 400025.

Sunlight Plastic Ind., 324, A to Z Ind. Estate, Fergusson Rd., Lower Parel, Bombay 400013.

Vinod Plastic Works, 248, 252, A. Rehman St., Bandukwala's Bldg., Bombay 400003.

Punjab

Baljit Bros., Chowk Lachmansar, Amritsar 143001.

Tamil Nadu

Nirmala Plastic Works, 170/2, S. C. Bose Rd., Madras 600001.

Polyene General Ind., Unit 11A, Ind. Estate, Guindy, Madras 600032.

Uttar Pradesh

Lari Ind., Iqbal Manzil, Near City Station, Lucknow 226001.

West Bengal

Ever Bright Plastic Works, 10/1, Portuguese Church St., Calcutta 700001.

Indar Plastic Works, 56/1, Canning St., Calcutta 700001.

Radheshyam Plastic Ind., 65-A, Nimtollaghat St., Calcutta 700006.

PLASTIC CANE & ROPES

Hyderabad Polyethylene Ind., 5/4/383, Mukaramjahi Rd., Hyderabad 500001.

Indar Plastic Works, 56/1, Canning St., Calcutta 700001.

Maharashtra Plastic Industries, Subhas Nagar, Off Caves Rd., Jogeshwari East, Bombay 400060.

Polymers (I) Pvt. Ltd., 10, Mall Rd., Dum Dum, Calcutta 700028.

Ravish Synthetic Twines & Ropes Pvt. Ltd., B-70, Ind. Estate, Rajajinagar, Bangalore 560010.

PLASTIC COMPRESSION MOULDING

Delhi

Globe Products (India), 24, Friends Colony, G. Trunk Rd., Shahdara, Delhi 110032.

Gujarat

Alembic Chemical Works Co. Ltd., Vadodara 390003.

Hemant Bros., Super Market, Ashram Rd., Ahmedabad 380009.

Plastic Products Engg. Co., 'Lavanya', Behind Ahmedabad Medical Association Hall, Ahmedabad 380009.

Haryana

Nuchem Plastics Ltd., 54, Ind. Estate, Faridabad 121001.

Karnataka

Associated Trdg. Corpn., 48/4, Sri Jayachamarajendra Rd., Bangalore 560002.

Maharashtra

Barakaso Pvt. Ltd., Ishwarbhai Patel Rd., Goregaon East, Bombay 400063.

Baroda General Ind., Ram Baug, S. Vivekanand Rd., Malad, Bombay 400064.

Bombay Burmah Trading Corpn. Ltd. (Electronics Divn.), Plot No. 2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

Cipra Bakelite Co., Rout Wadi, Moghul Lane, Mahim, Bombay 400016.

Daylight Plastic Ind., 45, Suryodaya Mills Comp., Tardeo, Bombay 400034.

Ellora Art Ind., Shreejee Bhuvan, Lohar Chawl, Bombay 400002.

Imperial Ind. Co., Opp. Sitladevi Temple, L. Jamshedji Rd., Mahim, Bombay 400016.

Merchant & Co. Pvt. Ltd., C/o Janata Works Comp., Pipe Rd. (S.), Lower Parel, Bombay 400013.

Milan Products, 64-D, Govt. Ind. Estate, Kandivli, Bombay 400067.

Plastella, 91, S. Vivekanand Rd., Borivli, Bombay 400092.

Podar Plastics Pvt. Ltd., Podar Chambers, Parsee Bazar St., Bombay 400001.

Polymer Products Co., Saki-Vihar Lake Rd., Bombay 400072.

Polypick Ind., Bombay Mutual Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Polyset Corpn., Plot No. A-44-45, M.I.D.C., Marol Ind. Estate, Mahakali Caves Rd., Bombay 400069.

Presto Ind., 106, Kansara Chawl, Kalbadevi Rd., Bombay 400002.

Prest-O-Lite, Ghodbunder Rd., Opp. Bandra Bus Garage, Santa Cruz, Bombay 400054.

Sputnik Ind., 30, Tejpal Rd., Vile Parle East, Bombay 400057.

Walchandnagar Ind. Ltd., Construction House, Ballard Estate, Bombay 400038.

Tamil Nadu

Plasticraft Ind., Velachery Rd., Madras 600042.

Praga Ind. Pvt. Ltd., Avanashi Rd., Coimbatore 641018.

Uttar Pradesh

Plastics Products Ltd., Kamala Tower, Kanpur 208001.

West Bengal

Assam Produce Co. Pvt. Ltd., 4, India Exchange Place, Calcutta 700001.

Eastern Traders (Agencies), 3, Chittaranjan Ave., Calcutta 700013.

Orient Plastic Ind., 12, Portuguese Church St., Calcutta 700001.

Universal Moulders, 4, Canal Rd., New Alipore, Calcutta 700053.

PLASTIC ELECTRICAL ACCESSORIES

Delhi

Rexco Ind. (India), Expo Plastics, G-35, Gulabi Baghi, Delhi 110007.

Maharashtra

Automats Engineers, T. K. Ind. Estate, King Edward Rd., Bombay 400015.

Merchant & Co. Pvt. Ltd., 162, Tulsi Pipe Rd. South, Lower Parel, Bombay 400013.

Standard Batteries Ltd., Vakola, Santa Cruz, Bombay 400055.

PLASTIC EXTRUSION

Andhra Pradesh

Hyderabad Polyethylene Ind., 5/4/383, Mukaramjahi Rd., Hyderabad 500001.

Indian Detonators Ltd., Sanatnagar, Hyderabad 500018.

Delhi

Tobu Enterprises Pvt. Ltd., 8/29, Indl. Area, Kirti Nagar, New Delhi 110015.

Gujarat

D. R. Industries, Swaminarayan Godown, Outside Dariapur Gate, Ahmedabad 380001.

Deutron Plastic Ind., Gujarat Laghu Udyog Vikas Mandal, Shamapur Gate, Ahmedabad 380001.

Gujarat Packaging Inds., Plot 165/3, Udyog Nagar, Udhna 394210.

Hindustan Polythene & Plastic Works, Yamuna Mill Rd., Vadodara 390004.

Modern Plastics Corpn., 4/4488, Begampura, Surat 395001.

Monalax Plastics, Sabhir House, Near Hajoori Soda Factory, Salabalgoura, Surat 395002.

Polypack Plastics, 85, G.I.D.C., Indl. Est., Vatva 382445.

Unick Plastics Ind., Plot No. 2/A/2/3, Udhna Ind Estate, Udhna 394210, Surat Dist.

Karnataka

D. M. Industries, Morzaria Ind. Estate, 4, Banarghatta Rd., Bangalore 560029.

F. Fibre Corpn., A-83, Ind. Estate, Rajajinagar, Bangalore 560010.

Jambo Plastics Pvt. Ltd., M. S. Ramaiah College Comp., Gokul, Bangalore 560054.

Multiplast Ind. (Karnataka) Pvt. Ltd., P.B. 10, Hospet 583201.

Precision Extrusions, 8/B, Daddannadhundi Indl. Area, P.O. Mahdevpura, Bangalore 560048.

T. T. Pvt. Ltd., Duravaninagar, Bangalore 560016

Kerala

Kumar Ind., Sree Devi, Kottumukku, Quilon 691001

Phoenix Plastics, Kottayam 686001.

Maharashtra

Airoplast Private Ltd., C/40, 'Y' Rd., Wagle Ind. Estate, Thane 400604.

Ashok Plastics Ind., Shed No. 12, Ind. Estate, Dhule 424001.

Atom Plast, "Bhavna", 422, V. Savarkar Rd., Bombay 400025.

Bombay Synthetic Corpn., Govt. Ind. Estate, Plot No. 81, Kandivli West, Bombay 400067.

Bright Bros. Ltd., 156A, J. Dadajee Rd., Bombay 400034

Chemo Plastics, 14, 'Sailesh', 59/75, Forjett St., Bombay 400026

Dhiren Plastic Inds., A-101, Ghatkopar Indl. Estate, Bombay 400086.

Dhoot Chemo Plast Pvt. Ltd., Kranti Chowk, Aurangabad 431001.

Dikay Inds., 32, Sidhpur Indl. Est., Goregaon (W), Bombay 400062.

Eagle Enterprises Pvt. Ltd., 141, S. Devjee St., Bombay 400003.

Everest Enterprises, 226, Kalbadevi Rd., Bombay 400002.

F. Block Agencies Pvt. Ltd., Shale Bldg., Bank St., Bombay 400023.

Ganesh Ind., 32/34, 1st Marine St., Bombay 400002.

Glosso Pack Ind., Laxmi Woollen Mills Comp., B. Jagtap Rd., Bombay 400011.

Great India Plastics, I.B. Patel's Estate, I. Patel Rd., Goregaon East, Bombay 400062.

Jain Pipe Mfg. Co., Post Box 20, Jalgaon 425001.

Jay-Kee Plastics, C/o Kakad Ind. Estate, L. Jamshedji Rd., Mahim, Bombay 400016.

Kaveri Plastichem Pvt. Ltd., Bullion Exchange Bldg., Jhaveri Bazar, Bombay 400002.

Maharashtra Plastic Ind., 312, Kalbadevi Rd., Bombay 400002.

Modern Waterproof Papers Manufg. Co., 109, Masjid Bunder Rd., Bombay 400003.

Nova Plast Ind. Pvt. Ltd., Shree Laxmi Silk Mills Premises, M. C. Javla Rd., Bombay 400028.

Nylo Plast Ind. Pvt. Ltd., Nyloc House, 254-D2, Dr. A. Besant Rd., Prabhadevi, Bombay 400025.

Packart, Ahmedabad House, 13/15, W. H. Mrg., B. Estate, Bombay 400038.

Plastic Extruders Pvt. Ltd., National Insurance Bldg., Dr. D. Naoroji Rd., Bombay 400001.

Plastic Extrusion Products, M.I.D.C. Ind. Estate, Plot No. 16/17, II Cross Rd., J. B. Nagar, Bombay 400059.

Plasticable Pvt. Ltd., Lentin Chambers, 36, Dalal St., Bombay 400023.

Plastoflex Ind., 46, Nagdevi St., Bombay 400003.

Plasto-Pack Ind., 5-B, Suryodaya Mills Comp., Tardeo, Bombay 400034.

Polymers & Resins Corpn., 46, V. Nariman Rd., Opp. Akbarally's, Bombay 400001.

Ramdas Plastic Manufg. Co. Pvt. Ltd., 111/128, Sadhu Vaswani Nagar, Ganeshkhind Rd., Pune 411007.

Shree Mahalaxmi Trading Corpn., 198, Kalbadevi Rd., Bombay 400002.

Sylvex Cable Company Pvt. Ltd., Behind India Cork Mills, Saki-Vihar Rd., Bombay 400070.

Thermo-Plastic Ind., 78, Kalachowki Rd., Lalbaug, Bombay 400033.

Trinity Plastics, 238, Nagdevi St., Bombay 400003.

Tamil Nadu

Devon Plastics, Dhun Bldg., 175/1, Mount Rd., Madras 600002.

Paper, Film & Foil Converters, P.B. 6, Sivakasi 623501. Ramnad Dist.

Uttar Pradesh

Garg Plastics, 47/86, Hatia, Kanpur 208001.

West Bengal

Extrusion, P-38, India Exchange Place, Calcutta 700001.

India Burlap & Laminating Works, 10, Clive Row, Calcutta 700001.

Neptune Plastic & Metal Inds., 16, India Exchange Place, Calcutta 700001.

Polyfabs Ltd., 2, Pretoria St., Calcutta 700016.

Transpackers, Flat No. 401, ‘Niharika’, 17/1C, Alipore Rd., Calcutta 700027.

PLASTIC FABRICATION

Delhi

Fancy Plastic Moulders, Mayapuri Indl. Area, Phase II, New Delhi 110027.

Maharashtra

Airoplast Pvt. Ltd., C-40, ‘Y’ Rd., Wagle Indl. Est., Thane 400601.

Amar Plastics, 81, Clive Rd., Bombay 400009.

Artec Products, 2/2, Dwarkanath Bhuvan, Katrak Rd., Wadala, Bombay 400031.

Bombay Plastic Corpn., Elphinstone Bldg., 10, Churchgate St., Bombay 400001.

Bright Bros. P. Ltd., 156-A, J. Dadajee Rd., Bombay 400034.

Indian Plastics Ltd., Poisar Bridge, Kandivli, Bombay 400067.

Jagdhir Desai & Co., 13, Gunbow St., Bombay 400001.

Jyoti Plastic Works, Bombay Talkies Comp., Hemansu Rd., Malad West, Bombay 400064.

K. K. Nag Pvt. Ltd., 23/5-A, Bund Garden Rd., Pune 411001.

Multicrafters, 31, M. G. Rd., Ghatkopar, Bombay 400080.

Oriental Manufg. Co., 94, 3rd Bhoiwada, Bombay 400002.

Plastika Enterprise, 120, Bapu Khote St., 1st Flr., Pydhonie, Bombay 400003.

Podar Plastics Pvt. Ltd., Podar Chambers, Parsee Bazar St., Bombay 400001.

Premier Leather Krafts, 35-37, Hamam St., Bombay 400023.

Rainbow Products, Indl. Assce. Bldg., Churchgate, Bombay 400020.

Universal Luggage Manufg. Co. Pvt. Ltd., Bldg. B, Shah Indl. Est., Saki Vihar Rd., Bombay 400072.

Venus Prints, Pitamberwadi, Mahim, Bombay 400016.

Tamil Nadu

Polyene Film Inds. Pvt. Ltd., B-17, Indl. Est., Ambattur, Madras 600058.

PLASTIC FOAM

Andhra Pradesh

U. Foam Pvt. Ltd., 8-15 16, Ind. Estate, Sanatnagar, Hyderabad 500018.

Delhi

Bharat Foam Udyog Pvt. Ltd., 49, Rajpur Rd., Delhi 110006.

J. J. Foam Pvt. Ltd., 224, Okhla Indl. Estate, New Delhi 110055.

Gujarat

Nu-Foam Inds., G.I.D.C. Estate, Shed A/2, Nos. 3 & 4, Vatva 382440. (Ahmedabad Dist.).

Karnataka

K. B. Foam Pvt. Ltd., 12, Bore Bank Rd., Bangalore 560046.

Maharashtra

Artbangle Pvt. Ltd., 204, National Insurance Bldg., Dr. D. Naoroji Rd., Bombay 400001.

BASF Ind. Ltd., Maybaker House, Ahire Mrg., Bombay 400025.

PLASTIC GOODS

Andhra Pradesh

Admark Plastics Pvt. Ltd., P2 & P3, Ind. Area, Nacharam, Hyderabad 500039.

• CATALOGUE AVAILABLE ON REQUEST
• PLEXCONCIL EXPORT AWARD WINNER
PLEXCONCIL

PRINCE
BOMBAY
INDIA

PRINCE PLASTICS

MANUFACTURERS AND EXPORTERS OF
PLASTIC MOULDED HOUSEHOLD AND INDUSTRIAL ARTICLES
SUCH AS
BUCKETS, BASINS, TUBS, JUGS, SHOPPING BASKETS, JERRY CANS, MUGS, SCHOOL BAGS, MASALA BOXES, WASTE PAPER BASKETS, PLATES, LETTER TRAYS, DUST PANS, WATER BOTTLES, LEMON SQUEEZER, DRUMS, SOAP CASES, CYCLE BASKETS, LUNCH BOXES, PENCIL BOXES, AND MANY OTHER USEFUL ARTICLES.

312, CHURCHGATE CHAMBERS
5, NEW MARINE LINES
CHURCHGATE, BOMBAY-400020.
INDIA
Office : 295333 & 255672
Factory : 584519 & 583887
Resi : 472084 & 442537
GRAM: HOUSEWARE
TELEX: 011-6332 PEXO IN

Padma Plastic Inds., Kareemabad Rd., Warangal 506002.

Delhi

Pearl Polymers Pvt. Ltd., 27-A, Najafgarh Rd., New Delhi 110015.

Plastic House, 5255, Ballimaran St., Delhi 110006.

S. Mohd. Suabheen & Co., 824, Ballimaran St., Delhi 110006.

Gujarat

ABS Plastics Ltd., 6, B. Jadav Chambers, Ashram Rd., Ahmedabad 380009.

Anjna Ind. Corpn., Bharat Bobbins Premises, Opp. Ajit Mills Ltd., Rakhial Rd., Ahmedabad 380023.

Bharat Plastic & Bakelite Ind. Ltd., Krishnagar Housing Rd., Saijpur Bogha, Ahmedabad 380002.

Parag Plastics Ind. Pvt. Ltd., 80, Makarpura Ind. Estate, P.B. No. 199, Vadodara 390009.

Maharashtra

Bharat Foam Industrial Pvt. Ltd., 9, Kitab Mahal, Dr. D.N. Rd., Bombay 400001.

Billion Plastics Pvt. Ltd., 101, Himalaya House, Palton Rd., Bombay 400001.

Brahma Bharati Udyog, Green House, Green St., Bombay 400023.

Bright Bros. P. Ltd., 156-A, J. Dadajee Rd., Bombay 400023.

General Plastics, Calicut House, 8, Tamarind St., Bombay 400023.

Narichania Consultancy & Agency Pvt. Ltd., 22, Sir P. M. Rd. Bombay 400001.

Prince Plastics, 312, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Vinis Products, 43/44, Royal Ind. Estate, 5-B, Naigaum Cross Rd., Wadala, Bombay 400031.

Orissa

Kartik Enterprises Pvt. Ltd., B-20, Indl. Est., Cuttack 753003.

Tamil Nadu

Deluxe Plastics Products, 6B, N. M. Mudaliar Rd., Madras 600029.

Electro Plastic Combination, 65, N. M. Mudaliar Rd., Madras 600029.

Plastic Glass Enterprises, 15, Tatabad, 9th St., P.O. Tatabad, Coimbatore 611012.

Praga Inds. Ltd., Peelamedu, Coimbatore 641004.

Tiptop Plastic Inds. Pvt. Ltd., 25, Kasi Chetty St., Madras 600001

West Bengal

Climax Plastic Udyog, 11, Pollock St., Calcutta 700001.

Delton Steel & Metal Ind., P-2, Dalimtola Lane, Calcutta 700006.

Emco Gen. Plastic Ind., P-35, C.I.T. Rd., Calcutta 700014.

High Volt Equipment Pvt. Ltd., Premier House, P-39, Mission Row Extn., Calcutta 700013.

Indar Plastic Works, 56/1, Canning St., Calcutta 700001.

Peerless Plastics Ind. Pvt. Ltd., 4, Upper Chitpur Rd., Calcutta 700007.

Plastics Enterprises, 38, Strand Rd., Calcutta 700001.

Polymers (India) Pvt. Ltd., 10, Mall Rd., Dum Dum, Calcutta 700028.

Ratan Plastics Pvt. Ltd., 43/1, Strand Rd., Calcutta 700001

Synthetic Moulders Ltd., 16, N. Subhas Rd., Calcutta 700001.

Techno Rubber & Plastic Works, 14, Chandni Chowk St., Calcutta 700001.

PLASTIC HOSES

Billion Plastics Pvt. Ltd., 101, Himalaya House, Palton Rd., Bombay 400001.

PLASTIC INJECTION MOULDINGS

Andhra Pradesh

Plastic Engg. Components Pvt. Ltd., D/8-9, Govt. Ind. Estate, Moula Ali, Hyderabad 500040.

Delhi

Aarcee Plastic & Metal Ind. Pvt. Ltd., D-8, Nizamuddin (W), New Delhi 110013.

Bright Distributors, Swadeshi Market, Sadar Bazar, Delhi 110006.

Delton Cable Ind. Pvt. Ltd., Delton House, 24, Daryaganj, New Delhi 110002.

Fancy Plastic Moulders, 104 A, Phase II, Mayapuri, Delhi 110027.

Rapid Engg. Co. Pvt. Ltd., 112, New Okhla Indl. Complex, Phase I, N. Delhi 110020.

Sindhu Plastic Containers, A-61/1, G. T. Karnal Rd., Indl. Area, Delhi 110033.

Goa

Goa Plast Pvt. Ltd., Vello Bldg., Panaji 403001.

Gujarat

Hindustan Polythene & Plastic Works, Indl. Area, Yamuna Mill Rd., Vadodara 390004.

Kaj Ind., Plastic House, Udyognagar, Udhna 394210.

Ranco Plastics, 'Shrinath Prasad', Takhteswar Plots, Bhavnagar 364001.

Sinter Plast Containers, Kalol 382721.

Jammu & Kashmir

Kashmir Plastic Inds., Polo View, Srinagar 190001.

Karnataka

Karnatak Bangle Works, 4/3, Platform Rd., Seshadripuram, Bangalore 560020.

Kaveri Plastic Pvt. Ltd., Morzaria Ind. Estate, Unit F, Shed No. 2, 4, Bannerghatta Rd., Bangalore 560029.

Plasticana, 63, 2nd Stage, Indl. Suburb, Tumkur Rd., Bangalore 500022.

Precision Engineers, Duravaninagar, Bangalore 560016.

T. T. Pvt. Ltd., Duravaninagar, Bangalore 560016.

Kerala

Common Facility Service Centre, Ind. Estate, Changanacherry 686104.

Madhya Pradesh

Acrocast, F9, Ind. Estate, Polo Ground, Indore 452003.

Ahuja Ind. Co., G. E. Rd., Opp. D. K. Hospital, Raipur 492001.

Jai Plastic Ind., 4-A, Ind. Estate, Raipur 492001.

Maharashtra

Acme Plastics Ind., Chandivalli Farm, Chandivalli Rd., Bombay 400072.

Amartara Plastics Pvt. Ltd., Saki Vihar Rd., Bombay 400072.

Anand Plastics, 244, Bellasis Rd., Opp. Alexandra Cinema, Bombay 400008.

Anant Shridhar, 7, Lokamanya Nagar, Mahim, Bombay 400016.

Arora Plastics Pvt. Ltd., Deonar, Govandi Station Rd., Bombay 400088.

Ashok Plastics, 67, Ideal Ind. Estate, Mathuradas Mills Comp., Lower Parel, Bombay 400013.

Bata Shoe Co., Pvt. Ltd., Sandak Div., P.B. 84, Thane 400601.

Bien Plastics, Paragon Textile Mills Comp., Globe Mills Passage, Worli, Bombay 400018.

Central Plastics, No. 4, Ghodbunder Rd., Indian Crucible Comp., Malad, Bombay 400064.

Comet Corpn., 446, S. V. Patel Rd., Seksaria Bldg., Bombay 400004.

Dynamic Plastics Pvt. Ltd., 91, Tejpal Rd., V. Parle (E), Bombay 400057.

Elegant Inds. Pvt. Ltd., Udyog Bhavan, 250-D, Worli, Bombay 400025.

Endo Plastic Pvt. Ltd., A-21, Nand Dham Indl. Est., Andheri (E), Bombay 400059.

Everest Plastic Ind., Bajaj Bhavan, Nariman Pt., Bombay 400021.

Exen Ind., Parekh Nagar, Ghodbunder Rd., Kandivli (B.S.D.), Bombay 400067.

Flexcord Corpn., 266, Dr. A. Besant Rd., M. U. Garage Bldg., Prabhadevi, Bombay 400025.

Formacators, 20, Evergreen Ind. Estate, Dr. E. Moses Rd., 2nd Fl., Mahalaxmi, Bombay 400011.

Gemini Plastic Ind., 3-A, Krishna Udyog Bhuvan, Dhuruwadi, Near Bengal Chemicals, Bombay 400025.

Gujarat Ind. Pvt. Ltd., Vishveshwarnagar, Goregaon (E), Bombay 400063.

Harrison & Co., 23/25, Paradise Lane, L. Jamshedji Rd., Mahim, Bombay 400016.

Indian Plastics Ltd., Poisar Bridge, Ghodbunder Rd., Kandivli, Bombay 400067.

J. L. Morrison Son & Jones (I) Ltd., Poisar, Kandivli, Bombay 400067.

Jaisingh Plastics Ind., 3rd Bhoiwada, Bhuleshwar, Bombay 400002.

Jamsar Engg. Works, Laxmi Woollen Mills Estate, Haines Rd., Mahalaxmi, Bombay 400011.

Jaybee Plastic Works, Ebrahim Mansion, 366-68, Kalbadevi Rd., Bombay 400002.

Jayesh Plastics, 112 A-B, Govt. Ind. Estate, Kandivli, Bombay 400067.

Jolly Plastics, Sona Indl. Est., Parsi Panchayat Rd., Andheri (E), Bombay 400069.

Jyoti Plastic & Allied Ind., Plot No. 49, A/B, Govt. Ind. Estate, Bombay 400067.

K. K. Nag Pvt. Ltd., 2/362, Bund Garden Rd., Pune 411001.

Kings Plastics, Block No. 7, Devkaran Mansion, 34, Vithaldas Rd., Bombay 400002.

Krishna Plastics, 139, Nagindas Master Rd., Bombay 400001.

M. K. Plastics Ind., 112, Kakad Ind. Estate, Bombay 400016.

Maniar Plastics Ind., 63, 3rd Bhoiwada, Bombay 400002.

Meenul Metallizing Pvt. Ltd., 1076, Haines Rd., Worli, Bombay 400018.

Mhatre Pen & Plastic Ind. Pvt. Ltd., Tulsi Pipe Rd., Dadar, Bombay 400028.

Modella Plastics, 167, C.S.T. Rd., Kalina, Bombay 400029.

Motco Plastics, 13-B, Kurla Ind. Estate, Agra Rd., Ghatkopar, Bombay 400086.

National Plastic Ind., 40, Mirchi Galli, Opp. Jamma Masjid, Bombay 400002.

Overseas Plastics Moulders, Sadhana Ind. Estate, Oshivara Bridge, Jogeshwari, Bombay 400060.

P. S. Plastic Ind., M.I.D.C. Indl. Est., Plot No. A-10, Andheri, Bombay 400093.

Phiroze Sethna Ind., Royal Insurance Bldg., 14, J. Tata Road, Bombay 400020.

Pla-Age Inds., 307/308, Sharda Chambers, 15, New Marine Lines, Bombay 400020.

Plastica, 94, Vithalwadi, Kalbadevi Rd., Bombay 400002.

Plastics Converters, National House, 6, Tulloch Rd., Bombay 400039.

Plastipeel Chemicals & Plastic Pvt. Ltd., Kripalani Est., Saki-Vihar Rd., Bombay 400072.

Plastocrafts Inds. Pvt. Ltd., Apte Est., 1076, Dr. E. Moses Rd., Worli Naka, Bombay 400018.

Polyplastics Corpn., 105-106, A-Z, Indl. Estate, G. Kadam Mrg., Lower Parel, Bombay 400013.

Prem Plastics, 301, Bharat Ind. Estate, T. Jivraj Rd., Sewree, Bombay 400015.

Premier Ind. Works, 42, Taikalwadi Lane, Off L. Jamshedji Rd., Mahim, Bombay 400016

Rainbow Products, Ind. Assurance Bldg., Churchgate, Bombay 400020.

Rajpal Plastics Ind., 303, Neelkanth, 98, Marine Drive, Bombay 400002.

Simac Group (I) Pvt. Ltd., Plot No. B-72, Rd. No. 33, W.I. Estate, Thane 400604.

Sona Plastics Pvt. Ltd., 109, S. A. Brelvi Rd., Podar Chambers, Bombay 400001.

Standard Plastics Co., Udyog Mandir, Kurla Andheri Rd., Bombay 400072.

Supreme Inds., 17/18, Shah Ind. Estate, Veera Desai Mrg., Andheri West, Bombay 400058.

Trinity Plastics, 238, Nagdevi St., Bombay 400003.

Unique (India) Dies, 13, Sainath Indl. Estate No. 2, Goregaon East, Bombay 400063.

United Enterprises, 340/341, A to Z Ind. Estate, Fergusson Rd., Bombay 400013.

Universal Corpn., 7, Udyognagar, Gala No. 104, 1st Flr., S.V. Road, Goregaon West, Bombay 400062.

V. K. Engg. & Plastics Ind., Western India House, Sir P. Mehta Rd., Bombay 400001.

Vinal Ind., 23, Sidhpura Ind. Estate, S. Vivekanand Rd., Goregaon, Bombay 400062.

Orissa

Orissa Plastics, P. O. Balasore 756001.

Tamil Nadu

Bhupendra Plastic Ind., 20, Singara Garden Third Rd., Washermanpet, Madras 600021.

Govel Plastics Pvt. Ltd., 5/9, Veerabhadraier St., Nungambakkam, Madras 600034.

Indian Polythene Ind., 17, Ramanan Rd., Madras 600001.

National Products, 28, B. P. Mudali St., Mount Rd., Madras 600002.

Needle Ind. India Ltd., Ketti, Nilgiris 643215.

Pandiyan Plastic Inds., 33, West Avani Moola St., Madurai 625001.

Plasticraft Inds., 45, Velacherry Main Rd., Madras 600042.

Sree Ambika Inds., 49/A, Mettupalayam Rd., Coimbatore 641030.

U.M.S. Radio Factory, Avanashi Rd., Coimbatore 641018.

Uttar Pradesh

Bihani Ind., 30-B, Indl. Colony, Naini, Allahabad 211008.

West Bengal

Hind Plastic Works Pvt. Ltd., 16, Pageyputty St., Calcutta 700001.

Mahabir Plastic Ind., 6, Canal Rd., New Alipore, Calcutta 700033.

Pioneer Plastic Works Pvt. Ltd., 9, Ezra St., Calcutta 700001.

Plastic Mouldings & Allied Ind., 135, Park St., Calcutta 700017.

Pradip Plastic Moulders, 12-B, Rabindra Sarani, North Block, Calcutta 700001.

Spritz Automation (India) Pvt. Ltd., 140, A. Mukherjee Rd., Calcutta 700025.

Synthetic Moulders Ltd., 43, N. Subhas Rd., Calcutta 700001.

Universal Moulders, 4, Canal Rd., New Alipore, Calcutta 700053.

Western Plastics Co., 9, Gurusaday Rd., Calcutta 700019.

PLASTIC LAMINATION

Andhra Pradesh

Bakelite Hylam Ltd., Sanatnagar, Hyderabad 500018.

Gujarat

Duck Lemiplast, C/B, Plot No. 463, G.I.D.C. Makarpura Ind. Est., Vadodara 390009.

Melamine & Fibre Boards Ltd., Dr. Ambedkar Rd., Kalol 382721.

Wood Polymer Ltd., Mahatma Gandhi Rd., Bilimora 396321.

Madhya Pradesh

Lamina Ind. Pvt. Ltd., 21, Ind. Estate, Polo Ground, Indore 452001.

Maharashtra

ABC Synthetics Pvt. Ltd., 324, Arun Chambers, Tardeo Rd., Bombay 400034.

Caprihans (I.) Pvt. Ltd., Block 'D', Shivsagar Estate, Dr. A. Besant Rd., Bombay 400018.

Formica India Ltd., P.B. 64, Pune 411001.

Industrial Fabrics Pvt. Ltd., 95, A. Rehman St., Bombay 400003.

International Packaging, 250-B, Worli Rd., K. D. Compound, Bombay 400025.

Uttar Pradesh

Indian Coating & Laminating Corpn., 31, Factory Area, Kanpur 208012.

West Bengal

India Burlap & Laminating Works, 10, Clive Rd., Calcutta 700001.

Plastic Lamination Co., 8, Locke Gate Rd., Calcutta 700002.

PLASTIC LEATHER CLOTH

Delhi

Neo Poly Pack Pvt. Ltd., E-2, Greater Kailash, New Delhi 110048.

Karnataka

Varma Industrials Ltd., 5th Mile, Domlur Rd., Bangalore 560017.

Maharashtra

Asian Leather Cloth Manufg. Co., Manohar Indl. Est., Malad, Bombay 400064.

Bhor Inds. Ltd., 10, Bombay Samachar Marg, Bombay 400023.

Billion Plastics Pvt. Ltd., 101, Himalaya House, Palton Rd., Bombay 400001.

Caprihans (India) Pvt. Ltd., Block-D, Shivsagar Estate, Dr. A. Besant Rd., Worli, Bombay 400018.

Dharampur Leather Cloth Co. Pvt. Ltd., 10, Chowpatty Sea Face, Opp. Tilak Statue, Bombay 400007.

BRIMCO PLASTIC MACHINERY PRIVATE LIMITED

PLASTIC MACHINERY MFRS.

Brimco House, 55, Govt. Industrial Estate,
Kandivli (West), Bombay 400 067.
Phones : 695351/2. Grams : "BRIMSEAL", Bombay Kandivli.

Machinery and equipments for processing Plastics, Brimco Thermoplastic Extruders and Equipments for Extrusion of Tubular film (Layflat tubes), Rods, Strips, Sections, Cane, Monofilament and Covering Wires and Cables, etc. from Polyethylene, Polystyrene, PVC, Cellulose Acetate, High Density Polyethylene, Polypropylene, etc.

Also Granulators, Palletizing, Colouring, Reprocessing Equipments and Automatic Bag Making Machines, Blow Moulding Machines, Lamination Plant and Plant for manufacturing Oriented PP HDPE lace, box strapping, etc.

Besides new additions for producing Polypropylene filaments, Polypropylene blown films, production of wide width film 6 metres layflat width from ldpe, co-extruded ldpe film for milk pouches etc. Also HM HDPE tubular film.

●

Branches at :

1. 29, Errabalu Chetty Street, Madras 600 001. Phone: 23889.
2. Room No. 14, National Chambers, Ashram Road, Ahmedabad 380 009. Phone : 77377.
3. 5-9-7/3-6, Saifabad, Opp. Kamat Hotel, Hyderabad 500 004.
4. Mr. L. B. Michael, C/o Khandelwal & Co., 23A, Netaji Subhas Road, Calcutta 700 001. Phone : 229705.
5. 212A, Ansal Bhavan, 16, Curzon Road, New Delhi 110 001. Phone : 386283.
6. Rajsheema, 269/1, XXXVI T. D. Road, Ernakulam, Cochin 682 011.

Ellora Ind., 15, Tulsi Niwas, D Rd., Churchgate, Bombay 400020

Elphinstone Spg. & Wvg. Mills Co. Ltd., Kamani Chambers, Bombay 400038.

Jasmine Mills Pvt. Ltd., Dharavi, Bombay 400017.

Jyoti Leather Cloth Inds. Pvt. Ltd., Udyognagar, S. Vivekanand Rd., Goregaon West, Bombay 400062.

Mamaji Ind. Corpn., Atlas Mills Compd., Reay Rd., Bombay 400010.

National Leather Cloth Manufg. Co., Akuli Rd., Kandivli (E), Bombay 400067.

Polytex Ind., 5, Kurla Ind. Estate, L. B. S. Mrg., Ghatkopar, Bombay 400086.

Radhakrishna Ramnarain Pvt., Ltd., State Bank Bldg., Bank St., Bombay 400023.

West Bengal

East India Rubber Works Pvt. Ltd., 161, Chittaranjan Ave., Calcutta 700007.

PLASTIC MACHINERY

Alfred Herbert India Ltd., 13/3, Strand Rd., Calcutta 700001.

Boolani Engg. Corpn., Prabhadevi Ind. Estate, 402, V. Savarkar Marg, Bombay 400025.

Brimco Plastic Machinery Pvt. Ltd., 55, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Engel India Machines & Tools Ltd., 1, Taratala Rd., Calcutta 700053.

Gee Kay Plastics Pvt. Ltd., 21/1, Mahalaxmi Indl. Est., Gandhi Nagar, Lower Parel (W), Bombay 400013.

Goyal Electronics Ind., 319, Prasad Chambers, Opera House, Bombay 400004.

Hindustan Machine Tools Ltd., 36, Cunningham Rd., Bangalore 560052.

PLASTIC MACHINERIES

- HYDRAULIC INJECTION MOULDING MACHINES.
- HYDRAULIC BLOW MOULDING MACHINES.
- PLASTIC SCRAP GRANULATORS RANGE FROM 0.75 TO 30 H.P.
- DRY COLOUR MIXING MACHINES.

Pioneer Mfg. Corporation

41, Veena Dalvai Ind. Estate,
S. V. Road, Bombay 400 060.

Grams : "GRANULATOR"
Phone : 563452

Indian Hydraulic Ind., 70, Shivaji Marg, New Delhi 110015.

Jashvant C. Shah & Co., Bharati Nivas, Besant Rd., Santacruz West, Bombay 400054.

Juneja Engineering Works, A-36, M.I.D.C. Ind. Area, St. No. 2, Andheri (East), Bombay 400093.

Kolsite Ind., 31, Shah Ind. Estate, Bombay 400058.

Monga Electronics Pvt. Ltd., Arun Bazar, S. V. Rd., Malad West, Bombay 400064.

Novel Engrs. Pvt. Ltd., Sambava Chambers, Sir P. Mehta Rd., Bombay 400001.

Pioneer Engg. Co., 57, Bombay Samachar Mrg., Bombay 400023.

Pioneer Mfg. Corpn., 41, Veena Dalvai Ind. Estate, S.V. Rd. Bombay 400060.

Polycoat Inds., 316, Linghi Chetty St., Madras 600001.

Proclex Machinery Co., 16, 4th Main Rd., Gandhinagar, Adyar, Madras 600020.

R. H. Windsor (India) Ltd., E-6, Wagle Ind. Estate, Thane 400604.

Sandhu Mechanical Engg. Works, 32, Indl. Area 'A', Ludhiana 141003.

Shiv Ganga Inds., 16, Najafgarh Rd., New Delhi 110015.

S.L.M. Maneklal Ind. Ltd., Reid Rd., Ahmedabad 380002.

Solar Machines Pvt. Ltd., 22-D, S.A. Brelvi Road, Bombay 400001.

Spritz Automation (India) Pvt. Ltd., 140, A. T. Mukherjee Road, Calcutta 700025.

Suji Plastic Moulds & Die Works, Shantinagar Co-op. Indl. Est., Vakola, Santa Cruz, Bombay 400055.

Universal Mechanical Works Pvt. Ltd., Off Fergusson Rd., Opp. B.D.D. Chawl No. 112, Bombay 400013.

PLASTIC MOULDS

Gujarat

Bakubhai Ambalal Pvt. Ltd., Bank of India Bldg., Bhadra, Ahmedabad 380001.

Hinet Brothers, Ind. Estate Corner, Bapunagar, Ahmedabad 380021.

Maharashtra

Accurate Moulds & Dies, United Industrial House, Shanti Nagar, Vakola, Bombay 400055.

Boolani Engg. Corpn., Prabhadevi Ind. Estate, 402, V. Savarkar Road, Bombay 400025.

Kalimata Plastic Ind., 205, Wadala Udyog Bhuvan, Naigaum Cross Road, Wadala, Bombay 400031.

Kolshite Ind., Meher Tiles Comp., 31, Shah Ind. Estate, Bombay 400058.

L.W. Plastic Moulders, 506, Sir Vithaldas Chambers, 15, Bombay Samachar Mrg., Bombay 400023.

Niranjan Plastics, 19/7, Botawala Bldg., S.D.T. Road, Bombay 400016.

Plastic Engg. Corpn., 14-A, Sainath Ind. Estate No. 2, Off Aarey Road, Goregaon E., Bombay 400063.

R. H. Windsor (Ind.) Ltd., E6, Wagle Ind. Estate, Thane 400604.

Sheth & Sheth Ind., Janmabhoomi Chambers, Fort Street, Bombay 400001.

Solar Machines Pvt. Ltd., 22-D, S. A. Brelvi Road, Bombay 400001.

West Bengal

Engle India Machines & Tools Ltd., 1, Taratala Road, Calcutta 700053.

PLASTIC PRESENTATION NOVELTIES

Delhi

Chanson Plastic Manufg. Co., I/104, Panch Sheel Enclave, New Delhi 110017.

Gujarat

Top-O-Plast, 292, G.I.D.C. Estate, Makarpura, Vadodara 390005.

Karnataka

Paxal Corpn., No. 13, Sri Krishnarajendra Road, Fort, Bangalore 560002.

Tip-top Plastic Ind., 124, Kilari Road, Balepet, Bangalore 560053.

Maharashtra

Bharat Pen & Plastic Ind., Jagruti Indl. Estate, Moghal Lane 1, Bombay 400016.

Bright Brothers Ltd., 156-A, J. Dadajee Road, Bombay 400034.

Hemu Plastics, Unit No. 31, Sona Udyog Estate, Parsi Panchayat Rd., Andheri East, Bombay 400069.

Hiroo Mfg. Co., 93, Bhajipala Lane, Bombay 400003.

S. L. Trading Co., 236A, Maulana Azad Rd., Bombay 400008.

West Bengal

Industrial Trading Agency, 27-B, Chittaranjan Avenue, Calcutta 700013.

Orissa Plastics, 40, Strand Road, Calcutta 700001.

PLASTIC RAW MATERIAL SUPPLIERS

(Moulding Powder, Sheets, Rods, Tube & Chemicals)

Gujarat

Cibatul Limited, Atul 396020. Valsad Dist.

Suhrid Geigy Ltd., P.B. 48, Wadi Wadi, Vadodara 390005.

Synthetics & Polymer Ind., S-2, Bapunagar, Ind. Estate, Ahmedabad 380023.

Haryana

Acropolymers Pvt. Ltd., Khandsa Rd., Gurgaon 122001.

Crystic Resins India Pvt. Ltd., 54, Ind. Area, Faridabad 121001.

Karnataka

Mysore Polymers, Shed No. E/10, Ind. Estate, Ramanagaram 571511. Bangalore Dist.

Maharashtra

Allied Traders (Ind.), 169, Masjid Bunder Road, Bombay 400003.

Ambica Impex Agencies, Parvati Nivas, Daulat Nagar, Rd. No. 7, Borivli, Bombay 400092.

Amritlal & Co. Pvt. Ltd., Rang Udyan, Sitladevi Temple Road, Mahim, Bombay 400016.

Bakelite Hylam Ltd., Tiecicon House, 18, Dr. E. Moses Road, Bombay 400011.

Bayer (I.) Ltd., Express Towers, Nariman Point, Bombay 400021.

Chowgule & Co. Hind Pvt. Ltd., India House, Fort St., Bombay 400001.

Ciba of India Ltd., Royal Insurance Bldg., 14, J. Tata Road, Bombay 400020.

Dr. Beck & Co. (Ind.) Ltd., Bombay-Poona Road, Pimpri, Pune 411018.

Everbright Industries, 82, Bapu Khote St., Bombay 400003.

Fino Plast Sales Corpn., 21, Mani Mahal, Mathew Road, Bombay 400004.

General Pigment & Chemical Products Pvt. Ltd., Vihar Lake Road, Saki Naka, Bombay 400072.

H. S. Sobha Singh & Sons, 16/18, Manu Mansion, Old Customs House Yard, Bombay 400001.

Harshadray Pvt. Ltd., Jiji House, Raveline Street, Bombay 400001.

Herdillia Chemicals Ltd., Air India Bldg., Nariman Point, Bombay 400021.

Hoechst Dyes & Chemicals Ltd., Hoechst House, Backbay Reclamation, Bombay 400021.

India Carbon Ltd., Shivsagar Estate, Dr. A. Besant Road, Worli, Bombay 400018.

Indian Plastics & Chemicals Pvt. Ltd., 9, Wallace Street, Bombay 400001.

Indofil Chemicals Ltd., Nirlon House, Dr. A. Besant Road, Worli, Bombay 400025.

Mettur Beardsel Ltd., 15/16, Sir P. Mehta Road, Bombay 400001

Mitter & Co., Mapla Bldgs. 187-A, A. Rehman St., Bombay 400003.

Monsanto Chemicals of India Pvt. Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 400038.

National Organic Chemical Ind. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Plastichemicals Co., Mahalakshmi Chambers, B. Desai Road, Bombay 400026.

Plastipeel Chemicals Corpn., Kripalani Estate, Saki Vihar Road, Bombay 400072.

Polychem Ltd., 7, J. Tata Road, Churchgate Recl., Bombay 400020.

Polyolefins Ind. Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Sanghavi Brothers, Rahmat Bldg., 52, A. Rehman Street, Bombay 400003.

T. T. Krishnamachari & Co., Vulcan Insurance Bldg., 202-A, V. Nariman Road, Bombay 400020.

Union Carbide India Ltd., Ind. Products Division, 15, Mathew Road, Bombay 400004

Tamil Nadu

Shriram Fibres Ltd., Thiru Bldg., 3rd Flr., 160, Greames Rd., Madras 600006.

West Bengal

Allied Resins & Chemicals Ltd., 13, Camac Street, Calcutta 700017

East Anglia Plastics (India) Ltd., 3, Camac Street, Calcutta 700016

Plastic Powders Pvt. Ltd., 1, A. Mukherjee Road, Belgharia 700056. 24-Parganas.

Waldies Ltd., A-1, Gillander House, N. Subhas Road, Calcutta 700001.

PLASTIC SHEETS—METALLISED, ETC.

Chemicoat Ltd., Kalab Rd., P.O. Atladara, Vadodara 390003.

Jobshan Inds., 39, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Plastika Enterprise, 120, Bapu Khote St., Bombay 400003.

Vac Met Corpn., Pvt. Ltd., Damodar Udyog Kendra, Udhna Udyog Nagar, Udhna 394210.

PLASTIC SPECTACLE FRAMES

Madhya Pradesh

Vijay Plastics Pvt. Ltd., Ind. Area, Govindpura, Bhopal 462001.

Maharashtra

Montex Corpn., Yusuf Bldg., M. Gandhi Road, Bombay 400023.

PLASTIC TOOTH BRUSHES

Delhi

Sarosh Corpn. (Ind.), 23F, Nizamuddin West, New Delhi 110013

Maharashtra

Aryan Brush Co. Ltd., Lentin Chambers, Dalal Street, Bombay 400023.

Ashish Manufg. Co., A-47, Royal Optical Ind. Estate, Wadala, Bombay 400031.

Vita Pvt. Ltd., Laxmi Woollen Mills Estate, Haines Road, Mahalaxmi, Bombay 400011.

PLASTIC TRANSFER MOULDING

Bombay Burmah Trading Corpn. Ltd. (Electronics Divn.), Plot No.2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

PLASTIC VACUUM FORMING

Poona Complast Pvt. Ltd., Plot No. 72, D-III, M.I.D.C. Indl. Estate, Chinchwad, Pune 411019.

Vacuum Forming Co., 3-21, Prabhadevi Ind. Estate, 402, V. Savarkar Marg, Bombay 400025.

Visco Enterprise, 31, Shreenath Ind. Estate, Mahakali Caves Road, Andheri East, Bombay 400093.

PLASTICIZERS

Alta Laboratories Pvt. Ltd., Alta Bhavan, 532, Senapati Bapat Marg, Dadar, Bombay 400028.

Amines & Plasticizers Ltd., D Bldg., Shivsagar Estate, Dr. A. B. Road, Worli, Bombay 400018.

Indo-Nippon Chemical Co. Ltd., Maker Bhuvan, New Marine Lines, Bombay 400020.

PLAYING CARDS

Bright Mfg. Co., 14-A, Tank Bunder Rd., Bombay 400010.

Hindustan Playing Cards Mfg. Co., C.S.T. Road, Kalina, Bombay 400029.

Laxmi Playing Cards Mfg. Co., 23, Goa Street, Bombay 400001.

Metro Playing Cards Co., Metro Estate, Central Salsette Track Road, Kalina, Bombay 400029.

Parksons Printers, Ind. Est., Lalbaugh, Bombay 400012.

Popular Fine Art Litho Works Pvt. Ltd., 133-C, Vakola, Santa Cruz East, Bombay 400055.

PLYWOOD PRODUCTS

Abjeejay Agencies Pvt. Ltd., 61, Muktaram Babu Street, Calcutta 700007.

Andaman Timber Inds. Ltd., 8, Tolstoy Marg, New Delhi 110001.

Assam Forest Products Pvt. Ltd., Adex House, 6, Rampart Row, Bombay 400023.

Balaji Metal & Plywoods, Devraj Bldg., S. V. Road, Goregaon West, Bombay 400062.

Bharat Plywood & Timber Products Pvt. Ltd., Fort Road, Cannanore 670001. (Kerala).

Central Plywood Agency, 53, C. R. Ave., Calcutta 700012.

Dadar Plywood, Anandsagar, Opp. Nanavati Girls School, Vallabhbhai Rd., V. Parle West, Bombay 400056.

Free India Plywood Co., Cheruvannur, Feroke, Calicut 673631. (Kerala).

Godavari Plywoods Ltd., B-4/F1, Poonam Apartments, Chirag Ali Lane, Abid Road, Hyderabad 500001.

Hunsur Plywood Products Ltd., P.B. No. 2, Hunsur 571105. (Karnataka).

Indian Plywood Mfg. Co. Ltd., 9, Wallace St., Bombay 400001.

Indian Plywood Mfg. Co. Ltd., Dharwar 580007.

Indian Plywood Mfg. Co. Ltd., Akber House, 151, Broadway, Madras 600001.

Kachwalla Brothers, 122/24, A. Rehman St., Bombay 400003.

Kanara Wood & Plywood Inds., Jeppu, Mangalore 575002.

Maklai Timber & Plywood Co., 79, Ghogari Mohalla, Bombay 400003.

Malabar Plywood Works, Feroke, Calicut 673631. (Kerala).

Meghalaya Plywoods Ltd., Bara Bazar Road, Shillong 793002. *Branches:* 453, C.I.T. Scheme, Calcutta 700029; Pinto Villa, R.B.S.K. Bole Road, Dadar, Bombay 400028.

Mysore Chip Boards Ltd., 13-D, Gokulam Rd., V.V. Mohalla, Mysore 570002.

Mysore Plywood Corpn., 76, Ismail Curtey Road, Bombay 400003.

Mysore Plywoods Ltd., Post Box No. 2276, Yeshwantpur, Bangalore 560022.

Nagaland Forest Products Ltd., Tijit. Mon Dist. 798621. (Nagaland).

Noordin Ebrahim & Co., 119, Bazargate St., Bombay 400001.

ACRYLIC PLASTIC SHEETS
1 mm to 50 mm. Clear & Colour.

ACRYLIC RODS/TUBES TRANSPARENT
3 mm to 75 mm.
Available ex-stock.

CUTTING| FABRICATION
as per your design|drawings undertaken.

PLASTIKA ENTERPRISE
120, Bapu Khote Street (1st Floor), Jamali Mohalla, Bombay 400 003.
Phones :
Office : 339180 & 336456 *Resi. :* 663639 & 665331
Grams :
"ACRYPLAST" BOMBAY

Sales Depot : 55, Veena Dalwai Indl. Estate, Oshiwara, S. V. Road, Jogeshwari (W), Bombay 400 060.

ACRYLIC PLASTIC SHEETS
1 mm to 50 mm. Clear & Colour.

ACRYLIC RODS/TUBES Transparent
3 mm to 75 mm.
Available ex-stock.

CUTTING/FABRICATION
as per your Design/Drawings undertaken.

PLASTIKA ENTERPRISE

120, BAPU KHOTE STREET,
(1ST FLOOR),
JAMALI MOHALLA,
BOMBAY 400 003.

Phones: OFFICE: 339180 & 336456
RESI.: 663639 & 665331.

Grams: " ACRYPLAST ", BOMBAY.

■ *Sales Depot:*
55, VEENA DALWAI INDL. ESTATE,
OSHIWARA, S. V. ROAD,
JOGESHWARI (W),
BOMBAY 400 060.

Om Parkash Fateh Chand Pvt. Ltd., 7/7, D.B. Gupta Road, Paharganj, New Delhi 110055.

Orient Plywood & Veneering Inds. Ltd., 34-B, Jolly Maker Chambers II, Nariman Point, Bombay 400021.

Plywood Emporium, 61, C. R. Avenue, Calcutta 700012.

Polyformalin Pvt. Ltd., Lamina, Banerji Road, Cochin 620018.

Purushotham Goculdas Plywood Co., Purushotham Goculdas Bldg., Cannanore 670001. (Kerala).

Ram & Co., Pinto Villa, R.B.S.K. Bole Rd., Dadar West, Bombay 400028.

Saharia Krishi Prathisthan Ltd., Ador House, 6, Rampart Row, Bombay 400023.

Sarda Plywood Inds. Ltd., 9, Parsee Church St., Calcutta 700001.

South India Plywood Inds., Post Box No. 55, Kottayam 686001. (Kerala).

Southern India Plywood Co., Peramannur, Mangalore 574159.

Southern Veneers & Woodworks Ltd., Post Box No. 35, Tellicherry 670101. (Kerala).

Sundershan Plywood Inds., 62-B, August Kranti Marg, Bombay 400036

Sylvan Plywood Mills, Post Box No.1, Kallattumkara, Trichur 680683. (Kerala).

Synthetic Plywood Inds. Pvt. Ltd., B-4, Ind. Estate, Uppal, Hyderabad 500039.

Travancore Plywood Inds. Ltd., Punalur 691305. (Kerala State).

Varat Timber Assam Pvt. Ltd., Tinsukhia 786125. (Assam State).

Venus Plywood Co., P.O. Nemmara, Palghat 678508. (Kerala).

Western India Plywoods Ltd., Mill Road, P.O. Baliapatam, Cannanore 670010. (Kerala).

Woodcrafts Assam, Lal Dwara Bldg., New Link Rd., Jhandewalan, New Delhi 110055

CONSOLIDATED PNEUMATIC TOOL CO. (INDIA) LIMITED

301/302, L. B. Shastri Marg, Mulund,
Bombay 400 080.
Phones : 592274/75/76, 591327 & 594262.
Grams : "PNEUMATIC", Bombay. Telex : 011-3490.

Manufacturers of :

Air Compressors : Portable and Stationary, Diesel and Electric Driven Rotary Air Compressors. Reciprocating Air Compressors including Balanced-Opposed designs in lubricated and non-lubricated versions.

Pneumatic Tools : For Industry : Drills, Die Grinders, Steel-clad Grinders, Angle Grinders/Sanders, Impact Wrenches, Aero Riveters, Riveting Hammers, Rivet Cutters, Chipping Hammers, Rammers. For Mining & Construction, Hand Drills, Rock Drills, Feedleg, Demolition Tools, Sump & Sludge Pumps, Vibrators, Tampers.

Electric Tools : Hicycle Drills & Grinders/Sanders, Flame Proof Electric Coal Drill.

Branches :

Calcutta : 30, Jawaharlal Nehru Road, Calcutta 700 016,
Madras : 480 482, Mount Road, Nandanam, Madras 600 035.
New Delhi : 607 & 608, Eros Apartments, 6th Floor, 56, Nehru Place, New Delhi 110 024.
Jamshedpur : Flat No. N-2/K-5, Muneshwari Bhawan, Contractors' Area, Jamshedpur-1 (Bihar).
Goa : Bernardo Da Costa Road, Near Hospici, Margao 403 601, Goa.
Bangalore : 244-A, VII Block, Second Main Road, Java Nagar, Bangalore 560 011.
Pune : 'Gulmohar', 108/18, Exandwane Dhananjay Gadgil Marg, Pune 411 084.

PACKAGING

Manufacturers & Exporters of:

LD/HD POLYTHENE BAGS, ROLLS, HDPE WOVEN BAGS, FABRIC ROLLS, POLYPROPYLENE BAGS, ROLLS, etc.

(TREATED/PLAIN/NATURAL/ COLOURED)

PRINTED IN MULTICOLOURS

POLYTHENE INDUSTRIES

17/21, Essaji Street,
Off Samuel Street, Bombay 400 003.

Phones: Office : 343388, 341744.
Resi : 474146

Grams : "KISHOREBAG".
Bombay 400 003.

PNEUMATIC TOOLS & EQUIPMENT

Advance Automation & Process Control Pvt. Ltd., B-55, Mayapuri, Phase 1, New Delhi 110064.

Baker Horstmann Mercer (I) Ltd., Nagar Road, Pune 411014.

Consolidated Pneumatic Tool Co. (India) Ltd., 301/302, L.B. Shastri Marg, Mulund, Bombay 400080.

Edicon Mining Equipment, Guru Gobind Singh Ind. Estate, Unit 12, Off W. Express Highway, Goregaon (E), Bombay 400063.

Electropneumatics, Plot 11/72, Cross Rd., 'C', MIDC, Marol Indl. Estate, M. Caves Rd., Bombay 400093.

Hardware & Pneumatics, 30, Strand Rd., Calcutta 700001.

Holman & Climax Mfg. Co., Dolphin Court, 7A, Middleton St., Calcutta 700071.

Industrial & Mining Tools Co., P36, India Exch. Place, Calcutta 700001.

Nucon Industries Pvt. Ltd., 5-2-175/1, Rashtrapati Rd., Secunderabad 500003.

Time Furnace Foundry Equipment Services, R/13, Jagdish Mkt., Abids, Hyderabad 500001.

Tomco Chemicals (Engg. Dn.), 105, Byculla Service Inds., Sussex Rd. X Lane, Bombay 400027.

Wintrol, 98/10A, Peenya Indl. Area, Bangalore 562140.

(Also see under 'Tools — Pneumatic' in this list.)

POLISHING MACHINES

Adair Dutt & Co. India Pvt. Ltd., 5, Dalhousie Sq. East, Calcutta 700001.

Nistarini Electric Co. Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

POLYESTER YARN

(See under Nylon & Polyester Filament Yarn in this list.)

POLYSTYRENE, POLYPROPYLENE & POLYFIBRES

Clarity Enterprise, Gantiwala Compd., Ashwanikumar Rd., Surat 395008. (Gujarat).

Cosmo Films Ltd., J-4, MIDC Indl. Area, CIDDCO Colony, Chikalthana, Aurangabad 431003. (Maharashtra).

Harihar Polyfibres, Post Box 22, Harihar 577601 (Karnataka).

Hindustan Polymers Ltd., 264, A. Besant Road, Bombay 400025.

Mettur Beardsell Ltd., Dhannur, Sir P. M. Rd., Bombay 400001.

Neomar Ltd., Alembic Road, Vadodara 390003.

Stretch Fibres India Ltd., 20, Dr. E. Moses Road, Mahalaxmi, Bombay 400011.

Well-Packed Packaging Pvt. Ltd., 105/107, Abdul Rehman St., Bombay 400003.

POLYTHENE BAGS

Andhra Pradesh

Andhra Polythelane Ind., 5-5-689/2, Goshamahal, Hyderabad 500012.

Sanathnagar Polythene Ind., 15/6/490, Kamalkhan Devdi, Begum Bazar, Hyderabad 500012.

Delhi

Chanson Plastic Manufg. Co., I-104, Panchsheel Enclave, New Delhi 110017.

Hindustan Plastic Corpn., C-239, Mayapuri Indl. Area, Phase II, New Delhi 110027.

New Poly Pack Pvt. Ltd., C-9, Friends Colony, New Delhi 110014.

Rexco Industries (I.) Ltd., Expo Plastics, G-35, Gulabi Bagh, Delhi 110007.

Gujarat

Elite Plastic Co., 12A, Bharatkhand Cotton Mills Compound, Naroda Road, Ahmedabad 380001.

Hindustan Polythene & Plastic Works, Ind. Area, Yamuna Mill Rd., Vadodara 390004.

Parag Plastic Industries Pvt. Ltd., 80, Makarpura Ind. Estate, P.B. No. 199, Vadodara 390001.

Karnataka

Paxal Corpn., No. 13, Sri Krishnarajendra Road, Fort, Bangalore 560002.

Tiptop Plastic Industries, 124, Kilari Rd., Balepet, Bangalore 560002.

Maharashtra

Deekay International, 206, A to Z Indl. Estate, G. Kadam Mrg., Lower Parel, Bombay 400013.

Gaju Concern Plastic Inds., 258/9, Raviwarpeth, Solapur 413002.

Glosso Pack Industries, Laxmi Woollen Mills Compound, Haines Rd., Bombay 400011.

J. K. Plastic Works, 72, Nakhoda St., Bombay 400003.

J. M. Trading Co., 145, Samuel St., Bombay 400009.

Kalpana Plastic Ind., 20/2, Hadapsar Ind. Estate, Pune 411013.

Maharashtra Plastic Industries, Subhas Nagar, Off Caves Road, Jogeshwari East, Bombay 400060.

Mangaldas Velji & Co., 135/139, Kazi Syed St., Bombay 400003.

Narichania Consultancy & Agency Pvt. Ltd., P. B. No. 207-A, 22, Sir P.M. Road, Bombay 400001.

Oyatape Fibres Pvt. Ltd., Sunderbaug Estate, Bharat Silk Mills Compound, LBS Marg, Bombay 400070.

Pearl Thread Mills Ltd., Laxmi Bldg., 6, Shoorji Vallabhdas Marg, Bombay 400038.

Polyfab Plastic Ind., 121/127, Kazi Syed Street, Bombay 400003.

Polythene Inds., 17/21, Essaji St., Bombay 400003.

Polythene Printing & Sealing Works, 340, Girgaum Road, Bombay 400002.

Polyweave, 25/32, Kala Bhavan, 3, Mathew Rd., Bombay 400004.

Premco Plastics, D-14, Nandanvan Indl. Estate, Bombay Agra Rd., Thane 400604.

Ravi Corpn., Bussa Indl. Estate, Century Bazar Lane, Bombay 400025.

S.L. Trading Co., 236A, Maulana Azad Road, Bombay 400008.

Shree Mahalaxmi Trading Corpn., 198, Kalbadevi Road, Bombay 400002.

Vora Bros., 115, S. Devji Street, Bombay 400003.

Tamil Nadu

Crystal Packs Pvt. Ltd., Sri Devikuppam Rd., Valasaravakkam, Madras 600087.

New Paramount Industries, 28, Buddi Sahib St., Madras 600001.

Oriental Plastics, 4, Singanna Naicken St., Madras 600001.

Polyene General Ind. Pvt. Ltd., 11A, Ind. Estate, Guindy, Madras 600032.

West Bengal

Bengal Polythene Bag Co., 55, Canning Street (Mehta Bldg.), Block E, Calcutta 700001.

General Extruders, 128, Hazra Rd., Calcutta 700026.

Indar Plastic Works, 56/1, Canning St., Calcutta 700001.

Lite Engg. Industries, 19, Pollock St., Calcutta 700001.

Orissa Plastics, 40, Strand Rd., Calcutta 700001.

Plasto Craft Industries, 4, Synagogue St., Calcutta 700001.

Polymers India Pvt. Ltd., 10, Mall Rd., Dum Dum, Calcutta 700028.

Shree Uma Textile & Ind., 196, J. Bajaj St., Calcutta 700007.

FLEXO PRINTED
POLYTHENE BAGS
- SHOPPING BAGS &
- TUBINGS UP TO 4 COLOURS

REASONABLE RATE
PROMPT DILIVERY

MFRS
SHREE MAHALAXMI TRADING CORPN.
OFFICE:
198, KALBADEVI ROAD,
3RD. FLOOR, BOMBAY-400 002
FACTORY:
310-B, MANDPESHWAR IND. EST.
BORIVALI (W) BOMBAY-400 092
PHONE 314341 ● 662617

POLYTHENE CONTAINERS

Glosso Pack Industries, Laxmi Woollen Mills Compd., B. Jagtap Mrg., Bombay 400011.

Gujarat Polythene Ind., 86, Sutar Chawl, Ghia Mansion, Bombay 400002.

Newlite Plastic Inds., 211, Nagdevi St., Bombay 400003.

Sinter Plast Containers, Plastics Divn., Bharat Vijaya Mills Ltd., Kalol 382721 (Gujarat).

POLYTHENE FILM

Andhra Pradesh

Sanathnagar Polythene Ind., 15-6-490, Kamalkhan Devdi, Begum Bazar, Hyderabad 500012.

Techno Pack Pvt. Ltd., Manchukonda Gardens, Visakhapatnam 530007.

Delhi

Rexco Ind., Expo Plastics, G-35, Gulabi Bagh, Delhi 110007.

Shivalik Agro-Poly Products Ltd., 16, Nizamuddin East, New Delhi 110013.

Gujarat

D. R. Industries, Swaminarayan Godown, Outside Dariapur Gate, Ahmedabad 380001.

Himachal Pradesh

Shivalik Agro-Poly Products Ltd., Plot 1, Sector 111, Indl. Area, Parwanoo 173220. (Solan Dist.)

Karnataka

Metro Polythene Manufrs., 35/5, Kalikadevi Rd., Davangere City 577001.

Mysore Plastic Industries, Mahaveer Rd., Bijapur 586101.

Maharashtra

Glosso Pack Ind., Laxmi Woollen Mills Comp., B. Jagtap Marg, Bombay 400011.

Marvel Ind. Corpn., Block No. 118, Kakad Ind. Estate, Mahim, Bombay 400016.

Modern Packagings, 201, Kalbadevi Rd., Bombay 400002.

National Plastic Enterprises, 105, Rewa Chambers, New Marine Lines, Bombay 400020.

Pearl Plastics, Laxmi Bldg., Ballard Rd., Bombay 400038.

Plastic Processors, Interlink Ind. Estate, Jogeshwari East, Bombay 400060.

Polymer Corpn., Kansara Chawl, Kalbadevi Rd., Bombay 400002.

Pratibha Plastic Ind., 18/A-2, Bombay Poona Rd., Pune 411003.

Shree Plastics, Happy-Colony, Kothrud, Pune 411029.

Supreme Inds. Ltd., 17/18, Shah Indl. Estate, V. Desai Rd., Andheri East, Bombay 400058.

United Plastics Corpn., 162, Tulsi Pipe Rd., Lower Parel, Bombay 400013.

Veejay's Trading Corpn., 49/51, Lohar Chawl, Bombay 400002.

Tamil Nadu

Oriental Plastics, 12, Singanna Naicken St., Madras 600001.

West Bengal

Alkali & Chemical Corpn. of India Ltd., 18, Strand Rd., Calcutta 700001.

Extrusions, P-38, India Exchange Place, Calcutta 700001.

General Extruders, 128, Hazara Rd., Calcutta 700026.

Orissa Plastics, 40, Strand Rd., Calcutta 700001.

Plasto Craft Ind., 4, Synagogue St., Calcutta 700001.

Polymers (India) Pvt. Ltd., 10, Mall Rd., Dum Dum, Calcutta 700028.

Shree Uma Textile & Ind., 196, J. Bajaj St., Calcutta 700007.

POLYTHENE PRODUCTS

Aasha Plastics, Shakti Mills Lane, Bombay 400011.

Basant Plasto Chemicals Pvt. Ltd., 201, Ansal Bhawan, K. Gandhi Mrg., New Delhi 110001.

Bisoplast & Polymers Pvt. Ltd., 3575, N. Subhas Mrg., Daryaganj, New Delhi 110002.

Gautam Plastic & Inds., 328, Tifra Indl. Area, Bilaspur 495001. (M.P.)

Gita & Co., 205, Masjid Bunder Rd., Bombay 400003.

Jessore Comb Industry Co., 117, Baitha Khana Rd., Calcutta 700009.

Narichania Consultancy and Agency Pvt. Ltd., P. B. No. 207-A, 22, Sir P. M. Rd., Bombay 400001.

Novel Engrs. Pvt. Ltd., Sambava Chambers, 4th Flr., Sir P.M. Road., Bombay 400001.

Orissa Plastics, 40, Strand Rd., Calcutta 700001.

Polyolefins Industries Ltd., Mafatlal Centre, Nariman Rd., Bombay 400021.

Shish Hari Enterprises, B-7, Anandi Indl. Estate, Bhayandar (East). Thane Dist.

Shree Mahalaxmi Trading Corpn., 198, Kalbadevi Rd., Bombay 400002.

Synthetic Fibres (Mysore) Pvt. Ltd., 14/1, J. C. Rd., Bangalore 560002.

PORCELAIN

(See 'Crockeries' in this list).

PORCELAIN & REFRACTORY MATERIALS

Perfect Pottery Co. (M.B.) Ltd., Ratlam 457001.

(Also see 'Refractory Makers' in this list).

POTATO WAFER MAKING MACHINES

Hindustan Engg. Co., Aban House, 25, Ropewalk St., Off Rampart Row, Bombay 400023.

National Small Ind. Corpn. Ltd., Prestige Chambers, Kalyan St., Bombay 400009.

P.V.C. CABLES & FLEXIBLES

Andhra Pradesh

Radiant Engg. Co., Sanatnagar, Hyderabad 500018.

Ranka Cables Pvt. Ltd., Ind. Estate, Cuddapah 516001.

Delhi

Delton Cable Inds. Pvt. Ltd., Delton House, 24, Daryaganj, New Delhi 110002.

Moti Electrical Ind. Pvt. Ltd., 15-A, Najafgarh Rd., New Delhi 110015.

Premier Cable Co. Ltd., 14/15F, Conn. Place, New Delhi 110001.

Victor Cables Ltd., 410, New Delhi House, 27, Barakhamba Rd., New Delhi 110001.

Goa

Goa Cables, Post Box 187, Panaji 403001.

Gujarat

Cema Ltd., Opp. 'D' Cabin, Chhani Rd., Vadodara 390002.

Raj Plastic Cables, L162 & 163, GIDC Indl. Estate, Odhav, Ahmedabad 382415.

Special Cable Inds., A-1/404, GIDC Indl. Estate, Ankleshwar 393001. (Gujarat).

Slydex Ind., B-3, B-4, Real Estate Co., Near Nagerwal Hanuman, Rakhial Rd., Ahmedabad 380023.

Kerala

Premier Cable & Co. Ltd., Karukutty 683576. Ernakulam Dist.

Maharashtra

Bharat Inds., 215, Champaklal Ind. Estate, Sion East, Bombay 400022.

VOKAB ®
PVC WIRES & ELECTRONIC CABLES
HOOK-UP WIRES, FLEXIBLE WIRES,
COAXIAL CABLES 50 OHMS/75 OHMS,
SHIELDED & MICROPHONE CABLES
TELECOMMUNICATION CABLES
(TELEPHONE PAIRS)
ANY TYPE OF CABLE AS PER
YOUR SPECIFICATIONS
MANUFACTURED BY
bharat
industries
215, Champaklal Udyog Bhavan, Sion (East),
Bombay-400 022 • Phone: 48 51 91.

Accredited Dealer: M/s. BAJAJ BROTHERS
Dealers in Electronics, Ganesh Bhawan, Tara Temple
Lane, Bombay 400 007. Phone: 383086.

Billion Plastic Pvt. Ltd., 101, Himalaya House, Palton Road, Bombay 400001.

Cable Corpn. of India Ltd., Laxmi Bldg., 6, Ballard Rd., Ballard Estate, Bombay 400038.

Fincab Corpn.. 104, Mani Mahal. Mathew Rd., Bombay 400004.

International Cable Corpn., 32, Vithaldas Rd., Lohar Chawl, Bombay 400002.

Kaysons Cable Industries, Kaysons House, Hind Saurashtra Indl. Estate, Marol, Andheri Kurla Rd., Bombay 400059.

Metaplast Inds., C-6/6A, 13, Ghatkopar Indl. Estate, Bombay 400086.

Plastic Extrusion Products, 16/17, Marol Ind. Area, M. I. D. C., Bombay 400059.

Ravin Trading Co., 5, Mohatta Mkt., Palton Rd., Bombay 400001.

Thakur Inds., Plot No. 53/4, 7th St., MIDC., Marol Indl. Area, Andheri East, Bombay 400093.

Thermo Plastic Inds., 78, Kalachowki Rd., Bombay 400033.

Trinity Electric Syndicate, 154, S. Gandhi Mrg., Bombay 400002.

Udey Pyrocables Ltd., 167, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

Punjab

Alcon Wires & Cables Inds., 27-A, Focal Point, Rajpura 140401.

Tamil Nadu

Inca Cables Pvt. Ltd., Tambaram Velacherry Road, 149, Sembakkam, Madras 600044.

Krupanandha Polymers, 145, East Masi St., Madurai 625001.

Wavin India Ltd., 63-66, Ambattur Indl. Est., Madsas 600058.

West Bengal

Bells Electrical Corpn., 10A, Harrington St., Calcutta 700016.

Fort Gloster Inds. Ltd., 31, **Chowringhee Road, Calcutta 700016.**

Novoflex Cable Inds., 3B, Camac St., Calcutta 700016.

Power Insulated Cable Inds., 28/2, Shakespeare Sarani, Calcutta 700017.

P.V.C. AND FIBREGLASS FABRICATION

Poly Plast, Thakore Est., Khalai Village, Vidya Vihar (West), Bombay 400086.

P.V.C. LAMINATED SHEETS, FILMS, TUBINGS, ETC.

Caprihans (India) Ltd., Block D, Shivsagar Estate, Dr. A. Besant Road, Bombay 400018.

Indo-Kobe-Polymers, A-24, Nand Bhuvan Ind. Estate, Mahakali Caves Rd., Andheri East, Bombay 400093.

Orlum Laminates, 165/1, M.T.H. Rd., Madras 600049.

Shiv Laminating & Coating Pvt. Ltd., E-33/35, Chikalthana Ind. Area, Aurangabad 431001.

Sri Lakshmi Polymers, C-4 Unit, Ind. Estate, Thanjavur 613006. (Tamil Nadu).

P.V.C. LEATHER CLOTH

Bhor Industries Ltd., 392, Veer Savarkar Marg, Bombay 400025.

Dharampur Leather Cloth Co. Ltd., 10, Chowpatty Sea Face, Bombay 400007.

Varma Industries Ltd., Domlur Road, Vimanpura, Bangalore 560017.

P.V.C. PIPES & CONDUITS

Amar-Deo Plastic Inds., 7-9, Satguru Nanak Indl. Estate, W. Express Highway, Goregaon East, Bombay 400063.

Arun Plast, Sivakasi 626123. (Tamil Nadu).

Arvind Polymers Pvt. Ltd., 37/1-C, Mount Road, Guindy, Madras 600032.

Asmaco Plastipipe Pvt. Ltd., 15-17, Shamshet St., Bombay 400002.

Avon Inds., 2/3, Shantappa Lane, Bangalore 560002.

Bajaj Plastics Ltd., Imambada Rd., Nagpur 440018.

Calico Chemicals, Plastics & Fibres Divn., Anik-Chembur, Bombay 400074.

Climax Pipes Pvt. Ltd., 18B, Brabourne Road, Calcutta 700001.

Consumers Plastics Pvt. Ltd., 912/913, Tulsiani Chambers, Nariman Point, Bombay 400021.

Finolex Plastic Pvt. Ltd., 26/3, Bombay Poona Rd., Pimpri, Pune 411018.

Garware Plastics & Polyester Pvt. Ltd., 50-A, Central Salsette Road, W. Express Highway, Vile Parle East, Bombay 400057.

Jain Pipe Mfg. Co., Post Box 20, Jalgaon 425001. (Maharashtra)

Jyoti Plastic Works, 94, B.T. Compound, Malad West, Bombay 400064.

Kurpanandha Polymers, 145, East Masi St., Madurai 625001. (Tamil Nadu).

Pinakin Plastic Products, Kalali Rd., P.O. Atladra, Vadodara 390012.

Pipe Products of India, 15, Bannerghatta Rd., Bangalore 560030.

Prakash Pipes & Inds. Ltd., 201, Padma Tower, Rajendra Place, New Delhi 110008

Ramesh Plastic Product, 83, Govt. Indl. Estate, Kandivli, Bombay 400067.

Synmates India, 85, Chandralok, S.D. Road, Secunderabad 500003.

Uiplast Pvt. Ltd., 4/1, Mariswamappa Lane, S.J. Park Rd. Cross, Bangalore 560002.

Victory Plastics Pvt. Ltd., 912/913, Tulsiani Chambers, Nariman Point, Bombay 400021

P.V.C. PLASTIC ARTICLES

Bachubhai N. Shah, 170, Abdul Rehman Street, Bombay 400003.

Dilip Trading Co., 5, Shamsheth Street, Chippi Chawl, Bombay 400002.

Popular Stores, 155, Janjikar Street, Bombay 400003.

Premier Plastics, 303, Abdul Rehman St., Bombay 400004.

P.V.C. RESINS & COMPOSITIONS

Andhra Pradesh

Continental Chemicals, Block D-7, Indl. Estate, Nellore 524004.

Crystal Polymers & Additives Pvt. Ltd., 417/3RT, S.R. Nagar, Hyderabad 500038.

Delhi

Shriram Chemical Ind., Kanchanjunga, Barakhamba Road, New Delhi 110001.

Karnataka

International Polymers, 80, 18th Cross. Wilson Gardens, Bangalore 560027.

International Traders, 18, Lalbagh Rd., Bangalore 500027.

Maharashtra

Ahmedabad Manufg. & Calico Printing Co., Ltd., Calico Mills, Chemical Division, Anik-Chembur, Bombay 400074.

Plastic Resins & Chemicals Ltd., Bharat Insurance Bldg., 15-A, Horniman Circle, Bombay 400023.

Shree Bharat International, 512, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Tamil Nadu

Chemicals & Plastics India, Ltd., Dhun Bldg., 175/1, Mount Road, Madras 600002.

West Bengal

Polymer Engrs., P-193A, Ramakrishna Samadhi Rd., Calcutta 700054.

P.V.C. SHEETING FOR FILES

Asmaco, 15-17, Dhabliwala Bldg., Shamshet Street, Bombay 400002.

Leatherite Inds. Ltd., 64/3, Indl. Area IV, Sahibabad 201005. U.P.

Tejdeep Plastics, 116, Rewa Chambers, New Marine Lines, Bombay 400020.

PRESSURE COOKERS

Asian Industries, B/15A, Ghatkopar Indl. Estate, Bombay 400086.

Goodwill Light House, Safed Pool, Kurla-Andheri Rd., Bombay 400072.

India Metal Inds., 139/141, C.P. Tank Road, Bombay 400004.

Killick Nixon Ltd., 31, Murzban Rd., Bombay 400001.

Noble Electric Co., Kala Ind. Estate, LBS Marg, Bombay 400078.

Pressure Cookers & Appliances Ltd., United India Bldg., Sir P. Mehta Rd., Post Box 1542, Bombay 400001.

T.T. Pvt. Ltd., Dooravaninagar. Bangalore 560016.

Tempo Engg. Works, 215, Kamla Mkt., New Delhi 110002.

United Bros., 1397, Ballimaran, Delhi 110006.

Veejay's Trading Corporation, Ahmed Bldg., 49/51, K.M. Sharma Marg, Bombay 400002.

Victory Engg. & Indl. Works, Qutab Rd., Delhi 110006.

W. R. Talwarkar Bros. Pvt. Ltd., Sharif House, 74, S. Bhagat Singh Road, Bombay 400023.

Warm Stream, Anand Sojitra Road, Vithal Udyognagar 388121 (Gujarat).

PRESSURE VESSELS & GAUGES

ACC-Vickers-Babcock Ltd., Express Towers, 18th Flr., N. Point, Bombay 400021

Anup Engg. Ltd., Post Box No. 1164, Ahmedabad 380002.

Deccan Mechanical & Chemical Inds. Pvt. Ltd., 78, Bhosari Ind. Area, Pune 411026.

Decorative Metal Works. 86. Shuklaji St., Bombay 400008.

Do-Well Oil Plants Pvt. Ltd., 306, Manish Comml. Centre, Dr. A. Besant Rd., Bombay 400025.

Everest Engg. Works, Crosscut Rd., Coimbatore 641012.

Girija Engg. Inds., Patel Estate, Goregaon East, Bombay 400063.

India Tube Mills & Metal Inds. Pvt. Ltd., Dhiraj Chambers, 9, H. Somani Mrg., Bombay 400001.

Industrial Marketing Services, Jiji House, 1st Floor, Ravelin St., Bombay 400001.

J.S. Chemiequipment Pvt. Ltd., A/7, M.I.D.C., Meera Ind. Area, Meera 401104 (Thane Dist.).

K.C.P. Ltd., Tiruvottiyur, Madras 600019.

Kanara Engg. Co. Pvt. Ltd., Melville House, Mazgaon, Bombay 400010.

Kaveri Structurals, Senthannipuram Golden Rock, Tiruchirapalli 620004.

Keming Tools Co. Ltd., 165/1, Kolshet Rd., Thane 400607.

Lloyds Steel Inds., Lloyds House, 86/19, M. Vasanji Rd., Andheri East, Bombay 400059.

M.A. Engg. Corpn., L.3, Universal Compd., Andheri East, Bombay 400069.

Monometer (India) Pvt. Ltd., Manu Mansion, 16, S. Bhagatsingh Rd., Bombay 400023.

Nagam Serak Instruments, Majestic Colony, Arcot Rd., Madras 600087.

RCG Instruments, A1/25, Rambag, Pune 411030.

Standard Engineers, Sharda Sadan, 11, S.A. Brelvi Rd., Bombay 400001.

Testubes Mechanical Inds., Mathuradas Mills Compound., Lower Parel, Bombay 400013.

Textile Art Machinery, Unit 145, 1st Flr., Adarsh Indl. Estate, Sahar Rd., Chakala, Andheri East, Bombay 400093.

Unitop Engrs. Pvt. Ltd., Janardhan Cold Storage Compound, Chahani Rd., Vadodara 390002.

PRINTING INK

Bharat Varnish Manufg. Co., L. B. Shastri Marg, Ghatkopar, Bombay 400077.

Camlin Pvt. Ltd., Kondivitta, M. Vasanji Rd., Bombay 400059.

Coates of India Ltd., Off Dr. E. Moses Rd., Worli, Bombay 400018.

Diamond Printing Inks, 22, Lake View Road, Madras 600033.

Ganesh Printing Ink Factory Ltd., No. 2, Guindy Road, Madras 600020.

Ganesh Printing Inks, 260, Poonamalle High Road, Madras 600029.

Ganges Printing Ink Factory Ltd., Gillanders House, Block F/3, N. Subhas Rd., Calcutta 700001.

Ganges Printing Ink Factory (Bombay) Ltd., Bombay Agra Rd., Vikhroli, Bombay 400083.

Girisen Printing Ink Factory, P. Box No. 129, Sivakasi 626123. (Tamil Nadu).

Globe Printing Co. Pvt. Ltd., Porur, Madras 600016.

Hooghly Ink Co. Bombay Ltd., 7, Kumpta St., Bombay 400001.

J.B.A. Printing Inks Pvt. Ltd., A-42, Rewari Line Ind. Area, Mayapuri, New Delhi 110027.

Lavanya Printings Inks, 64, Mallan Ponnappa Mudali St., Triplicane, Madras 600005.

Monark Printing Ink Pvt. Ltd., 202, Poonnamalle High Rd., Madras 600029.

National Printing Ink Co., G-3, Ambattur Ind. Estate, Madras 600058.

Paintal Organics Pvt. Ltd., 192, G.I.D.C.,Vapi 396195 (Gujarat).

Popular Printing Ink Co., 6, Priyanath Mukharji Road, Calcutta 700002.

Rainbow Ink & Varnish Mfg. Co. Pvt. Ltd., 133-C, Vakola Pipe Line, Bombay 400055.

Triveni Printing Inks Ltd., 13, Camac St., Calcutta 700017.

United Ink & Varnish Co. Pvt. Ltd., 37, Paranjape B. Scheme, Bombay 400057.

V.G. Colour Inds., Survodaya Mills Compd., Tardeo, Bombay 400034.

Wilson & Company Pvt. Ltd., Printing Ink Factory, Tondiarpet, Madras 600021.

PRINTING PRESS MACHINERY

Acme Machinery Co., 233-A, Zaveri Bazar, Bombay 400002.

Acmeprint Engg. Co., 81-A, Dhanji St., Bombay 400003.

Big Ben Engg. Works, 4 Sadi Bazar, 171, M. Azad Rd., Madanpura, Bombay 400008.

Brooke Bond India Ltd., Development & Machine Bldg. Factory, 3, Hide Rd., Calcutta 700034.

Darbar Engrs., 22, East Mohannagar, Amritsar 143001.

Deluxe Printing Machine Co., 'Shital Sadan', 75/81, Bazargate St., Bombay 400001.

Gunvantray & Co., Haranwali Pole, Khadia Char Rasta, Ahmedabad 380001.

Handa Rotary Machines Ltd., 32, A to Z Indl. Estate, Bombay 400013.

Indo-Europa Trading Co. Pvt. Ltd., Bhupen Chambers, 9, Dalal Street, Bombay 400023.

Indo European Machinery Co. Pvt. Ltd., Sambhava Chambers, Sir P.M. Road, Bombay 400001.

Indo Swiss Trading Co. Pvt. Ltd., 14, G.C. Avenue, Calcutta 700013.

Kalaimani Printing Ind. Pvt. Ltd., Post Bag No. 551, Coimbatore 641001.

Linotypes Associates India Pvt. Ltd., Rajan House, Off Veer Savarkar Mrg., Bombay 400025.

Lotus Ind., Haranwali Pole, Khadia Char Rasta, Ahmedabad 380001.

Machinex V3, 509/B, Neelkanth, 98, Marine Drive, Bombay 400002.

Marsons Engineers of India, Premier House, Plot 38, Phase 2, Central Rd., MIDC., Andheri East, Bombay 400093.

Maschinenfabrik Polygraph (India) Ltd., Manu Mansion, 16, Shahid Bhagat Singh Road, Bombay 400023.

Monotype India Ltd., 12, Govt. Place East, Calcutta 700069.

Nutex India Pvt. Ltd., 79, Princess St., Bombay 400002.

Print & Paper (Sales) Pvt. Ltd., 4/7A, Waterloo St., Calcutta 700069.

Printer's House Pvt. Ltd., 10, Scindia House, Connaught Place, New Delhi 110001.

Printing Machinery & Allied Equipments, Techniprint Bldgs., Guindy, Madras 600032.

Printing Machinery Co., Anees Chambers, Carnac Road, Bombay 400001.

Raj & Co., 40, C. Patel St., Bombay 400001.

Sadana Bros., 265. Frere Rd., Near GPO. Bombay 400001

Standard Machinery Co., 546. Mount Rd. Madras 600018

Standard Machinery Corpn., 8, Panthaki House, Maruti Lane, Bombay 400001.

Standard Polygraph Machines Pvt. Ltd., 152, Habidullah Rd., T. Nagar, Madras 600017.

Standard Printers Providers, 5-9-2, Gunfoundry, Hyderabad 500001.

Super Printing Machinery Co., 12/14, Modi St., Bombay 400001.

Swifts Pvt. Ltd., Marathe Udyog Bhavan, A. Maratne Marg, New Prabhadevi, Bombay 400025.

PRINTING PRESS REQUISITES

Alpha Trading Corporation, 19, Police Court Lane, Bombay 400001.

Gajendra Enterprises, 4/5, Kali Prasanna Singhee Rd., Cossipur, Calcutta 700002.

Indo-Europa Trading Co., Pvt. Ltd., 9, Dalal Street, Bombay 400023.

Kamla Type Foundry Pvt. Ltd., 1686, Sohanganj, Subzimandi, Delhi 110007.

Lakshmi Type Foundry, 3938, Machhli Walan, Delhi 110006.

Print & Paper Sales Pvt. Ltd., 4/7A, Waterloo St., Calcutta 700001.

Printing Materials Corpn., 6-A, 1st Floor, Mohatta Market, Palton Road, Bombay 400001.

Printing Materials Store, 89, Samaldas Gandhi Marg, Bombay 400002.

Scientific Printers Materials Manufg. Co. Ltd., Mirzapur Road, Ahmedabad 380001.

Shanti Metal Works, 12, ABCD Govt. Ind. Estate, Kandivli (W.), Bombay 400067.

Standard Type Foundry Pvt. Ltd., 4, Himalaya House, Palton Rd., Bombay 400001.

Tech Nova, Laxmi Mills Estate, Off Dr. E Moses Rd., Mahalaxmi, Bombay 400011.

Wilson & Co. Pvt. Ltd., B-15, Royal Optical Ind. Estate, 5B, Naigaum Cross Rd., Wadala, Bombay 400031.

PROCESS CONTROL & PRECISION MOULDS, INSTRUMENTS & TOOLS

Andhra Pradesh

Andhra Scientific Co. Ltd., Cantonment Rd., Machilipatnam 521001.

Delhi

Ballarpur Inds. Ltd., Thapar House, 124, Janpath, New Delhi 110002.

National Instruments Ltd., Ansal Bhawan, K. Gandhi Marg, New Delhi 110001.

Parvez Engg. Co., 1005, Haveli Hissamuddin, Ballimaran, Delhi 110006.

Gujarat

Calama Process Pumps, 173, GIDC Ind. Estate, Naroda, Ahmedabad 382330.

Omicron Inds., F-25, Rupavari Rd., Bhavnagar 364001.

Techno Bonanza Pvt. Ltd., 71/10, GIDC Ind. Area, Vatva, Ahmedabad 382445.

Haryana

Taylor Instruments Co. (India) Ltd., 14/1, Mathura Rd., Faridabad 121001.

Tulpar Sales Corpn., 1A, Sector 6, Faridabad 121006

Karnataka

Consolidated Process Controls Pvt. Ltd., 521, Rajmahal Vilas, Bangalore 560080.

Gloheat Instruments Corpn., 418, 12th Cross, Upper Palace Orchards, Sadashivnagar, Bangalore 560006.

Mysore Kirloskar Ltd., Yantrapur 577602, Harihar.

Precision Tooling Systems Ltd., Sattur 580004, Dharwar Dist

Triveni Engg. Works Ltd., 12A, Peenya Indl. Area, Bangalore 562140.

Madhya Pradesh

Jash Engg. Ind., Ind. Estate, Pologround, Indore 452002.

ज्योति **Jyoti Ltd.** VADODARA

HYDRAULICS ELECTRICALS POWER ELECTRONICS

Pioneering Manufacturers of:

Vertical Mixed-flow, Axial-flow and Radial-flow Pumps, Vertical and Horizontal Non-clog Pumps, Vertical Turbine Pumps, Horizontal, Radial and Mixed-flow End-Suction Pumps, Horizontal Multistage Pumps, Horizontal Split-case Centrifugal Pumps, Coolant Pumps, 'Unibuilt' (Monobloc) Pumps, Jet Pumps, Dredger Pumps, Sand and Slurry Pumps, Chemical and Process Pumps, Lubricating Oil Pumps for Steam Turbines, Turbines, Special-purpose Pumps for Thermal and Nuclear Power Stations, Hydro-electric Generating Sets (with suitable generators), Turbo Impulse and Pelton Wheel, Propeller Turbines, Francis Turbines, Tubular Turbines, Governors, Horizontal and Vertical Solid Shaft L.T. and H.T. Motors, Vertical Hollow Shaft L.T. Motors, Loom and Card Motors, Centrifuge Motors, Multi-speed Motors, D.C. Motors, Induction Regulators, Arno Converters, Frequency Converters, Self-regulated and Self-excited Generators, Synchronous Generators with exciters and AVRs, Air-break Starters, Oil-immersed Starters, Auto-transformer Starters, Textile Motor Starters, L.T. Rotary Switches, L.T. Air-circuit Breakers, H.T. Low Oil-content Circuit Breakers, E.H.T. Circuit Breakers, H.T. Instrument Transformers and Epoxy Cast Resin Components, L.T. and H.T. Switchboards, Draw-out type Indoor Panels and Outdoor Kiosks, Thermal Time-delay and Over-current Relays, Inverse Definite Minimum Time Over-current and Earth Fault Relays, Constant Time Relays, All-or-nothing Auxiliary Relays, Over-voltage and Under-voltage Relays, Annunciator Relays, Power Packs and Test Plugs, Solid State D.C. Drives, Solid State Medium Frequency Induction Melting Units, Uninterrupted Power Supply Units, Invertor for A.C. Drives, Static Excitation Systems and Solid State Automatic Voltage Regulators for Alternators, Multi-crop Threshers, Wheat Threshers, Paddy Threshers, Chaff Cutters, Seed-cum-Fertilizer Drills, Milking Machines, Industrial Ceramics, Industrial Solar Hot Water and Hot Air Systems, Industrial Laser Systems, Laser Alignment Systems and Instrumentations.

Regd. Office:
Industrial Area, P.O. Chemical Industries, Vadodara 390 003.
Phones: 82851-2-3-4-5, 82706-7, 82945-6-7. Grams: JYOTIPUMPS. Telex: 0175-214. ABC: JOTI-IN

Marketing Division:
Darpan Building, 6th Floor, R.C. Dutt Road, Vadodara 390 005.
Phones: 67131-2-3 & 67197-8. Grams: PROJYOTI. Telex: 0175-481. ABC: JMP-IN

Showroom:
Sterling Centre, 16/2 Dr. Annie Besant Road, Worli, Bombay 400 018.
Phones: 377005, 373166. Grams: JYOTIPUMPS. Telex: 011-2750. ABC: JOTI-IN

Branches:
Bangalore, Bhopal, Bombay, Calcutta, Gauhati, Indore, Jaipur, Jamshedpur, Lucknow, Madras, New Delhi, Patna, Pune, Senthi-Chittorgarh, Secunderabad, Vadodara.

Zonal Service Centres:

Vadodara:
3/15, Industrial Estate, Gorwa, Vadodara 390 016.
Phones: 82548, 82726. Grams: SERVEJYOTI. Telex: 0175-214. ABC: JOTI-IN

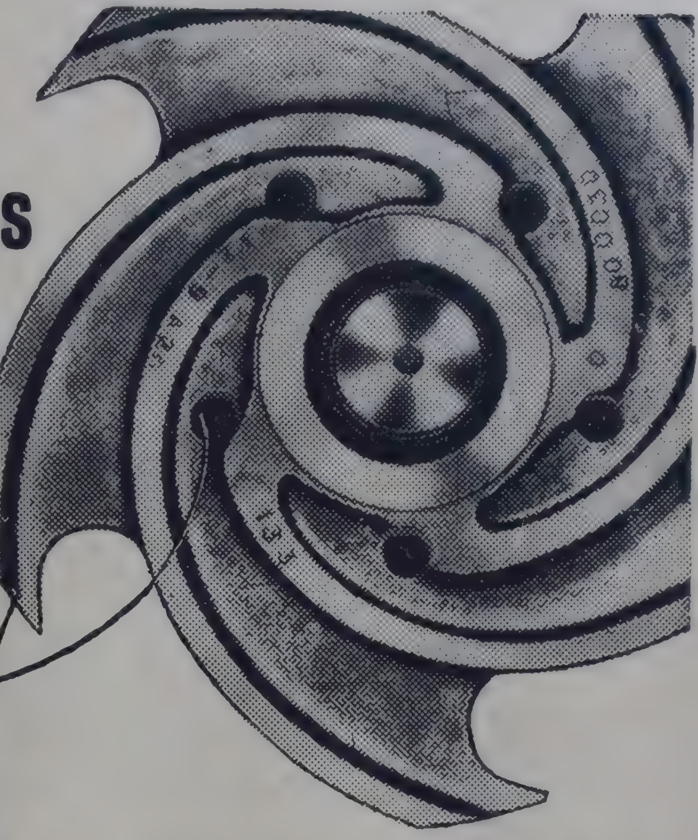
Calcutta:
45, Jhowtala Road, Syed Amir Ali Avenue, Calcutta 700 019.
Phones: 441609, 432843 & 433306. Telex: C/o. 021-7895. ABC: JOTI-IN

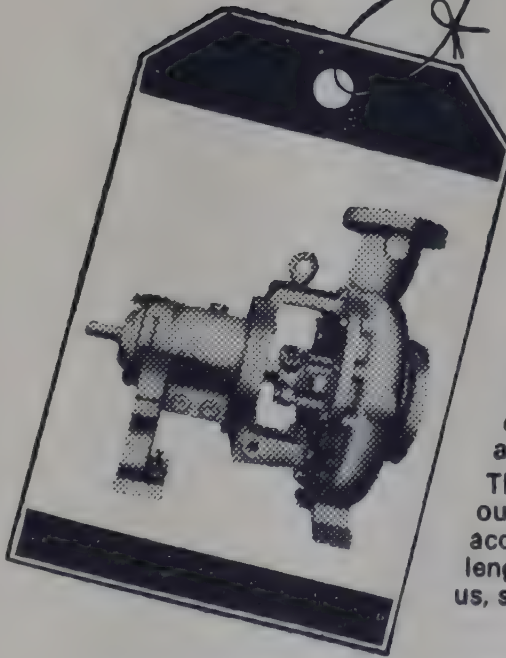
Madras:
145/146, Nungambakkam High Road, Madras 600 034.
Phone: 85007. Telegrams: SERVEJYOTI. Telex: 041-595. ABC: JOTI-IN

New Delhi:
50, Hanuman Road, New Delhi 110 001.
Phone 310810 Grams SERVEJYOTI. Telex: C/o. 031-2613. ABC: JOTI-IN

everest/81/JY/579

The impelling reasons behind nation-wide acceptance of chemflo® pumps





-by process industries

The Impeller is just one of the highlights of the outstanding features of Chemflo Pumps. Its unique design of smoothly contoured inlet passages reduces turbulence and provides exceptionally high efficiency. Statically and dynamically balanced, it allows operation over a wide range of suction pressures.

There are, of course, other features too, equally outstanding, which impel the widespread acceptance of Chemflo Pumps—throughout the length and breadth of India. Why not write to us, so that we may tell you all about them?

aki

akay Industries

Sales Headquarter
Post Box 6557 Bombay 400 018 India
Gram • AKAYIND Telex • 011 3271 AKAYIND
Phone • 372909
Branch Sales Offices
New Delhi • Calcutta • Madras
Manufacturing Plant • Hubli (Karnataka) a B. D. Khimji Enterprise

"Better... by design!"

R.C.Advt-aki-140

HIP Precision Gauges

ADJUSTABLE THREAD CALIPER GAUGE

Range of products .

Thread (Screw) Plug Gauges 1 mm to 250 mm and Thread (Screw) Ring Gauges 1 mm to 250 mm in all Threads. Taper Thread (Screw) Plug and Ring Gauges BSPT, IS, NGT, ANPT, NPTF and Taper 1:8. Plain Cylindrical Plug and Ring Gauges 1 mm to 300 mm. Tolerances to customers specification. Minipin Plug Gauges 1 mm to 20 mm. Tolerances to customers specification. Screw Plug and Ring Gauges to different thread forms such as Acme, Modified, Trapezodial, Buttress, etc. Standard Plugs and Rings available ex-stock.

Distributors
Gauges & Small Tools Sales Corpn.
37/40, Nagar Road, Pune-411 014
Phone: 23886/23887 Gram: 'GAUGES' Pune
Telex: 014361 (GAUGES)
Manufacturers:
HORSTMANN INDIA PVT. LTD., Pune.

Maharashtra

Akay Industries, Post Box 6557, Bombay 400018.

Applied Electronics Pvt. Ltd., A-5, Wagle Ind. Estate, Thane 400604.

Ashok Sunil & Co., A-7, Wagle Indl. Estate, Thane 400604.

Bajaj Electrical Ltd., 45-47, V. Nariman Rd., Bombay 400001.

Bestobell India Ltd., 297, Vidyanagri Marg, Bombay 400098.

Bhatia Inds., 6, Arvind Nagar, Kalina, Bombay 400029.

Blue Star Ltd., Kasturi Bldgs., J. Tata Rd., Bombay 400020.

Bombay Burmah Trading Corpn. Ltd., 253 A to Z Indl. Estate, G. Kadam Marg, Bombay 400013.

Bombay Tools Supplying Agency, T. G. Shah Bldg., Pydhonie Jn., Bombay 400003.

Cambridge Instruments (India) Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Electronica, 691/1A, Satara Rd., Pune 411009.

Elmecon Manufg. Co., P.B. No. 93, Pune 411001.

Excell Process Pvt. Ltd., 117, Andheri-Kurla Rd., Andheri, Bombay 400069.

Extrusion Process Pvt. Ltd., Swami Vivekanand Rd., Malad, Bombay 400064.

Fabrica, Instrument Dn., 60, V.B. Gandhi Marg, Bombay 400023.

General Instruments Co., 194/95, Shivaji Park X Lane No.5, Gopi Tank Road, Mahim, Bombay 400016.

Hindustan Precision Instruments Pvt. Ltd., Pimpri, Pune 411018.

Horstmann India Pvt. Ltd., 7, New Marine Lines, Bombay 400020.

Industrial Mill Gin Stores, 51/53, Nagdevi Cross Lane, Bombay 400003.

J. N. Marshall Pvt. Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Laxsons Engg. & Electronics Pvt. Ltd., Laxsons House, Plot No. AA-2, Walbhat Rd., Goregaon East, Bombay 400063.

Mahlo-Star Electronic Equipments Pvt. Ltd., Shree Laxmi Woollen Mills Estate, Dr. E. Moses Rd., Bombay 400011.

Mapuna Indl. Corpn., Opp. Phoenix Mills Ltd., S. Bapat Mrg., Bombay 400013.

Metzer (India) Optical Instruments Co., 79, Palton Rd., Bombay 400001.

National Instruments Ltd., K. Parikh House, 47, P. D'Mello Rd., Bombay 400009.

P. Dalal & Co., 104, Kakad Chambers, 132, Dr. A. Besant Rd., Bombay 400018.

Peico Electronics & Electricals Ltd., Shivsagar Estate, Dr. A. Besant Rd., Bombay 400018.

Precision Industrial Components, 171, Agra Rd., Indra Deep, Ghatkopar West, Bombay 400086.

Precision Instrument Co., Jolly Maker Chambers No. 2, Nariman Pt., Bombay 400021.

Pyrotech Instruments Corpn., 340, Jaigopal Ind. Estate, 510, Bhavani Shankar Rd., Bombay 400028.

Small Gauges, 24/A, Hadapsar Indl. Estate, Pune 411013.

Spirax-Marshall Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Star Trdg. Co. Pvt. Ltd., Dhanraj Mahal, Apollo Bunder, Bombay 400039.

Testing Machines Corpn., Kakad Chambers, 132, Dr. A. Besant Rd., Bombay 400018.

Toshniwal Bros. Pvt. Ltd., 198, J. Tata Rd., Bombay 400020.

Tradeweld, 7, Kakad Chambers, 132, Dr. A. Besant Rd., Worli, Bombay 400018.

Vijay Lakshmi Electric Co., Sitaram Bldg., 37, Dr. D. Naoroji Rd., Bombay 400001.

Yashmun Engrs. Ltd., A-69/70, Rd. No. 22, Wagle Ind. Estate, Thane 400604.

Orissa

National Instruments Ltd., Coll. Square, Cuttack 753003.

Punjab

Accumeasures Punjab Ltd., 3-A, Sector 7-C, Madhya Mrg., Chandigarh 160019.

Molins of India Ltd., A-7, Ind. Estate, Mohali 160051.

Rajasthan

Instrumentation Ltd., Kotah-Jhalawar Rd., Kotah 324001.

Tamil Nadu

Espa Industrials, 6, Housing Board Rd., Kuniamuthur, Coimbatore 641008.

National Instruments Ltd., 150A/3, Anna Salai, Madras 600002.

Precision Controls, 94B, Mount Rd., Madras 600018.

Premier Instruments Coimbatore Ltd., Perianaickenpalayam, Coimbatore 641020.

Ramm Precision Products Pvt. Ltd., Gopal Bagh, Avanashi Rd., Coimbatore 641018.

Uttar Pradesh

Precision Moulds & Dies, 8/4C, Indl. Area 4, Sahibabad 201005. U.P.

West Bengal

A.N. Instruments Pvt. Ltd., 1-B, Ashutosh Mukherjee Rd., Calcutta 700029.

Bestobell India Ltd., Grosvenor House, 21, Camac St., Calcutta 700016.

Engineering Manufrs. Pvt. Ltd., 34, Jhil Rd., Calcutta 700031.

H. Guru Instruments Pvt. Ltd., 10B, Ho Chi Minh Sarani, Calcutta 700016.

Mahindra & Mahindra Ltd., 6, Little Russel St., Calcutta 700016.

Mansfield Oil Gas Co. Ltd., 16, R. Chowdhary Rd., Calcutta 700015.

National Instruments Ltd., 1/1, Raja S. C. Mullick Rd., Jadavpur, Calcutta 700032.

Precision Tools and Accessories, 50-B, Gariahat Rd., Calcutta 700019.

Process Control Equipment Co., 44, J. Mitter St., Calcutta 700005.

W. J. Alcock & Co. Pvt. Ltd., K. S. Ray Rd., Calcutta 700001.

PUBLIC ADDRESS SYSTEMS

Ahuja Radios, 215, Okhla Ind. Estate, New Delhi 110020.

Allgemein Sana Ind., 1903, Chandni Chowk, Delhi 110006.

Aneja Radios, 395-E, Lamington Rd., Bombay 400004.

Audio Tech Inc., 4/4, Unique Indl. Estate, V. Savarkar Mrg., Prabhadevi, Bombay 400025.

ETA Radio Ind., 4491, Patnamal St., Pahari Dhiraj, Delhi 110006.

General Radio Corpn., 2/2, Jhandewalan Ext. Scheme, New Delhi 110055.

Motwane Pvt. Ltd., 127, M. Gandhi Rd., Bombay 400023.

Shah Audio-Vision Centre, 66, Shanti Sadan Estate, Opp. Dinbai Tower, Lal Darwaja, Ahmedabad 380001.

Singh Radio Co. India Pvt. Ltd., 21, Daryaganj, New Delhi 110002.

PULLEYS, HOISTS, TACKLES

(See under Material Handling Equipment.)

PUMPS & PUMPING SETS

Andhra Pradesh

Balaji Industrial & Agri. Castings, 4-3-140, Hill St., P. B. No. 1634, Secunderabad 500003.

Kakati Karshak Inds. Pvt. Ltd., Nacharam Ind. Area, Hyderabad 501507.

Neeta Enterprises Pvt. Ltd., A-3, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Sri Ram Engg. Co., Opp. Synthetic Drugs Project, Kakatpalli, Hyderabad 500037.

Delhi

Amta Inds., 17, DLF Indl. Estate, New Delhi 110015.

DGL Pvt. Ltd., 14/M, Block, Connaught Circus, New Delhi 110001.

Flowmore Pvt. Ltd., E Block, Connaught Place, New Delhi 110001.

Gautam Electric Motors Pvt. Ltd., 42, Okhla Ind. Estate, New Delhi 110020.

I.M.C. Vogel Ind. Pvt. Ltd., 4E/8, Jhandewalan Ext., New Delhi 110055.

Goa

Octagon Fabricators, Govt. Indl. Estate, Corlim, Ilhas 403110.

Gujarat

Bomin Pvt. Ltd., Odhav 382410. (Ahmedabad Dt.).

Economy Engg. Co., P. B. No. 57, Ruvapari Rd., Bhavnagar 364001.

Forge & Blower Co., Naroda Rd., Ahmedabad 380002.

Gajjar Steel Ind., Opp. Ramji Mandir, Maninagar, Ahmedabad 380008.

Hydro Power Corpn., G.I.D.C., Makarpura, Vadodara 390003.

Jyoti Ltd., 1/8, Indl. Estate, Gorwa, Vadodara 390003.

Machino Techno, Jawahar Rd., Bilimora 396321.

Navalram Agro-Machineries Pvt. Ltd., Near Kalyan Mill, Naroda Rd., Ahmedabad 380002.

Pump Engg. Co., C-39, G.I.D.C., Odhav 382415 (Ahmedabad Dist.).

S. L. M. Maneklal Inds. Ltd., Vatva, Ahmedabad 382440.

Shree Engrs. & Founders, Varachha Rd., Surat 395003.

Shree Vishwakarma Engg. Works, Mahadeo Nagar, Bilimora 396321.

Sigil (India) Services Pvt. Ltd., 1/3, Indl. Estate, Atladara, Vadodara 390003.

Karnataka

Akay Inds., Station Rd., Hubli 580020.

Best & Crompton Engg. Co. Ltd., Yediyur, Bangalore 560011.

Protecto Engg. Corpn., 83, Silver Jubilee Park Rd., Bangalore 560002.

Kerala

Kerala Electrical & Allied Engg. Co. Ltd., Kundara 691501.

Kumar Inds., Edathara 678611, South Malabar.

Madhya Pradesh

Kirloskar Bros. Ltd., Dewas 455001.

Maharashtra

Abbo's Engg. Pvt. Ltd., 15/11, Kothrud, Pune 411029.

Acme Manufg. Co. Ltd., Antop Hill, Bombay 400031.

Acmevac Pumps and Engg. Pvt. Ltd., 60, V.B. Gandhi Mrg., Bombay 400023.

Airauto Engg. Co., 38, Gala Ind. Estate, Mulund (West), Bombay 400080.

Akay Ind., Shiv Sagar Estate, Dr. A. Besant Rd., Bombay 400018.

Arjan Singh Khemchand, 118, Commerce House, Medows St., Bombay 400023.

Bhangar Bros. & Co. Pvt. Ltd., 142/48, S. Vivekanand Rd., Jogeshwari, Bombay 400060.

Bharat Bijlee Ltd., Udyognagar, Electric Mansion, Near Century Bazar, Bombay 400025.

Bharat Electric & Engg. Co., 21, Dalal St., Bombay 400023.

Calama Ind. Pvt. Ltd., 7, Gaiwadi Ind. Estate, S. V. Rd., Goregaon, Bombay 400062.

Cooper Engg. Ltd., Satara 415001.

Crescent Iron & Steel Corpn. Ltd., Ind. Estate, Lalbaug, Bombay 400012.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

D.C.M. Engg. Work, Ocean View, A-4, Khan Rd., Worli, Bombay 400018.

Delta Corpn., Udyog Bhavan, Naigaum Cross Rd., Bombay 400031.

Florite Engg. Corpn., 162, Tulsi Pipe Rd., Opp. Phoenix Mills, Lower Parel, Bombay 400013.

Herberts Grovers Engg. Co., Hamam St., Bombay 400023.

Hindustan Dorr-Oliver Ltd., Dorr-Oliver House, Chakala, Andheri (E), Bombay 400093.

Industrial Marketing Services, Jiji House, 1st Flr., Ravelin St., Bombay 400001.

Ingersoll-Rand India Pvt. Ltd., Maybaker House, S. K. Ahire Mrg., Bombay 400025.

International Instruments, 15, Samrat Silk Mills Estate, Bombay 400079.

J. B. Sawant Engg. Pvt. Ltd., Udyog Nagar, Goregaon (W), Bombay 400062.

K.S.B. Pumps Ltd., 173, J. Tata Rd., Bombay 400020.

Kirloskar Bros. Ltd., Udyog Bhavan, Tilak Rd., Pune 411018.

Kishor Pumps Pvt. Ltd., A 13/H, Block, MIDC Indl. Area, Pimpri, Pune 411018.

Larsen & Toubro Ltd., L. & T. House, Ballard Estate, Bombay 400038.

Lynx Machinery Ltd., 43, Nariman Rd., Bombay 400001.

Mather & Platt Ltd., Hamilton House, 8, Graham Rd., Ballard Estate, Bombay 400038.

MBH Pumps Pvt. Ltd., 3, Mira Indl. Estate, Mira 401104. Thane Dist.

Mercantile & Ind. Dev. Co. Pvt. Ltd., National House, 6, Tulloch Rd., Bombay 400039.

Modi Industries (F.C.) Pvt. Ltd., 62, B. Shankar Rd., Dadar, Bombay 400028.

Narhari Engg. Works, 480, Kalbadevi Rd., Bombay 400002.

New Vijay Ind. Ltd., P.O. Wellington College, Vishrambagh, Sangli 416416.

Packco Engg. Pvt. Ltd., Block 2, Shivaji Udyam Nagar, Kolhapur 416001.

Poona Intermesh Pump Pvt. Ltd., S-116, Pune 411026.

Precision Pumps Inds., 219/4, Harish Terrace, R.A. Kidwai Rd., Wadala, Bombay 400031.

Protos Engg. Co. Pvt. Ltd., 173, J. Tata Rd., Bombay 400020.

Radiant Electric & Machinery Co., C/12, A, Commerce House, Tardeo, Bombay 400034.

Rohini Engg. Works Pvt. Ltd., Ind. Estate, Miraj 416410.

Ruston & Hornsby (I) Ltd., Chinchwad, Pune 411019.

Semeicon Pvt. Ltd., 132, A. Besant Rd., Bombay 400018.

Shivaji Works Ltd., Shivashahi 413224. Solapur Dist.

Shukla-Manseta Ind. Pvt. Ltd., 8, Hamam St., Bombay 400001.

Sigil (I) Services Pvt. Ltd., Ismail Bldg., 381, Dr. D. Naoroji Rd., Bombay 400001.

SU Motors Pvt. Ltd., Bal Rajeshwari Rd., Off LBS Marg, Mulund, Bombay 400080.

Tahira Ind. (I) Pvt. Ltd., 19/21, Manohardas St., Opp. G.P.O., Bombay 400001.

Teknoworks (India), Lal Bahadur Shastri Marg, Bhandup, Bombay 400078.

Todi Ind. Pvt. Ltd., Todi Estates, Lower Parel, Bombay 400013.

Vickers Sperry of India Ltd., Akurli Rd., Kandivli, Bombay 400067.

Vishvanath Industries, 99, Netaji Subhas Rd., Bombay 400002.

W. R. Talwalker Bros. Pvt. Ltd., Lentin Chambers, Dalal St., Bombay 400023.

Water Supply Specialists Pvt. Ltd., 8, Hamam St., Bombay 400023.

Rajasthan

Pump Manufg. Corpn., Opp. M.I. Rd., Jaipur 302001.

Tamil Nadu

Balasubramania Foundry, 166, Patel Rd., Coimbatore 641009.

Best & Crompton Engg. Ltd., 13/15, North Beach Rd., Madras 600001.

Bharat Foundry, 13, Amman Kulam Rd., Pappanaickenpalayam, Coimbatore 641018.

British & Eastern Engg. Co., No. 16, General Patters Rd., Madras 600002.

Chandra Foundries Pvt. Ltd., 55, Basin Bridge Rd., Madras 600021.

Chitra Industries, 1135-B, Trichy Rd., Coimbatore 641005.

Dhandayuthapani Foundry Pvt. Ltd., 2/1, Pappanaickenpalayam, Coimbatore 641018.

Eastern Electrical Co. Pvt. Ltd., 26/22, Aerodrome Rd., Singanallur, Coimbatore 641005.

EL P EM Industrials, Mettupalayam Rd., Coimbatore 641002.

Elgi Equipments Ltd., India House, Trichy Rd., Coimbatore 641018.

Eltex Engg. Corpn. Pvt. Ltd., P.O. Ganapathy, Coimbatore 641006.

General Engg. Co., Mettupalayam Rd., Coimbatore 641011.

IAEC Pumps Ltd., Near Villivakkam Rly. Stn., Rajamangalam, Madras 600049.

Kala Ind. Pvt. Ltd., Mettupalayam Rd., P.O. Tudiyalur, Coimbatore 641034.

Meenakshi Engg. Works, 12, Periathambi Mudali St., Madras 600007.

Mouli & Sons Engrs. Pvt. Ltd., 43, Rajaji Rd., Ramnagar, Coimbatore 641009.

Nasa Pump Factory, B-13, Guindy Indl. Estate, Madras 600032.

P. S. G. Industrial Institute, Peelamedu, Coimbatore 641004.

Prakash Engg. Co., Mettupalayam Rd., P.O. Saibaba Mission, Coimbatore 641011.

Premier Ind., Trichy Rd., Coimbatore 641005.

Raja Foundry, Ammankulam Rd., Pappanaickenpalayam, Coimbatore 641018.

Ramu Foundry, 353, Avanashi Rd., Coimbatore 641018.

Sabari Inds., Puliyakulayam Rd., Pappanaickenpalayam, Coimbatore 641037.

Shell India Foundry, Peelamedu, Coimbatore 641004.

Southern Engg. Ind., 343, Avanashi Rd., Coimbatore 641018.

Sree Srinivasa Foundry, Ammankulam Rd.. Pappanaickenpalayam, Coimbatore 641037.

Subbiah Foundry, Avanashi Rd., Pappanaickenpalayam, Coimbatore 641018.

T. R. Ind., Kuniamuthur, Coimbatore 641008.

Texmo Ind., P.O. Ganambika Mills, Coimbatore 641011.

Udhay Krishna Engg. Works, 1, Pera Naidu St., Peelamedu, Coimbatore 641004.

Vanton Pumps (India) Ltd., 84, G.S.T. Rd., Madras 600044.

Uttar Pradesh

Delta Engg. Co. Pvt. Ltd., Chipi Tank, Meerut 250001.

Jai Gopal Inds., Civil Lines, Bulandshahr 203001.

Roto Pumps & Hydraulics Pvt. Ltd., 162B, Co-op. Ind. Estate, Kanpur 208022.

Roxon Engg. Corpn., G.T. Rd., Ghaziabad 201001.

West Bengal

Associated Electrical Ind. (I) Ltd., Crown House, 13, R. Mukherjee Rd., Calcutta 700001.

Baveja Group, 10/1, Princep St., Calcutta 700072.

Bengal Automobiles, 25-B, Park St., Calcutta 700016.

Bengal Iron Works Pvt. Ltd., 16/2, Chatterjee Para Lane, Howrah 711101.

British Electrical & Pumps Pvt. Ltd., 4, BBD Bagh (E), Calcutta 700001.

C.S.K. Industries, 219/C, Old China Bazar St., Calcutta 700001.

Electric Construction & Equipment Co. Ltd., 27/B, Camac St., Calcutta 700001.

Electl. & Mechanical Equipment Corpn., 17, Das Le., Calcutta 700012.

General Electric Co. of India Ltd., 6, Chittaranjan Ave., Calcutta 700013.

Hindustan Machines & Pumps, 17, Das Lane, Calcutta 700012.

Hindustan Pumps & Machinery Corpn., 3, N. C. Chowdhury Rd., Kasba, Calcutta 700042.

Indian National Diesel Engine Co. Ltd., Little Russel St., Calcutta 700071.

International Combustion India Ltd., 101, Park St., Calcutta 700016.

Johnston Pumps India Ltd., 2, Fairlie Place, Calcutta 700001.

Lloyds Engg. Co., 3, Amratolla St., Calcutta 700001.

Plant & Machinery, 3, Mangoe Lane, Calcutta 700001.

Precivac Engg. Co., Jogendra Garden, Rajdanga, 24 Parganas.

Roger Engg. Works, 23A, N. Subhas Rd., Calcutta 700001.

Varat Pumps & Machinery Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

RADIO & TELEVISION SETS (Also see under Television Sets).

Andhra Pradesh

Bharat Television Ltd., 1-10-63/64, Begumpet, Hyderabad 500016.

Electronics Corpn. of India Ltd., Cherlapalli, Hyderabad 500762.

Delhi

British Radio & General Supply Co., Gauri Shanker Temple, Chandni Chowk, Delhi 110006.

General Radio Corpn., 2/2, Jhandewalan Ind. Scheme, New Delhi 110055.

National Radio Corpn., 2, DLF Najafgarh Rd., New Delhi 110015.

Singh Radio Co. (India) Pvt. Ltd., 21, Darya Ganj, New Delhi 110002.

Telefunken (India) Ltd., G-4, N.D.S.E., Part I, New Delhi 110049.

Telesound India Ltd., G-4, NDSE Part I, New Delhi 110049.

Television Service Corpn., G-8A, Hauz Khas, New Delhi 110016.

Television & Sound Centre, 16/1022, Main Arya Samaj Rd., Karol Bagh, New Delhi 110005.

Televista Electronics Pvt. Ltd., 293, Okhla Ind. Estate, New Delhi 110020.

Weston Electronics Pvt. Ltd., 244, Okhla Ind. Estate, New Delhi 110020.

Gujarat

Parry Engg. & Electronics Pvt. Ltd., Opp. Jain Temple, M. Gandhi Rd., Ahmedabad 380001.

Power Cables Pvt. Ltd., 40, Alkapuri, Vadodara 390005.

Karnataka

Associated Electronic & Electrical Ind. (Bangalore) Pvt. Ltd., 113-A, Brigade Rd., Bangalore 560001.

Electronic Devices, Andrews Bldgs., M. Gandhi Rd., Bangalore 560001.

Radio & Electrical Mfg. Co. Ltd., 2, Mysore Rd., Bangalore 560026.

Maharashtra

Aarjay & Co., Walker House, 381, Dr. Bhadkamkar Rd., Bombay 400007.

Acharya Electronics Ltd., 38-C, MIDC Indl. Area, Hinghana Rd., Nagpur 440001.

Afco Ltd., 9, Wallace St., Bombay 400001.

Bhatty Electronics Corpn., 98, Ind. Estate, Kandivli West, Bombay 400067.

Bush India Ltd., Sukh Sagar, Sandhurst Bridge, N. S. Patkar Marg, Bombay 400007.

Cosmic Radio, 9-B, Mahal Ind. Estate, M. Caves Rd., Andheri (E), Bombay 400093.

Mulchandani Electrical & Radio Ind. Ltd., Wagle Ind. Area, Thane 400604.

Murphy India Ltd., Nirmal, Backbay Reclamation, Nariman Point, Bombay 400021.

National Radio & Electronics Co. Ltd., Unity House, 8, M. Parmanand Marg, Bombay 400004.

Philips India Ltd., Shivsagar Estate 'A', Dr. A. Besant Rd., Worli, Bombay 400018.

Radio Electric Pvt. Ltd., Lamington Chambers, Dr. Bhadkamkar Rd., Bombay 400004.

Sivdarshan Electronics Corpn., 26, Jolly Maker Chamber I, Nariman Point, Bombay 400021.

Telecom Ind. Pvt. Ltd., 37, Saki Vihar Rd., Bombay 400072.

Telerad Ltd. (Divn. of S. M. Chemicals & Electronics Ltd.), Chandivali, Saki Vihar Rd., Bombay 400072.

Waco Radio Electronics Ind., Sukhsagar Bldg., Hughes Rd., Bombay 400007.

Rajasthan

Television Combine, Jhotwara, Jaipur 302006.

Tamil Nadu

Dynavision Ltd., 1, Padmanabhanagar, Adyar, Madras 600020.

G. Janshi & Co., 2/163, Mount Rd., Madras 600002.

Uttar Pradesh

Asia Electric Mfg. Co., 329, Muthiganj, Allahabad 211003.

West Bengal

Esdee Engg. Works, 50/A, Kankurgachi Rd., Calcutta 700054.

General Electric Co. of India Pvt. Ltd., Magnet House, 6, Chittaranjan Ave., Calcutta 700013.

Gramophone Co. of India Ltd., Dum Dum, Calcutta 700028.

Guest, Keen, Williams Ltd., Jeevan Deep, 3A, Shakespeare Sarani, Calcutta 700016.

Hindustan General Electric Corpn. Ltd., 25, Brabourne Rd., Calcutta 700001.

Santosh Radio Products, 21, Sooterkin St., Calcutta 700072.

Voice Master Radio Corpn., 159/1B, R. Behari Ave., Calcutta 700029.

RAILWAY COACHES, WAGONS & MATERIALS, SIGNALLING EQUIPMENT, ETC.

Bihar

Tata Engg. & Locomotive Co. Ltd., Jamshedpur 831001.

Delhi

Greysham & Co., 7249, Roop Nagar, Delhi 110007.

Karnataka

Bharat Earth Movers Ltd., Unity Bldgs., J. C. Rd., Bangalore 560002.

Madhya Pradesh

Gwalior Engg. Works, Lashkar, Gwalior 474001.

Maharashtra

K. T. Steel Ind. Pvt. Ltd., 9, Altamount Rd., Bombay 400026.

Marian Engg. Co., 7/10, Botawala Bldg., Horniman Circle, Bombay 400023.

McKenzies Ltd., Sewree, Bombay 400015.

N. Mohanlal & Co., 4th Lane, Darukhana, Bombay 400010.

Siemens India Ltd., 134A, A. Besant Rd., Bombay 400018.

Rajasthan

Cimmco Wagon Factory, Bharatpur 321001.

Tamil Nadu

Binny's Engg. Ltd., Meenambakkam, Madras 600027.

Festo Elgi Pvt. Ltd., India House, Trichy Rd., Coimbatore 641018.

Integral Coach Factory, Perambur, Madras 600038.

Southern Structurals Ltd., P.B. No. 74, Madras 600006.

Uttar Pradesh

Modern Industries, Sahibabad, Ghaziabad 201001.

West Bengal

Bird & Co. Ltd., Chartered Bank Bldg., Calcutta 700001.

Braithwaite & Co. (I) Ltd., Clive Works, 3, Hide Rd., Kidderpore, Calcutta 700043.

Brocho & Co. Pvt. Ltd., 36, Weston St., Calcutta 700013.

Burn & Co. Ltd., Howrah Iron Works, Howrah 711101.

Gresham & Craven of India Pvt. Ltd., 22, Gobra Rd., Entally, Calcutta 700014.

Hindusthan Iron & Steel Co., 8, R. Deb Rd., Calcutta 700007.

Indian Standard Wagon Co., Ltd., 12, Mission Row, Calcutta 700001.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Marcandy Prasad Radhakrishna Prasad Pvt. Ltd., 65, G. T. Rd., Salkia, Howrah 711106.

National Ind. Impex Corpn., 35, Stephen House, Calcutta 700001.

Pelican Engg. Corpn. Pvt. Ltd., 36, Strand Rd., Calcutta 700001.

Railway Supply Corpn. Pvt. Ltd., 10, G. C. Ave., Calcutta 700013.

Shree Hanuman Foundry & Engg. Co. Ltd., 46, Strand Rd., Calcutta 700001.

Victoria Engg. Works, 60, Goshala Rd., Liluah 711204.

RAYON

Andhra Pradesh Rayons Ltd., 1-2-597/15, Gaganmahal, Hyderabad 500029.

Baroda Rayon Corpn. Ltd., P.O. Baroda Rayon 394220 (Surat Dist.).

Century Rayon, Industry House, Churchgate Reclmn., Bombay 400020.

Indian Rayon Corpn. Ltd., Veraval 362266. (Gujarat).

Kesoram Rayon, 10, Camac St., Calcutta 700017.

National Rayon Corpn. Ltd., Ewart House, Homi Mody St., Bombay 400023.

Shriram Rayons, Kota 324001.

Travancore Rayons Ltd., Rayonpuram 683543 (Kerala State).

RECORD PLAYERS

Gramophone Co. of India Ltd., 33, Jessore Rd., Calcutta 700028.

H. M. V., Universal Bldg., Sir P. M. Rd., Bombay 400001.

Peico Electronics & Electricals Ltd., 7, J.C. Madhab Rd., Calcutta 700020.

RECTIFIERS

Andrew Yule & Co. Ltd., Yule House, 8, Clive Row, Calcutta 700001.

Argo Transformers P. Ltd., 187, Dr. D. Bhadkamkar Rd., Bombay 400004.

Automatic Electric Co. Ltd., Rectifier House, 570, Naigaum X Rd., Bombay 400031.

THE NATIONAL RAYON CORPORATION LIMITED

Grams : " NARACORP ", Bombay.

Head Office :

Ewart House, Homi Mody Street, Fort,
Bombay 400 023.

Phones : 272490 (7 Lines). Telex : 011-3013.

Registered Office :

Eros Theatre Bldg., I, J. Tata Road,
Bombay 400 020.

Phones : 221712, 221766.

Sales Office :

Eros Theatre Bldg., 124, Maharshi Karve Road,
Bombay 400 020.

Phones : 222166, 222022, 222088, 220073. Telex : 011-6041.

Factory :

Mohone, Taluka : Kalyan, Dist. Thane 421 102.

Phones : 3681, 3682, 3683, 3684, 3685, 3686, 3687 (Kalyan Exchange).

Manufacturers of :

- **Textile Rayon Yarn**
- **Rayon Tyre Yarn/Fabric**
- **Nylon Tyre Yarn/Fabric**
- **Caustic Soda (Lye)**
- **Liquid Chlorine**
- **Hydrogen**
- **Hydrochloric Acid**
- **Sulphuric Acid & Oleum 20%**
- **Carbon Disulphide**
- **Carbon Tetrachloride**
- **Anhydrous Sodium Sulphate**
- **Sodium Sulphide (Solution)**

Cresta Instruments, 140, S. Temple Rd., Bombay 400016.

Delton Electricals, A/1. Vasai Taluka Indl. Co-op Estate Ltd., Vasai Rd. East. P.O. Gokhivare 401202. (Thane Dist.).

Hind Rectifiers Ltd., Mahalaxmi Chambers, B. Desai Rd., Bombay 400026.

International Rectifiers (India) Pvt. Ltd., Flat No. 15, C-40, Dwarka Sadan, Conn. Place, New Delhi 110001.

Jindar Electricals, 398-A, Indl. Area 'A', Ludhiana 141003.

Keltron Rectifiers Ltd., Hill View, 14/864, Vellayambalam, Trivandrum 695010.

Khandelwal Hermann Electronics Ltd., Bhandup, Bombay 400078.

Pactil Electronics Pvt. Ltd.; Feltham House, Graham Rd., B. Estate, Bombay 400038.

Ruttonsha-International Pvt. Ltd., P.B. No. 661, G.P.O., Bombay 400001.

Semcon Electronics Pvt. Ltd., S. D. F. Bldg., Unit No, 16, Santacruz Electronics Processing Zone, Marol Ind. Area, Mahakali Caves Rd., Andheri (E), Bombay 400093.

Sukson Ind., 16/3, Jawaharnagar, Road No. 2, Goregaon (West), Bombay 400062.

Usha Rectifiers Corpn. (I) Ltd., 12/4, Delhi Mathura Rd., Faridabad 121003.

REDUCTION GEARS & SPEED CONTROLLERS, INDICATORS, ETC.

Beacon Indl. Electronics Pvt. Ltd., Shree Ram Indl. Estate, Wadala, Bombay 400031.

Daver Engg. Pvt. Ltd., 70, Lakshmi Insurance Bldg., Sir P.M. Road, Bombay 400001.

Dymo Electronics, 157, Lohar Chawl, Bombay 400002.

Essential Engg. Co., P. Box No. 1830, Bombay 400001.

Fenner J. H. & Co. (I) Ltd., 56D, Free School St., Calcutta 700016.

H.V. Industrial Electronics Pvt. Ltd., Choksey Chambers, Zaveri Bazar, Bombay 400002.

Paresh Engg. Co., 7/10, Botawala Bldg., Horniman Circle, Bombay 400023.

Wooden Vat Mfg. Co., Pardi Stn. 396145. (Valsad Dist.).

REFRACTORIES

Andhra Pradesh

Dr. V. S. Krishna Ceramics & Potteries, Rajahmundry 533101.

Bihar

Assam Sillimanite Ltd., Ranchi Rd., P.O. Marar 829117. Hazaribagh Dist.

Bharat Firebricks & Pottery Works Ltd., Jharia 828111. Dhanbad Dist.

Harish Tara Refractories, Lake Ave., Kanke Rd., Ranchi 834001.

India Firebricks & Insulation Co. Ltd., Marar 829117. Hazaribagh Dist.

Jharia Firebricks & Refractory Works Pvt. Ltd., P.O. Dhansar 828106. Dhanbad Dist.

Kumardhubi Fireclay Silica Works Ltd., Kumardhubi 828203. Dhanbad Dist.

Naveen Ind., Mugma, Dhanbad 826001.

Reliance Firebricks & Pottery Co. Ltd., P.O. Chanch Pottery, Dhanbad Dist.

Delhi

Amar Nath Bhaskar Sons, P. O. Ishwar Nagar, New Delhi 110001.

Dalmia Ceramic Ind., 4, Scindia House, Connaught Place, New Delhi 110001.

Durga Enterprises Pvt. Ltd., 10, Daryaganj, New Delhi 110002.

Express Inds., E-11, Defence Colony, New Delhi 110024

Ishwar Ind. Ltd., P.O. Ishwar Nagar, New Delhi 110065

Orissa Cement Ltd., 4, Scindia House, Connaught Place, New Delhi 110001.

Premier Refractories of India Pvt. Ltd., 10, Alipur Rd., Delhi 110006.

S. N. Sunderson & Co., 1, D. B. Gupta Rd., New Delhi 110055.

Gujarat

Bhavnagar Refractories & Ceramic Manufg., Nari Rd., Bhavnagar 364001.

Narendra Ceramics Pvt. Ltd., National Highway Rd., Wankaner 363622.

Nowroji N. Vakil & Co., Naroda Rd., Ahmedabad 380002.

Parshuram Pottery Works Ltd., Morvi 363641.

Haryana

A. N. Bhaskar Sons, Amar Nagar, Faridabad 121003.

Karnataka

Firebricks & Potteries Ltd., Yeshwantpur, Bangalore 560022.

Mysore Stoneware Pipes & Potteries Ltd., 80, 6th Cross Rd., G. Nagar, Bangalore 560009.

Kerala

Ceramic Engg. Enterprises, 18, Ratna Vilas Bldg., R.S. Rd., Trichur 680001.

Feroke Tile Works, Feroke 673631. Kozhikode Dist.

Hightemp Refractories & Clay Works, Sanskrit College Rd., Tripunithura 682301.

Standard Pottery Works Ltd., Alwaye 683101.

Madhya Pradesh

Burn & Co. Ltd., Refractory & Ceramic Works, North Civil Lines, Jabalpur 482001.

Premier Refractories of India Ltd., Katni 483501, Jabalpur Dist.

Maharashtra

Alexander & Raymond (Bombay), Sun-n-Sea Co.-op. Housing Society Ltd., J. Prakash Rd., Bombay 400058.

Alka Refractories, 5, Jaldhara, 15th Road, Khar West, Bombay 400052.

Associated Cement Cos. Ltd., Cement House, 121, M. Karve Road, Bombay 400020.

Ceramic Engg. Enterprise, 166, Vidyanagari Mrg., Kalina, Bombay 400098.

Gandhi Sales Corpn., 138, Nagdevi St., Bombay 400003.

High Grade Refractories Pvt. Ltd., 208, New Anant Bhuvan, 257/67, Narsi Natha St., Bombay 400009.

J. Chandravadan & Co., 53, C.P. Tank Rd., Bombay 400004.

Jelly & Co., 301, Dalamal Chambers, 29, New Marine Lines, Bombay 400020.

Marathwada Refractories Ltd., Post Box 14, Aurangabad 431210.

Precision Ceramics, Mira Village, Vivekanand Rd., Bombay 400092.

Saraf Engg. Works, 203-D, Poonam Apartments, Dr. A. Besant Road, Bombay 400018.

Sharad Refractory Works, Khorshed Bldg., Sir P. Mehta Rd., Bombay 400001.

Special Refractories, Heatreaters & Engrs. Compd., Off LBS Mrg., Near Shreyas Cinema, Ghatkopar, Bombay 400086.

Springs & Auto Corpn., 431, Lamington Rd., Opera House, Bombay 400004.

Sterling Refractories Corpn., 6/1st Flr., Tardeo Air-conditioned Mkt., Bombay 400034.

Thakkar Trading Co., 57, S. Patil Rd., Bombay 400009.

Therelek Furnaces Pvt. Ltd., A-131, Rd. No. 23, Wagle Ind. Estate, Thane 400604.

Orissa

Belpahar Refractories Ltd., Belpahar 768218. Sambalpur Dist.

Orissa Cement Ltd., Rajgangpur 770017. Sundorgarh Dist.

Orissa Inds. Ltd., P.O. Lathikala, Rourkela 769004.

Tamil Nadu

Carborundum Universal Ltd., 11/12, North Beach Rd., Madras 600001.

Dalmia International, 29, Ind. Estate, Ambattur, Madras 600058.

Dalmia Magnesite Corpn., P.B. No. 508, Salem 636005.

Salem Magnesite Pvt. Ltd., Panorama, Hasthimpatti Extension, Salem 636005.

Tube Suppliers Ltd., 99, Armenian St., Madras 600001.

West Bengal

Assam Sillimanite Ltd., P4, Oil Installation Rd., Calcutta 700023.

Associated Tar & Refractories Pvt. Ltd., 9, Old Court House St., Calcutta 700001.

Balsukh Refractories & Ceramics Ltd., Salanpur 713357. Burdwan Dist.

Behar Firebricks & Potteries Ltd., 22, Strand Rd., Calcutta 700001.

Belapahar Refractories Ltd., 43, Chowinghee Rd., Calcutta 700071.

Bengal Bihar Firebricks & Pottery Works Pvt. Ltd., 26, Burtalla St., Calcutta 700007.

Bengal Refractories Ltd , 32A, Dharmtolla St., Calcutta 700013.

Bhattacharya A.K. Sen Pvt. Ltd.. Post Box 2124, Calcutta 700001.

Burn & Co. Ltd., 12, Mission Row, Calcutta 700001.

Harry Refractory & Ceramic Works Pvt. Ltd., 200, U. Chitpur Rd., Calcutta 700005.

Hind Refractories Ltd., 135, B.R.B. Basu Road, Calcutta 700001.

Hindustan Refractories & Ceramics Pvt. Ltd., 20, N. Subhas Rd., Calcutta 700001.

India Refractories Ltd., Industry House, 23/24, Radhabazar St., Calcutta 700001.

Industrial Minerals & Mill Stores Traders, Mercantile Bldg., Lall Bazar, Calcutta 700001.

Kumar Manufg. Co., Howrah Ind. Estate, P.O. Baltikuri 711402. Howrah Dist.

Kumardhubi Fireclay & Silica Works Ltd., Chartered Bank Bldgs., Calcutta 700001.

Maithan Ceramics Pvt. Ltd., 36/2, Vivekanand Road, Calcutta 700007.

Marshall Refractories (India), 40, Strand Rd., Calcutta 700001.

Nagrath Firebricks & Potteries Pvt. Ltd., Gandhi House, 16, G. Chandra Ave., Calcutta 700013.

New Bharat Refractories Ltd., 66, G.T. Rd., Liluah 711204. Howrah Dist.

Nirsa Refractory and Ceramic Works, 2A, G.C. Ave., Calcutta 700013.

Orissa Ind. Ltd., 9, Ezra St., Calcutta 700001.

Reliance Firebricks & Pottery Co. Ltd., 11-12, Esplanade Mansion, Calcutta 700001.

Valley Magnesite Co., 408, Vivekananda Rd., Calcutta 700007.

REFRIGERATORS

Economy Refrigeration & Engg. Pvt. Ltd., Kirti Bldg., Dr. V.B. Gandhi Marg, Bombay 400023.

General Electric Co. of India, Magnet House, B. Estate, Bombay 400038.

Godrej & Boyce Mfg. Co. Pvt. Ltd., Godrej Bhavan, Home St., Bombay 400001.

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

Mec (India) Pvt. Ltd., F-3/4, Krishna Nagar, Delhi 110031.

Paramount Industries, Moti Ram Road, Shahdara, Delhi 110032.

Refrigeration Inds., Plot No. 76, Phase II, M.I.D.C. Ind. Area, Andheri (E), Bombay 400093.

Spencer & Co. Ltd., Spencer Bldg., Forjett St., Bombay 400026.

Sur Inds. Pvt. Ltd., 163, A.J. Bose Rd., Calcutta 700014.

Tropical Refrigeration Inds., Kangra Bhavan No. 2, Dr. A. Besant Road, Bombay 400025.

Voltas Ltd., Voltasagar, Chinchpokli, Dr. Ambedkar Rd., Bombay 400033.

RIVETS & FASTENERS

Ghanshamdas & Sons, 78, Nagdevi X. Lane, Bombay 400003.

Krishna Inds., Mehrauli Rd., Gurgaon 122001. (Haryana).

Kuick Fasteners, 20, GIDC Estate, Wadhwan City 363030.

Neon Auto Agency, 28, Parekh St., Bombay 400004.

Paradise Inds., 18-A, Mayapuri Indl. Area, Phase, New Delhi 110064.

Raj Kamal Inds. (Fasteners). 135-C, Govt. Indl. Estate, Charkop, Kandivli West. Bombay 400067.

Ranjit Rivet Inds., 67, Bombay Talkies Compd., Malad West, Bombay 400064.

Rivets & Fasteners, 60, Satguru Nanik Indl. Estate, Western Express Highway, Goregaon East, Bombay 400063.

ROAD MAKING MACHINES & ROAD ROLLERS

Escorts Ltd., 11, Scindia House, Con. Circus, New Delhi 110001.

Ha-Ko Engg. Co., 10, Sati Ind,. Estate, I.B. Patel Rd., Goregaon East, Bombay 400063.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Marshall Sons & Co. (India) Ltd., 75-C, Park St., Calcutta 700016.

Millars Machinery Co. Pvt. Ltd., Victoria House, Victoria Rd., Bombay 400027.

Seema Trading Co., 302, Auto Commerce House, Kennedy Bridge, Bombay 400007.

RIVETS & FASTENERS

Manufacturers of :

RIVETS : SOLID, SEMITUBULAR, HOLLOW, BIFURCATED AND POP (BLIND) RIVETS ETC.

SCREWS: C.S.K., ROUND, CHEESE, PHILIPS FLAT, PAN HEAD, MUSHROOM HEAD ETC.

BOLTS : HEX. HEAD, SQUARENECK, CARRIAGE BOLTS ETC.

PRESSED PARTS : ALL PRESSED PARTS UPTO 35 TONS PRESS CAPACITY.

From Copper, Brass, Aluminium, Mild Steel, Stainless Steel & Alloy Steel as per Specifications/Drawings.

RIVETS & FASTENERS

60, Sat Guru Nanik Ind. Estate,
Western Express Highway,
Goregaon (East), Bombay 400 063.

Phone : **686685.** Grams : **"FASTRIVET"**

Vak Engg. Pvt. Ltd., Queen's Court, 15, Montieth Rd., Egmore, Madras 600008.

ROPES

Acme Mfg. & Agencies, Alli Chambers, Dean Lane, Bombay 400001.

Amarsons, 181, Kazi Syed St., Bombay 400003.

B. Thanawala & Sons Pvt. Ltd., 47, Tamarind Lane, Bombay 400023.

East Coast Commercial Co. Ltd., 25-D, Shakespeare Sarani, Calcutta 700016.

G.J. Rassiwala Rope Factory, 44, Clare Road, Byculla, Bombay 400008.

Ganges Rope Co. Ltd., 106, Cowies Ghat Rd., Howrah 711102.

Garware-Wall Ropes Ltd., Chowpatty Chambers, Sandhurst Bridge, Bombay 400007.

Gungadhar Bannerji & Co. Pvt. Ltd., 45, Benares Rd., Howrah 711101.

International Cane Ind., 109, N. Subhas Rd., Calcutta 700001.

International Rope Mfg. Co., Kapasia Bazar, Ahmedabad 380002.

Kurla Rope & Thread Factory, Pipe Rd., Kurla, Bombay 400070.

M.M.A. Rasiwalla & Co., 17, Janjikar St., Bombay 400003.

Madanlal Bajranglal & Co., 131, Cotton St., Calcutta 700007.

Ochhavlal Chhotalal & Co., 207-209, Nagdevi St., Bombay 400003.

Shalimar Rope Works Ltd., 14, N. Subhas Rd., Calcutta 700001.

Thana Textile Rope Works, Crescent Chambers, Tamarind Lane, Bombay 400023.

Todi & Co., Todi Estate, Lower Parel, Bombay 400013.

United Agencies, P-16, New CIT Rd., Calcutta 700012.

W. H. Harton & Co. Ltd., 8, B.B.D. Bag East, Calcutta 700001.

ROSIN & TURPENTINE

(See Turpentine & Rosin in this list.)

RUBBER APRONS

Bengal Waterproof Works (1940) Ltd., 41, Shakespeare Sarani, Calcutta 700017.

Elastica Rubber Works, 386/8, Saijpur Bogha, Ahmedabad 380001.

Fenner Cockill Ltd., Madurai 625001.

Inarco Ltd., 12-A, Bhonsle Marg, Bombay 400021.

Kanam Rubber Co. Pvt. Ltd., 38, N. Subhas Marg, New Delhi 110002.

Krishna Rubber & Engg. Works, Hanuman Rd., Rakhial, Ahmedabad 380021.

Nanco Rubber & Plastics, P. Box 243, Coimbatore 641001.

Precision Rubber Inds. Pvt. Ltd., A-71, Wagle Estate, Thane 400604.

Swastic Rubber Products Ltd., Kirkee, Pune 411003.

Union Rubber Co., 55, G. Patters Rd., Madras 600002.

RUBBER BLANKETS & MATTINGS

Lathia Rubber Manufg. Co. Pvt. Ltd., Saki Naka, Bombay 400072.

Northland Rubber Mills, Rai 131029, Sonepat Dt. (Haryana).

T. Maneklal Manufg. Co. Ltd., Vaswani Mansion, D. Vachha Rd., Bombay 400020.

RUBBER, CELLULAR & LATEX FOAM

Agra Leather Board Pvt. Ltd., 5, Ind. Estate, Agra 282001.

Bharat Foam Inds. Pvt. Ltd., Kitab Mahal, Dr. D. N. Rd., Bombay 400001.

Bharat Foam Udyog Pvt. Ltd., 49, Rajpur Rd., Delhi 110006.

Bharatkumar & Co., 187, Abdul Rehman St., Bombay 400003.

Dunlop India Ltd., 57B, Mirza Ghalib St., Calcutta 700016.

Foam Mattings (India) Ltd., Post Box No. 283, Alleppey 688001. (Kerala State)

Girnar Foam Centre, 69, Tardeo Rd., Bombay 400035.

Goa Foam Pvt. Ltd., 2/53, Kamal Mansion, 7, Arthur Bunder Rd., Colaba, Bombay 400005.

Hindustan Foam Inds., "Khayaban Kothi", 37/38, Idgah Hills, Bhopal 462001.

Ideal Foams Pvt. Ltd., P.B. No. 192, Vadodara 390001.

J.J. Foams Pvt. Ltd., 224, Okhla Indl. Estate, New Delhi 110020.

Jain & Jayna Foam Udyog, 4, Indl. Area, Tilak Nagar, Pune 411018.

Koolfoam Pvt. Ltd., Kottayam 686001.

MM Rubber Co., 150-B, Mount Road, Madras 600002.

Modern Rubber Manufg. Pvt. Ltd., 12/1B, Lindsay St., Calcutta 700001.

National Tyre & Rubber Co. of India Ltd., 213, Dr. D.N. Rd., Bombay 400001.

Nu-Foam, 39, Jagabhai Park, Kankaria, Ahmedabad 380022.

Sheela Foam Pvt. Ltd., 4/8, Asaf Ali Rd., New Delhi 110002.

Swastik Rubber Works Ltd., Kirkee, Pune 411003.

U. Foam Pvt. Ltd., 16, Ind. Estate, Hyderabad 500018.

RUBBER FLOORING TILES

Bhor Ind. Pvt. Ltd., 16, Apollo St., Bombay 400023.

East India Rubber Works Pvt. Ltd., Stark Rd., Howrah 711101.

Hindustan Rubber Works Ltd., Ballygunj Stn. Rd., Calcutta 700019.

Simplex Rubber Products Ltd., Amraiwadi, Ahmedabad 380008.

RUBBER GLOVES

Asha Rubber Ind., Agra Rd., Opp. Ralli Wolf, Mulund, Bombay 400080.

Dharampur Leather Cloth Co. Pvt. Ltd., 10, Chowpatty Sea Face, Bombay 400007.

RUBBER GLOVES

Manufacturers of

'QUALITEX'

Brand Acid & Alkali Proof Natural & Neoprene Rubber Gloves & 'MEDITEX' Brand Surgical Gloves.

ASHA RUBBER INDUSTRIES

Agra Road, Opp. Ralli Wolf,

Plot No. 62, Mulund, BOMBAY-80

PHONE: OFF: 592209 RES: 592836

Dial Rubber Works, Sonawala X Rd., Goregaon (E), Bombay 400063.

Helix Latex Products, C-11-6, Model Town, Delhi 110009.

Kale Rubber Works Pvt. Ltd., Dindoshi Express Highway Rd., Bombay 400063.

Neo Foam Rubber Ind., Perur Rd., Coimbatore 641010.

R.B.S. Rubber Mills Pvt. Ltd., J.P. Park, Liluah 711204. (W. Bengal).

Roman Rubber Industries, 2/B, Ganga Vihar, 94, Kazi Syed St., Bombay 400003.

Swastik Rubber Products Ltd., Kirkee, Pune 411003.

Trivandrum Rubber Works Ltd., Trivandrum 695007.

RUBBER HOSES

Aerolex Hose Inds., Ramaiah Ind. Estate, Bangalore 560054.

Atur Rubber Products, Basant Court, Opp. Sion Railway Station, Bombay 400022.

Basant Rubber Factory Pvt. Ltd., Basant Court, Opp. Sion Rly. Stn., Bombay 400022.

Bengal Inds., 5/1, Duke Rd., Howrah 711103.

Chhaya Indl. Corpn., T-2, Vikram Chambers, Ashram Rd., Ahmedabad 380009.

Cosmos India Rubber Works Ltd., 7, Homji St., Bombay 400001.

F. Pestonji & Co., 98, Nagdevi St., Bombay 400003.

Imperial Tyre & Rubber Co. Pvt. Ltd., Agra Rd., Bombay 400079.

Indian Rubber Manufrs. Ltd., 11, Esplanade Mansions, Calcutta 700001.

Kadar Rubber Manufg. Co. Pvt. Ltd., 46-B, Theatre Road, Calcutta 700016.

Kazaf Engg. Co., 191, Nagdevi St., Bombay 400003.

Malco Indl. Corpn., 122, Satguru Naik Indl. Estate, Western Express Highway, Goregaon East, Bombay 400063.

Malvia Agencies, 2939, Zorawar Singh Marg, Delhi 110006.

National Rubber Co., Post Box No. 3727, Coimbatore 641018.

Pioneer Rubber Mills Ltd., Agra Rd., Bombay 400078.

Royal India Corpn., 258, Nagdevi St., Bombay 400003.

Royal Rubber & Indl. Co., Venkatesh Chambers, Prescot Rd., Bombay 400001.

Rustom Mills & Inds. Ltd., Post Box 131, Ahmedabad 380001.

Shreeji Rubber Industries Pvt. Ltd., 96, Narayan Dhuru St., Bombay 400003.

SLM-Maneklal Inds. Ltd., Vaswani Mansions, D. Vachha Rd., Bombay 400020.

Teksons Pvt. Ltd., Modi Chambers, French Bridge, Bombay 400004.

Vikram & Co., 258, Nagdevi St., Bombay 400003.

RUBBER LINING

B.D.K. Synthetics Pvt. Ltd., B-107 & 108, Indl. Estate, Hubli 580030, (Karnataka).

Emmes Metals Pvt. Ltd., 147, Govt. Ind. Estate, Kandivli, Bombay 400067.

Industrial Linings, 547, Kalbadevi Road, Bombay 400002.

Machard Indl. & Engg. Corpn., 250, Kalbadevi Road, Bombay 400002.

Poly Rubber Ind., Patanwala Estate, Ghatkopar, Bombay 400077.

Shree Jay Bharat Rubber Ind., Ramnagar, Ahmedabad 380005.

South India Rubber Works, Calcutta 700046.

T. Maneklal Mfg. Co. Ltd., Vaswani Mansion, D. Vachha Road, Bombay 400020.

Tega India Ltd., 2/3, Clive Row, Calcutta 700001.

RUBBER MACHINERY

Alfred Herbert India Ltd., Kaiser-i-Hind Bldg., Sprott Road, B. Estate, Bombay 400038.

Blue Steel Engrs. Pvt. Ltd., 144, A-Z, Ind. Estate, Fergusson Road, Bombay 400013.

Devon Machines Pvt. Ltd., 52-F, Northern Phase, Ind. Area, Ambattur, Madras 600058.

Ekomech Engineers, 69, Govt. Ind. Estate, Kandivli (West), Bombay 400067.

Greaves Cotton & Co. Ltd., Industrial Equipment Divn., 1, Dr. V.B. Gandhi Marg, Bombay 400023.

Indian Expeller Works Pvt. Ltd., A-4, Naroda Ind. Estate, Naroda, Ahmedabad 382330.

Modern Engg Works, 310, Ind. Estate, 541, S. Bapat Mrg., Bombay 400028.

Parry & Co. Ltd., Dare House, 1st Line Beach, Madras 600001.

Premier Machinery Enterprises, C/o Asiatic Tyres, 71, General Patters Rd., Madras 600002.

Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.

Santosh Inds., A-1, Sona Udyog, Parsi Panchayat Rd., Andheri East, Bombay 400069.

Sohal Engg. Works, Sohal Ind. Estate, L. B. S. Marg, Bhandup, Bombay 400078.

Victory Pumps & Engines Mfg. Co., 69, Govt. Ind. Estate, Kandivli, Bombay 400067.

RUBBER OILSEALS

Delhi

A-Kor Seals, 24, Okhla Ind. Estate, New Delhi 110020.

Bedi Ind. Corpn. (Regd.), 116, D. B. Gupta Market, New Delhi 110005.

India Auto Ind., Patel Motor Market, K. Gate, Delhi 110006.

Mykoda Auto Ind., (Regd.), 2, Krishna Motor Market, K. Gate, Delhi 110006.

Super Seals India Pvt. Ltd., 21, A. Nizammuddin West, New Delhi 110013.

Gujarat

Gasket & Oil Seals Pvt. Ltd., P. O. Box 89, Vadodara 390001.

Maharashtra

Bombay Oilseals Co., Opp. Sanghani Estate, Kachrapatti Rd., Bombay 400086.

Camata Enterprises, 2, M.K. Bros. Indl., Estate, Kurla-Andheri Rd., Bombay 400072.

Cypher Engg. Co., 19/AB, Nandanwan Ind. Estate, Agra Rd., Thane 400604.

Dikson & Co., 8, Bharat House, 104, Apollo St., Bombay 400023.

Gasket Corpn. of India, 7/10, Botawala Bldg., H. Circle, Bombay 400023.

Ghanshyam & Co., 501-3, S. V. Patel Rd., Bombay 400004.

Jmco Rubber Products, 24, Agarwal Indl. Estate, 17, S.V. Rd., Dahisar East, Bombay 400068.

Lotus Rubber Inds., Inside V. G. Mkt., Grant Rd., Bombay 400007.

Pravin Rubber Co., Patil Bros. Indl. Estate, Bhayander East 401101. Thane Dist.

Supreme Washerballs Pvt. Ltd., Sukh Sagar, Hughes Rd., Bombay 400007.

Universal Oil Seals Manufg. Co., 17, Sidhpura Ind. Estate, Masrani Lane, Bombay 400070.

Venus Rubber Works, 43, Kennedy Bridge, Bombay 400004.

Victor Gaskets India Ltd., 20, M.I.D.C. Estate, Satpur, Nasik 422007.

Vidyug Cable & Rubber Inds., 66, Govt. Ind. Estate, Bombay 400067.

West Bengal

American Rubber Mfg. Co., 40, Strand Rd., Calcutta 700001.

India Oil Seals & Synthetic Products, P-36, India Exchange Place, Calcutta 700001.

Industrial Leather & Rubber Works, 10, B. R. B. Bose Rd., Calcutta 700001.

Modern Engg. & Rubber Products, 85, N. Subhas Rd., Calcutta 700001.

Nundlall Inderchand Pvt. Ltd., 10, B. R. B. Bose Rd., Calcutta 700001.

Prankrishna Ind. Pvt. Ltd., 40, Strand Rd., Calcutta 700001.

RUBBER PRODUCTS—MISCELLANEOUS

Andhra Pradesh

Andhra Rubber Ind., D-14 & 15, Indl. Est., Hyderabad 500002.

Deccan Enterprises Pvt. Ltd., 8573, Rashtrapati Rd., Secunderabad 500003.

Foam Rubber Factory, Ind. Estate, Chandulal Baradari, Hyderabad 500002.

Stallion Tyres Pvt. Ltd., P9, Indl. Devpt. Area, Nacharam, Hyderabad 501507.

Stanes Tyres & Rubber Products Ltd., 13/90 Pandhi St., Vijayawada 520001.

Sutlej Rubber Ind., 21-1-153, Rikabgunj, Hyderabad 500002.

U-Foam Pvt. Ltd., B-15, Ind. Estate, Sanatnagar, Hyderabad 500018.

Delhi

Bharat Rubber Ind., 8382, Roshanara Rd., Delhi 110007.

Bindu Rubber Inds. Pvt. Ltd., 12, D.L.F. Indl. Area, Najafgarh Road., New Delhi 110015.

Brickley Engg. Pvt. Ltd., 1590, Daribakalan, Delhi 110006.

Everest Electl. Inds., 18, DLF Ind. Area, New Delhi 110015.

General Rubber Co. Pvt. Ltd., P.B. 490, New Delhi 110001.

J. K. Ind. Ltd., 3, Bahadur Shah Zafar Mrg., New Delhi 110002.

Mercury Rubber Mills, 2/7, D. B. Gupta Rd., New Delhi 110055.

Phoenix India Rubber Products, 10184, Amar Palace, A. Samaj Rd., New Delhi 110005.

Saco Rubbers Pvt. Ltd., A-3, Kirti Nagar, Najafgarh Rd., New Delhi 110015.

Sawhney Rubber Ind., 616, Loni Rd., Delhi 110032.

Shree Bharati Udyog Pvt. Ltd., 6/17, Guru G. S. Marg, New Delhi 110001.

Universal Technical & Commercial Enterprises, P. O. Box 7818, New Delhi 110005.

Goa

Shetye Tyre & Rubber Inds., Bicholim 403504.

Gujarat

Atika Rubber Mills Pvt. Ltd., Commerce House, Dhebar Chowk, Rajkot 360001.

Atul Rubber Ind., Opp. Chakudia Mahadev, Rakhial, Ahmedabad 380021.

Baroda Rubber Ind. Pvt. Ltd., B2668, Gurunath Bhavan, Raj Mahal Rd., Vadodara 390001.

Bharat Casements Pvt. Ltd., P.B. 15, Vadodara 390001.

Bharat Rubber Ind., N. Hanuman Rd., Rakhial, Ahmedabad 380021.

Darbar Vulcanizing Works, Post Box 1112, Near Sarangpur Bridge, Ahmedabad 380002.

Gooduse Rubber Products, Raipur Gate, Kankaria Rd., Ahmedabad 380001.

Gujarat Rubber Works Ltd., Dabhoi Rd., Pratapnagar, Vadodara 390004.

Lathia Ind. Supplies Co. Pvt. Ltd., 108, Naroda Ind. Estate, Naroda, Ahmedabad 382330.

MSM Universal Tyre & Rubber Co. Gujarat Ltd., B.M.C. Bank Bldg., Gandhi Rd., Ahmedabad 380001.

National Ind., 8/64, Municipal Ind. Estate, Bapunagar, Ahmedabad 380021.

Simplex Rubber Products Pvt. Ltd., Amraiwadi Rd., Ahmedabad 380008.

Vikas Rubber India, Bedeshwar, Jamnagar 361001.

Haryana

Asia Rubber Mills, Railway Rd., Gurgaon 122001.

Haryana Rubber Inds. Pvt. Ltd., G. T. Rd., Sonepat 131001.

Karnataka

Bangalore Rubber Ind., C-26, Rajajinagar Ind. Estate, Bangalore 560044.

Dynamic Rubber & Plastic Pvt. Ltd., 494, Rajmahal Vilas Ext., Mahadevapura, Bangalore 560006.

Falcon Tyres Ltd., 5, Crescent Rd., High Grounds, Bangalore 560001.

Karnataka Rubber Works, 19, M. Gandhi Rd., Bangalore 560001.

Rubrofibre Pvt. Ltd., 11, Bore Bank Rd., Bangalore 560046.

Ruby-Maratt, 11, Rajbhavan Rd., Bangalore 560001.

Vikrant Tyres Ltd., 13th Cross, Kalidasa Rd., V. V. Mohalla, Mysore 570002.

Kerala

Allied Rubber Works Pvt. Ltd., Karapuzha, Kottayam 686001.

Appollo Tyres Ltd., Perambra 680689 (Trichur Dist.)

Associated Fibre and Rubber Ind. Pvt. Ltd., IX/312, A. M. Cross Rd., Cochin 682002.

Good Shepherd Rubber Co., Ind. Estate, Palghat 678002.

Kerala Rubber & Allied Products, Market Landing, Kottayam 686001.

Mayfield Rubbers, Market Rd., Cochin 682011.

Navabharata Enterprises Pvt. Ltd., Box No. 54, Cochin 682003.

Nenmany Rubber & Produce Co. Ltd., Ancheri Bldg., Baker Rd., Kottayam 686001.

Ruby Rubber Works Ltd., 7/460, Oyitty Rd., Calicut 673001.

South India Rubber Works, Post Box 302, Alleppey 688001.

Stanes Tyre & Rubber Products Ltd., Nagampadam, Kottayam 686001.

Trivandrum Rubber Works Ltd., Trivandrum 695007.

William Goodacre & Sons (India) Ltd., P.O. Box No. 6, Alleppey 688001.

Madhya Pradesh

National India Rubber Works Ltd., Katni 483501.

Maharashtra

Acharya Ind., 404/A, Waghwadi, Kalbadevi Rd., Bombay 400002.

Akron Rubber Ind., 134, Old Hanuman Lane, Kalbadevi Rd., Bombay 400002.

Alfred Rubber Works, 12A, Parekh Nagar, Indl. Estate, Kandivli West, Bombay 400067.

Arvico Rubber Ind., Khanna Dyeing Comp., 38, Sonawala Estate, Goregaon East, Bombay 400063.

Associated Rubber Ind. Ltd., Union Bank Bldg., Apollo St., Bombay 400023.

Auto Steel Inds., Alkarim Manzil, 15, Palton Rd., Bombay 400001.

Autorub Ind., A/112, Wagle Indl. Est., Thane 400604.

B. J. Rubber Ind., 6, Kala Indl. Est., Bombay 400078.

Basant Rubber Factory Pvt. Ltd., 103-B, Bombay-Agra Rd., Vikhroli, Bombay 400083.

Bedrock Tyre & Rubber Co., Masjid Manor, 16, Homi Mody St., Bombay 400023.

Bombay Latex and Dispersions Pvt. Ltd., Western India House, Sir P. Mehta Rd., Bombay 400001.

Bombay Rubber Works Pvt. Ltd., Saki Vihar Rd., Bombay 400072.

Brahans Rubber Pvt. Ltd., 16A, Mahal Estate, Mahakali Caves Rd., Andheri East, Bombay 400093.

Carona Sahu Co., Ltd., 221, Dr. D. Naoroji Rd., Bombay 400001.

Ceat Tyres of India Ltd., 463, A. Besant Rd., Bombay 400025.

Century Rubber & Cable Ind., Sainath Ind. Estate, Kotkar Rd., Goregaon East, Bombay 400063.

Chimanlal L. Vasa, lA, Gokhale Rd., Bombay 400004.

Cosmos India Rubber Works Pvt. Ltd., Behind R.K. Studio, Chembur, Bombay 400071.

Eagle Rubber Ind., Ghatkopar Ind. Estate, Behind Geoffrey Manners, Ghatkopar, Bombay 400086.

Firestone Tyre & Rubber Co. of India Ltd., Hay Bunder Rd., Bombay 400033.

Ghanshyam & Co., 501-3, S. V. Patel Rd., Bombay 400004.

Goodyear India Ltd., Mani Mahal, Mathew Rd., Bombay 400004.

Greentose Pvt. Ltd., 24, Dalal St., Bombay 400023.

Hind Rubber Ind. Pvt. Ltd., Suryodaya Mills Comp., Tardeo Rd., Bombay 400034.

Hindustan Rubber Works, 402, Veer Savarkar Marg, Bombay 400025.

Hindustan Tyres Pvt. Ltd., Opp. Agripada Police Station, Dr. A. R. Nair Rd., Bombay 400011.

Imperial Waterproofing Ind. (India), 14, Chakla Cross Lane, Bombay 400003.

India Rubber Products, Kasturchand Mills Estate, Dadar, Bombay 400028.

Industrial Rubber Products Pvt. Ltd., Raghu Vanshwadi, Bombay 400068.

Industrial Rubber Works, 54, Saki Vihar Rd., Bombay 400072.

International Rubber & General Industries Pvt. Ltd., 18/24, Nandlal Jani Rd., Wadi Bunder, Bombay 400009.

J. K. Ind. Ltd., Kasturi Bldg., J. Tata Rd., Bombay 400020.

J. Khushaldas & Co., "JK" Chambers, 78/83, Nagdevi St., Bombay 400003.

Jai Hind Rubber Products Pvt. Ltd., 391-F, Grant Rd., Bombay 400007.

Kale Rubber Works Pvt. Ltd., 56, Bhajipala Lane, Bombay 400003.

Kirti Rubber Works, 205, S. Vivekanand Rd., Jogeshwari, Bombay 400060.

Kohinoor Rubber Products, 380, Bhavani Peth, Pune 411002.

Korula Rubber Co. Pvt. Ltd., 249-B, Worli, Bombay 400018.

Lathia Rubber Mfg. Co. Pvt. Ltd., Saki Naka, Bombay 400072.

Lolap Metal & Rubber Inds., 3/4, Devasthan Ind. Estate, Quay St., Darukhana, Bombay 400010.

Merchant Bros., 151, Nagdevi St., Bombay 400003.

Modak Rubber Products Pvt. Ltd., Kondivitta Village Rd., Bombay 400059.

Nilambur Rubber Works, 52, Shri Krishna Niwas, New Silk Bazar, Kalbadevi Rd., Bombay 400002.

Oriental Rubber Factory, New Silk Bazar, Kalbadevi, Bombay 400002.

Oriental Rubber Ind. Pvt. Ltd., Agra Rd., Bhandup, Bombay 400078.

Parkman Polymer Inds., Gupta Deshpande Estate, Pokhran Rd., No. 1, Thane 400606.

Perfect Oil Seals & Industrial Rubber Products, 84, Bhosari Ind. Area, Pune 411026.

Picon Pvt. Ltd., 50, Nesbit Rd., Mazgaon, Bombay 400010.

Pioneer Rubber Mills (Bombay) Pvt. Ltd., L. B. Shastri Marg, Bhandup, Bombay 400078.

Poly Rubber Ind., Patanwala Estate, L. B. Shastri Marg, Ghatkopar, Bombay 400077.

Precision Rubber Co. (India), Jaya Talkies Bldg., Borivli (W), Bombay 400092.

Precision Rubber Inds. Pvt. Ltd., 401-A, Poonam Chambers, Shivsagar Estate, Dr. A.B. Rd., Bombay 400018.

Premier Rubber & Cable Ind., 211, Nagdevi St., Bombay 400003.

Premier Tyres Ltd., Merchant Chambers, New Marine Lines, Bombay 400020.

Purohit Rubber Works, 13-D, Kurla Indl. Estate, Ghatkopar, Bombay 400086.

Rane Elastomer Processors, 26-27, Agarwal Ind. Estate, S. V. Rd., Dahisar (E), Bombay 400068.

Rubber Industries (India) Pvt. Ltd., Kurla-Andheri Rd., Andheri, Bombay 400069.

Rubber Products Pvt. Ltd., C-44, Wagle Ind. Estate, Thane 400604.

Spare-Age (I) Pvt. Ltd., 9-B, Purshottam Bldg., Tribhuvan Rd., Bombay 400004.

Standard Latex Products, 250, Nagdevi St., Bombay 400003.

Supreme Ind. Ltd., Sewri Cross Rd., Wadala, Bombay 400031.

Swastik Rubber Products Ltd., Swastik House, Behind Kirkee Rly. Stn., Pune 411003.

Vir Rubber Products Pvt. Ltd., M.I.D.C. Ind. Estate, Plot No. 1, Ambernath 421501.

Pondicherry

Pondicherry Rubber Factory, C-6, Mettupalayam Ind. Estate, Pondicherry 605001.

Punjab

Ashok Rubber Works, Ind. Area, Jullundur 144001.

Bharat Rubber Factory (Regd.), 60, Indl. Area A., Ludhiana 141003.

Prince Rubber Inds., Jullundur 144004.

Ralson Ind., 810, Ind. Area, Ludhiana 141001.

Universal Rubber Ind., Shalimar Garden Rd., Kapurthala 144601.

Rajasthan

Kotah Rubber Inds., Bhimganj Mandi, Kota Junction 324002.

Rajasthan Rubber Ind., C-37, Ind. Estate, Jaipur 302006.

Tamil Nadu

Apex Rubber Pvt. Ltd., 9, Pattulos Rd., Madras 600002.

Automobile Rubber Products Pvt. Ltd., G-8, Ind. Estate, Madras 600058.

General Rubber & Latex Inds., 3/11, Seshachala Gramani Garden St., Madras 600019.

London Rubber Co. (India) Ltd., Madras 600043.

M. M. Rubber Co. Pvt. Ltd., 150B, Mount Rd., Madras 600002.

Madras Ind. Linings Ltd., 42/8, Gilchrist Ave., Madras 600031.

Madras Polymer Ind., 5A/147, Mount Rd., Madras 600006.

Madras Rubber Factory Ltd., P.B. 3760, Dhun Bldgs., 175/1, Anna Salai, Madras 600002.

Nanco Rubber & Plastics Ltd., 215, Thadagam Rd., Velandipalayam, Coimbatore 641025.

Shakthi Rubber Works, 1, Swaminaicken St., Madras 600002.

Stanes Tyre & Rubber Products Ltd., Trichy Rd., Coimbatore 641018.

Sundaram Inds. Ltd., Usilampatti Rd., Kochadai, Madurai 625016.

Uttar Pradesh

Aliga Rubber Works, 84/8, Fazal Ganj, Kanpur 208001.

Basant Rubber Inds., Gyarpura, F. Sikri Rd., Agra 282002.

Deekay Rubber Inds., 16A, Jainnagar, Meerut 250002.

Goodday Rubber Ind., 97/6, Hira Ganj, Kanpur 208001.

Goodluck Rubber & Allied Ind., D-9, Govt. Ind. Estate, Lucknow 226001.

International Rubber Mills, P.B. 56, Bhagwat Rd., Meerut 250001.

Jain Chemical & Allied Ind., 5-B, Co-op. Ind. Estate, Vivekanand Nagar, Kanpur 208001.

KOHINOOR RUBBER WORKS PVT. LTD.

Registered Office and Works:
35/1A, Canal East Road, Calcutta 700011.

Sales and Accounts Office:
10, Digamber Jain Temple Road,
Calcutta 700 007.
Phones : 33-7153, 33-0113 and 33-9766.

ISI

Licence for:
IS : 3976

Type I & II
Miners Safety Boots
IS : 5557

Type III
Knee Boots
IS : 1867

Hot Water Bottles
IS : 638

Insertion Rubber Sheets
IS : 5676

Moulded Rubber Soles and Heels

★

Leading Manufacturers of Rubber Goods since 1934

Safety Rubber Canvas Boots for Miners to IS : 3976 : 1975 Type I & II, Rubber Sheets and Insertion Sheets as per IS : 638, Ebonite Sheets, Synthetic Sheets, Hospital Rubber Sheetings, Acid and Alkali Proof Sheets, Steam Quality Sheets, D. T. Cloth, S. T. Cloth, Mackintosh Sheets, Neoprene Sheets, Carmatting, Combat Boots, Jungle/Hunter Boots, Knee Boots, Gum Boots, Gum Boots (Industrial heavy and light), Hot Water Bottles, Horn Bulbs, Tyre Flaps, Braided Hoses and Expansion Joints and all kinds of Moulded Rubber Goods.

BRANCHES:

(1) **BOMBAY :**
63/24, Dhanji Street,
Bombay 400 003.
Grams : "BADAMTEL"
Phones : 32-2676 and 32-8752.

(2) **DELHI :**
1162, Kuncha Mahajani,
Chandni Chowk,
Delhi 110 006.
Grams : "WHITESTAR".
Phones : 25-0041 and 25-9970.

Modi Rubber Ltd., Modipuram 250110 (Meerut Dist.).
Swadeshi Rubber & Gen. Mills, Baghpat Rd., Meerut 250001.
U.P. Tyres & Tubes Ltd., B-17, J. Rd., Sector E. Mahanagar Extn., Lucknow 2260006.

West Bengal

Ajanta Valves & Rubber Ind., 11, Pollock St., Calcutta 700001.
Alexander Pvt. Ltd., 26, Strand Rd., Calcutta 700001.
American Rubber Mfg. Co., 40, Strand Rd., Calcutta 700001.
Azad Rubber Co., 2, New Tangra Rd., Calcutta 700015.
Banik Rubber Inds., 7A, Bentinck St., Calcutta 700001.
Bata Shoe Co. Pvt. Ltd., 30, Shakespeare Sarani, Calcutta 700017.
Bengal Waterproof Works (1940) Ltd., 41, Shakespeare Sarani, Calcutta 700017.
Bhattacharya Rubber Works (1964) Pvt. Ltd., 174, Jessore Rd., Dum Dum, Calcutta 700055.
Central Rubber Works Pvt. Ltd., 20/B, Tangra Rd., Calcutta 700015.
Crown Rubber Ind. Pvt. Ltd., 3, Saklat Place, Calcutta 700013.
D. Wren & Co., Wardley House, 25, Swallow Lane, Calcutta 700001.
Deepak Rubber Ind., 7, Lyons Range, Calcutta 700001.
Dunlop India Ltd., 57B, Mirza Ghalib St., Calcutta 700016.
Everest Rubber Works, 171A, M. Gandhi Rd., Calcutta 700007.
Fort Gloster Ind. Ltd., 31, Chowringhee Rd., Calcutta 700016.
Kadar Rubber Mfg. Co. Ltd., 46/B, Theatre Rd., Calcutta 700016.
Kohinoor Rubber Works Pvt. Ltd., 35/1A, Canal East Rd., Calcutta 700011.
Long-Life Rubber Ind., 11-B, Topsia 2nd Lane, Calcutta 700039.
Luna Tyres Pvt. Ltd., 71/1, Canal Circle Rd., Calcutta 700054.
M. S. Rubber Co., 81A, Manicktala St., Calcutta 700006.
McMurry Rubber Works, 5, Mission Row, Calcutta 700001.
New Bharat Rubber Ind. Pvt. Ltd., 17, Paymental Garden Lane, Calcutta 700046.
Paul & Dutta Enterprises, 87/1, J. Mohan Ave., Calcutta 700005.
Phoenix Rubber Works, Old Banaras Rd., Belgachia 700037.
S. G. R. Ind. Pvt. Ltd., 10, The Mall, Dum Dum, Calcutta 700028.
Shree Krishna Rubber Works Ltd., 36, B.T. Rd., 19, R. N. Mukherjee Rd., Calcutta 700058.
Synthetics & Chemicals Ltd., 2, Brabourne Rd., Calcutta 700001.
West Bengal Rubber Works, 67, Canal Circular Rd., Calcutta 700054.

RUBBER—RECLAIMED

Indian Rubber Regenerating Co. Ltd., Plot No. F-2, Wagle Ind. Estate, Thane 400604.
Rubber Reclaim Co. of India Ltd., L-62, Conn. Circus, New Delhi 110001.
Sundaram Inds. Ltd., Rubber Dn., West Veli St., Madurai 625001. (Tamil Nadu).
Supreme Rubber Reclaimers Ltd., 31, Karangalpady, Mangalore 575003.

RUBBER ROLLERS

Akron Rubber Ind., 134, Old Hanuman Lane, Bombay 400002.
Basant Rubber Factory Pvt. Ltd., Basant Court, Opp. Sion Rly. Stn., Bombay 400022.
Bengal Belting Works Ltd., 2, BBD Bagh (E), Calcutta 700001.
Bengal Waterproof Works (1940) Ltd., 41, Shakespeare Sarani, Calcutta 700017.
Bombay Rubber Works Pvt. Ltd., Saki-Vihar Rd., Bombay 400072.
D.P. Rubber Inds., Mani Mahal, 11/21, Mathew Rd., Opera House, Bombay 400004.
Gujarat Rubber Works Ltd., Pratapnagar, Vadodara 390005.
Hindustan Rubber Works, 402, Cadell Rd., Bombay 400025.
Inarco Ltd., 1-A, Foreshore Rd., Bombay 400021.
Industrial Linings, 547, Kalbadevi Rd., Bombay 400002.
Kirti Rubber Works, 205-207, S.V. Rd., Jogeshwari, Bombay 400060.
Korula Rubber Co. Pvt. Ltd., 249-B, Worli, Bombay 400018.
Lathia Rubber Manufg. Co. Ltd., Saki Naka, Bombay 400072.
Madras Ind. Linings Ltd., 8, Gilchrist Ave., Madras 600031.
Phoenix India Rubber Products, 64, Mohamedali Road, Bombay 400003.
Rawal Rubber Works Pvt. Ltd., Sukh Sagar, Hughes Road, Bombay 400007.
Rubber Products Pvt. Ltd., 38A, Phase II, Peenya Indl. Area, Bangalore 560058.
Rubber Regenerating & Processing Co., 39-2, Canal West Road, Calcutta 700004.
Swastik Rubber Products Ltd., Kirkee, Pune 411003.
T. Maneklal Mfg. Co. Ltd., Vaswani Mansion, D. Vachha Road, Bombay 400020.
United India Rubber Works, Lal Darwaja, Surat 395001.

RUBBER SHEETS

Associated Rubber Ind. Ltd., Gogo Road, Bhavnagar 364001.
Associated Rubber & Plastic Works, 1, M.M. Ghosh Road, Calcutta 700028.
B.J. Rubber Inds., 22, N. Dhuru X Lane, Bombay 400003.
Bhor Ind. Ltd., Bhor 412206. Maharashtra.
East India Rubber Works Pvt. Ltd., 161, C. R. Ave., Calcutta 700007.
F. Pestonji & Co., 94, Nagdevi Street, Bombay 400003.
General Rubber Co. Pvt. Ltd., 1/10-B, A. Ali Road, New Delhi 110002.
Hindustan Rubber Works, 402, Cadell Road, Bombay 400025.
Hindustan Rubber Works Ltd., Ballygunge Stn. Rd., Calcutta 700019.
Kiran Enterprises, 91-B, Sherif Devji St., Bombay 400003.
Kohinoor Rubber Works Pvt. Ltd., 35/1A, Canal East Rd., Calcutta 700011.
Madras Ind. Linings Ltd., 8, Gilchrist Ave., Madras 600031.
McMurry Rubber Works, 5, Mission Row, Calcutta 700001.
New India Rubber Works Ltd., 34-A, D. C. Dey Rd., Calcutta 700015.
Oriental Rubber Ind. Pvt. Ltd., Agra Rd., Bhandup, Bombay 400078.
Rane Elastomer Processors, 26-27, Agarwal Indl. Estate, S.V. Rd., Dahisar East, Bombay 400068.
Sabarmati Rubbers, C-29, Naroda Ind. Estate, Ahmedabad 380002.

RUBBER SPORTS GOODS

Ajit Rubber Ind., Ballabhgarh 121004, Haryana.
Bata Shoe Co. Pvt. Ltd., Batanagar 743313, 24-Parganas Dist.
Beekay Rubber Ind., P.O. Rayon Mills, Amritsar 143001.
Bhattacharya Rubber Works Ltd., Jessore Rd., Calcutta 700055.
Everest Rubber Works, Kalibari Rd., Calcutta 700030.
National India Rubber Works Ltd., Katni 483501. (M.P.)
Pioneer Rubber Mills (Bombay) Pvt. Ltd., Agra Rd., Bhandup, Bombay 400072.

RUBBER TAPES

Adtapes Ltd., Darbargarh, Bhavnagar 364001.
Leukoplast (India) Pvt. Ltd., Rua S. Thome, Panaji 403001
S. Thakore & Co., Nava Darwaja Rd., Ahmedabad 380001.

RUBBER TREAD

Dunlop India Ltd., 57-B, Mirza Ghalib St., Calcutta 700016.

Good Shepherd Rubber Co., Indl. Estate, Olavakkot 678002. Palghat Dist., Kerala State.

Goodyear India Ltd., Ballabhgarh 121004, Haryana.

Inchek Tyres Ltd., 19, J.L. Nehru Rd., Calcutta 700013.

Madras Rubber Factory Ltd., 175/1, Anna Salai, Madras 600002.

RUBBER TUBING

Anand Rubber & Ebonite Products, Ind. Estate, Satpura, Nasik 422001.

Cekop Rubber Ind. Pvt. Ltd., Rana Pratap Bagh, Kondwa Road, Pune 411001.

Chhaya Engg. Corpn., T-2, Vikram Chambers, Ashram Rd., Ahmedabad 380009.

Cosmos India Rubber Works Pvt. Ltd., 7, Homji St., Bombay 400001.

Helix Latex Ind., C-11, Model Town, Delhi 110009.

Industrial Products, 139-G, S. Vivekanand Road, Bombay 400060.

Kantilal Chhotalal & Co., 22, B. Genu Road, Bombay 400002.

Paul Rubber Works, 9, Ind. Estate, Faridabad 121001.

Tropical Rubber Co., 1, Barreto Lane, Calcutta 700001.

RUBBERISED COIR PRODUCTS

Bagdi Enterprises, 301, Parekh Mkt., Opera House, Bombay 400004.

Bharat Motors, 37, Greames Rd. Madras 600006.

Coirfoam Inds., 14/6, Mathura Road, Faridabad 121003. (Haryana).

Fibre Foam Pvt. Ltd., Viveknagar, Baliapatam 670010 (Cannanore Dist.), Kerala State.

Hastings Mill Ltd., Coir & Felt Dn., 14, Netaji Subhas Rd., Calcutta 700001.

Karnataka Consumer Products Ltd., 3rd Flr.. Industry House, 45, Fair Field Rd., Bangalore 560001.

Koirlap Ind. Pvt. Ltd., Mavelikara 690101, Kerala.

Rubro Fibre Pvt. Ltd., Chungom, Alleppey 688001, Kerala State.

SAFETY APPLIANCES

Adigee Ind., 475, Keyatala Road, Calcutta 700029.

Allibhai Premji Tyrewalla, 205, Bhadkamkar Marg, Bombay 400007.

B. B. Inds., 58, N. S. Road, Calcutta 700001.

B. N. Ghoshal & Sons (Calcutta), 25B, C. R. Avenue, Calcutta 700001.

Bengal Engg. Co. Pvt. Ltd., 12, Dalhousie Sq. East, Calcutta 700001.

Blue Star Corpn. (India), 16, Rupchand Roy St., Calcutta 700007.

Daga Udyog, 41-B, Brajodulal St., Calcutta 700006.

Dharmesh Enterprises, 55, S.V. Rd., Satyanarayan Bhuvan, Borivli West, Bombay 400092.

Fida Traders, 97, Dhaboo St., Bombay 400003.

Francis Leslie & Co., Kakad Indl. Estate, Room No. 140, Lady Jamshedji Road, Mahim, Bombay 400016.

Impex Engg. & Equipment Co., 138, N. Dhuru St., Bombay 400003.

Joseph Leslie & Co., 11/12, Apeejay House, 130, Apollo St., Bombay 400023.

Kiran Trading Co., 81, V. Savarkar Marg, Bombay 400016.

Mehta Sanghvi & Co., 21A, Canning St., Calcutta 700001.

Metasafe Trading Corpn., 65, Apollo St., Bombay 400023.

Mines Service Corpn., Safety House, Ushagram, Asansol 713302. (W. Bengal).

Mohan Indl. Service, 17, Bhavana, Savarkar Marg, Prabhadevi, Bombay 400025.

Nityanand Leather Works, Shankar Gaikwad Chawl No.4, Dharavi, Bombay 400017.

Pradeep Safety Pvt. Ltd., Jamnabai Mansion, 472, Sardar Patel Road, Bombay 400004.

Pratik Inds., P.O. Box 121, Baroda 390001.

Safety Services, 118-119, New B.P.T. Rd., Wadala (E), Bombay 400037.

Sparkweld, 350/352, Grant Road, Bombay 400007.

Subtronics, Kaliandas Udyog Bhavan, 147, Near Century Bazar, Worli, Bombay 400025.

Technoperfect India, 11, Pollock St., Calcutta 700001.

Usha Leather Inds., Pila Bungalow, Dharavi, Bombay 400017.

Weldman Gloves & Inds., 30, Sir H. Goenka St., Calcutta 700070.

SAFETY MATCHES

Golden Match Industries, Bodipet Rd., Gudiyattam 632601.

Gudiyattam Match Industries, Santhapet, Gudiyattam 632601.

Hind Matches Ltd., P. Box 38, Sivakasi 626123.

Meenakshi Match Factory, 139, Elayarasanendal, Kovilpatti 627702. (T. Nadu).

Modern Match Industries, Santhapet, Gudiyattam 632602.

Shri Mahila Griha Udyog Lijjat Pappad (Match. Ind. Dn.), Near Maruti Temple, Agra Rd., Dahanu 401601. (Maharashtra).

Western India Match Co. Ltd., Indian Mercantile Chambers, Nicol Rd., Ballard Estate, Bombay 400038.

SANITARYWARES & FITTINGS

Delhi

Civil Engg. Co., Arya Samaj Rd., Karol Bagh, New Delhi 110005.

Develop Pump Ind., F.2/27, Krishna Nagar, Delhi 110051.

Gayfield & Co., Chawri Bazar, Delhi 110006.

Gem Sanitary Appliances Pvt. Ltd., Delhi 110052.

Hind Trdg. & Manufg. Co., Gali Barna, Bara Tooti, Sadar Bazar, Delhi 110006.

Kasting Pvt. Ltd., 31, Karnal Road, Delhi 110038.

Naveen Ind., C-82, Maya Puri, New Delhi 110064.

Parekh & Co., Chawri Bazar, Delhi 110006.

Sanitary Goods Mfrs., 27, Shivaji Marg, New Delhi 110015.

Somko Metal Inds. (Regd.), 3513, Gali Bajrang Bali, Chawri Bazar, Delhi 110006.

Supra Enterprise, 32-33, Nehru Place, New Delhi 110019.

Vijay Metal Ind., 3684, Chawri Bazar, Charkhewalan, Delhi 110006.

Gujarat

Khodiyar Pottery Works Ltd., Sihor 364240.

Madhusudan Ceramics, 'Ankur', Near, Dinbai Tower, Ahmedabad 380001.

Haryana

A.N. Bhaskar Sons, Amar Nagar, Faridabad 121003.

Hindustan Sanitary Wares Ind. Ltd., Bahadurgarh 124507.

Metal India Corpn., Plot 345, Sector 24, Faridabad 121001.

Karnataka

Metro Malleable Mfrs. Pvt. Ltd., S.J. Park Road, Bangalore 560002.

Mysore Stoneware Pipes & Potteries Ltd., 80, Sixth Cross Rd., Gandhinagar, Bangalore 560009.

Maharashtra

Amar Brass & Iron Works, 159, S.G. Barve Marg, Bombay 400029.

Anand Machinery Pvt. Ltd., 3 B, Chinchwad Ind. Area, Pune 411019.

Bilmat Sanitary Fittings, 73, N. Master Rd., Bombay 400023.

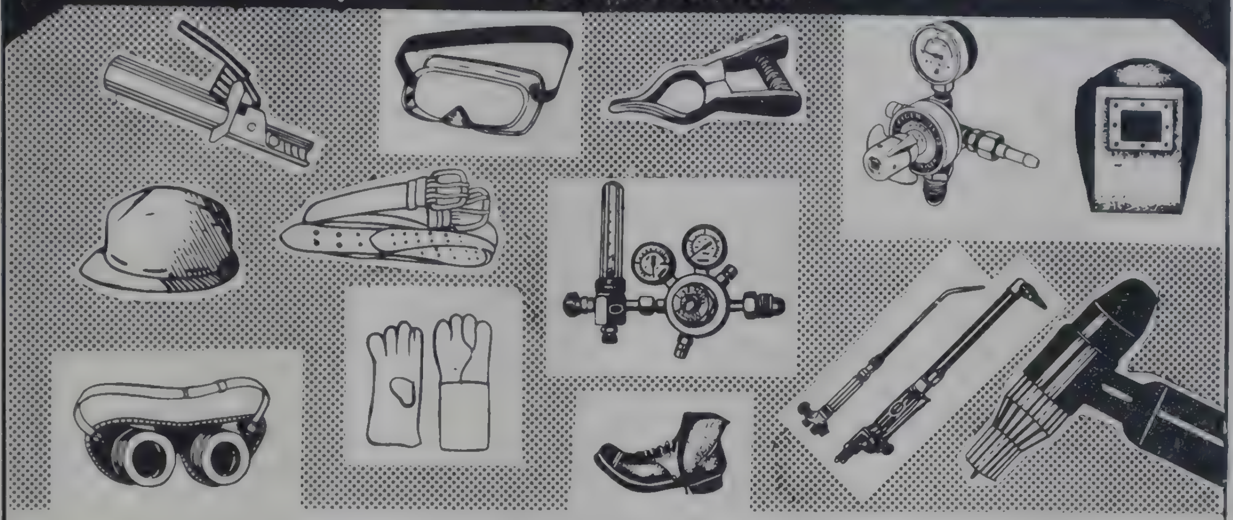
Fordham Pressings (India) Pvt. Ltd., Bombay Agra Rd., Near Pipe Line, Ghatkopar, Bombay 400086.

Johnson Pedder Pvt. Ltd., Kakad Chambers, Dr. A. Besant Rd., Bombay 400018.

PHONE: 342205

weldsafe
CORPORATION

FOR EVERYTHING IN WELDING
& SAFETY EQUIPMENTS



Manufacturers & Suppliers
ELECTRIC & GAS WELDING MATERIALS, INDUSTRIAL SAFETY WEARS,
ARC WELDING SETS, AND MANY OTHER EQUIPMENTS OF WELDING TRADE

211, NAGDEVI STREET, BOMBAY-400 003

Orissa

Orissa Inds. Ltd., Barang 754005, Cuttack Dist.

Punjab

Ambika Metal Inds., 2116, Sector 15-C, Chandigarh 160016.

Aminchand Bholanath, Tanda Rd., Jullundur 144001.

Batala Engg. Co. Ltd., Grand Trunk Road, Batala 143505.

Tamil Nadu

E.I.D. Parry Ltd., Dare House, Madras 600001.

Hargo Ind., 2A, Ind. Estate, Madras 600058.

Madras Enamel Works Ltd., 65, Sydenham Road, Madras 600003.

Neiveli Ceramics & Refractories Ltd., Vadalur 607303, S. Arcot Dist.

Regal Products Pvt. Ltd., 186, Royapettah High Rd., Madras 600014.

Uttar Pradesh

Sardar Inds., Meerut Rd., Hapur 245101.

West Bengal

Agarwal Hardware Works Pvt. Ltd., 3-A, Shakespeare Sarani, Calcutta 700071.

Ajanta Fibreglass Inds., 24, Brabourne Road, Calcutta 700001.

Allied Agencies (India), 10, N. Chunder St., Calcutta 700012.

Bengal Machinery Co. Pvt. Ltd., 9A, New Tangra Road, Calcutta 700046.

Pedlars International, 5, Clive Row, Calcutta 700001.

Soma Plumbing Fixtures Ltd., 2, Red Cross Place, Calcutta 700001.

Thakurdas Sureka Iron Foundry Ltd., 24, Goshala Rd., Howrah 711101.

Viking Corpn., 45, Lenin Saranee, Calcutta 700013.

SCIENTIFIC INSTRUMENTS

(See Instruments, Scientific in this list.)

SCOOTERS, SCOOTERETTES, MOPEDS, TWO AND THREE WHEELERS & ACCESSORIES

Andhra Pradesh Scooters Ltd., 18-A, Indl. Development Area, Patancherlu 502320. (*Vijai Pushpak* Scooters).

Aravalli Svachalit Vahan Ltd., 8, Central East Block, Alwar 301001. (*Aravali* Scooters).

Automobile Products of India Ltd., LBS Marg, Bhandup, Bombay 400078. (*Lambretta* Scooters).

Bajaj Auto Ltd., Bombay-Poona Road, Pune 411035. (*Bajaj* Scooters).

Bajaj Tempo Ltd., Bombay-Poona Rd., Pune 411035. (*Hanseat* and *Viking* Tempos; *Matador* 4-seaters).

Bihar Scooters, P.O. Fatwah 803201, Patna Dist. (*Digvijay* Scooters).

Electromobiles (India) Ltd., 48, Kasturba Road, Bangalore 560001.

Enfield (India) Ltd., Madras 600019. (*Enfield, Bullet* and *Crusader* Motorcycles).

Escorts Ltd., Motorcycle & Scooter Divn., 19/6, Mathura Road, Faridabad 121001. (*Rajdoot* Scooters).

Globe Accessories Pvt. Ltd., Shanti Nagar Indl. Estate, Vakola, Santa Cruz (East), Bombay 400055.

Hindustan Electro Metallics, Nimmco Tiles Compound, Lalbaug, Bombay 400012. (*Hem* side-car).

Ideal Jawa (India) Pvt. Ltd., Indl. Estate, Mysore 570002. (*Yezdi* Motorcycles).

Identics Ltd., Thodupuzha 685584. (Kerala State)

India Automotive Ltd., Tatanagar 831002. (*Hitodi* Mopeds).

Karnataka Scooters, 5, Crescent Road, Bangalore 560001.

Kinetic Engg. Pvt. Ltd., Pune. (*Luna* Mopeds).

Kirloskar Chatge Patil Auto Ltd., R.S. No. 307A, Uchgaon 416005. (Kolhapur Dist.) (*Luxmi* Mopeds).

Maharashtra Scooters Ltd., C/o Bajaj Auto Ltd., Pune 411035. (*Priya* Scooters).

Majestic Auto Ltd., C-48, Focal Point, Ludhiana 141010.

Mopeds India Ltd., Tirupathi 517501 (A.P.). (*Suvega* Mopeds).

Perfect Ind., Modi Mansion, 37/2C, Shankerset Rd., Pune 411009.

Punjab Scooters Ltd., Nabha 147201.

Ramon Engg. Ltd., Ramon House, 169, Backbay Reclamation, Bombay 400020. (*Ramona* Scooterettes).

Roplas India Ltd., Pimpri, Pune 411018. (*Roplas Companion* Scooters).

Saund Zweirad Union India Pvt. Ltd., Gwalior 474001. (*Vicky* Mopeds ; *Saund* Motorcycles).

Scooters Kerala Ltd., P.O. Vadackal, Alleppey 688003. (*Digvijay* Scooters; *Vijay Deluxe* Scooters; *Lambro* 3-wheelers).

Scooters India Ltd., Sarojininagar, Lucknow 226002. (*Vijay Super* Scooters & Three Wheelers).

Southern Scooters Pvt. Ltd., Madras 600018.

Sundaram Clayton Ltd., Moped Dn., Harita, Post Box. 15, Hosur 635109. (T. Nadu)

Sunrise Auto Inds. Ltd., 25/26, Indl. Estate, Tumkur Rd., Bangalore 560022. (*Badal* 3-wheelers).

Tamil Nadu Mopeds Ltd., Indl. Estate, Guindy, Madras 600032. (*Tansi* Mopeds).

West Bengal Indl. Development Corpn. Ltd., 23A, N. Subhas Rd., Calcutta 700001.

West Bengal Scooters Ltd., 227/1, Acharya J. Bose Rd., Calcutta 700020. (*Digvijay* Scooters).

SCREWS

Anupam Inds., 116, Satguru Nanik Ind. Estate, Goregaon East, Bombay 400063.

Arul Agencies, 48, Linghi Chetty St., Madras 600001.

Ashok Industrial Traders, 50, Bibijan St., Bombay 400003.

Associated Mfrs. (India), 40, Strand Rd., R. No. 9, Calcutta 700001.

Bareja Knipping Fasteners Ltd., 16-B/4, Asaf Ali Rd., New Delhi 110002.

Burma Indl. Corpn., G.T. Rd., Putlighar, Amritsar 143001.

C. Manilal & Co., 155, N. Dhuru St., Bombay 400003.

Fit Tight Nuts & Bolts Ltd., M. Vissanji Rd., Bombay 400069.

Ishwar Auto Inds., 35D, Govt. Ind. Estate, Kandivli, Bombay 400067.

Jayendra Traders, 124, N. Dhuru St., Bombay 400003.

Kalra Tools, 19, Neel Gagan, 7th Rd., Santacruz East, Bombay 400055.

Lakshmi Precision Screws Ltd., Hissar Rd., Rohtak 124001. (Haryana).

Maharashtra Fasteners, 'Purnima', Waman Rao Sawant Rd., Dahisar East, Bombay 400068.

Mahavir Agencies, 8/13, Nivetiya Rd., No. 6, Hawaldar Chawl, Malad East, Bombay 400064.

Manekji Clips Mfg. Co., 99/100, L. B. S. Mrg., Bhandup, Bombay 400078.

Microw Screw Mfg. Co., Purnima Bldg., W. S. Rd., Dahisar East, Bombay 400068.

Pentagon Screws & Fasteners Ltd., Jayem House, 97/99, Apollo St., Bombay 400023.

Perfect Fasteners Pvt. Ltd., 1/43, DLF Indl. Area, Faridabad 121003, (Haryana)

Precision Fasteners Ltd., 17, Cooperage Rd., Bombay 400039.

Ranjit Rivet Ind., 62, B. T. Compd., Malad West, Bombay 400064.

Supreme Screws Inds., 59/14A, 4th Main, Indl. Town, Rajajinagar, Bangalore 560044.

Universal Screw Factory Pvt. Ltd., G. T. Road, Chheharta 143105 (Punjab).

Virani Fasteners & Bolts Pvt. Ltd., Aji Ind. Area, Rajkot 360003.

SEALS & SEALING PRODUCTS

Durametallic (India) Ltd., 147., Karapakkam Village, Madras 600096.

Mars Seal Pvt. Ltd., 8, Ambalal Doshi Mrg., Bombay 400023.

Sealol Hindustan Ltd., F-27, Shantikunj, Opp. G.P.O., Pune 411001.

SEEDS

Maharashtra Hybrid Seeds Co. Ltd., Plot No. B-4, Ind. Estate, Jalna 431203, Maharashtra.

Nimbkar Seeds & Agricultural Devpt. Co. Pvt. Ltd., Satara 415001. Maharashtra.

Palekar & Co., Sitaram Bldg., Near Crawford Market, Bombay 400001.

Safal Seeds Pvt. Ltd., A-2, Indl. Area, Jalna 431203.

Sheetal Hybrid Seeds Co., Post Box 77, Mama Chowk, Jalna 431203.

SEWING MACHINES

Andhra Pradesh

Hyderabad Engg. Industries, Balanagar Township, Hyderabad 500037.

National Sewing Machine Co., 15-4-51, Gowliguda Chaman, Hyderabad 500012.

Standard Engg. Works, 19/1, Ind. Area, Azamabad, Hyderabad 500020.

Delhi

Delhi Sewing Machine Co., Pvt. Ltd., Qabul Nagar, Shahdara, Delhi 110032.

Jukie (India) Pvt. Ltd., B-72, Naraina Indl. Area, Phase II, New Delhi 110028.

Leader Sewing Machine Co., A/85/2, Indl. Area, Phase I, Naraina, New Delhi 110028.

Mahabir Export & Import Co. Pvt. Ltd., G. T. Rd., Shahdara, Delhi 110032.

Peter Engg. Co., 29, Beadonpura, Karol Baugh, New Delhi 110005.

Rama Sewing Machine Co., 4168, Nai Sarak, Delhi 110006.

Sansar Machines Ltd., G. T. Rd., Shahdara, Delhi 110032.

Gujarat

Vijay Sewing Machines Co., Ashapuri Rd., Navsari 396445.

Haryana

British Machinery Supplies Co., 17A, New Ind. Township, Faridabad 121001.

Karnataka

All India Sewing Machine Co., Cauvery Bhavan, K.G. Rd., Bangalore 560009

Maharashtra

Anson (India), 605, Girgaum Rd., Bombay 400002.

Bharucha Sewing Machine Co., 238, S. V. Patel Rd., Opp. Alankar Cinema, Bombay 400004.

Rajaram V. Tarphe & Co., 29/37, Padhye Wadi, Bhawanishankar Rd., Bombay 400028.

Imperial Sewing Machine Mfg. Co., 282, Sardar V.P. Road, Bombay 400004.

Indian Sewing Machine Co. Ltd., Singer Bldg., 207, Dr. D. Naoroji Rd., Bombay 400001.

Punjab

Amar Electric & Mechanical Engg. Works, G. T. Rd., Millerganj, Ludhiana 141001.

C. R. Aulack & Co., 426, Ind. Area, G. T. Rd., Ludhiana 141001.

Gobind Ram & Sons, Millerganj, Ludhiana 141001.

Panesar Mechanical Works Pvt. Ltd., Ind. Area, Gill Rd., Ludhiana 141001.

Pt. Ramji Das Harbans Lal (Regd.), Sewing Machine Works, Bastti Pathanam, Patiala 147001.

Rico Inds., B-26, Focal Point, Ludhiana 141010.

Rita Mechanical Works, Ind. Area, Ludhiana 141001.

Tamil Nadu

British Machinery Supplies Co., 136, Mount Rd., Madras 600006.

Paul Bros. & Co., 2/130, Mount Rd., Thousand Lights, Madras 600006.

Sharda Machinery Corpn., G. S. Trunk Rd., Chromepet, Madras 600044.

West Bengal

Jay Engg. Works Ltd., 183, A.P., Anwar Shah Rd., Calcutta 700031.

Lotus Ind., 15, Stark Rd., Liluah 711204. Howrah Dist.

Mahinder Singh Ragbir Singh, 55/103, Canning St., Calcutta 700001.

SEWING THREAD

Alexander Thread Co., P. Box No. 5, Mettur Dam 636402. Salem Dist. (T. Nadu).

Bharmal Thread Works, 10, Saifee Jubilee St., Bombay 400003.

Dawn Mills Co. Ltd., Lower Parel, Bombay 400013.

India Ball Thread Co. Pvt. Ltd., 2/C, J. Mullick Rd., Calcutta 700006.

Ishwardas & Co., 2, Sutar Chawl, Bombay 400002.

Lukmanji Musaji Sutarwala, 41, Nagdevi St., Bombay 400003.

Madura Coats Ltd., 81, Palton Rd., Bombay 400001.

Modi Thread Mills, Modinagar 201204, U. P.

Punjab Soot Gola Factory, Sadar Bazar, Delhi 110006.

Surya Trading Co., Gandhi Chowk, Tenali 522201. (A.P.).

SILICA & SILICATES

Allied Silicate Inds., RIC House, Off Tank Rd., Bhandup, Bombay 400078.

Bombay Silica Pvt. Ltd., Kasara St., Darukhana, Bombay 400010.

Silicates and Catalysts, 7, Indl. Estate, M. N. R. Engg. Coll., Allahabad 211004.

Sil-Tech. Products, 52-4, Ind. Colony, Naini, Allahabad 211008.

SILK & ART SILK MILLS

(Mills having more than 24 power-looms).

Andhra Pradesh

Sirsilk Ltd., Sirpur Kagaznagar 504296.

Delhi

D. C. M. Silk Mills, Najafgarh Rd., New Delhi 110015.

Gujarat

Artex Manufg. Co., New Cotton Mills, No. 1 Comp., Outside Rajpur Gate, Kankaria Rd., Ahmedabad 380001.

Crown Silk & Rayon Mills Pvt. Ltd., Sobhraj Park, 208, Nicol Rd., Ahmedabad 380001.

Dhamanwala Silk Mills, Udhana Rd., Khatodare, Surat 395002.

Diamond Silk & Rayon Mills, Nicol Rd., Ahmedabad 380002.

Garden Silk Mills Pvt. Ltd., Rampura Tanki, Surat 395003.

Mehta Silk Mills Pvt. Ltd., P. B. 32, Bilimora 396321.

Prabhat Silk & Cotton Mills Co. Ltd., Bella Mills Compound, Surat 395001.

Prabhu Silk Mills, Vasta Devdi, Surat 395003.

Standard Silk Mills, Lal Darwaja, V. Devdi Rd., Surat 395003.

Wintex Mills, Lal Darwaja, Station Rd., Surat 395001.

Madhya Pradesh

Gwalior Rayon Silk Manufg. (Weaving) Co. Ltd., P. O. Birlanagar, Gwalior 474004.

Maharashtra

Alliance Silk Mills, Atlas Mills Comp., Reay Rd., Bombay 400010.

Amar Silk Mills, New Islam Mills Comp., Currey Rd., Bombay 400013.

Ambika Silk Mills Co. Ltd., Bapat Mrg., Bombay 400013.

Anant Silk Industries, 53, Chhipi Chawl, Bombay 400002.

Ashok Silk Mills, Agra Rd., Near Dargah, Ghatkopar, Bombay 400077.

Asian Rayon Mills, New Islam Mills Comp., Currey Rd., Bombay 400013.

Bhaichand Textile Mills, Agra Rd., Bhandup, Bombay 400078.

Bharat Silk Mills Ltd., Opp. Kumari Village, Agra Rd., Kurla, Bombay 400070.

Bharat Vijay Velvet & Silk Mills, Near Saphed Pool, Kurla-Andheri Rd., Kurla, Bombay 400072.

Bipin Silk Mills Pvt. Ltd., 12, Dadar Rd., Kasturchand Mills Comp., Dadar, Bombay 400028.

Bombay Silk Mills Pvt. Ltd., Ind. Estate, Lalbaugh, Bombay 400012.

Cadell Weaving Mill Co. Pvt. Ltd., 211/213, Kalbadevi Rd., Bombay 400002.

D. V. Industries, Bhau Saheb Desai Wadi, B. Shankar Rd., Dadar, Bombay 400028.

Dhanamall Silk Mills Pvt. Ltd., Dadi Mansion, Cinema Rd., Bombay 400020.

Eldee Velvet & Silk Mills, Opp. Bawalla Mosque, Delisle Rd., Parel, Bombay 400013.

Ellora Silk Mills Pvt. Ltd., Kashmira, S. Vivekanand Rd., Bhayandar 401101. Thane Dist.

Haren Textiles Pvt. Ltd., Opp. Check Naka, Dahisar, Bombay 400068.

Harshad Textile Mills Pvt. Ltd., Sadhana Rayon House, Dr. D. Naoroji Rd., Bombay 400001.

Himdoot Weaving & Finishing Mills Pvt. Ltd., Saki Vihar Rd., Powai, Bombay 400072.

Jaifabs Rayon Industries Pvt. Ltd., Shastri Marg, Bombay 400086.

Jasmine Mills Pvt. Ltd., Dharavi, Bombay 400017.

Kailash Silk Mills, Jivan Mills Comp., Andheri-Kurla Rd., Sakinaka, Bombay 400072.

Kamala Silk Mills, 31, Silk House, Hamalwadi Corner, Girgaum Rd., Bombay 400002.

Khanna Silk Mills Ltd., Silk House, Silk Bazar, P. B. 2174, Bombay 400002.

Kiran Silk Mills Ltd., Kasturchand Mills Comp., Dadar, Bombay 400014.

L. D. Weaving Industries Pvt. Ltd., Mehra Estate, Agra Rd., Vikhroli, Bombay 400079.

Liberty Silk Mills Pvt. Ltd., Bharat House, 104, Apollo St., Bombay 400023.

Mahendra Silk Mills Ltd., 105/107, Tambakanta, Bombay 400003.

Manhar Mills Ltd., Framji Petit Mills Comp., Reay Rd., Bombay 400010.

Mohanlal Silk Mills, Atlas Mills Comp., Reay Rd., Bombay 400010.

Nanikram Sobhraj Mills Ltd., 79, Karve Rd., Bombay 400020.

National Art Silk Mills Ltd., Old Kasturchand Premises, Dadar, Bombay 400028.

New Era Fabrics Pvt. Ltd., Mogul Lane, Mahim, Bombay 400016.

New India Rayon Mills Co. Ltd., Mathuradas Mills Comp., Lower Parel, Bombay 400013.

New Mahalaxmi Silk Mills Ltd., Mathuradas Mills Comp., Lower Parel, Bombay 400013.

New Oriental Silk Mills Pvt. Ltd., Shree Nath Bhavan, 27, Picket Rd., Cross Lane, Bombay 400002.

New Vinod Silk Mills Pvt. Ltd., Kasturchand Mills Estate, Dadar, Bombay 400028.

Orkay Silk Mills Pvt. Ltd., 5/C, Vulcan Insurance Bldg., Veer Nariman Rd., Bombay 400020.

Panalal Silk Mills Ltd., Atlas Mills Comp., Reay Rd., Bombay 400010.

Paragon Textile Mills, Globe Mills' Passage, Bombay 400013.

Podar Silks & Synthetics Ltd., Podar Chambers, Syed A. Brelvi Rd., Bombay 400001.

Premco Silk Industries, A-15/16, M. I. D. C., Marol, Andheri (E), Bombay 400059.

Radha Silk Mills, 30, Parsi Panchayat Rd., Andheri West, Bombay 400059.

Rayon Textiles Manufg. Co., 771, Mogul Lane, Mahim, Bombay 400016.

Reliance Textile Industries Pvt. Ltd., Court House, Tilak Marg, Dhobi Talao, Bombay 400002.

Ruby Mills Ltd., Lady Jamshedji Rd., Dadar, Bombay 400028.

S. A. R. Silk Industries, Sonal Indl. Estate, Saki Vihar Rd., Bombay 400072.

Sadhana Textile Mills Pvt. Ltd., Sadhana Rayon House, Dr. D. Naoroji Rd., Bombay 400001.

Samarth Velvet Manufg. Co., Kanjur Village Rd., Bhandup, Bombay 400078.

Samraat Silk Mills, L. B. Shastri Marg, Vikhroli, Bombay 400079.

Sarvodaya Silk Mills, Agra Rd., Old Kurla, Bombay 400070.

Satish Textiles Pvt. Ltd., 56, Champa Galli, Opp. M. J. Market, Bombay 400002.

Silk Industries (I.), Mehra Ind. Comp., Kurla-Andheri Rd., Bombay 400072.

PODAR SILKS AND SYNTHETICS LTD.

Podar Chambers, Fort,
BOMBAY 400 001.
Phones : Office : 253800 ; Mills : 375281.

★

Podar Textiles present the improved Polyester Blends in very wide range of

Polyester Blend Suitings, Safaris and Shirtings in over 100 designs and shades.

★

Directors:

Kantikumar R. Podar, *Chairman*
D. N. Shroff
Vinaykumar R. Podar
Mrs. Snehalata K. Podar
Mrs. Nandini V. Podar
Sagarmall D. Bhiwaniwalla
S. L. Kothari
Rameshkumar Saboo

Siyaram Silk Mills Ltd., 18/24, Nandlal Rd., Wadi Bunder, Bombay 400009.

Subhash Silk Mills, Kurla-Andheri Rd., Sakinaka, Bombay 400072.

Usha Prints (I.) Pvt. Ltd., Mehra Estate, Agra Rd., Vikhroli, Bombay 400079.

Uttar Pradesh

Modi Rayon & Silk Mills, Modinagar 201204.

Shree Silk Mills, C-30/35/D-1, Maldehiya, Varanasi 221001.

West Bengal

Calcutta Silk Manufg. Co., 135-A, B. R. Basu Rd., Calcutta 700001.

Eastern Silk Manufg. Co. Pvt. Ltd., 19, R. N. Mukherjee Rd., Calcutta 700001.

Sarat Textiles Ltd., 9, B. Trunk Rd., Calcutta 700002.

Shri Ram Silk Manufg. Co., Rishra 712248. Hooghly Dist.

SILOS

Shirke-Prive-Reimbert Silos Pvt. Ltd., 72-76, Mundhwa, Pune 411036.

SIRENS & HOOTERS

Calcutta Fan Works Pvt. Ltd., 30, Chowringhee Rd., Calcutta 700016.

G. R. Electrical Ind., 110, Ripon St., Calcutta 700016.

Jetha Drums & Containers Pvt. Ltd., Opp. Byculla Goods Depot, Bombay 400027.

Kheraj Electrical Inds., 32, Tavawala Bldg., 2nd Floor, Lohar Chawl, Bombay 400002.

Ladhan Electrical & Manufg. Co., 18, Rabindra Sarani, Calcutta 700001.

Lightcraft Corpn., 14, Lohar Chawl, Bombay 400002.

Naik Bros., 358, Mint St., Madras 600001.

Subtronics, Kaliandas Udyog Bhavan, 147, Near Century Bazar, Worli, Bombay 400025.

Veejay's Trading Corporation, Ahmed Bldg., 49/51, Lohar Chawl, Bombay 400002.

Vijay Lakshmi Electric Co., Sitaram Bldg., 37, Dr. D. Naoroji Rd., Bombay 400001.

SLOTTED ANGLES

Adequate Steel Fabricators, 1975, Bank St., Karol Bagh, New Delhi 110005.

Amsons Industries, 211/13, Kalbadevi Rd., Bombay 400002.

Crescent Metal Pressing Works, 17-C, Old Anjirwadi, Mount Rd., Mazgaon, Bombay 400010.

Divakaran Storage & Handling Systems Pvt. Ltd., Post Box 17330, Bhandup, Bombay 400078.

Filex Systems, Hornby Bldg., 172/74, Dr. D.N. Rd., Bombay 400001.

Fit Right Slotted Angles Mfg. Co., Eastern Chambers, Poona St., Bombay 400009.

Fix-O-Well, Ghanshyam Ind. Estate, Veera Desai Rd., Andheri West, Bombay 400058.

Fleet Fasteners Pvt. Ltd., Delstar, 9-9A, S. Patkar Mrg., Bombay 400036.

Gem Steel Products Pvt. Ltd., 8-A, Kashi House, Con. Place, New Delhi 110001.

Intermark, 211/213, Kalbadevi Rd., Bombay 400002.

Killick Slotted Angles Ltd., Kurla-Powai Rd., Bombay 400072.

Mahavir Engrs. 44/1, Ghanshyam Indl. Estate, V.D. Rd., Andheri West, Bombay 400058.

MEK Engg. Works Ltd., 3, Broach St., Bombay 400009.

Metalware Inds., C-8, Ind. Estate, Moula Ali, Hyderabad 500040.

Metrex Pvt. Ltd., Sunder Estate, Near Kamani, Kurla, Bombay 400070.

Modern Inds., No.66, 3rd Cross, Robertson Block, Ramachandrapuram, Bangalore 560021.

Panama Sales (India), 159, Sardar Patrappa Rd., Bangalore 560002.

Pilco Marketing & Mfg. Corpn. (India), 2/39, Ansari Rd., Daryaganj, New Delhi 110002.

Rals (India), 262, Lokmanya Tilak Mrg., Bombay 400002.

Ripon Road Iron Foundry, Allana Compound, Dr. A. Nair Road, Bombay 400011.

Rolex (India) Engg. Co., 110/6, S. Bapat Mrg., Bombay 400016.

S.S. Fabricators & Dealers, 89/1, J.C. Rd., Bangalore 560002.

Sarada Agencies, 1/155, Mount Rd., Madras 600002.

Simplex Udyog, 11, Indl. Estate, Bhilai 490001 (M. P.).

Steel Inds., Shed No. 4, Gala No. 22, 36, Jairajbhai Lane, Bombay 400008.

Steel Products Pvt. Ltd., 8-A, Kashi House, Connaught Place, New Delhi 110001.

Trigon Metal Sections, 4/5, Indl. Estate, Gorwa Rd., Vadodara 390003.

Vinar Systems Pvt. Ltd., 59, Apollo St., Bombay 400023.

Well-Set Slotted Angles, 542, Kalbadevi Rd., Bombay 400002.

SOAP & TOILETRIES

Andhra Pradesh

A.P. Oil & Chemical Inds. Ltd., Post Box No. 216, Arundelpet, Guntur 522002.

Foods, Fats & Fertilisers Ltd., Tadepalligudem 534101.

Rama Krishna Soap Factory, Old Bhoiguda, Secunderabad 500003.

Bihar

Anand Chemical Ind., Kachisarai, Muzaffarpur 842001.

Delhi

D. C. M. Chemical Works, Majafgarh Rd., New Delhi 110015.

Universal Perfumery Co., 5643, Gandhi Market, Sardar Bazar, Delhi 110006.

Karnataka

Desi Soap Works, Sampangi Tank Rd., Bangalore 560002.

Mallya Soap Works, Post Box No. 709, Mangalore 575003.

Manyam & Co., Raja Snow Bldg., Seshadripuram, Bangalore 560020.

Margarine & Refined Oils Co. Pvt. Ltd., 125/1, Mysore Rd., Bangalore 560026.

Miltan Chemeplas Corpn., 17/18, Small-Scale Ind. Area, Rajajinagar, Bangalore 560010.

Kerala

Diamond Soap Works, Palace Rd., Cochin 682002.

S. V. Products, Irinjalakuda 680121.

Maharashtra

Agra Soap & Chemical Works, Mount Rd., Bombay 400010.

Balsara Hygiene Products, 43, Nagindas Master Rd., Bombay 400023.

Bombay Soap Factory, Ahmed Oomer St., Two Tanks, Bombay 400008.

C. C. Mahajan & Co., 79, Sutar Chawl, Bombay 400002.

Colgate-Palmolive (I.) Pvt. Ltd., Steelcrete House, Dinshaw Vachha Rd., Bombay 400020.

D. D. Shah & Co., Damodar Bldg., 105, Princess St., Bombay 400002.

Devka Chemical Works, 322-27, New Mill Rd., Kurla West, Bombay 400070.

E. S. Patanwala, Patanwala Ind. Estate, Bombay-Agra Rd., Ghatkopar, Bombay 400077.

SPEEDEX

THE SLOTTED ANGLES WITH SUPER STRENGTH

DIAL
314771 • 310567

TELEX
011-2101 RAMA

Selling Agents :

INTERMARK

211/213, Kalbadevi Road, Bombay 400 002

General Detergents, 38, Podar Chambers, S. A. Brelvi Rd., Bombay 400001.

Godrej Soaps Ltd., Eastern Express Highway, Vikhroli, Bombay 400079.

HICO Products Pvt. Ltd., Mogal Lane, P. B: 6467, Bombay 400016.

Hindustan Lever Ltd., 165/166, Backbay Recl., Bombay 400020.

J. K. Helene Curtis Ltd., J. K. Bldg., N. Morarjee Mrg., Bombay 400038.

Lakme Ltd., Bombay House, 24, Homi Mody St., Bombay 400023.

Muller & Phipps (India) Pvt. Ltd., Queen's Mansion, Bastion Rd., Bombay 400001.

Poona Soap Factory, 129, Bhavani Peth, Pune 411002.

S. H. Kelkar & Co. Pvt. Ltd., L. B. Shastri Marg, Mulund, Bombay 400080.

Stepan Chemicals Ltd., Liberty Bldg., Sir Vithaldas Thakersey Marg, Bombay 400020.

Swastik Oil Mills Ltd., 13, W. Hirachand Marg, Bombay 400038.

Tata Oil Mills Co. Ltd., 24, Homi Mody St., Bombay 400023.

Vivek Oil & Soap Inds., A-1, Sidhpur Ind. Co-op. Estate Ltd., L. B. S. Mrg., Bombay 400077.

Tamil Nadu

Cholayil Pharmaceuticals, 1, Palayakara St., Madras 600023.

Ganga Works, Lattice Bridge Rd., Adyar, Madras 600020.

Madras Vanaspati Ltd., 86, S. N. Chetty St., Madras 600013.

Veto Co., 16, Jones St., Madras 600001.

Uttar Pradesh

Amrit Banaspati Co. Ltd., Amritnagar, Ghaziabad 201001.

Modi Soap Works, Modinagar 201201.

Prag Vanaspati Products, Aligarh 202001.

West Bengal

Asiatic Soap Co., 8, Dalhousie Sq. East, Calcutta 700001.

HINDUSTAN LEVER LTD.

Manufacturers, Sellers and Exporters :

Chemicals, Soaps, Synthetic Detergents, Personal Products, Edible Fats and other foods, Animal Nutrition Products.

●

Head Office :

Hindustan Lever House, 165-166, Backbay Reclamation,
Bombay 400 020.
Phone : 221222. Grams : " HINDLEVER ".
Telex : Bombay 2323.

Major Factories :

Bombay, Calcutta, Shamnagar and Haldia (West Bengal), Jammu (J. & K.), Ghaziabad and Etah (U.P.). Taloja (Maharashtra), Tiruchy (Tamil Nadu).

Research Centre : Andheri, Bombay.

Branches : Bombay, Delhi, Calcutta and Madras.

Board of Directors :

Dr. A. S. Ganguly (Chairman), Mr. G. A. Alcock, Mr. R. Bahadur, Mr. P. K. Chadha, Mr. J. C. Chopra, Mr. S. M. Datta, Dr. K. K. G. Menon, Mr. P. J. M. Panikar, Mr. B. R. Shah and Mr. S. S. Mehta.

Company Secretary : Mr. C. J. Mahimker.

●

Subsidiary Companies :

Lever Associated Trust Limited; Levindra Trust Limited; Hindlever Trust Limited; and Indexport Limited, Bombay.

Bangaluxmi Soap Works, 7, Chowringhee Rd., Calcutta 700013.

Bengal Chemical & Pharmaceutical Works Ltd., 6, G. C. Ave., Calcutta 700013.

Calcutta Chemical Co. Ltd., 35, Panditia Rd., Calcutta 700029.

Calcutta Soap Works, 'Calsopark', Tiljala 700039. 24 Parganas Dist.

Chasme Chemical Co. Pvt. Ltd., 37, Sardar Shankar Rd., Calcutta 700028.

Himani Pvt. Ltd., 3, Khelat Babu Lane, Calcutta 700002.

Hindustan Development Corpn. Ltd., Hindu Family Bldgs., 27, Sir R. N. Mukherjee Rd., Calcutta 700001.

Howrah Chemical Co., 53/12/2, B. B. Bose Rd., (Ramkristopur), Howrah 711101.

John Paterson & Co. (I) Ltd., 96, Garden Reach Rd., Calcutta 700023.

Kusum Products Ltd., Bombay Mutual Bldgs., 9, Brabourne Rd., Calcutta 700001.

Model Soap Co., Mehta Bldg., 55, Canning St., Calcutta 700001.

Reckitt & Coleman of India Ltd., 41, Chowringhee, Calcutta 700016.

Sisir Soap Works, 12/1, Jessore Rd., Calcutta 700028.

Swaika Vanaspati Products Ltd., P. N. B. House, 18B, Brabourne Rd., Calcutta 700001.

Vegetable Products Ltd., 1 & 2, Old Court House Corner, Calcutta 700001.

SOAP PLANTS

Pennwalt India Ltd., Signal Hill Annexe, Tank Rd., Sewri, Bombay 400033.

SOUND EQUIPMENT & PROJECTORS

Ahuja Radios, 215, Okhla Ind. Estate, New Delhi 110020.

Bajaj Electronics, 323, Unique Ind. Estate, Off V. Savarkar Marg, Bombay 400025.

Cinerama Pvt. Ltd., Metro House, M.G.Rd., Bombay 400020.

Interwood Deco Pvt. Ltd., 137, Dhanji Shamji Indl. Estate, LBS Mrg., Vikhroli, Bombay 400083.

PDR Videotronics (India) Pvt. Ltd., 99, Old Prabhadevi Rd., Bombay 400025.

Philips India Ltd., Shivsagar Estate, Dr. A. Besant Rd., Bombay 400018.

Photophone Pvt. Ltd., 7, Saki Vihar Rd., Bombay 400072.

Sonodyne Corpn., 7, S. Roy Rd., Calcutta 700034.

Stereo Sounds Corpn., 35, Tardeo Airconditioned Mkt., Bombay 400034.

SPECTACLES, FRAMES

(See under Plastic Spectacle Frames).

SPORTS GOODS

A. H. Wheeler & Co. Pvt. Ltd., 15, Elgin Rd., Allahabad 211001.

Alfa Sports, Metro House, Bombay 400020.

Azad Rubber Works, Malad West, Bombay 400064.

K. L. Malhotra Bros., WX/83, Basti Nau, Jullunder 144001.

Lightway Sports Co., 199, Mount Rd., Madras 600002.

Mahavir Rubber Inds., S-132, Indl. Area, Jullundur City 144001.

Mag & Co., 77, G. P. Rd., Madras 600002.

Pioneer Sports Works Pvt. Ltd., 292, Tilak Mrg., Dhobitalao, Bombay 400002.

SPRAYERS & SPRAY GUNS

American Spring & Pressing Works Pvt. Ltd., Marve Rd., Malad, Bombay 400064.

Baker Engg. Co., 35, Nagdevi St., Bombay 400003.

Jost's Engg. Co. Ltd., Great Social Bldg., Sir P.M. Rd., Bombay 400001.

Manik Machinery Mfrs. Pvt. Ltd., 21, Sona Udyog, Parsi Panchayat Rd., Andheri East, Bombay 400069.

DIE SPRINGS
DISC SPRINGS
INT-EXT. CIRCLPS.
E-CLIPS
SPRING PLATES.
VALVE PLATES
BALOON SPRINGS.
SHEET METAL SPRINGS.
SPIRE NUT
STAR WASHERS
SPRING DOWEL S.
SPIRAL SPRING DOWELS.
SPIRAL SPRINGS.
SNAP SPRINGS
AAKAR ARTS

CRESCENT SPRINGS
173, NANDANAVAN IND. ESTATE, BLOCK A-8 UNIT NO. 16 A, AGRA RD., THANA-400 604 (P.B. NO.-316).
PHONES : 593072 • 594400 • GRAM: "COILSPRING" THANA

Metallizing Equipment Co., Chopasani Rd., Jodhpur 342007.

National Metallizing & Engg. Co., 8, R.N. Mukerhee Rd., Calcutta 700001.

Schori Blasting & Metal Spraying Co., 100/104, N. Master Rd., Bombay 400023.

Sigma Steel Inds. (Regd.), A-2, Indl. Estate, Ludhiana 141003.

Statfield Equipments Pvt. Ltd., 132/8, Ganeshkhind Rd., Pune 411007.

Trinity Metal Ind., A-5, Coop. Ind. Estates Ltd., Balanagar, Hyderabad 500037.

SPRINGS, WASHERS & CIRCLIPS

Andhra Pradesh

Indian Leaf Spring Mfg. Co. Pvt. Ltd., 62, M. G. Rd., Secunderabad 500003.

Rockson Springs (India), C-27, Indl. Estate, Sanatnagar, Hyderabad 500018.

Torison Products, Uppal Rd., Hyderabad 500007.

Bihar

H.S.Spring Mfg. Co., Court Rd., Giridih 815301

Delhi

Ganesons Machinery Corpn., A-25, Indl. Area, Naraina, New Delhi 110028.

Goldfield Mfg. Co., 22, Gupta Motor Mkt., Kashmere Gate, Delhi 110006.

Hindustan Spring Manufg. Co., 3740, Gali Hakiman, H. Qazi, Delhi 110006.

Manasmann International Pvt. Ltd., 2730, Kashmere Gate, Delhi 110006.

Murarka Engg. Works, 28/37, Najafgarh Rd., New Delhi 110015.

Spring Masters Pvt. Ltd., 8707, Shidipura, New Delhi 110005.

Springs India, A-52, Okhla Indl. Area, Phase II, New Delhi 110020.

Gujarat

Ideal Sheet Metal Stamping & Pressing Pvt. Ltd., Kalidas Mills Compound, Gomtipur, Ahmedabad 350021.

Rajkot Spring Works, Lilavati Chambers, Dhebarbhai Rd., Rajkot 360001.

Sarang Spring Mfg. Co. Plot 34, Makarpura Indl. Estate, Vadodara 390010.

Karnataka

Canara Workshop Ltd., Kodialbail, Mangalore 575003.

Stumpp, Schuele & Somappa Pvt. Ltd., P. O. Box 78, Bangalore 560001.

Yoshama & Co. Pvt. Ltd., 33-5, Ind. Area, Rajaji Nagar, Bangalore 560010.

Maharashtra

A. H. Kapur & Co., Court House, 302, Lokmanya Tilak Marg, Dhobitalao, Bombay 400002.

A. K. Motiwala, 145, Lohar Chawl, Bombay 400002

American Spring & Pressing Works Pvt. Ltd., P. B. No. 7602, Off Marve Rd., Malad, Bombay 400064.

Apex Engg. Pvt. Ltd., 34, MIDC Indl. Estate, Nagpur 440016.

Beco Springs, C-30, Rd. No. 16, Wagle Estate, Thane 400604

Bestamco, 94, S. V. Rd., Erla, Bombay 400056

Bharat Electronics & Spring Co., B-66, Rd., No. 34, Wagle Indl Estate, Thane 400604

Bharat Spring Pvt. Ltd., 37, Reay Rd., Cotton Green, Bombay 400033.

Bombay Spring Works Pvt. Ltd., 118, Dadasaheb Phalke Rd., Dadar, Bombay 400014.

Calcutta Spring Works, 6th Kharwa Galli, Kumbharwada Le., Bombay 400004.

MODERN SPRING CO.

Mfrs. of :
PRECISION WIRE & STRIP SPRINGS
CIRCLIPS, WASHERS, FLEXIBLE
SHAFTS & CONCRETE VIBRATORS
FOR ALL INDUSTRIES

SPECIALIST IN : Cot's, Lock's and Radio's Springs
We Manufacture springs with Testing equipments
on Modern Machines.

64, MUNICIPAL INDUSTRIAL ESTATE, DRAINAGE CHANNEL -
ROAD, OFF DR. E. MOSES RD., WORLI, BOMBAY-400 018.

OFFICE TEL. NO. 378568
OFFICE TEL. C/O 391834
RESI. TEL. C/O 374753, 890937
GRAM : 'MOSCOCOILS' BOMBAY-11

Circlips India, Opp. Lion Pencils Pvt. Ltd., Dahisar Check Naka, S.V. Rd., P.O. Mira 401104. (Thane Dist.)

Cosmos Industries, 2/2, Sainath Indl. Estate, Off Aarey Rd., Goregaon (East), Bombay 400063.

Crescent Engg., Narayan Nagar, Agra Rd., Ghatkopar, Bombay 400077.

Crescent Springs, 173, Nandanvan Ind. Estate, Thane 400604.

Devidayal Electronics & Wires Ltd., Pokhran Valley, P. B. No. 39, Thane 400604.

Engineer Bros., 16, Apollo St., Bombay 400023.

Fairfield Manufg. Co., Aman Chambers, 113, M. Parmanand Marg, Bombay 400004.

Forbes Forbes Campbell & Co. Ltd., Forbes Bldg., Charanjit Rai Mrg., Bombay 400001.

Great Western Engg. Works, Sea View, 1st Pasta Lane, Colaba, Bombay 400005.

Harry Inds., 209, Sati Ind. Estate, I. B. Patel Rd., Goregaon West, Bombay 400063.

Imanes Pvt. Ltd., 94, S. Vivekanand Rd., Irla, Bombay 400056.

India Leaf Spring Manuf. Co. Pvt. Ltd., Souvenir, 1st Pasta Lane, Bombay 400005.

Indo-Spring Inds., Akash Deep, French Bridge, Bombay 400007.

Industrial Spares Co., Dada Manzil, 67-69, Mohamedali Rd., Bombay 400003.

Industrial Spring Mfg. Co., 9-A, Govt. Industrial Estate, Kandivli (West), Bombay 400067.

International Industrial Springs, 238, Nandanvan Indl. Estate, Block A-B, Unit 14-A, Thane 400604.

J.C. Vora & Co., Saraswati Bhavan, Benham Hall Lane, Bombay 400004.

Kemen Springs Pvt. Ltd., Harilela House, Opp. G. P. O., Bombay 400001.

La Precision Springs & Engg. Co. Ltd., 1103/A-2, Model Colony, Pune 411016.

Larsen & Toubro Ltd., L. & T. House, Ballard Estate, Bombay 400038.

Metropolitan Springs Ltd., Antop Hill, Wadala, Bombay 400031.

Milan Spring Works, 39, Khandia St., Nr. Two Tanks, Bombay 400008.

Modern Engg. & Spring Co., 11, Sona Udyog Estate, Parsi Panchayat Rd., Andheri (E), Bombay 400069.

Modern Spring Co., 64, Municipal Indl. Estate, Dr. E. Moses Rd., Worli, Bombay 400018.

Modern Spring Works, 43, Khandia St., Nr. Two Tanks, Bombay 400008.

Morris, 16-A, Giriraj Indl. Estate, Mahakali Caves Rd., Chakala, Andheri (E), Bombay 400093.

Narotham Gokaldass & Bros., 3rd Kumbharwada, Bombay 400004.

Paras Engg. Co., Ghatkopar Ind. Estate, Unit No. C-11A, L. B. S. Mrg., Bombay 400086.

Pravin Iron Works, 30, Sindhi Lane, Bombay 400004.

Premier Spring Works, 1/1, Kala Ind. Estate, Goregaon, Bombay 400063.

Rainbow Ind., 94, S. Vivekanand Rd., Bombay 400056.

Shree Shakti Iron Works, 54, Sutar Chawl, Bombay 400002.

Spring & Auto Corpn., 431, Bhadkamkar Marg, Bombay 400004.

Standard Spring & Metal Pressing Works, Opp. Indian Oxygen Ltd., Ghatkopar, Bombay 400086.

Super Coil Spring Mfg. Co. Pvt. Ltd., Vidyanagari, Santa Cruz East, Bombay 400055.

Supreme Washerballs Pvt. Ltd., Sukh Sagar, N. S. Patkar Marg, Bombay 400007.

Swastik Industrial Works, 122, N. Dhuru St., Bombay 400003.

Texo Agencies, 12, Noble Chambers, S.A. Brelvi Rd., Bombay 400001

SPRINGS
&
FORMS

By

YOSHAMA

AND
COMPANY PRIVATE LIMITED

Regd. Office :
94, S. V. Road, Erla, Bombay 400 056.

Factory :
33-5, S.S.I. Area,
3rd Cross, Rajaji Nagar, Bangalore 560 010.
Grams : "YOSHAMA". Phones : 80025, 80237.
Telex : BSPL YPL BG 588
Directors Residence Nos. : 80727 & 81759.

Union Mfg. Co., UMC Estate, Chakala Rd., Andheri (E), Bombay 400069.

Yoshama & Co. Pvt. Ltd., 94, S. Vivekananda Rd., Bombay 400056.

Punjab

Mittal Inds., Near Kanwal Theatre, Bhatinda 151001.

Rajasthan

Spring (Rajasthan) Manufg. Co., Tank Rd., Jaipur 302004.

Tamil Nadu

King's Spring Industries, 32, Mukttharunnisa Begum St., Ellis Rd., Madras 600002.

Southern Automatic Ind. Pvt. Ltd., Super B-2, Indl. Estate, Guindy, Madras 600032.

South India Spring Mfrs., 36, Patel Rd., Coimbatore 641009.

Uttar Pradesh

Coiltech (India) Pvt. Ltd., 13/391B, Civil Lines, Kanpur 208001.

Lallco India Pvt. Ltd., Opp. Govt. Inter Coll., Meerut 250001.

Nanda Brush & Steel Spring Manufg. Co., Railway Rd., Prempuri, Meerut 250002.

R. J. Indl. Corpn., 50, Ambar Talaya, Roorkee 247667.

Springs India Ltd., 46/1, Site 4, Indl. Area, Sahibabad, Ghaziabad 201005.

West Bengal

Advance Marketing Agencies (Regd.), Post Box 11, Calcutta 700001.

All India Spring Mfg. Co., 135, Netaji Subhas Rd., Calcutta 700001.

Avon Springs & Accessories Pvt. Ltd., 12, India Exchange Place, Calcutta 700001.

B. M. Industries, 18, Acharya Prafulla Chandra Rd., Calcutta 700009.

Bhabataran Sarkar & Sons, 62/1A, N. Subhas Rd., Calcutta 700001.

Bharat Spring Manufg. Co., 115, N. Subhas Rd., Calcutta 700001.

Calcutta Spring Mfg. Co., 71-A, N. Subhas Rd., Calcutta 700001.

Circlip & Oilseals Co. (Regd.), P. O. Box 603, Calcutta 700001.

Coventry Spring & Engg. Co. Pvt. Ltd., 23, G. Chandra Ave., Calcutta 700013.

Gautam Engg. & Trdg. Co., 87A, D. Mitra St., Calcutta 700006.

George Salter India Ltd., Chartered Bank Bldg., Calcutta 700001.

Guest, Keen, Williams Ltd., 3A, Shakespeare Sarani, Calcutta 700016.

Henry Morgan & Co., 71A, N. Subhas Rd., Calcutta 700001.

Hoare Miller & Co. Pvt. Ltd., 15, G. Chandra Ave., Calcutta 700015.

Howrah Spring Mfg. Co., 118/1, Brindabon Mullick Le., Howrah 711104.

Indo British Spring Manufg. Co., 28, Christopher Rd., Calcutta 700014.

Industrial Spring & Steel Inds., 85, N. Subhas Rd., Calcutta 700001.

Joy Narayan Spring Manufg. Co., 103, Salkia School Rd., Howrah 711106.

Jyoti Industries, 26, Pottery Rd., Calcutta 700015.

Midland Spring Manufg. Co., 38, N. Subhas Rd., Calcutta 700001.

Naveen Metal Ind., P. B. No. 10016, Calcutta 700025.

New Dominion Engg. Works, 1/B, Pottery Rd., Calcutta 700015.

Olympic Spring Mfg. Co., 7, Sooterkin St., Calcutta 700013.

Pioneer Spring & Steel Concern Pvt. Ltd., Eagle House, 4, Govt. Place North, Calcutta 700001.

Sanker Spring & Steel Co., 40, Strand Rd., Calcutta 700001.

Spring Manufrs. (India), 132, Beliaghatta Rd., Calcutta 700015.

Swami (Spring Mfg.) Co., 40/1, Strand Rd., Calcutta 700001.

STAPLERS

Jagjivandas Nandlal & Co., 237, A. Rehman St., Bombay 400003.

National Electro Mechanical Ind., C, B-1, Kalol Ind. Estate, Kalol 382721. (Gujarat).

Stapco Ind., 16, Rocky Ind. Estate, I. Patel Rd., Goregaon (E), Bombay 400063.

Staple Pins Pvt. Ltd., 293, D. Upadhyaya Marg, Mulund West, Bombay 400080.

Staplers Corpn. (India), Sambava Chambers, Sir P. Mehta Rd., Bombay 400001.

Wireways Inds. Corpn., 4/7, Ind. Estate, Gorwa, Vadodara 390003.

STATIONERY

(also see Office Equipment)

Anand Sales Corpn., 34 Maruti Lane, Bombay 400001.

Bombay Stationery Mart, 7A, Sir P. Mehta Rd., Bombay 400001.

Bombay Stationery Supply Co., 147-149, Abdul Rehman St., Bombay 400003.

City Stationery Stores, Gool Mansion, S. A. Brelvi St., Bombay 400001.

East India Stationery Mart, 84, Cawasji Patel St., Bombay 400001.

Excelsior Stationery Mart, Tamarind House, Tamarind Lane, Bombay 400023.

Express Stationery Service, 12-A, Gunbow St., Bombay 400001.

Imperial Stationery Co., Medows St., Bombay 400023.

International Stationery Stores, Victoria Bldg., S. A. Brelvi Rd., Bombay 400001.

Noble Stationery Mart, Victoria Bldg., S. A. Brelvi Rd., Bombay 400001.

Raja Traders, 117, Medows St., Bombay 400023.

Superior Stationery Mart Pvt. Ltd., Examiner Bldg., Medows St., Bombay 400023.

GUEST KEEN WILLIAMS LTD

REGISTERED OFFICE:
3A Shakespeare Sarani, Calcutta 700071
HEAD OFFICE:
97 Andul Road, Howrah 711103, West Bengal
WORKS:
97 Andul Road, Howrah 711103, West Bengal
Lal Bahadur Shastri Marg, Bhandup, Bombay 400078
Rajajinagar, Bangalore 560010

MAIN PRODUCTS MANUFACTURED BY THE SIX OPERATING DIVISIONS

Sankey Pressings Division

Electrical steel stampings and laminations; precision pressed metal components; tools, jigs and fixtures.

Steel Division

Alloy, spring, high quality carbon, ball bearing, boron, file, forging quality, free cutting and other special steels as hot rolled or bright bars; flange bars and lock ring sections.

Bolt & Nut Division

High tensile fasteners, mild steel bolts and nuts, stainless steel fasteners, rivets and spikes.

Screws & Fasteners Division

Wood screws, machine screws, self tapping screws, cotter pins, tinmen's rivets, semi-tubular and tubular rivets and other industrial fasteners; safety pins.

Forgings Division

Carbon, alloy and other special steel automotive forgings, forgings for diesel engines and other machinery; elastic rail fasteners.

Engineering & Machinery Division

Special purpose machinery.

MUKAND

the makers of quality steels
who offered you
a full range of carbon,
alloy and free cutting steels
now present

EN31 EN24

in 6 mm-22 mm coils, and
25 mm-70 mm rounds in straight lengths.

For all inquiries, contact:

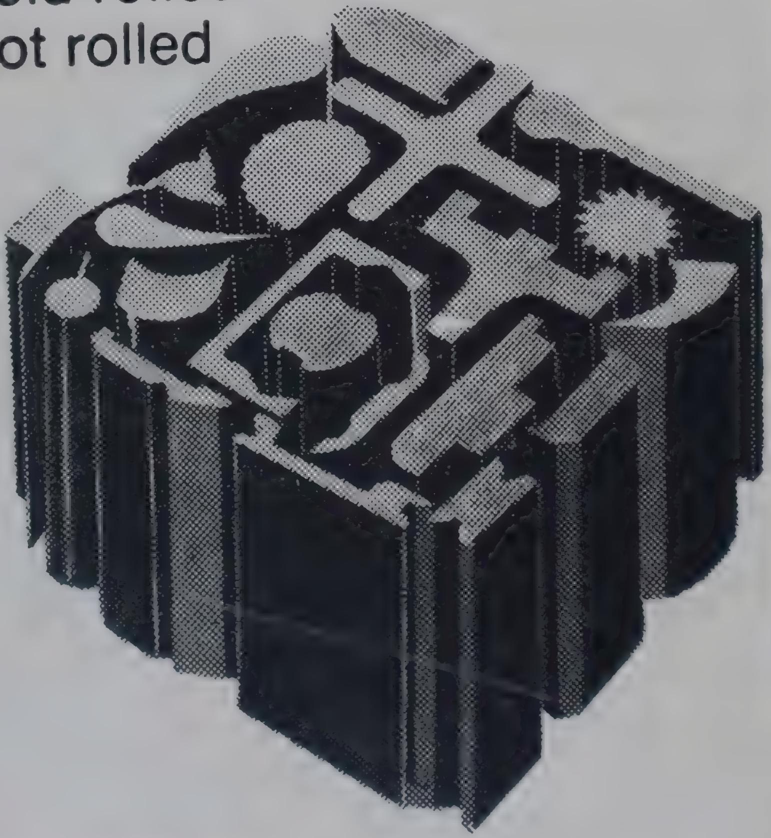
Rolled Product Sales
Mukand Iron & Steel Works Ltd.
Lal Bahadur Shastri Marg
Kurla, Bombay 400 070.

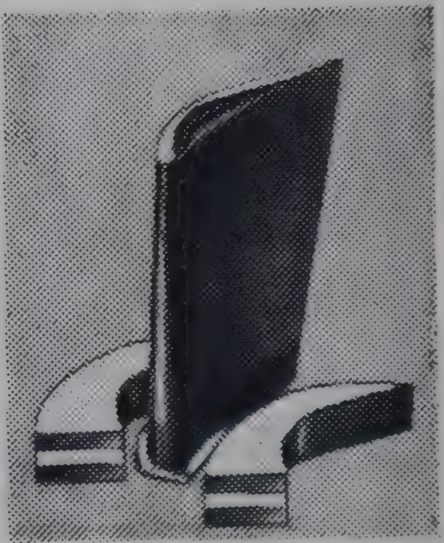
**MUKAND
IS
STEEL
TECHNOLOGY**

ISOPROFIL

WEST GERMANY

Special steel shapes
cold drawn
cold rolled
hot rolled





CARBON AND ALLOY STEELS INCLUDING TITANIUM

Applications • TEXTILE MACHINERY • TURBINE BLADES • TYPEWRITER SECTIONS • AIRCRAFT INDUSTRY • GENERATOR SPACER BARS • PRINTING MACHINERY • SEWING MACHINE INDUSTRY • SPORT ARMS • DEFENCE ARMAMENTS • POLE SHOE SECTIONS • AUTOMOBILE SECTIONS • GEAR LEVER SECTIONS • HOLLOW SECTIONS

MONGA

AGENTS,
VIRGO MARKETING PRIVATE LIMITED,
507, ROHIT HOUSE, TOLSTOY MARG, NEW DELHI-110001
PHONES : 385739, 385731, 385751 CABLE : KAYMONGA
TELEX : 31-2882 and 31-4124 VRGO IN

emerald-vm-124

Wellknown Stationery Mart, Gool Mansion, Parsee Bazar St., Bombay 400001.

Young India Stationery Mart, 43, Ghoga St., Bombay 400001.

STATIONERY MAKING MACHINES

Dadiala Engg. Works, 27, DLF Ind. Area, Najafgarh Rd., New Delhi 110015.

STEEL—ALLOY

Bihar

Tata Iron & Steel Co. Ltd., Jamshedpur 831001.

Delhi

Rathi Alloys & Steel Ltd., 3-A, Vandhana II, Tolstoy Mrg., New Delhi 110001.

Gujarat

Star Steel Pvt. Ltd., Maneja, Vadodara 390013.

Haryana

Globe Motors Ltd. (Globe Steels Division), 21/5, Mathura Rd., Ballabhgarh 121004.

Northern India Iron & Steel Company Ltd., 20/3, Milestone, Mathura Rd., Faridabad 121003.

Partap Steel Rolling Mills Pvt. Ltd., 21/3, Mathura Rd., Ballabhgarh 121004.

Karnataka

Brindavan Alloys Ltd., Peenya Indl. Area, IV Phase, Peenya, Bangalore 562140.

Canara Workshops Ltd., Deyeli Padavu, Mangalore 575001.

Central Steel Corpn., No. 9, S. P. Rd., Bangalore 560002.

Saroj Alloy & Steels Ltd., Post Box 38, Hospet 583201.

Visvesvaraya Iron & Steel Ltd., P.O. Bhadravati 577301.

Madhya Pradesh

Shree Ishar Alloy Pvt. Ltd., Sanwer Rd., Sukhalia, Indore 452003.

Maharashtra

Aditya Mills Ltd., Stadium House, V. Nariman Rd., Bombay 400020.

Basant Alloy Steel Ltd., C-6, MIDC Ind. Area, Tarapur 401502. (Thane Dist.).

Comet Steels, 3/11/29, Navjivan Socy., Lamington Rd., Bombay 400008.

Firth India Steel Co. Ltd., Plot No. F-3, Rd. No. 22, Thane Ind. Area, P.O. Wagle Estate, Thane 400604.

Guest, Keen, Williams Ltd., Lal Bahadur Shastri Marg, Bhandup, Bombay 400078.

Hariganga Alloys & Steel Ltd., 39, MIDC Area, Hingna, Nagpur 440016.

Mahindra Ugine Steel Co. Ltd., Bakhtawar, Nariman Point, Bombay 400021.

Man Ind. Corpn. Ltd., 66, Alli Chambers, Tamarind Lane, Bombay 400023.

Mukand Iron & Steel Works Ltd., Shastri Mrg., Bombay 400070.

Narendra Carbon & Alloy Steel Co., 366/68, Kalbadevi Rd., Bombay 400002.

Navbharat Steel Rolling Mills, L. B. S. Marg, Bhandup, Bombay 400078.

Shakti Alloy Steel Ltd., Kerala Bldg., H. School Rd., Sangli 416416.

Special Steels Ltd., Datta Pada Rd., Borivli (E), Bombay 400066.

Sumer Metal Corpn., 44/62, A. Dady St., Bombay 400004.

Uni Abex Alloy Products Ltd., Liberty Bldg., New Marine Lines, Bombay 400020.

Workshop Engg. & Equipment Co., 30/32, Bhajipala Lane, Bombay 400003.

Punjab

Ashoka Alloy Steels Pvt. Ltd., Sadopur, Ambala City 134007.

Mohta Alloys & Steel Ltd., Ludhiana 141001.

Punjab Iron & Steel Co. Pvt. Ltd., G.T. Rd., Jullundur Cantt. 144005.

Upper India Steel Mfg. & Engg. Co. Pvt. Ltd., Ludhiana 141003.

Tamil Nadu

Madras Alloy & Stainless Steel Ltd., 151/3, Mount Rd., Madras 600002.

Mehta Industrial Corpn., 35, Mount Rd., Madras 600002.

P. Sood & Co., 56, Linghi Chetty St., Madras 600001.

Roshan Trading Corpn., 6, Jaffar Sarang St., Madras 600001.

Steel Distributors, 61, Sembudoss St., Madras 600001.

Super Forgings & Steels (Sales) Pvt. Ltd., 274, Linghi Chetty St., Madras 600001.

Trichy Steel Rolling Mills Ltd., TVS Bldg., West Veli St., Madurai 625001.

West Bengal

Associated Supply Corpn. (I), 10, Pollock St., Calcutta 700001.

Baijnath & Sons, 22, Strand Rd., Calcutta 700001.

Bengal Ferro-Alloys & Steel Ltd., 8, Chittaranjan Ave., Calcutta 700012.

Crown Steel Co. Pvt. Ltd., 4, Narayan Prasad Babu Lane, Calcutta 700007.

Guest, Keen, Williams Ltd. (Steel Division), 97, Andul Rd., Howrah 711103.

Hanuman Forging Ind., 134/1, M. Gandhi Rd., Calcutta 700007.

Industrial Steels Supplies Co., 35, Chittaranjan Ave., Calcutta 700012.

Madanlal Steel Corpn., 89, N. Subhas Rd., Calcutta 700001.

Metropolitan Steel Corpn., 23A, N. Subhas Rd., Calcutta 700001.

National Iron & Steel Co. Ltd., Belur, Howrah 711101.

New Steel Agency, 2, Narendra Chandra Dutt Sarani, Calcutta 700001.

Orient Steel & Inds. Ltd., 2, Brabourne Rd., Calcutta 700001.

Special Steel Supply Centre, 219-C, Old China Bazar St., Calcutta 700001.

Steel Rolling Mills of Hindustan Pvt. Ltd., 47, Hyde Rd., Calcutta 700027.

United Steel Corpn., 24, Strand Rd., Calcutta 700001.

STEEL FABRICATION

Allen King Steel Fabs, 10/1F, Block ' C ', Mercantile Bldgs., Calcutta 700001.

Alloy Steel Fabrication Pvt. Ltd., 902, Raheja Centre, Nariman Point, Bombay 400021.

Amiya Corpn., 19, British Indian St., Calcutta 700001.

Beekay Inds., 7, Chittaranjan Ave., Calcutta 700072.

Bharat Fabricators, 55-D, Govt. Ind. Estate, Kandivli, Bombay 400067.

Deccan Mech. & Chem. Ind., 78, Bhosari Ind. Estate, Pune 411026.

Eagle Engg. Co., 35, Chittaranjan Ave., Calcutta 700072.

FACT Engg. Works, Udyogamandal 683501. (Kerala).

Gansons Ltd., 131, Mount Rd., Madras 600006.

Hitvic Engg. & Mfg. Co. Pvt. Ltd., Anand Sojitra Rd., Vallabh Vidyanagar 388120. (Gujarat).

Khandelwal Udyog Ltd., Kurla Kirol Rd., Ghatkopar (W), Bombay 400086.

Krishna Fabrications Pvt. Ltd., 6A, Peenya Ind. Area, Phase 1, Bangalore 562140.

Lakshmi Engg. Works, 134/1, M. G. Rd., Calcutta 700007.

Lidant Electric Co. Pvt. Ltd., Gupta Mills Estate, Darukhana, Reay Rd., Bombay 400010.

Lunar Engrs., 10C, Tulsi Pipe Rd., Bombay 400013.

Motilal & Co., Oshiwara, S. V. Rd., Jogeshwari West, Bombay 400060.

EAGLE ENGINEERING COMPANY

Engineers — Steel Fabricators — Exporters

★

Dealers in :

Trailers, Tank Trailers, Jeep Trailer, Trolleys and Barrows, Pallet & Elevating Trucks, Hydraulic Mobile Lifting Table & Cranes and other Mechanical Handling Equipments as per Customer's Drawings.

★

Reply to Sales Office :

35, Chittaranjan Avenue,
Calcutta 700 072.

Phone : 26-2077. Grams : "TRACMAN".

Nathani Steel Pvt. Ltd., Vidya Vihar, Bombay 400086.

P.J.Surotia & Co., Rakhial, Ahmedabad 380023.

Patcon Pvt. Ltd., 7A, Elgin Rd., Calcutta 700020.

Peacefort Chem-Ind. Engg. Pvt. Ltd., 37-A, L.B.S. Mrg., Bombay 400078.

Peters Engg. Pvt. Ltd., 74, Bhosari Ind. Estate, Pune 411026.

Pharchemets, 117, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Precision Controls, 94-B, Mount Rd., Madras 600018.

Rathi Industrial Equipment Co. Pvt. Ltd., 162, Ambedkar Rd., Pune 411001.

Sahyadri Structurals Pvt. Ltd., Preet Chambers, Pune 411005.

Shakti Chemical Works, Crescent Chambers, 3rd Flr., Tamarind Lane, Bombay 400023.

Shivsakti Engg. Corpn., 27-A, Ahmed Mahmujee St., Liluah 711204. (Howrah Dist.).

Siesta Steel Construction Pvt. Ltd., 401, Lotus House, 33A, New Marine Lines, Bombay 400020.

Simplex Udyog, 65, Ind. Estate, Bhilai 490001. (M.P.)

Standard Fabricators (India) Pvt. Ltd., Jeevan Sahakar, Sir P. M. Rd., Bombay 400001.

Steel & Alloy Steel Fabricators, P.N.B. House, 2nd Flr., Sir P.M. Rd., Bombay 400001

Steel Fabrication Products, Charpur, Navsari 396445.

Steel Fabricators, Ind. Estate, Sangli 416416.

Sujata Engineers & Fabricators, Plot No. 112, MIDC, Marol Ind. Area, Andheri East, Bombay 400093.

Sunrise Electric Corpn., 92 AB, Govt. Ind. Estate, Bombay 400067.

Sved Corpn., Sved House, Plot C-5, St., 22. MIDC., Andheri East, Bombay 400093

Todi Inds. Pvt. Ltd., Todi Estate, Lower Parel, Bombay 400013.

Tower Engg. Pvt. Ltd., 501-E, Poonam Chambers, Dr. A. Besant Rd., Worli, Bombay 400018.

Transved Industries, Plot No. C-3, Street No. 11, MIDC, Marol Indl. Area, Bombay 400093.

Union Sales Corpn., 1181-C, Ambedkar Marg, Bombay 400012.

United Steel Works, Kabilpore Naka, Juna Thana, Navsari 396445.

Vertex Engg. Works, B-23, Girikunj Ind. Estate, Andheri East, Bombay 400093.

Vijay Engg. & Trading Co., 71, M. Karve Road, Bombay 400020.

STEEL FURNACES

Andhra Pradesh

Andhra Steel Corpn. Ltd., Malkapuram, Visakhapatnam 530001.

Electric Transformers & Equipment Co., Indl. Estate, Sanatnagar, Hyderabad 500018.

Bihar

Ashoka Steels, Ashoka Cement Ltd., Dalmianagar 821305.

Foundry Forge Plant of Heavy Engg. Corpn. Ltd., Dhurwa, Ranchi 834004.

Kumardhubi Engg. Works Ltd., Kumardhubi 828203. Dhanbad Dist.

Tata Engg. & Locomotive Co. Ltd., Jamshedpur 831001.

Tata Yodogawa Ltd., Adityapur 831013.

Usha Alloys & Steel Ltd., Adityapur 831013.

Gujarat

Bharat Steel Foundry, Ganedia Kuwa Road, Kotharia, Rajkot 360001.

Hindustan Brown Boveri Ltd., Maneja, Makarpura Rd., Vadodara 390001.

Poly Steels (India) Ltd., Survey No. 46, Nari Road, Bhavnagar 364001.

Steelcast (Bhavnagar) Pvt. Ltd., Ruvapari Road, Bhavnagar 364001.

Haryana

Dabriwals Steel & Engg. Co. Ltd., Sector 24, Plot No. 136, P.O. Faridabad 121001.

Globe Steels (Divn. of Globe Motors Ltd.), 21/4, Mathura Road, Ballabgarh 121004.

Haryana Steel & Alloys Ltd., G.T. Road, Murthal (Sonepat) 131001.

Jindal Strips Pvt. Ltd., Delhi Road, Hissar 125001.

Northern India Iron & Steel Co. Ltd., 20/3, Milestone, Mathura Road, Faridabad 121001.

Oswal Steels, Plot No. 263, Sector No. 24, Faridabad 121001.

Pratap Steel Rolling Mills Pvt. Ltd., 21/3, Mathura Road, Ballabgarh 121004.

S. G. Steels Pvt. Ltd., Plot No. 6, Sector 4, Ind.-cum-Housing Estate, Faridabad 121001.

Universal Steel & Alloys Ltd., P.O. Gurukul, Indraprastha Ind. Estate, Faridabad 121001.

Karnataka

Bhoruka Steel Ltd., Mahadevpura P.O., Whitefield Road, Bangalore 560048.

Canara Workshops Ltd., Maroli, Mangalore 575005.

Visvesvaraya Iron & Steel Ltd., Bhadravati 577301.

Kerala

Steel Complex Ltd., 'Wisco Manor', Feroke 673631.

Madhya Pradesh

Binod Steels Ltd., 68/77, Ind. Estate, Pologround, Indore 452001.

Central India Machinery Manufg. Co. Ltd., Agra Loop Road, Birlanagar, Gwalior 474004.

Shri Ishar Alloy Steels Pvt. Ltd., Sector 'D', Sukhalia, Sanwar Road, Indore 452003.

Maharashtra

Aeron Steel Rolling Mills, 2nd Pokharan Road, Majiwada, Thane 400601.

B. R. Hermann & Mohatta (I) Pvt. Ltd., Mustafa Bldg., Sir P.M. Road, Bombay 400001.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Vikhroli, Bombay 400079.

Indian Steel Ind. Corpn., 106-7, Bazar Ward, Kurla, Bombay 400070.

K. T. Steel Ind. Pvt. Ltd., Broach St., Bombay 400009.

Krishna Steel Ind. Pvt. Ltd., Vaswani Mansion, D. Vachha Road, Bombay 400020.

Kumar Steel & General Mills, Shastri Marg, Bombay 400083.

Mahindra Ugine Steel Co. Ltd., Bakhtawar, Nariman Point, Bombay 400021.

Malleable Iron & Steel Castings Co. Pvt. Ltd., Mathuradas Mills Comp., S.Bapat Road, Bombay 400013.

Mukand Iron & Steel Works Ltd., Shastri Marg, Bombay 400070.

Western Rolling Mills Pvt. Ltd., L.B. Shastri Marg, Bhandup, Bombay 400078.

Punjab

Apeejay Steel Castings Co. Pvt. Ltd., Tanda Road, Jullunder City 144001.

Punjab Concast Steels Ltd., Dhandri Kalan, Ludhiana 141001.

Punjab Iron & Steel Co. Pvt. Ltd., G.T. Road, Jullundur Cantt. 144005.

Upper India Steel Manufg. & Engg. Co. Pvt. Ltd., Village Sherpur Kalan, G. T. Road, Ludhiana 141003.

Rajasthan

Man Ind. Corpn. Ltd., P.B. 131, Jaipur 302001.

National Engg. Ind. Ltd., Jaipur 302001.

Tamil Nadu

Continuous Steel Casting Plant of TIDCO Ltd.; Mosur Road, Arkonam 631001.

Ennore Foundries Ltd., Ennore, Madras 600057.

K.C.P. Ltd., Central Workshop, Tiruvottiyur, Madras 600019.

Shri Ramakrishna Steel Ind. Ltd., Karamadai 641104. Coimbatore Dist.

Sivananda Steels Ltd., Ind. Estate, Ambattur, Madras 600058.

Uttar Pradesh

Ambica Steels Pvt. Ltd., 51/2, Ind. Area, Site 4, Sahibabad, Ghaziabad 201005.

J. K. Iron & Steel Co. Ltd., Kalpi Road, Kanpur 208001.

Modi Steels, Modi Ind. Ltd., Modinagar 201201.

Motilal Padampat Sugar Mills Co. Pvt. Ltd., Steel Foundry Division, Gutaiya, Kanpur 208001.

Rathi Ispat Ltd., Area No. 1, Ghaziabad 201001.

West Bengal

Alloy Steel Plant, Durgapur 713204.

Burn & Co. Ltd., 20, N. Mukerjee Rd., Howrah 711101.

Electrosteel Castings Ltd., Stephen House, 31A, Jhowtala Road, Calcutta 700017.

Gontermann Peipers (I) Ltd., 69, G. C. Ave., Calcutta 700013.

Guest, Keen, Williams Ltd., Steel Division, 97, Andul Road, Howrah 711103.

Hindustan Iron & Steel Co., 68, Jessore Road, Dum Dum, Calcutta 700028.

Hindustan Motors Ltd., 15, India Exchange Place, Calcutta 700001.

Howrah Iron & Steel Works Pvt. Ltd., 90, Benares Road, Salkia, Howrah 711106.

Indian Iron & Steel Co. Ltd., Asansol 713301

Indo-Japan Steels Ltd., 5/1, G.T. Road, Belur, Howrah 711101.

Kusum Steels Pvt. Ltd., 3, Amratolla St., Calcutta 700001.

Mining and Allied Machinery Corpn. Ltd., P.O. Durgapur 713201.

National Iron & Steel Ltd., P.O. Belur Math 711202. Howrah Dist.

Orient Steel & Wire Inds. Ltd., 2, Brabourne Road, Calcutta 700001.

Textile Machinery Corpn. Ltd., Steel Foundry Division, Belgharia, Calcutta 700056.

STEEL FURNITURE & SECURITY EQUIPMENT

Andhra Pradesh

Andhra Steel Furniture Works, 7, M. Gandhi Road, Secunderabad 500003.

Bantia Steel Ind. Pvt. Ltd., 14, New Bhoiguda, Secunderabad 500003.

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

Trinity Metal Ind., A-5, Co-op. Ind. Estate Ltd., Balanagar, Hyderabad 500037.

Assam

Metal & Alloy Inds., Tinsukhia 786125.

Chandigarh

Decor Steel Pvt. Ltd., 71/72, Indl. Area, Chandigarh 160002.

Delhi

Delhi Engg. Works Pvt. Ltd., Azadpur, Delhi 110033.

Delite Safe Works, Qutab Road, Delhi 110006.

Fourbhai Engg. Works, G.T. Road, Delhi 110032.

Garnish Traders Pvt. Ltd., 24, Kamla Market, New Delhi 110001.

Indian Safe Factory, 10254, Loha Mandi, Motia Khan, New Delhi 110007.

J. M. Chimanlal Agarwal & Co., 3676, Chawri Bazar, Delhi 110006.

Style Steel & Engg. Works, 60, Rani Jhansi Road, New Delhi 110055.

Union Engg. Co., AA/6, Anand Parbat, St. No. 4, Guru Gobind Singh Marg, New Delhi 110005.

Gujarat

Ahmedabad Eagle Engg. Enterprises Pvt. Ltd., 410, Near Rly. Crossing, Naroda, Ahmedabad 382325.

Chandan Metal Products Pvt. Ltd., Gorwa Road, Vadodara 390003.

Jayendra Metal Ind. Ltd., Opp. Baroda College, Vadodara 390001.

Laxmi Steel Inds., Opp. Vakal Seva Kendra, Bhimnath Road, Sayajiganj, Vadodara 390001.

Pasmar Enterprises, C-11, Indl. Est., Gandhidham 370201.

Security Equipment Manufacturers, 47, Ind. Estate, Naroda, Ahmedabad 382325.

Trigon Metal Sections, Gorwa Road, Vadodara 390003.

Vaultex Ind., 4/24, Ind. Estate, Gorwa Road, Vadodara 390003.

Karnataka

Bangalore Metal Products Pvt. Ltd., C-34, Govt. Ind. Estate, Rajajinagar, Bangalore 560010.

Chamundeshwari Engg. Works, 8th Mile, Mysore Road, R.V. Coll. Post, Bangalore 562124.

Mahakali Engg. Corpn., 133, Nagarthpet, Bangalore 560002.

Vijaya Trading Co., 306, Sub. Chatram Road, Bangalore 560009.

Madhya Pradesh

Malwa Steel Factory, Topkhana Road, Ujjain 456001.

Vanguard Business Systems Ltd., 355, Jawahar Marg, Indore 452004.

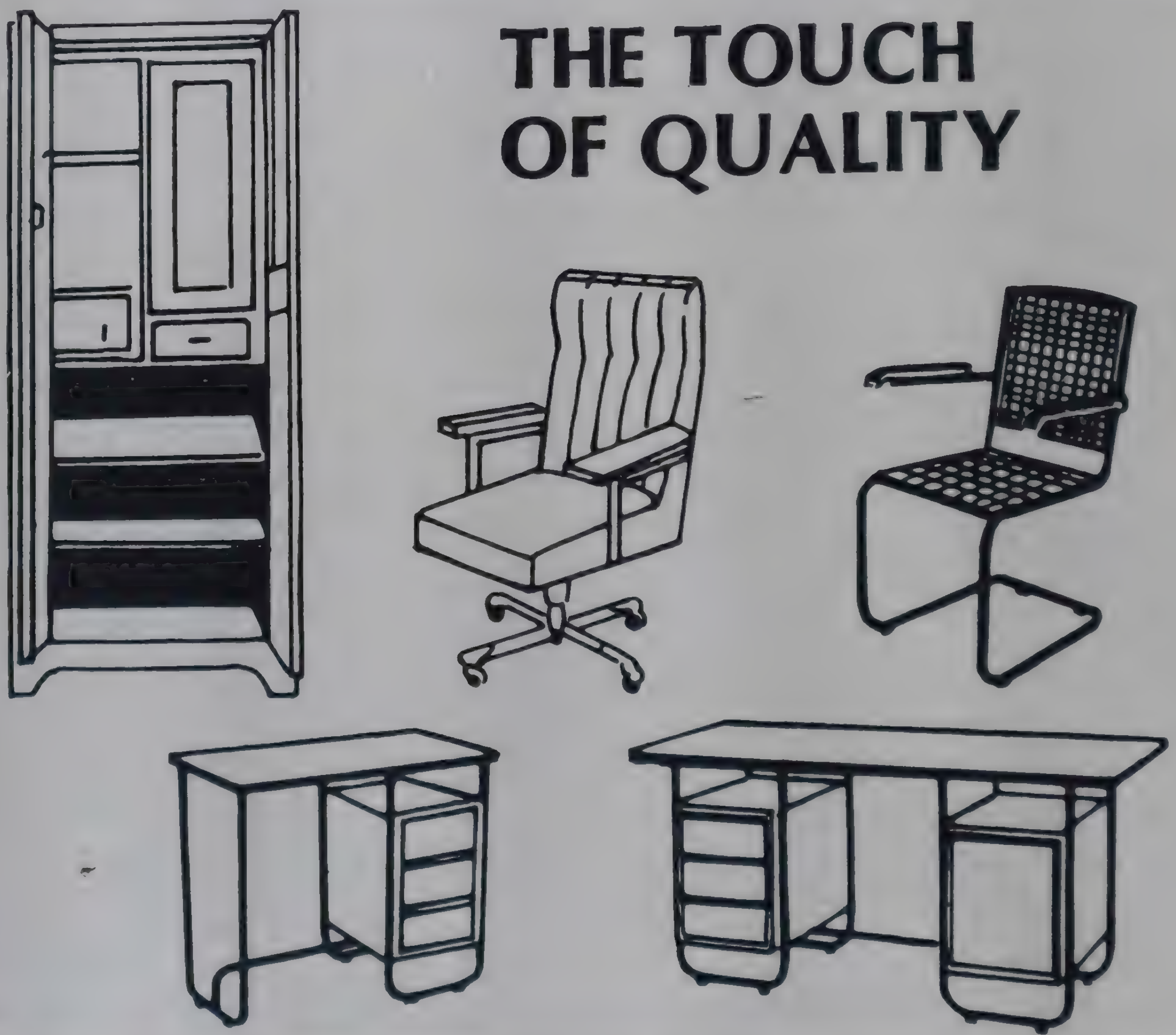
Maharashtra

Allsteel, Bombay Mutual Terrace, 534, Sardar Patel Road, Bombay 400007.

Asian Steel Products, 311-13, Kalbadevi Road, Bombay 400002.

VEEKAY

PHONE:
68 48 14



THE TOUCH
OF QUALITY

VEEKAY Enterprises

(Manufacturers & Wholesellers of Steel Furnitures)

199, 134, BOMBAY TALKIES COMPOUND, MALAD (W),
BOMBAY-400 064.

EXPORT ENQUIRIES ARE SOLICITED

Dwivedi Steelmade Pvt. Ltd., 230, Dr. A. Besant Road, Bombay 400018.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Godrej Bhavan, Home Street, Bombay 400001.

Govin's Safe Manufg. Co., 167, Viegas St., Bombay 400002.

Gujarat Iron & Steel Works, 356, Sandhurst Road, Bombay 400004.

Harpreet Inds., Pt. J.L. Nehru Marg, Aurangabad 431001.

Honesty Iron Works, 60, 1st Carpenter St., Bombay 400004.

Khinvasara Ind., S. No. 127, Akurdi, Pune 411019.

Khira Steel Works Pvt. Ltd., Sandhurst Bridge, Bombay 400007.

Methodex Business Systems, 33-A, New Marine Lines, Bombay 400020.

Metro Steel Products, Kalbadevi Road, Bombay 400002.

New Gujarat Safe & Steel Works, Jogeshwari (E), Bombay 400060.

Office Equipment Co. of India, Bombay Mutual Bldg., Sir P. Mehta Road, Bombay 400001.

Record Management Aids, 9/3, Tardeo A/C Market, Bombay 400034.

Standard Steel Furniture Works, 91, Mohammedali Road, Bombay 400007.

Steelage Ind. Ltd., Opp. Post Office, Mazgaon, Bombay 400010.

Steelmade, 230, Dr. A. Besant Road, Bombay 400018.

Union Sales Corpn., 239, P. D'Mello Road, Bombay 400001.

Veekay Enterprises, S/3, 602, Sunder Nagar, S.V. Rd., Malad West, Bombay 400064.

Venus Steel Products (India), 301, Kalbadevi Road, Bombay 400002.

Tamil Nadu

Agro-Indl. Engg. Combine, Bodipatti, Udamalpet 642126. Coimbatore Dist.

Bendweld Ind., 297, T. H. Road, Madras 600001.

Chelur Corpn., 30A, Pantheon Road, Egmore, Madras 600008.

Dindigul Lock Workers Co-op. Ind. Society Ltd., Malaipatli Road, Dindigul 624001.

L.K.S.Furniture, 23, Madurai Rd., Tiruchirapalli 620008.

Southern Engg. Indls., 146, Dr. R. Prasad Road, Tatabad, Coimbatore 641012.

Sri Ram Corpn., 3/2, Jagannathan Road, Nungambakkam, Madras 600034.

Tamilnad Thozhilagam, Sidco Plot-13, Ind. Estate, Ambattur, Madras 600058.

Uttar Pradesh

Charan Safe Works Pvt. Ltd., 6-A, Ind. Estate, Kanpur 208001.

New Era Steel Inds., Mukand Nagar, Ghaziabad 201001.

West Bengal

Acme & Co., 'Jain House', 8/1, Esplanade East, Calcutta 700001.

Anand Metal & Steel Works, 23, Brabourne Road, Calcutta 700001.

Bengal Steel Furniture, P-40/45, Ezra Street, Calcutta 700001.

Bombay Safe & Steel Works Pvt. Ltd., 56, N. Subhas Road, Calcutta 700001.

Bungo Steel Furniture Ltd., 57, Diamond Harbour Road, Calcutta 700023.

Calcutta Furniture Works Ltd., 69/1, S. K. Deb Road, Calcutta 700028.

Chatterjee Engg. Co., 113, Lenin Sarani, Calcutta 700043.

Commercial Medium Pvt. Ltd., 51, Chittaranjan Avenue, Calcutta 700012.

Commercial Syndicate, 22, Canning St., Calcutta 700001.

Cromelite India Pvt. Ltd., P-35, India Exchange Place, Calcutta 700001.

D. P. Steel Ind., 93/1, Tollygunge Road, Calcutta 700033.

DE's Lock Ind., 31, H. Dutta Lane, Calcutta 700033.

India Steel Furniture Manufg. Co., 95, M. Gandhi Road, Calcutta 700007.

Joinery Manufg. Co., 77/1, Christopher Road, Calcutta 700046.

Jupiter Steel Manufg. Co., 20/A, Brabourne Road, Calcutta 700001.

Kedarnath Parsotamdas & Co., Pvt. Ltd., 37, N. Subhas Road, Calcutta 700001.

Metro Ind. Works, 94, B. Ghose Road, Calcutta 700040.

Orient Safe & Cabinet Manufg. Pvt. Ltd., 133, B.R.B.B. Rd., Calcutta 700001.

Raj & Raj, 18, Rabindra Sarani, Calcutta 700001.

Roy-Singha Engg. Works, 639, Diamond Harbour Road, Behala, Calcutta 700034.

Steel Furniture & Construction Co., 8, Brabourne Rd., Calcutta 700001.

Steel Products Ltd., 96, Garden Reach Road, Calcutta 700023.

STEEL—STAINLESS

Andhra Pradesh

Deccan Stainless Steel & Wire Ind., Block B, 19/4, Ind. Area, Azamabad, Hyderabad 500020.

Vishalandhra Ind., Plot 1, Ind. Area, Azamabad, Hyderabad 500020.

Delhi

Ashok Manufg. Co. Pvt. Ltd., 37, Panchkuin Road, New Delhi 110001.

D. C. M. Datta Products, Kanchenjunga Bldg., 18, Barakhamba Road, New Delhi 110001.

Indl. Engg. Corpn. of India, 701, Asha Deep, 9, Hailey Road, Badli, New Delhi 110001.

Metal Forgings Pvt. Ltd., B-1, Indl. Area, New Delhi 110027.

Shahdara Aluminium Factory, G. T. Road, Shahdara, Delhi 110032.

Shree Metal Works, 25/4, Block 'A', Connaught Place, New Delhi 110001.

Gujarat

Asha Metal Ind., Prajapatiwadi, Vejalpore, Navsari 396445.

Dasharathlal Chimanlal & Bros., Gujarat Pharmaceutical's Comp., Asarwa, Ahmedabad 380016.

Naran Lala Metal Works Pvt. Ltd., Near Rly. Stn., Navsari 396445.

Precision Engg. Ind., Kapadia Bldg., Lakkad Pitha, Madan Zampa, Vadodara 390001.

Haryana

Adarsh Metal Ind., Behind Gowshala, Jagadhri 135003.

Punjab Wire Netting Ind., Railway Rd., Narnaul 123001.

Himachal Pradesh

Garga Steel Inds., Bhadri Nagar, Paonta Sahib 173025.

Jesico Metalware Factory, Bhadri Nagar, Paonta Sahib 173025.

Shivalik Metal Ind., Bhadri Nagar, Paonta Sahib 173025.

Karnataka

Ferro Concrete Co. of India (Stainless Steel), Indl. Estate, Gokul Rd., Hubli 580030.

Sri Viswanatha Silver Manufg. & Electroplating Works, 124, Sadar Patrappa Road, Bangalore 560002.

Kerala

A. K. P. Metals & Alloys, Christ College Road, Irinjalakuda 680121.

Maharashtra

Amalgamated Universal Agencies Pvt. Ltd., 306, Lotus House, 33A, New Marine Lines, Bombay 400020.

Anil Metal Corpn., 5, 2nd Panjrapole Lane, Bombay 400004.

Asian Metal Corpn., 142, Panjrapole Road, Gulalwadi, Bombay 400004.

Best Silver Co., 55, M. Gandhi Road, Vile Parle (East), Bombay 400057.

Bhogilal & Co., 250-C, New Cross Road, Opp. Metal Box Co., Worli, Bombay 400018.

Bihar Alloy Steels Ltd., Bombay-Agra Road, Bhandup, Bombay 400078.

Bombay Brass & Metal Works, 2nd Panjrapole Street, Bombay 400004.

Chetan Steel & Engg. Co., 6, V. P. Road, C. P. Tank, Bombay 400004.

Deepak Metal Ind., 16, Bank St., Bombay 400023.

Devidayal Stainless Steel Ind. Pvt. Ltd., Darukhana, Reay Road, Bombay 400010.

Eagle Industries, 41/C, Jairajbhai Lane, Bombay 400008.

Eastern Metal Works, 102, Dattaram Lad Path, Bombay 400012.

Galaxy Metal Corpn., 448, Falkland Road, Near Sindhi Lane, Bombay 400004.

Gujarat Metal Factory, 589, Rasta Peth (New), Pune 411011.

Hedavkar Metal Pressing Works, B. Shankar Cross Road, Dadar, Bombay 400028.

Highland Metal Ind., 163, Panjrapole Road, Bombay 400004.

Hiro Industrial Metal Corpn., 3rd Panjrapole Lane, Bombay 400004.

India Metal Ind., Parekh Nagar, S. Vivekanand Road, Kandivli (West), Bombay 400067.

Industrial & Commercial Corpn., 13-B, 9th Khetwadi Lane, Bombay 400004.

Industrial Metal Corpn., 52, Islampura Street, Bombay 400004.

Jain Metal Ind., 222, Panjrapole Road, Bombay 400004.

Jajodia Alloys Steel Co., Mittal Chambers, Nariman Point, Bombay 400020.

Jogani Metal Ind., Prabhu Niwas, 148-A, V. Patel Road, Bombay 400004.

K. C. Metal Ind., 14/1, Jaihind Estate, Bhuleshwar, Bombay 400002.

K. R. Metal Ind. Pvt. Ltd., C. Ashok Road, Ashok Nagar, Kandivli (East), Bombay 400064.

Kanoi Steel Corpn., 255, Harihar Niwas, Khetwadi 3rd Lane, Bombay 400004.

Kanti Impex Trading Co., 125, N. Master Road, Bombay 400001.

Kishco Cutlery Manufacturing Co., Empire Bldg., 138, Dr. D. Naoroji Road, Bombay 400001.

Kwality Steel Corpn., 156, Bapty Rd., Bombay 400008.

Lallubhai Amichand Pvt. Ltd., 48/50, Kansara Chawl, Bombay 400002.

Lucky Stainless Steel Works, 133rd Panjrapole Lane, Bombay 400004.

Mahavir Metal Ind., 12, Gala Ind. Estate, Mulund (West), Bombay 400080.

Metal India, 182, Kalbadevi Road, Bombay 400002.

Metallica Metals India, 13/21, 2nd Panjrapole Lane No. 208, Bombay 400004.

Metro Steel Corpn., 50, A. Dady St., Bombay 400004.

Mitsui & Co. Ltd., Manek Mahal, V. Nariman Road, Bombay 400020.

Modern Metals (India), 52/52A, Nanubhai Desai Rd., Islampura Corner, Bombay 400004.

Your Requirements in :

INDUSTRIAL RAW MATERIAL
STAINLESS STEEL

AISI 304, 304L, 316, 316L, 321, 310, 410 Grades
Rounds, Square, Hexagonal, Sheets, Plates, Tubes Capillary, Stainless Steel Nuts, Bolts Etc.

COPPER — BRASS — ALUMINIUM
SHEETS — PLATES — TUBES — BARS — WIRES

METALLICA METALS INDIA
13/21 3rd Panjarapole Lane No. 208, Bombay 400 004.
Grams : " METALLICA ", BOMBAY 400 004. Phone : 385140

REGULAR SUPPLIERS TO : GOVT. DEPT., DEFENCE, P.W.D.,
ELECTRICITY BOARDS & ATOMIC ENERGY EST.

N. M. Metal Ind., 20, Dadysett Agiary Lane, Bombay 400002.

National Metal Ind., 15-A, Parel Village Road, Parel, Bombay 400012.

Oriental Metal Pressing Works Pvt. Ltd., 131, Worli, Bombay 400018.

Oswal Metal Supply Corpn., 108/A, Kika Street, Bombay 400004.

P. Jayantilal & Co., 76-B, Mohamedali Road, Bombay 400004.

Paradise Metals, 8-10, 2nd Carpenter St., Bombay 400002.

Paramount Stainless Co., 187, Mumbadevi Road, Bomoay 400002.

Parmar Products, Moti Udyog Nagar, Ramchandra Lane, Malad, Bombay 400064.

Pearl Metal Works, 20, Wadi Bunder Rd., Bombay 400010.

Pitambardas Lallubhai & Co., 86, Kansara Chawl, Bombay 400002.

Popular Metal Works & Rolling Mills, Sion, Bombay 400022.

R. K. Ind., 12/18, V. Patel Road, Bombay 400004.

R. Navinchandra & Co., Mehta Chambers, Kalyan St., Bombay 400009.

Rainbow Metals (India), 117, Kika St., Bombay 400004.

Ramkishan Metal Corpn., 138, Kalbadevi Road, Bombay 400002.

Ramkishan Metal Works (Bombay), 32-34, Ashok Chambers, Broach Street, Bombay 400009.

Rasiklal Kantilal & Co., 145, Kika St., Bombay 400004.

Rose Metal Ind., G-77, Sarvodaya Nagar, Panjrapole Road, Bombay 400004.

Roshan Ind. Corpn., 7, Kika Street, Bombay 400004.

Samir Metal Corpn., 24-A, Fanaswadi, Bombay 400002.

Sanghvi Non-Ferrous Metal Ind., 159/2, Akurdi, Near Chinchwad Rly. Stn., Bombay Poona Rd., Pune 411019.

Shah Metal Pressing Works, 201, Khetwadi Main Rd., Bombay 400004.

Shri Krishna Associates, 431, Lamington Road, Bombay 400004.

Shri Krishna Metal Works, 26, Kotkar Ind. Estate, Bombay 400063.

Shripal Metal, 45, C.P.Tank, Bombay 400004.

Standard India Co., 136/138, C.P.Tank Rd., Bombay 400004.

Steel India Co., 35, Krishna Bhuvan, 1st Carpenter St., Bombay 400004.

Sumer Metal Corpn., 44/62, Ardeshir Dady St., Bombay 400004.

Suraj Metal Corpn., 21, 2nd Carpenter St., Bombay 400004.

Suresh & Co., 501, Loha Bhavan, Frere Rd., Bombay 400009.

Thakoor Metal Ind., 41-A, Chakala Rd., Andheri, Bombay 400069.

Uni Abex Alloy Products Ltd., Liberty Bldg., N. Marine Lines, Bombay 400020.

Universal Metal Corpn., Shrinathji Bldg., 3rd Bhoiwada Road, Bombay 400002.

Venus Metal Corpn., 52, Islampura Corner, Bombay 400004.

Vijay Metal Works, 'Ramkrupa', 25, Parekh Street, Girgaum, Bombay 400004.

Vinay Metal Ind., 29-C, Sarvodaya Nagar, Panjrapole Road, Bombay 400004.

Vinod Stainless Steel Works, 53, 2nd Bhoiwada, Bombay 400002.

Wikas Metal Works, Udyog Dham, L. B. Shastri Marg, Vikhroli, Bombay 400083.

Yaswant Steel & Metal Udyog, 13/21, 3rd Panjrapole Lane, No. 202, Bombay 400004.

Orissa

Kishore Ind., Station Rd., Berhampur 760005.

Punjab

Kohistan Alloys 182/7, Indl. Area, Chandigarh 160002.

Kuldip Ind., Kuldip Nivas, Main Bazar, Pathankot 145001.

Punjab Steel Forging & Agro-Industries; G. T. Rd., Chandigarh 160017.

Tamil Nadu

Comsales Industries, C-5, Ind. Est., Madras 600058.

Globe Ind. Corpn., 171/173, Nyniappa Naicken St., Madras 600003.

M. A. Ethirajulu Naidu, 7/4, Evening Bazar, Madras 600003.

Mysore Premier Metal Factory, 127, Mint St., Madras 600003.

S. D. & Sons, 16, Lakmudas St., Park Town, Madras 600003.

Sanghvi Metal House, 451, Mint St., Madras 600003.

Uttar Pradesh

Amit Alloys Pvt. Ltd., Mahmoodabad Estate Bldg., Hazratganj, Lucknow 226001.

M. S. Gupta & Bros., Rishikul Rd., Moradabad 244001.

Mittal Rolling Mills, Budh Bazar, Moradabad 244001.

Modi Steels Ltd., Modinagar 201201. Ghaziabad Dt.

West Bengal

Ashok Metal Ind. Ltd., 157, N. Subhas Rd., Calcutta 700001.

Bengal Ind. Corpn., 11, J. Jalan Rd., Liluah 711204.

Bombay Stainless Steel House, 50, Cotton St., Calcutta 700007.

C. S. K. Ind., 219/C, Old China Bazar St., Calcutta 700001.

Chandra Ind., 59, Cotton St., Calcutta 700007.

Eskey Stainless Steel Equipments Pvt. Ltd., P-31, Mission Row Extn., Calcutta 700013.

Ghorawat Metal Inds., 14/2, Old China Bazar St., Calcutta 700001.

Jeetmull Jaichandlal, 109, Netaji Subhas Rd., Calcutta 700001.

Kanoi Steel Corpn., 37, Canning St., Calcutta 700001.

New India Metal Ind., 139, Banares Rd., Salkia, Howrah 711006.

Pelican Engrs., 4, Hartford Le., Calcutta 700016.

Progressive India, 11, Armenian St., Calcutta 700001.

Standard (India) Co., 14/2, Old China Bazar St., Calcutta 700001.

Steel Emporium, 51, N. Subhas Rd., Calcutta 700001.

Steel Rolling Mills of Hindustan Pvt. Ltd., 47, Hide Rd., Calcutta 700027.

STEEL STRIPS

Almega Indl. Co., Dada Manzil, 67/69, Mohamedali Rd., Bombay 400003.

Anil Steel & Inds. Ltd., 8, Kondi Chetty St., Madras 600001.

Basant Alloy Steel Ltd., 201, Ansal Bhawan, K. Gandhi Mrg., New Delhi 110001.

Bestamco, 94, S. V. Rd., Erla, Bombay 400056.

Colourarc Electrodes, 112, N. Dhuru St., Bombay 400003

Dalmia & Co., 138, B. R. B. B. Rd., Calcutta 700001.

Eastern Steel Inds., 21-B, Noble Chambers, Parsi Bazar St., Bombay 400001.

Graham Firth Steel Products (India) Ltd., Firsteel Compd., W. Express Highway, Goregaon (East), Bombay 400063.

Hardtemp Steels Pvt. Ltd., 102, Kalamansion, Sarojinidevi Rd., Secunderabad 500003.

Jindal Strips Ltd., 56, Hanuman Rd., New Delhi 110001.

Mandelia Bros., 40, N. Subhas Rd., Calcutta 700001.

Mangal Steel Inds., 201, Arihant, Ahmedabad St., Bombay 400009.

Mohta Electro Steel Ltd., Sanas Bldg., Ambedkar Mrg., Byculla, Bombay 400033.

Nagarjuna Steels Ltd., Nagarjuna Hills, Panjagutta, Hyderabad 500004.

Nathani Steel Pvt. Ltd., Vidya Vihar, Bombay 400086.

Prime Wire Corpn., 50, Durgadevi St., Kumbharwada, Bombay 400004.

Rolled Strips and Profiles Pvt. Ltd., Plot 3, Ind. Estate, S. Vellalapatty, Karur 639114. Tamil Nadu.

Steel Corpn., 23, Kumbharwada 2nd Le., Bombay 400004.

Steel Strips Ltd., S.C.O.2 (1st flr.), Sector 26, Chandigarh 160026.

Tube Products of India Ltd., Avadi, Madras 600054.

STEEL TUBES & PIPES

Apollo Tubes Ltd., 147, Mount Rd., Madras 600006.

GRAHAM FIRTH STEEL PRODUCTS (INDIA) LIMITED

Established : 1960

Regd. Office & Factory :

Firsteel Compound, Western Express Highway,
Goregaon (East), Bombay 400 063.

Phones : 691802, 686731, 686734 & 686735 Grams : "GRAMFIRTH" BOMBAY-62. Telex : 011-6473.

Manufacturers of :

COLD ROLLED STEEL STRIPS

which are widely used by Electronic, Ball-bearing, Automotive, Bicycle, Electrical, Slotted Angles, Commercial Vehicles, Scooters, Tele-Communications, Drum Closure, Cameras & Defence Equipment Industries.

Board of Directors:

Dr. P. J. Patel, *Managing Director*
Mr. H. J. Nash
Mr. K. M. Vartak
Mr. D. S. Mulla
Mr. K. B. Rao
Mr. L. J. Vora
Mr. G. B. Newalkar
Mr. A. R. Wadia (*Alternate to* Mr. H. J. Nash)
Mr. R. P. Patel

Arjun Steel Tubes, Manjeet Engg. Inds. Bldg., 71/1, Shivaji Mrg., New Delhi 110015.

Ashok Tubes Pvt. Ltd., Park Rd., Golghar, Gorakhpur 273001. U.P.

Atma Tube Products Ltd., 112, Ansal Bhawan, K. Gandhi Mrg., New Delhi 110001.

Bharat Steel Tubes Ltd., 17, Parliament St., New Delhi 110001.

Bundy Tubing of India Ltd., 11/12, North Beach Rd., Madras 600001.

Century Tubes Ltd., Sector S-A, Plot No. 3, Faridabad 121001.

Choksi Tubes Co. Pvt. Ltd., 113/114, Bajaj Bhavan, Nariman Point, Bombay 400021.

Dinesh Tubes Pvt. Ltd., 1104, Vikram Tower, Rajendra Place, New Delhi 110008.

Fin-Tubes Mfg. Co., MIDC, Plot No. 76, Rd. No. 14, Andheri East, Bombay 400093.

Gujarat Steel Tubes Ltd., Kali, Near Sabarmati, Ahmedabad 382470.

Gupta Bros. Conduit Pipe Mfg. Co. Pvt. Ltd., Dinanagar 143531. Gurdaspur Dist. (Punjab).

Hyderabad Steel Tubes Pvt. Ltd., 16th K. M., Gandipet, Hyderabad 500008

Implex Tube Mfg. Co. Pvt. Ltd., Mahalaxmi Indl. Estate, L.J. Cross Rd., No. 1, Mahim, Bombay 400016.

Jindal Steel Products, 16-A, M. Gandhi Rd., Calcutta 700007.

Jotindra Steel & Tubes Ltd., 1/10-B, A. Ali Rd., New Delhi 110002.

Kochhar Tubes Pvt. Ltd., 157, Princess St., Bombay 400002.

Malet Welding Works (Tube Mill Divn.), 16, Bank St., Bombay 400023.

Nand Kishore Steel Tubes Pvt. Ltd., 404, Ashirwad, Ahmedabad St., Bombay 400009.

Quality Steel Tubes Pvt. Ltd., 323-325, Narshi Natha St., Bombay 400009.

Rajendra Mechanical Inds. Pvt. Ltd., 325, Kalbadevi Rd., Bombay 400002.

Shivmoni Steel Tubes Ltd., 2/4, Ashley Rd., Bangalore 560025.

Shri Ambica Tubes, Kankaria, Ahmedabad 380008.

Standard Steel (India) Pvt. Ltd., 20, Ind. House, Nagdevi X Lane, Bombay 400003.

Steel Tubes of India Ltd., 138, Jolly Maker Chamber 2,225, Nariman Point, Bombay 400021.

Surendra Inds. (Bombay) Pvt. Ltd., 22/24, Iron Mkt., Baroda St., Bombay 400009.

Tamilnadu Steel Tubes Pvt. Ltd., 3/10, Seshalachala Gramani Garden St., Madras 600019.

Tubes & Allied Products, 113/114, Bajaj Bhavan, 11th Flr., Nariman Point, Bombay 400021.

Tubes & Pipes Mfg. Co., 233, Mint St., Madras 600003

Uni Abex Alloy Products Ltd., Liberty Bldg., N. Marine Lines, Bombay 400020.

Zenith Steel Pipes & Inds. Ltd., Khopoli 410203. (Kolaba Dist.).

STEEL TUBULAR POLES, STRUCTURES, ETC.

Amiya Corpn., 19, British Indian St., Calcutta 700001.

Ajanta Tubes Ltd., D-20, Connaught Place, New Delhi 110001.

Asian Poles & Tubes Co., 7, Lucky Mansion, Mohamedali Rd., Bombay 400003.

Bombay Tubes & Poles Co., Darukhana, 2nd Lane, Mazgaon, Bombay 400010.

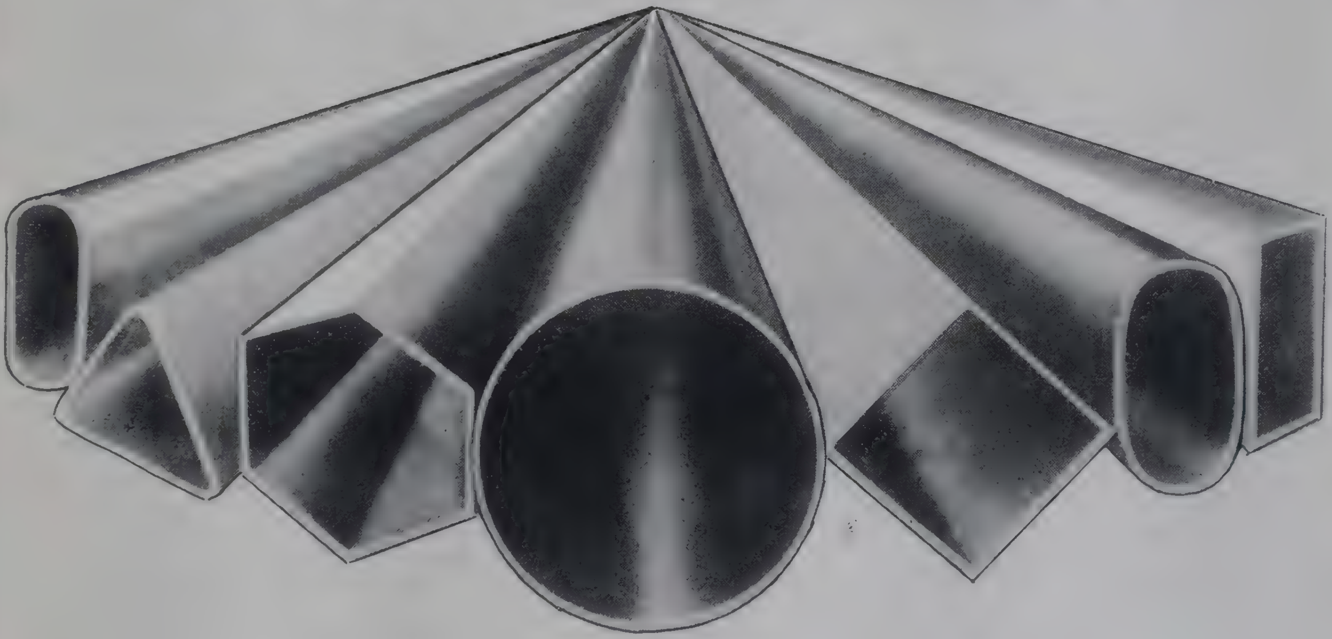
Chatterjee Engg. Co., 113, Lenin Saranee, Calcutta 700013.

India Electric Poles Mfg. Co., 3, Lane, Darukhana, Bombay 400010.

Jaibharat Poles Manufg. & Engg. Co., 4-5, Ind. Est., Vadodara 390003.

Jyoti Structures Pvt. Ltd., 430, Hind Rajasthan Bldg., 95, D.S. Phalke Rd., Dadar, Bombay 400014.

Precision Steel Tubes in a wide range of shapes and sizes



STI's H.F. Induction Welded Steel Tubes conform to BS: 980, 1717, 1775, 3059, ASTM: A-214, A-500 and are available in a wide range of sizes— 12.7 mm OD to 76.2 mm OD, in thicknesses from 10 SWG to 22 SWG: For applications like Automobiles, Transformers, Bus Bodies, Scaffolding, Heat Exchangers, Boilers, Bicycles, Furniture and General Engineering

STI Steel Tubes are also exported to developed markets—including U.K. and Australia.

Steel Tubes of India Limited
Dewas 455 001, M.P., INDIA

Export Division: 138 B, Jolly Maker Chambers 2
225, Nariman Point, Bombay 400 021. INDIA
Telephone Nos. 240494/240572/240597. Telex No. 011-3830

Branches: Bombay, Calcutta, Delhi, Kanpur, Ludhiana, Madras

Imageads

Kalinga Tubes Ltd., Bhubaneswar 751010.

Patcon Pvt. Ltd., 7A. Elgin Rd., Calcutta 700020.

Remex Engg. Pvt. Ltd., 501-E, Poonam Chambers, Dr. A. Besant Rd., Worli, Bombay 400018.

Steel Structures Pvt. Ltd., Ismail Bldg., Fountain, Bombay 400001

Steelfab Engg. Corpn., 5, Ismail Bldg., 381, Dr. D. Naoroji Rd., Bombay 400001.

Texmaco Ltd., Calcutta 700056.

Tower Engg. Pvt. Ltd., 501-E, Poonam Chambers, Dr. A. Besant Rd., Worli, Bombay 400018.

Tubit Poles Inds., B-4, Fosbery Rd., Sewri East, Bombay 400015.

Union Steel, Capital Cinema Bldg., 2nd Flr. (Rear Side), Waudby Rd., Bombay 400001.

STEEL WINDOWS & DOORS, ROLLING SHUTTERS, COLLAPSIBLE GATES, GRILLS ETC.

Andhra Pradesh

Ganesh Rolling Shutters & Engg. Works, 1-3-1024, Kavadiguda, Secunderabad 500003.

Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 500018.

Rama Rolling Shutters & Engg. Works, 8, Distillery Rd., Secunderabad 500003.

Assam

Assam Udyog Co., Mancotta Rd., Dibrugarh 786601.

Steel Works Pvt. Ltd., Commercial Bldg., Tezpur 784001.

Delhi

Anand Ind., 31-5, New Rohtak Rd., New Delhi 110005.

Indian Rolling Shutters & Engg. Works, 63, Rani Jhansi Rd., New Delhi 110055.

Metal Windows Corpn., 29-1, New Rohtak Rd., New Delhi 110005.

New Era Steel Co., 3, Indl. Complex, Wazirpur, Delhi 110052.

Prakash & Co. (Regd.), 48, M. M. Rd., New Delhi 110055.

Gujarat

AGEW Steel Manufrs. Pvt. Ltd., 522/1, Outside Panchkuva Gate, Ahmedabad 380002.

Ahmedabad Steelcrafts & Rolling Mills, Outside Sarangpur Gate, Ahmedabad 380018.

Doors & Windows Pvt. Ltd., 80, Ind. Estate, Udhna 391420.

General Engg. Group, Haribhakti Wadi, Timber Market Rd., Vadodara 390001.

Sarvodaya Rolling Shutters & Engg. Works, Rakhial Rd., Ahmedabad 380021.

Vishwakarma Rolling Shutters Manufg. Co., Gheekanta Rd., Ahmedabad 380001.

Haryana

Bawa Iron & Steel Works Ltd., M-1, Indl. Area, Sonepat 131001.

Karnataka

Dhanalaxmi Safe Co., Stn. Rd., Hubli 580020.

Kohinoor Rolling Shutters & Engrs. Pvt. Ltd., 53, S. Chatram Rd., Bangalore 560009.

S. B. Suvarna & Co., Gandhinagar, Bangalore 560009.

S. N. Enterprises, 156, 3rd Main Rd., Indl. Town, Rajajinagar, Bangalore 560044.

Shaktiman Rolling Shutters, No. 16, 2nd Cross, Subedar Chatram Rd., Bangalore 560009.

Vijaya Trdg. Co., 306, S. Chatram Rd., Bangalore 560009.

Welcome Corpn., 120, St. John's Church Rd., Coles Park, Bangalore 560005.

Madhya Pradesh

Simplex Engg. Co., Nagpur Rd., Jabalpur 482001.

Maharashtra

Acrow India Ltd., Sterling Centre, Dr. A. Besant Rd., Bombay 400018.

B. R. Hermann & Mohatta (India) Pvt. Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

Balmer Lawrie & Co. Ltd., 5, Graham Rd., B. Estate, Bombay 400038.

Beclawat of India Ltd., 32-34, V. Nariman Rd., Bombay 400001.

Breeze Window Manufg. Co., Subash Estate, S. Vivekanand Rd., Bombay 400060.

Deko Industrial Works, 8/A, Mittal Estate, Marol Naka, Andheri East, Bombay 400059.

Ferro-Steel Industries, 36AB, Govt. Ind. Estate, Kandivli West, Bombay 400067.

Fine Rolling Shutters Manufg. Co., 124, Dr. M. G. Mahimtura Marg, Bombay 400004.

Ganesh Engg. Works, 54, Shastri Marg, Bombey 400078.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Lalbaug, Bombay 400012.

Hercules Rolling Shutters Pvt. Ltd., 104, Steel Centre, Iron Market, Bombay 400009.

Hind Tank Manufg. Co., 150, B. T. Parsaram Rd., Bombay 400004.

Jeco Rolling Shutters Mfg. Co., 106, 3rd Kumbharwada Lane, Bombay 400004.

Metal Folds, Kurla Indl. Est., Bombay 400086.

Metal Window Manufg. Co., 117, Clive Rd., Bombay 400009.

Moosa Haji Patrawala, 20, Dr. E. Moses Rd., Bombay 400011.

Navbharat Rolling Shutters & Engg. Works, Station Rd., Parel, Bombay 400013.

New Era Rolling Shutters & Engg. Works, Sonawalla Cr. Rd., Goregaon East, Bombay 400063.

New Standard Engg. Co. Ltd., N. E. S. Est., Goregaon (E), Bombay 400063.

Rolwel Industries, A-32, Wagle Ind. Estate, Thane 400604.

S.R. Surve & Co., Shop No. 7, Opp. C. I. S. C. O. Factory, Bombay 400063.

Satyam Engg. Corpn., 93/95, Bazar Gate St., Bombay 400001.

Saurashtra Iron Works, 41, Dr. M. G. Mahimtura Mrg., Opp. Durgadevi Garden, Bombay 400004.

STEEL WINDOWS
for
modern
buildings

FLASH— BUTT WELDED

STEEL WINDOWS for modern buildings

of course manufactured by

Sen-Harvic

IS : 1038 1968

37, Abdul Rehman Street,
Bombay 400 003.
Phone : 327740. Cable : "TIMEKEEPER"
TLX. : 011-6007 SRVC.
Works : Industrial Estate, Udhna.
Phone : 88551. TLX. : 0178-206 SRVC

Sen Harvic, 37, A. Rehman St., Bombay 400003.

Sentinel Windows & Structurals Pvt. Ltd., 167, A. Besant Rd., Bombay 400018.

Shear-Bend Mechanical Works, 4/C, Singh Indl. Estate No. 1, Ram Mandir Rd., Goregaon West, Bombay 400062.

Shrikant Engg. Corpn., 41, Ind. Estate, Cuttekadi, Pune 411009.

Shubh Engg. Corpn., 15, Bank St., Bombay 400023.

Shubhdwar Rolling Shutters & Engg. Co., Bombay Airconditioned Mkt., Tardeo, Bombay 400034.

Standard Steel Doors Mfg. Co., 164, Dr. M. G. Mahimtura Mrg., Bombay 400004.

Star Rolling Shutters Mfg. Co., 139, M. Mahimtura St., Bombay 400004.

Steelage Ind. Pvt. Ltd., Mount Rd., Bombay 400010.

Swastik Rolling Shutters & Engg. Works, 73, Sant Tukaram Rd., Bombay 400009.

V. J. Dodia & Bros., Narayan Nagar, L. B. Shastri Mrg., Ghatkopar, Bombay 400086.

Vala & Co., Sanghani Estate, Near Bharat Varnish Co., LBS Mrg., Ghatkopar, Bombay 400086.

Venue Rolling Shutters & Engg. Works, 73, B. C. T. Compound, Bombay 400064.

Zenith Iron Works, 46, A. Rehman St., Bombay 400003.

Punjab

Chawla Rolling Shutters Ind., Opp. P. O., Rly Rd., Jullundur 144001.

Rajasthan

Man Indl. Corpn. Ltd., P. B. No. 131, Jaipur 302006.

Tamil Nadu

Atlas Metal Works (Madras), 24, Errabalu Chetty St., Madras 600001.

Diana Rolling Shutters (Madras), 167, Walltax Rd., Madras 600001.

Fabrimats (Madras) Pvt. Ltd., 50/1, Elliots Beach Rd., Madras 600032.

Nirmal Engg. Works, 14, K. Mudaliar Rd., Coimbatore 641002.

Prabhakar Inds., 97, S. Avanimoola St., Madurai 625001.

Rakhi Ind., 26, Devanga High School Rd., R. S. Puram, Coimbatore 641002.

Southern Engg. Industrials, 146, Dr. R. Prasad Rd., Coimbatore 641012.

Vinayak Senthil Ind., 201, Dr. Nanjappa Rd., Coimbatore 641018.

Uttar Pradesh

Allahabad Rolling Shutter Works, Triveni Rd., Allahabad 211001.

Northern India Iron Press Works, Aishbag, Lucknow 226004.

Saran Safe Works Pvt. Ltd., P. B. No. 412, Kanpur 208012.

Vanguard Rolling Shutters & Steel Works, Belanganj, Agra 282001.

West Bengal

Anamika Trading Co., 23A, N. Subhas Road, Calcutta 700001.

Bengal Rolling Shutters & Engg. Works, 103, N. Subhas Road, Calcutta 700001.

Bharat Rolling Shutters & Engg. Works, 7, Nawab A. R. Street, Calcutta 700016.

Calcutta Collapsible Gate Co. Ltd., 77, N. Subhas Road, Calcutta 700001.

Commercial Medium Pvt. Ltd., 51, Chittaranjan Avenue, Calcutta 700012.

Debendra Nath Paul & Co., 32/2, Nirmal Chunder Street, Calcutta 700012.

Dhariwal Rolling Shutters & Engg. Works, 109, N. Subhas Road, Calcutta 700001.

Diana Rolling Shutters & Engg. Works, 8, Stephen House, Dalhousie Sq., Calcutta 700001.

Gee Bee Ind., 34, Diamond Harbour Road, Calcutta 700060.

Gopal & Kumar Pvt. Ltd., 10A, Harrington Street, Calcutta 700060.

Hind Collapsible Gate Co., 167, Beliaghata Main Rd., Calcutta 700010.

Hopes Metal Windows Ltd., Transport Depot Road, Calcutta 700027.

India Collapsible Gate Co., 23, Picnic Garden Road, Calcutta 700039.

Kalyan Indl. Corpn., 56, N. Subhas Road, Calcutta 700001.

Khemchand Raj Kumar, 46/C, Chowringhee Road, Calcutta 700016.

Modi Steels Pvt. Ltd., P-22, Swallow Lane, Calcutta 700001.

Multiwyn Ind. Corpn., 61, Muktaram Babu St., Calcutta 700007.

Paul's Rolling Shutters & Engg. Works, IA/H/11, Lime Street, Calcutta 700015.

Steelwyn Corpn., P/11, Chitpur Spur, Calcutta 700007.

STEEL WIRES & WIRE ROPES

Andhra Pradesh

Universal Wires Ltd., Nacharam I.D.A., P.O. Nacharam, Hyderabad 501507.

Utility Metal Works, B-5 & 6, Ind. Area, Sanatnagar, Hyderabad 500018.

Bihar

Indian Steel & Wire Products Ltd., Post Indranagar, Jamshedpur 831008.

Maxwell Wire Inds., Rajapur, Patna 800001.

Delhi

Chetan Swarup Vinod Swarup, 29, Najafgarh Road, New Delhi 110015.

Hindustan Kokoku Wire Ltd., 22-B, Himalaya House, K. Gandhi Marg, New Delhi 110001.

Sterling Steels & Wires Ltd., Thapar House, 124, Janpath, New Delhi 110001.

Gujarat

C. Prabhudas & Co. Pvt. Ltd., Mehta Chambers, M. Gandhi Road, Bhavnagar 364001.

Navsari Processing Ind. Pvt. Ltd., Near Railway Station, Maroli 396130.

Karnataka

Deccan Wires Ltd., D. R. College East, Bommanahalli, Bangalore 560029.

Kerala

Aluminium Ind. Ltd., No. 1, Ceramic Factory Road, Kundara 691501.

Pearlite Wire Products Ltd., XXX/467E, M. G. Road, Cochin 682016.

South India Wire Ropes Ltd., Edathala, Alwaye 683101.

Madhya Pradesh

Anand-Bahri Steel & Wire Products, Ind. Estate, Bilaspur Road, Raipur 492001.

Bhilai Wires Ltd., Indl. Area, Bhilai 490001.

Maharashtra

B.R. Steel Products Pvt. Ltd., 29-30, Vaswani Mansion, D. Vachha Road, Bombay 400020.

Bombay Wire Ropes Ltd., 401/405, Jolly Bhavan No. 1, 10, New Marine Lines, Bombay 400020.

Devidayal Cable Ind. Ltd., Gupta Mills Estate, Reay Road, Bombay 400010.

Eldee Wire Ropes Pvt. Ltd., Eldee Chambers, 3, Broach Street, Bombay 400009.

Evergreen Wirecloth Factory, 18, New Marine Lines, Bombay 400020.

Hindustan Wire Inds. Pvt. Ltd., Kamruddin Estate, M. Vissanji Road, Bombay 400072.

J. Ebrahim & Co., 345, Katha Bazar, Bombay 400009.

Kantilal Jain & Co., 37, 2nd Bhoiwada, Bombay 400002.

Krips Consultants, 301, Kakad Chambers, 132, Dr. A. Besant Road, Worli, Bombay 400018.

Multiweld Wire Co. Pvt. Ltd., 59, Marol-Maroshi Road, Bombay 400059.

National Standard Duncan Ltd., Nirmal, Nariman Point, Bombay 400021.

Nutan Wire Corpn., 13/21, Virchand Umersey Bldg., 3rd Panjrapole Lane, Bombay 400004.

Special Steels Ltd., Dattapada Road, Borivli (East), Bombay 400066.

Steel India Pvt. Ltd., 259, Kalbadevi Road, Bombay 400002.

Tejpauls Pvt. Ltd., 225, S. Tukaram Rd., Bombay 400009.

Tensile Steel Ltd., Shah House, Shiv Sagar Estate, Dr. A. Besant Road, Bombay 400018.

United Wire Ropes Ltd., Marutikumar Road, Thane 400606.

Punjab

Sterling Wires Ltd., Shiv Murti House, Una Road, Hoshiarpur 146001.

Tamil Nadu

Indian Steel Rolling Mills Ltd., Oriental Bldg., 108, Armenian Street, Madras 600001.

Uttar Pradesh

Associated Ind. Corpn., 93, Factory Area, Fazalganj, Kanpur 208012.

West Bengal

AVJ Wires Pvt. Ltd., 28, Strand Road, Calcutta 700001.

B. Sarkar & Sons, P-4, New Howrah Bridge Approach Road, Calcutta 700001.

Bright Wires Ltd., 1/A, Vansittart Row, Calcutta 700001.

Chaliha Rolling Mills Pvt. Ltd., 5, Mission Row, Calcutta 700001.

Fort William Ltd., 14, N. Subhas Road, Calcutta 700001.

Guest, Keen, Williams Ltd., 97, Andul Road, Howrah 711103.

H. G. & Co. Pvt. Ltd., 113P, N. Subhas Road, Calcutta 700001.

Hind Wire Ind. Ltd., P-16, Kalakar St., Calcutta 700007.

Hindustan Wires Ltd., 3A, Shakespeare Sarani, Calcutta 700016.

Ramsarup Indl. Corpn., 66, Parvati Ghose Rd., Calcutta 700007.

Shalimar Ind. Pvt. Ltd., 25, G. Chandra Avenue, Calcutta 700013.

Usha Martin Black (Wire Ropes) Ltd., 14, Princep St., Calcutta 700013.

Wire Machinery Manufg. Corpn. Pvt. Ltd., 1/A, Vansittart Row, Calcutta 700001.

STRUCTURALS

Aruna Structurals, 213, St. Mary's Rd., Madras 600028.

Kaveri Structurals, Senthannipuram Golden Rock, Tiruchirapalli 620004.

Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.

Sahvadri Structurals Pvt. Ltd., Preet Chambers, 36, Bombay Poona Rd., Pune 411003.

SUGAR MILL MACHINERY & ACCESSORIES

Atul Electro Formers Pvt. Ltd., 2061, Sadashiv Peth, Vijayanagar Colony, Pune 411030.

Backau Wolf New India Engg. Works Ltd., Pimpri, Pune 411018.

THE TRIVENI ENGINEERING WORKS LTD.

Head Office : **" Kailash ", 2nd Floor, Post Box 370, 26, Kasturba Gandhi Marg, New Delhi 110 001.**
Phones: 40021, 40022, 42185, 43384 Telex: 031 2653 ELFA IN Cable: " TEWMACH "

Export Office : **1107, Ansal Bhawan, 16, Kasturba Gandhi Marg, New Delhi 110 001**
Phones : 388312, 382165 Telex : 031 2653 ELFA IN Cable : " ENGTECH "

Engineering Units : 1. Udyog Nagar, Naini, Allahabad
2. 12-A, Peenya Industrial Estate, Bangalore
3. Goverdhan Road, Mathura, U.P.
4. 1, 2, 3, Belagola Industrial Area, KRS Road, Karnataka.

Sugar Unit : Khatauli, Dist. Muzaffarnagar, Uttar Pradesh.

LEADING MANUFACTURERS OF :

1. Complete sugar plants on turnkey basis
2. Sugar Centrifugals
3. " SATURNE " cane diffusers and dewatering devices
4. Industrial steam turbines and turbo-alternators upto 5,000 KW capacity
5. Filters, Clarifiers and other solid/liquid separation equipments
6. Metallurgical Machinery
7. Positive Displacement Pumps
8. Industrial Batch Centrifdges, Industrial Decanters, Textile Centrifuges
9. Hydraulic Equipment
10. Mini Sugar plants
11. High Speed Reduction Gears
12. High grade crystal white sugar
13. Consultancy & Technical Services for sugar mills through its subsidiary " Engineering and Technical Services Limited "
14. Dredging of Ports, Lakes etc. by subsidiary " United Shippers & Dredgers Limited ", Bangalore.

Belliss & Morcom India Ltd., 6, Little Russel St., Calcutta 700016.
Dorr Oliver (India) Ltd., 16, Queen's Rd. Estate, Bombay 400020.
G. R. Engg. Works Pvt. Ltd., G. R. House, 86, M. Vassanji Rd., Bombay 400059.
Hooghly Docking & Engg. Co. Ltd., Botanic Gardens, Howrah 711103.
Indian Sugar & General Engg. Corpn., Yamunanagar 135001. Ambala Dist.
Jagriti Foundry & Machine Pvt. Ltd., 2/3, Ramjan Khol, Shrirampur, Ahmednagar Dist.
Kay Iron Works Pvt. Ltd., Yamunanagar 135001. (Ambala Dist.).
Larsen & Toubro Ltd., L. & T. House, Ballard Estate, Bombay 400038.
National Sugar Inds., 150, Mount Road, Madras 600006.
Navin Engg. Works, 2A, Tripolia, Allahabad 211001.
Prem Heavy Engg. Works Pvt. Ltd., Rani Mahal, Delhi Road, Meerut 250002.
Protos Engg. Co. Pvt. Ltd., 173, J. Tata Road, Bombay 400020.
Ravalgaon Industrial Machinery Divn., Construction House, W. Hirachand Mrg., B. Estate, Bombay 400038.
Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.
S. P. Foundries, 123/393, Factory Area, Kanpur 208012.
Saraswati Indl. Syndicate Ltd., P.O. Yamunanagar 135001, Ambala Dist.
Simplex Engrs. & Traders, 10/4, Gurdwara Road, Meerut 250001.
Standard Engg. Co., 40, Strand Road, Calcutta 700001.
Triveni Engg. Works Ltd., 26 K, Gandhi Mrg., New Delhi 110001.
Walchandnagar Inds. Ltd., Construction House, W. Hirachand Marg, Bombay 400038.

SUGAR MILLS

Andhra Pradesh

Andhra Sugars Ltd., P.B. 2, Venkatarayapuram, West Godavari Dist.
Deccan Sugar & Abkhari Co. Ltd., Samalkot, East Godavari Dist.
K.C.P. Ltd., Sugar Factory, Vuyyuru, Krishna Dist.
Nizam Sugar Factory Ltd., Fateh Maidan Road, P.B. No. 1, Khairatabad, Hyderabad 500004.
Nizamabad Co-op. Sugar Factory Ltd., Sarangpur, Nizamabad Dist.

Assam

Assam Co-op. Sugar Mills Ltd., Varua Bamungaon, Sibsagar 785640.

Bihar

Champaran Sugar Co. Ltd., Chanpatia, Champaran Dist.
Gobind Sugar Mills Ltd., P.O. Motihari, Champaran Dist.
New India Sugar Mills Ltd., P.O. Hasanpur, Darbhanga Dist.
Samastipur Central Sugar Co. Ltd., Samastipur (Darbhanga Dist.) 848101.

Haryana

Haryana Co-op. Sugar Mills Ltd., Circular Road, Rohtak 124001.
Panipat Co-op. Sugar Mills Ltd., Gohana Road, Panipat Karnal Dist.
Saraswati Sugar Mills, P.O. Yamunanagar, Ambala Dist.

Karnataka

India Sugars & Refineries Ltd., Hospet 583201.
Mysore Sugar Co. Ltd., Mandya 571401.
Ugar Sugar Works Ltd., Ugar Khurd, Belgaum Dist.

Kerala

Co-op. Sugar Ltd., Chittur, Menonpara, Palghat Dist.
Travancore Sugar & Chemicals Ltd., Valanjavattam, Tiruvalla 689104.

Madhya Pradesh

Bhopal Sugar Ind. Ltd., Sehore, Sehore Dist.
Jaora Sugar Mills Pvt. Ltd., Jaora, Ratlam Dist.

Maharashtra

Brihan Maharashtra Sugar Syndicate Ltd., P.O. Shreepur, Solapur Dist.
Godavari Sugar Mills Ltd., Sakarwadi, Ahmednagar Dist.
Hindustan Sugar Mills Ltd., 51, M. Gandhi Rd., Bombay 400023.
Maharashtra Sugar Mills Ltd., P.O. Tilaknagar, Shrirampur, Ahmednagar Dist.
Oudh Sugar Mills, Industry House, 159, Churchgate Recl., Bombay 400020.
Phaltan Sugar Works Ltd., Sakharwadi, Satara Dist.
Ravalgaon Sugar Farm Ltd., Ravalgaon, Nasik Dist.
Shrigonda Sahakari Sakhar Karkhana Ltd., P.O. Belvandi Sugar Farm, Ahmednagar Dist.
Shriram Sahakari Sakhar Karkhana Ltd., Phaltan, Satara Dist.
Terna Shetkari Sahakari Sakhar Karkhana Ltd., Ternanagar, P.O. Dhoki, Osmanabad Dist.
Walchandnagar Ind. Ltd., P.O. Walchandnagar, Pune Dist.
Yeshwant Sahakari Sakhar Karkhana Ltd., Chintamaninagar, P.O. Theur, Pune Dist.

Pondicherry

New Horizon Sugar Mills Pvt. Ltd., P.O. Kandamangalam, Sacrur (Ariyur).

Punjab

Amritsar Sugar Mills Co. Ltd., G. Trunk Rd., Amritsar 143001.
Doaba Co-op. Sugar Mills Ltd., Nawanshahr, Jullundur Dist.

Rajasthan

Ganganagar Sugar Mills Ltd., Sri Ganganagar.
Mewar Sugar Mills Ltd., Bhupalsagar, Chitorgarh Dist.

Tamil Nadu

Cauvery Sugar & Chemicals Ltd., Pettaivaytalai, Thiruchirapalli Dist.
Deccan Sugar & Abkhari Co. Ltd., P.O. Pugalur Sugar Factory, Thiruchirapalli Dist.
E. I. D. Parry Ltd., Nellikuppam, South Arcot Dist.
Kallakurichi Co-op. Sugar Mills Ltd., Moongilthuraippatu, Thiruvannamalai 606601.
Kothari Sugars & Chemicals Ltd., Kattur, Thiruchirapalli Dist.
Sakthi Sugars Ltd., P.O. Sakthinagar via Erode, Coimbatore Dist.
Salem Co-op. Sugar Mills Ltd., Pettaipalayam, Salem Dist.
South India Steel & Sugar Ltd., Mundiyampakkam, South Arcot Dist.

Uttar Pradesh

Basti Sugar Mills Co. Ltd., Basti 272001.
Deoria Sugar Mills Ltd., Deoria 274001.
Lord Krishna Sugar Mills Ltd., Saharanpur 247001.
Modi Sugar Mills, Modi Nagar 201201. Ghaziabad Dist.
Oudh Sugar Mills Ltd., Hargaon, Sitapur Dist.
Punjab Sugar Mills Co. Ltd., Ghugli, Gorakhpur Dist.
Raza Buland Sugar Co. Ltd., Rampur 244901.
Saraya Sugar Mills Pvt. Ltd., Sardarnagar, Gorakhpur Dist.
United Provinces Sugar Co. Ltd., P.O. Seorahi, Deoria Dist.
Upper India Sugar Mills Ltd., Khatauli, Muzaffarnagar Dist.

West Bengal

Shree Sitaram Sugar Co. Ltd., Thapar House, 25, Brabourne Rd., Calcutta 700001.

Tulsipur Sugar Co. Ltd., 9/1, R. K. Rakshit Lane, Calcutta 700007.

SURGICAL INSTRUMENTS

(See under Medical Equipment)

SURVEY INSTRUMENTS

(See under 'Instruments—Scientific' and 'Laboratory Equipment' in this list).

SWITCHES, SWITCHGEARS, SWITCH FUSES & ACCESSORIES—ELECTRICAL

Andhra Pradesh

Bharat Isolators Mfg. C., 6/7, Milestone, Vijayawada Rd., L.B. Nagar, Hyderabad 500963.

Controls and Schematics Pvt. Ltd., 1-1-64/1-A, Iftekar Mansion Compd., Musheerabad, Hyderabad 500020.

Electro Mechanical Switches (India) Pvt. Ltd., 3-2-628, Rd., No. 13, Banjara Hills Hyderabad 500034.

Switchgear Manufg. Co., C 4 & 5, Ind. Estate, Sanatnagar, Hyderabad 500018.

Bihar

HGEC Ltd., P.O. Thaparnagar, 828205. Dhanbad Dist.

Delhi

Asea Ltd., 301, Bhandari House, 91, Nehru Place, New Delhi 110024.

Associated Switchgears Pvt. Ltd., 28, New Rohtak Rd., New Delhi 110005.

Controls & Switchgear Co. Pvt. Ltd., 222, Okhla Ind. Estate, Phase III, New Delhi 110020.

Havells Industries. Post Box No. 1500, Delhi 110006.

KLK Scientific Inds., 313, Dhirpur Nirankari Colony, Delhi 110009.

M. C. Engineering Co. Pvt. Ltd., 20, Okhla Ind. Est., New Delhi 110020.

Syscon, A-55, Panchsheel Enclave, New Delhi 110017.

Swaran Singh & Co., 80, Okhla Ind. Estate, New Delhi 110020.

Gujarat

Dynamic Controls Co. Pvt. Ltd., Arvind Estate, Opp. Prabhuvir Society, Bapunagar, Ahmedabad 380024.

Electric Control Gear Pvt. Ltd., Rakhial, Ahmedabad 380023.

Jyoti Ltd., Ind. Area, Vadodara 390003.

Jyoti Switchgears Ltd., Mogar 388340. Taluka Anand, Kaira Dist.

Haryana

Cutler Hammer India Ltd., 20/4, Mathura Rd., Faridabad 121001.

Karnataka

Electronic Research Pvt. Ltd., 17th KM, Old Madras Rd., Bangalore 560048.

Karnataka Switchgears Pvt. Ltd., 5, Sudama Nagar, Bangalore 560027.

Kirloskar Systems Ltd., P.O. Hebbal Agricultural Farm, Bangalore 560024.

Mysore Electrical Ind. Ltd., Yeswantpur, Tumkur Rd., Bangalore 560022.

NGEF Ltd., P. Bag No. 3876, Bangalore 560038.

Kerala

Aluminium Inds. Ltd., Switchgear Divn., Mannar 689622. (Alleppey Dist.).

Ganesh Electricals Ltd., Palghat 678007.

Kerala Electl. & Allied Engg. Co. Ltd., Palghat 678731.

O/E/N India Ltd., 19/88E, Kaloor Rd., Cochin 682018.

Transformers & Electricals Kerala Ltd., Angamally 683572. Ernakulam Dist.

United Electrical Ind. Ltd., Pallimukku, Quilon 691001.

Madhya Pradesh

Heavy Electricals India Ltd., P.O. Piplani, Bhopal 462021.

Maharashtra

Ajmera Ind. & Engg. Works, 20, K. M. Sharma Marg, Bombay 400002.

Anchor Inds., 185, B.T. Compd., Malad West, Bombay 400064.

Arvind Relays Pvt. Ltd., Bajson Indl. Estate, 40, Chakala, Andheri, Bombay 400099.

Asea Ltd., Asea House, Goa St., Bombay 400038.

Asiatic Electric Corpn., Beaumon Chambers, 27/33, Medows St., Bombay 400023.

Balson, 46, Tilak Rd., Ghatkopar, Bombay 400077.

Bhogilal Fabricators Pvt. Ltd., Steelmade Ind. Estate, Bldg. No. 1, Shed No. 2, Marol Maroshi Rd., Bombay 400059.

Bombay Insulated Cables & Wires Co., Podar Chambers, S. A. Brelvi Rd., Bombay 400001.

Bombay Switchgears, Laxmi Woollen Mills Estate, Shakti Mill Lane, Off Dr. E. Moses Rd., Bombay 400011.

Colosseam Engg. Products & Sales Pvt. Ltd., 201, Kaliandas Udyog Bhavan, Near Century Bazar, Bombay 400025.

Crompton Greaves Ltd., 1, Dr. V. B. Gandhi Mrg., Bombay 400023.

Dattatraya Ind., 691/A, Pune-Satara Rd., Pune 411009.

Emco Electricals Pvt. Ltd., 106, Ind. Area, Sion, Bombay 400022.

Hindustan Brown Boveri Ltd., Brown Boveri House, 264-265, Dr. A. Besant Rd., Bombay 400025.

Hindustan Klockner Switchgear Ltd., Prospect Chambers, 68, Dadajee Rd., Bombay 400034.

Indian Engg. Co., 132, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

Jafkay Engg. Inds. Pvt. Ltd., A-21, MIDC Ind. Area, Andheri East, Bombay 400093.

Jyoti Ceramic Inds. Pvt. Ltd., C-21, N.I.C.E., Satpur, Nasik 422007.

Kaycee Industries Ltd., 32, Nicol Rd., B. Estate, Bombay 400038.

Kiron Textile Ind., Yusuf Bldg., M. Gandhi Rd., Bombay 400023.

Kusum Engg. Works, S. V. Rd., Goregaon, Bombay 400062.

Larsen & Toubro Ltd., L & T House, Dougall Rd., Ballard Estate, Bombay 400038.

Mechelonic Switches Pvt. Ltd., F-30, Nand Dham Indl. Estate, Marol Maroshi Rd., Andheri East, Bombay 400059.

Metallic Engg. Co., Shanti Nagar, Vakola, Santacruz (East), Bombay 400055.

Metro Electric & Mechanical Engg. Works, Off Savarkar Marg, Bombay 400028.

National Supply and Distributing Agency, 17, Picket Rd., Bombay 400002.

National Switchgear Mfg. Co., 46-47, Bombay Talkies Compd., Malad West, Bombay 400054.

Neptune Electrical Ind., 31, Adhyaru Ind. Estate, Sun Mill Compound, Lower Parel, Bombay 400013.

R. G. Keswani Ind., 132, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

Reliable Electronic Components Pvt. Ltd., Manoj Villa, D. Joshi Rd., V. Parle (W). Bombay 400056.

Reunion Engg. Co. Pvt. Ltd., Amar Bldg., Sir P. Mehta Rd., Bombay 400001.

Siemens India Ltd., 134-A, Dr. A. Besant Rd., Worli, Bombay 400018.

Stanley Switchgear Products, Satguru Ind. Estate, Goregaon (E), Bombay 400063.

Tata Merlin & Gerin Ltd., Raj Mahal, 84, V. Nariman Rd., Bombay 400020.

Thakoor Electricals Pvt. Ltd., Post Box 7408, Bombay 400059.

Trinity Electric Syndicate, 154, S. Gandhi Mrg., Bombay 400002.

Vidyut Switchgears Pvt. Ltd., A-12, Nandjyot Ind. Estate, Andheri Kurla Rd., Bombay 400072.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

Punjab

Beegee Corpn., 25, Factory Area, Patiala 147002.

ESS ESS Kay Engg. Co. Pvt. Ltd., Kapurthala 144601.

Essen Engg. Co. Pvt. Ltd., 371, Ind. Area, Chandigarh 160002.

Indo Asian Traders Pvt. Ltd., Nakoda Rd., Jullundur 144003.

Vikon Electric Works Pvt. Ltd., G.T. Rd., Goraya 144409.

Tamil Nadu

Driescher Panicker Switchgear Pvt. Ltd., 349, Poonamalle High Rd., Madras 600029.

Easun Engg. Co. Ltd., Bombay Mutual Bldg., N.S.C. Bose Rd., Madras 600001.

Eswaran & Sons Engrs. Ltd., Switchgear Dn., Ernavur, Madras 600057.

Fusegear Electric, Janakiram Colony, Arumbakkam, Madras 600029.

Ganapathy Engg. Mfrs. Pvt. Ltd., Ganapathy, Coimbatore 641006.

Hindustan Equipment Manufrs., Krishnarayapuram, P.O. Ganapathy, Coimbatore 641006.

Kumar Bros., 61, N.S.C. Bose Rd., Madras 600001.

Macneill & Magor Ltd., 92, Konnur High Rd., Madras 600012.

Reed Relays & Electronics India Ltd., Madras 600096.

S. & S. Power Switchgear Ltd., 175/1, Anna Salai, Madras 600002.

Southern Switchgear Ltd., Post Bag No. 14, Ambattur Indl. Estate, Madras 600058.

Vivin & Co., Vivin House, Tatabad, Coimbatore 641012.

Uttar Pradesh

Zeta Indl. Corpn. Pvt. Ltd., B-8, Indl. Area, Meerut Rd., Ghaziabad 201003.

West Bengal

Andrew Yule & Co. Ltd., Electrical Unit, 14, Mayurbhanj Rd., Calcutta 700027.

Asea Ltd., 4, Lyons Range, Calcutta 700001.

Biecco Lawrie Ltd., P-54, Hyde Rd. Extn., Calcutta 700027.

Electric Construction & Equipment Co. Ltd., 9, K. Singhee Rd., Calcutta 700002.

General Electric Co. of India Ltd., Magnet House, 6, Chittaranjan Ave., Calcutta 700013.

Golden Inds., 10, Jessore Rd., Calcutta 700028.

Hooghly Marine and Engg. Co., 27/2-C, Strand Rd., Calcutta 700001.

Indian Switchgear Corpn., 5A & 5B, Chowringhee Lane, Calcutta 700016.

Industries Syndicate, 7, Chittaranjan Ave., Calcutta 700072.

Techmech (India), 7, Swallow Lane, Calcutta 700001.

Voltamp Electricals Pvt. Ltd., P-15, New C.I.T. Rd., Calcutta 700073.

SYNTHETIC FIBRE SPINNERS

Delhi

Delhi Cloth & General Mills Co. Ltd., Bara Hindu Rao, Delhi 110006.

Rama Fibres Ltd., Sanchi, 4th Flr., 77, Nehru Place, New Delhi 110019.

Gujarat

Gandhidham Spg. & Manufg. Co. Ltd., Adipur 370205. Kutch Dist.

Neomar Ltd., Alembic Rd., Vadodara 390003.

Surat Textile Mills Ltd., Varachha Rd., Surat 395003.

Haryana

Bhiwani Textile Mills Ltd., P.O. Birla Colony 125022, Bhiwani, Hissar Dist.

Elsons Cotton Mills Pvt. Ltd., 23rd Milestone, Mathura Rd., Ballabgarh 121004.

Technological Institute of Textiles, P.O. Birla Colony 125022. Bhiwani, Hissar Dist.

Jammu and Kashmir

Chenab Textile Mills Ltd., Kathua 184101.

Karnataka

Sujata Textile Mills, Nanjangud 571301.

Madhya Pradesh

Bharat Commerce & Ind. Ltd., P.O. Birlagram 456331.

Jiyajeerao Cotton Mills Ltd., P.O. Birlanagar, Gwalior 474004.

Maharashtra

Kiran Spg. Mills, Kolshet Rd., Thane 400601.

Madhavnagar Cotton Mills Ltd., Bank of Baroda Bldg., Palton Rd., Bombay 400001.

New City of Bombay Manufg. Co. Ltd., 63, Tukaram B. Kadam Marg, Bombay 400033.

Podar Mills Ltd., N.M. Joshi Mrg., Bombay 400011.

Raghuvanshi Mills Ltd., 11-12, Haines Rd., Delisle Rd., Bombay 400013.

Punjab

Bharat Commerce & Ind. Ltd., Rajpura 140401. Patiala Dist.

Punjab Fibres Ltd., SCO 54-56, Sector 17-A, Chandigarh 160017

Rajasthan

Aditya Mills Ltd., Madanganj, Kishangarh 305802.

Jaipur Spg. & Wvg. Mills Ltd., Podarpuri, Jaipur 302006.

Modern Syntex (India) Ltd., Delhi Rd., Alwar 301001.

Rajasthan Textile Mills, Bhawani Mandi 326502.

Tamil Nadu

Narsimha Mills Pvt. Ltd., Kannampalayam, P.O. Sulur 641402, Coimbatore Dist.

Prakash Mills Pvt. Ltd., P.O. Peelamedu, Coimbatore 641004.

Sitalakshmi Mills Ltd.. Madurai 625005.

Suguna Mills Pvt. Ltd., Sugunalaya, Bashyakaralu Rd., R. S. Puram, Coimbatore 641002.

Vijayakumar Mills Ltd., Kalayamputhur 624615. via Palni, Madurai Dist.

Uttar Pradesh

Elgin Mills Co. Ltd., Civil Lines, Kanpur 208001.

Modi Spg. & Wvg. Mills Co. Ltd., Modinagar 201201.

Swadeshi Cotton Mills, Juhi, Kanpur 208014.

West Bengal

Bilaspur Spg. Mills & Ind. Ltd., 12, Govt. Place (E), Calcutta 700001.

Birla Jute Manufg. Co. Ltd., P. O. Birlapur 743318 - 24-Parganas.

General Ind. Society Ltd., 8, India Exchange Place, Calcutta 700001.

India Linoleums Ltd. (Victoria Division), 14, Dr. H. K. Chatterjee St., Ghusury, Howrah 711107.

Jayshree Textile & Ind. Ltd., Rishra 712248.

Shaktigarh Textile & Ind. Ltd., P. O. Barsul 713124. Burdwan Dist.

SYNTHETIC FIBRES & RESINS

Andhra Pradesh

Sirsilk Ltd., Sirpur-Kaghaznagar 504296.

Delhi

J. K. Synthetics Ltd., Ashoka Estate, 24, Barakhamba Rd., New Delhi 110001.

Siddha Syntex Ltd., 35, Deputyganj, Sadar Bazar, Delhi 110006

Gujarat

Neomer Ltd. Alembic Rd., Vadodara 390003

Haryana

Anand Synthetics Ltd., 22 KM., Mathura Rd., Faridabad 121001.

Karnataka

Priya Chemicals, 'Devata Plaza', D-6, 2nd Flr., Residency Rd., Bangalore 560025.

Resins India Pvt. Ltd., 88, Main Rd., Whitefield, Bangalore 560066.

Madhya Pradesh

Gwalior Rayon & Silk Manufg. (Wvg.) Co. Ltd., P. O. Birlanagar, Gwalior 474004.

Shree Synthetics Ltd., Ujjain 456001.

Maharashtra

Baroda Rayon Corpn. Ltd., Hoechst House, 16th Flr., 193, Backbay Reclamation, Nariman Point, Bombay 400021.

Century Enka Ltd., Nirlon House, 254-B, Dr. A. Besant Rd., Worli, Bombay 400025.

Century Rayon, Industry House, 159, Churchgate Recl., Bombay 400020.

Chowgule & Co. (Hind) Ltd., India House, 5th Flr., Walchand Hirachand Mrg., Bombay 400001.

Garware Synthetics Pvt. Ltd., 135, Dr. A. Besant Rd., Bombay 400018.

Indian Rayon Corpn. Ltd., Industry House, 159, Churchgate Recl., Bombay 400020.

J. K. Synthetics Ltd., 'Sarnath', 10th Flr., 59-B, Bhulabhai Desai Rd., Bombay 400026.

Krislon Synthetics Pvt. Ltd., 615, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Modipon Ltd., 7th Flr., 77, Mittal Chambers, Nariman Point, Bombay 400021.

National Rayon Corpn. Ltd., Ewart House, Homi Mody St., Bombay 400023.

Nirlon Synthetic Fibres & Chemicals Ltd., Nirlon House, Dr. A. Besant Rd., Bombay 400018.

Resins & Plastics Pvt. Ltd., Post Box No. 6, Taloje A.V. 410208. Raigad Dist.

Shree Synthetics Ltd., Shree Niwas House, H. M. Somani Marg, Bombay 400001.

Rajasthan

Banswara Syntex Ltd., C-235, Dayanand Mrg., Jaipur 302004.

Jekrilon Fibres & Yarns, Kota 324001.

Shree Rajasthan Syntex Ltd., 4-D, New Fatehpuria, Udaipur 313001.

Shriram Rayons, Shrirampur, Kota 324001.

Tamil Nadu

Shriram Fibres Ltd., 17/3-B, Nungambakkam High Rd., Madras 600034.

South India Viscose Ltd., Shanmuga Manram, Race Course, P. B. 1396, Coimbatore 641018.

Travancore Rayons Ltd., Indian Overseas Bank Bldg., 151-A, Mount Rd., Madras 600002.

Uttar Pradesh

Modipon Ltd., Post Box No. 11, Modinagar 201201.

West Bengal

Kesoram Rayon, 10, Camac St., Calcutta 700017.

SYNTHETIC GEM

Indo-Swiss Synthetic Gem Mfg. Co. Ltd., 13/239, Main Rd., Mettupalayam 641301. (Coimbatore Dist.).

SYRINGES

Bharat Surgical Inds. Pvt. Ltd., Sion-Chembur Rd., Bombay 400070.

Hindustan Syringe Pvt. Ltd., Indl. Area, Faridabad 121001. (Haryana).

Iscomed Inds. Pvt. Ltd., 4, India House, W.H. Mrg., Bombay 400001.

Steriware Pvt. Ltd., Plot No. 16, Sector 24, Faridabad 121005. (Haryana).

Suru Chemicals & Pharmaceuticals Pvt. Ltd., C-3, Sona Udyog, Parsi Panchayat Rd., Andheri East, Bombay 400069.

Top Syringe Mfg. Co., Mira, Vivekananda Rd., Bombay 400068.

TABLET MAKING MACHINES

Macneil & Magor Ltd., 34/1, Diamond Harbour Rd., Calcutta 700027.

Oriental Machinery (1919) Pvt. Ltd., 25, R.N. Mukherjee Rd., Calcutta 700001.

TANKS & PRESSURE VESSELS

Bharat Tank & Steel Co., 64, Podar Chambers, Parsi Bazar St., Bombay 400001.

Hind Tank Mfg. Co., 6th Kumbharwada Le., Bombay 400004.

Jayesh Engg. Works, Mount Rd., Mazgaon, Bombay 400010.

Kaveri Structurals, Senthannipuram, Golden Rock, Tiruchirapalli 620004. (Tamil Nadu).

Maharashtra Tank Mfg. & Engg. Co., Cooper Compd., Trimbak Parashuram St., Golpitha, Bombay 400004.

Mettur Beardsell Ltd., Heliplastics Dn., Jeroo Bldg., 137, M. Gandhi Rd., Bombay 400023.

Mistry Prabhudas Manji, 57B, 2nd Pathan St., Bombay 400004.

National Engg. Inds., 32, Jairajbhai Le., Foras Rd., Bombay 400008.

Pheros & Co. Pvt. Ltd., Indl. Est., Gauhati 781021. (Assam).

Rattan Inds., LBS Mrg., Bhandup, Bombay 400078.

Sahajanand Engg. Works Pvt. Ltd., Donde Marg, Bombay 400015.

Tas Engg. Co. Pvt. Ltd., 333, A. Rehman St., Bombay 400003.

Technofab Engg. Pvt. Ltd., 10, Nizamuddin East, New Delhi 110013.

Vijaya Tanks & Vessels Pvt. Ltd., 93, LBS Mrg., Mulund, Bombay 400080.

Westwork Engineers Ltd., 5-D, Vulcan Insc. Bldg., Veer Nariman Rd., Bombay 400020.

TAPE RECORDERS

Belltek Electronics Pvt. Ltd., A-80, Naraina Indl. Area, Phase I, New Delhi 110028.

Bhatty Electronics Corpn., 98, Ind. Estate, Kandivli West, Bombay 400067.

Capital Electronics, 12, Chowringhee Rd., Calcutta 700013.

Chandrika Electronics Ltd., 139, Sardar Patel Rd., Secunderabad 500003.

Eskay Inds., 10, L. B. Stadium, Hyderabad 500004.

General Radio Corpn., 2/2, Jhandewalan Ind. Scheme, New Delhi 110055.

Jai Electronic Ind. Pvt. Ltd., 114, Shivaji Park, Bombay 400028.

Kartari Electronics, Wagle Ind. Estate, Thane 400604.

Megha Overseas Pvt. Ltd., 1137, Chandni Chowk, Delhi 110006.

Mulchandani Electrical & Radio Inds. Ltd., Sukh Sagar, N. S. Patkar Marg, Bombay 400007.

Murphy India Ltd., Dr. Shirodkar Rd., Off Hospital Ave., Parel, Bombay 400012.

Parry Engg. & Electronics Pvt. Ltd., Opp. Jain Temple, M. Gandhi Rd., Ahmedabad 380001.

Singh Radio Co. India Pvt. Ltd., 21, Daryaganj, New Delhi 110002.

Singh Trading Co., 9, Blackers Rd., Madras 600001.

Sona Electronics Pvt. Ltd., A-129, Okhla Indl. Area, Phase II, New Delhi 110020.

Suman Electronics, 24, Daryaganj, New Delhi 110002.

Televista Electronics Pvt. Ltd., 39, Okhla Ind. Estate, New Delhi 110020.

Weston Electroniks Pvt. Ltd., 243, Okhla Ind. Estate, New Delhi 110020.

(Also see under Cassette Tape Recorders.)

TAPES—RECORDING

Acme Tape Twine &Thread Mfg. Co. Alli Chambers, Dean Lane, Bombay 400023.

Tarzian India Pvt. Ltd., 23A, Najafgarh Rd., New Delhi 110015.

Vimal Enterprises Pvt. Ltd., Main Rd., Umbergaon 396170. Gujarat.

TAPES & WEBBINGS

Amar Tapes & Allied Inds., 21/24, Indl. Town, Rajajinagar, Bangalore 560044.

Artex Products, 2/2, Dwarkanath Bhuvan, Katrak Rd., Wadala, Bombay 400031.

Bells Insulations Pvt. Ltd., 1/2, Lord Sinha Rd., Calcutta 700071.

Bhor Inds. Ltd., 392, V. Savarkar Mrg., Bombay 400025.

Fabrika Polyarn, Junction of Tata & Shastri Mrg., Bhandup, Bombay 400078.

Freemans Sales Pvt. Ltd., Ferozepur Rd., Ludhiana 141001.

Magnotape Co. Pvt. Ltd., 34B, Chandivli Farm, Saki Vihar Rd., Bombay 400070.

Million Tape Mfg. Co. (India) Regd., 2640, Hamilton Rd., Delhi 110006.

Motilal Dulichand, 20, Indl. Est., Kanpur 208012.

Tapes & Polymers, Atur House, Dr. A. Besant Rd., Bombay 400018.

Todi & Co., Tulsi Pipe Rd., Lower Parel, Bombay 400013.

TARPAULIN
Manufacturers

Estd : 1968

DAISY TRADING CORPORATION

402, Navjivan Bldg.,
125/27, Kazi Sayed Street,
Bombay 400 003.

Manufacturers, Exporters & Stockists of:

High quality Tarpaulins, Tent Canvas, Hessian Gunny Bags, Jute Twines, Ropes, Allied Jute Products & Bituminised Waterproof Hessian Bags etc.

Phones :
Office : 327007 Resi. : 661129
Grams : " PROOFTALP ".

MOST TRUSTED NAME IN TARPAULINS

DUCK
TARPAULIN

"TARPAULINS"
It is the waterproofing that counts. Waterproofing and processing done by expert hands backed by several years' experience in manufacturing tarpaulins

NOW NEW **DUCK POLY.** TARPAULINS
Now Standardised, Reinforced
Very Light, Very Strong, Economical &
Elegant **Now Sealed**

Manufacturers :
DWARKADAS VELJI TALPATRIWALA
Yogeshwar, 135/139, Kazi Sayed Street, Bombay-400 003
Telephones: 323232, 324332, 321615-16, 392220.
Telex : " DUCK " 011-5114.

Manufacturers of :
Duck Canvas Tarpaulin, Duck Poly Tarpaulin, Polyethylene-Lined Hessian Bags, High Density Polyethylene Woven Fabric

Vanaja Ribbons & Allied Inds., 27, C. K. Channappa Layout, Bangalore 560027.

Venus Tape Works, 87, S.B. Jadhav Mrg., Lower Parel, Bombay 400013.

TARPAULINS, TENTS ETC.

Assam

Assam Canvas Craft Ind., Ind. Estate, Gauhati 781001.

Delhi

Ashok Tent Inds., Shaheed Bhagat Singh Mrg., Lady Hardinge Rd., New Delhi 110001.

Bharat Tent House, Subzimandi, Delhi 110007.

Kay Tent Inds., 64/2253, Gurdwara Rd., Karol Bagh, New Delhi 110005.

Sarna Web-Equipment Manufg. Co., 7197, Qutab Rd., New Delhi 110006.

Gujarat

Premier Tent Inds., Mulchand Asharam Bldg., Opp. Madhav Baug, Ahmedabad 380002.

Karnataka

Cargo Tarpaulin Industries, Nr. State Bank of Hyderabad, J. C. Rd., Bangalore 560002.

Noble Tarpaulin Mfrs., Post Box 229, Davangere 577002.

Maharashtra

A-1, Tarpaulin Ind., 75, Dontad St., Masjid Bunder Rd., Bombay 400009.

Ajit Packing Inds., 184, Bhat Bazar, Bombay 400009.

Alibhai Sharafali Rasiwala, 16, Bhandari St., Bombay 400009.

Calcutta Proofing Co., Chinchpokli Cross Lane, Bombay 400027.

Daisy Trdg. Corpn., 402, Navjivan Bldg., 125/27, Kazi Syed St., Bombay 400003.

Damji Premji & Co., 298, Y. Meherally Rd., Bombay 400003.

Dwarkadas Velji Talpatriwala, 135/39, Kazi Syed St., Bombay 400003.

G. Morarji & Co., 245, Y. Meherally Rd., Bombay 400003.

Hindustan Trading Corpn., 117, Naoroji Hill Rd., Bombay 400009.

Jeram Shivji & Sons, 180, Yusuf Meherally Rd., Bombay 400003.

Joshi Ramji Moorji, 265, Y. Meherally Rd., Bombay 400003.

Khimji Velji & Co., 62, Dontad St., Bombay 400009.

Kohinoor Tarpaulin Inds., 10/11, Shivaji Udyognagar Extn., Kolhapur 416001.

Kooverji Karamshi Talpatriwala, Gaumukh Bhavan, Opp. Masjid Stn., Bombay 400009.

Lakhimchand Cooverji & Co., 297, N. Natha St., Bombay 400009.

Lotus Tarpaulin Inds., 11, Mangal Baug, Pushpa Park, Daftary Rd., Malad East, Bombay 400064.

Maharashtra Canvas Depot, 142, Y. Meherally Rd., Bombay 400003.

Mangaldas Ranchoddas, 251, Y. Meherally Rd., Bombay 400003.

Mavji Devji Talpatriwala, 146/48, S. Tukaram Rd., Dana Bunder, Bombay 400009.

Moneeto Plasti-Fab Pvt. Ltd., Panalal Silk Mills Estate, LBS Mrg., Bhandup, Bombay 400078.

Morarji Peraj & Co. (Talpatriwala), 138, Masjid Bunder Rd., Bombay 400003.

Nandi Tarpaulins, 375, N. Natha St., Bombay 400009.

Rachna Tarpaulins, 94, Masjid Bunder Rd., Bombay 400003.

Rainproof, 7, Chakla St., Mandvi, Bombay 400003.

Ratanshi Lalji, Rasul Jivaji Comp., Jacob Circle, Bombay 400011.

Shah Shivji Vali & Co., 184, Narshi Natha St., Bombay 400009.

Swastik Tarpaulins Manufg. Co., 66/68, Dontad St., Bombay 400009.

T. Lakhamsi Ladha & Co., 298, Narsi Natha St., Bombay 400009.

V. Kishorchandra & Co., 346, Samuel St., Bombay 400003.

Tamil Nadu

Betala Industries, 16-A, Ramanan Rd., Madras 600001.

Binny & Co., Ltd., 7, Armenian St., Madras 600001.

Calcutta Canvas Co., 144-A, Naick St., Madras 600001.

Mamidi Manavala Chetty & Co., 286, N. S. C. Bose Rd., Madras 600001.

Pondicherry Waterproofers, 2, Seni Amman Koil St., Madras 600081.

Premier Tarpaulins Inds., 39-B, Nehru St., Ramnagar, Coimbatore 641009.

Sunrise Trading Co., 7-D, Perambur Barracks Rd., Madras 600007.

Uttar Pradesh

J. K. Jute Mills Co., Kamala Tower, Kanpur 208001.

Kanpur Tent Factory, 89/208, Bansmandi, Kanpur 208001.

Kanpur Weaving & Inds. Works, Indl. Area, Kanpur 208012.

West Bengal

Apollo Tent Tarpaulins Co., P-4, New Howrah Bridge Approach Rd., Calcutta 700001.

Automatic Tent Mfg. Co., 4, Synagogue St., Calcutta 700001.

Bengal Tent Factories Pvt. Ltd., 40, Dharamtolla Rd., Belur 711402.

Bengal Waterproof Works Ltd., 41, Shakespeare Sarani, Calcutta 700016.

Birkmyre Bros. Pvt. Ltd., 87, Stephen House, Calcutta 700001.

Calcutta Proofing & Paulin Goods Manufg. Pvt. Ltd., 62, Alipore Rd., Calcutta 700027.

Calcutta Tent Mfg. Co., 1, Chitpurghat Lane, Calcutta 700002.

Goyalka Bros., P-4, New Howrah Bridge Approach Rd., Calcutta 700001.

ELEPHANT BRAND • 100% WATERPROOF
REGD. TRADE MARK
Tarpaulins

Mfrs.: "ELEPHANT" BRAND 100% WATERPROOF

Tarpaulins

Polyethylene & Paper Lined Hessian & Gunny Bags

DEALERS & STOCKISTS:

Canvas, Hessian, Jute, Twine & Eyelets.

★ BAMBOOS, BALLIES & COIR ROPES ★

—: FOR SALE & ON HIRE :—

To solve your storage problem immediately an all-weather-proof Protection can be constructed on any open land

by

PIONEERS & SPECIALISTS

OF

MONSOON SHEDS

for storing stocks of all kinds.

Expert Erection Services.

PRECIOUS PROTECTION

For

Industrial, Chemical & Pharmaceutical Factories, Warehouses & Workshops, Passages, Garages, Hotels, Auditoriums and Terraces, etc.

Contact : Protection Engineers.

MORARJI PERAJ & CO.
TALPATRIWALA

(Builders & Contractors)

138, Masjid Bunder Road, Next to Zakeria Masjid,
Bombay-400 003.

Phones: 322352, 320326. Grams: "TALPATRI".

WATERPROOF TARPAULINS ON HIRE ALSO.

MONSOON SHED BUILDERS

JESHI BRAND 100% WATERPROOF
JC
TRADE MARK
TARPAULINS

SUITABLE
FOR ALL WEATHERS
WINTER-SUMMER-MONSOON
on HIRE-SALE SERVICE

"SOLVE YOUR STORAGE PROBLEM"

PHONES:
Office : 330895
320326
Resi. : 473944

CONTACT :
MFRS. : JESHI BRAND WEATHERPROOF
TARPAULINS

Tarpaulins Supplied on Hire & Sale
Shed Builders & Contractors

JERAM SHIVJI & SONS

180, Yusuf Meherali Road, Futnani Chambers, Bombay 400 003.

Gungadhur Banerjee & Pvt. Ltd., 'Bakulia House', Kidderpore, Calcutta 700023.

India Canvas & Tarpaulin Co., 81A, C. R. Avenue, Calcutta 700012.

India Waterproof Ltd., 13, Brabourne Rd., Calcutta 700001.

International Traders Corpn., 40, Strand Rd., Calcutta 700001.

Jardine Henderson Ltd., 4, Clive Row, Calcutta 700001.

Jem & Co., Mercantile Bldgs., Lall Bazar St., Calcutta 700001.

Madhoprasad Mahabirprasad (Supplies) Pvt. Ltd., 4, Synagogue St., Calcutta 700001.

Modi Ind., 55, Canning St., Calcutta 700001.

New India Proofing Co., Calso Park, Calcutta 700039.

Premier Canvas Co., 28, N. Subhas Rd., Calcutta 700001.

Shew Prosad Bishnu Prosad, 11, D. Rakhit Lane, Calcutta 700005.

Sircar Bros. Pvt. Ltd., 26-1, S. N. Roy Rd., Calcutta 700001.

Sunrise Trdg. Co., 3/C, N. Lohia Lane, Calcutta 700007.

Tent Tarpaulin Indl. Corpn., 3/C, N. Lohia Lane, Calcutta 700007.

Textile Waste Co., 113-C, N. Subhas Rd., Calcutta 700001.

TEA—INSTANT

Food Specialities, Chevamtavadi Post, Nilgiri Hills, Tamil Nadu.

Tata Finlay Ltd., P. O. Munnar 685612. Kerala.

TEA GARDEN MACHINERY

Ajco Ltd., 9, Wallace St., Bombay 400001.

Aluminium Inds. (Assam) Pvt. Ltd., 23A, N. Subhas Rd., Calcutta 700001.

Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta 700001.

Bery Machinery Manufrs. Pvt. Ltd., 135, B. R. B. Bose Rd., Calcutta 700001.

Bharat Engg. Ind., 16, Bonefield Lane, Calcutta 700001.

Britannia Engg. Co. Ltd., 3, N. Subhas Rd., Calcutta 700001.

Heavy Castings Pvt. Ltd., 6/9, Race Course, Coimbatore 641018.

Marshall Sons & Co. India Ltd., 75C, Park St., Calcutta 700016.

Samuel Osborn India Ltd., 1, Acharya J. Bose Rd., Calcutta 700001.

Shome Bros. & Co., 29, R. N. Mookherjee Rd., Calcutta 700001.

Steelsworth Ltd., 17, Ganesh Ch. Ave., Calcutta 700013.

Taps & Dies Ltd., P-17, G. Chandra Ave., Calcutta 700013.

Teamco Machineries (Bengal) Pvt. Ltd., 4, G. C. Avenue, Calcutta 700013.

Trade & Industry (Assam) Ltd., 20, Mangoe Lane, Calcutta 700001.

TEFLON PRODUCTS

G.D.I. Engg., Works Pvt. Ltd., 135-A, B.R.B.B. Rd., Calcutta 700001.

J. Khushaldas & Co., 'JK' Chambers, 78/83, Nagdevi St., Bombay 400003.

TELECOMMUNICATION EQUIPMENT

Ericsson India Ltd., 15, Community Centre, Suraj Parbat, New Delhi 110024.

G. K. Trading Co., 46, Mohatta Mkt., Palton Rd., Bombay 400001.

Hinditron Services Pvt. Ltd., 69/A, L. Jagmohandas Mrg., Bombay 400006.

Indian Telecommunication Equipment Co., 235, Haqiqat Nagar, Delhi 110009.

Jayant Inds., 33, Naik Nivas, 30, Benham Hall Lane, Bombay 400004.

Metro Ind. Works, 95, B. Ghosh Rd., Calcutta 700040.

Superphone India, 93, B. Desai Rd., Bombay 400036.

TELEVISION SETS & COMPONENTS

Acharya Electronics Ltd., 38-C, MIDC Indl. Area, Hingna Rd., Nagpur 440001.

Bharat Television Ltd., Industries Manor, Prabhadévi, Bombay 400025.

Bhatty Electronics Corpn., 98, Ind. Est., Kandivli, Bombay 400067.

Bigston T. V., C-223, Rewari Ind. Area, Mayapuri Phase II, New Delhi 110027.

Debsons Pvt. Ltd., 11, Sooterkin St., Calcutta 700072.

Dynavision Ltd., 1, Padmanabhanagar, Guindy Rd., Madras 600020.

Elcompo Electronic Inds. Pvt. Ltd., 1-2, Instronics Campus, Thiruvanmiyur, Madras 600041.

Electronics Corpn. of India Ltd., Ind. Dev. Area, Cherlapalli, Hyderabad 500762.

Ferry Electronics, 291, Lajpatrai Mkt., Delhi 110006.

Goa Electronics, Ltd., Shree Saraswati Mandir Bldg., 18th June Rd., Panaji 403001. (Goa).

Hi-Beam Electronics Pvt. Ltd., Madras 600020.

Jupiter Radios (Regd.), C-46, Okhla Indl. Area, Phase II, New Delhi 110020.

Kannan Electronics Pvt. Ltd., 191, Usman Rd., Madras 600017.

Kartari Electronics, Wagle Ind. Estate, Thane 400604.

Kayjay Electronics, 66, Ist Avenue, Indiranagar, Adyar, Madras 600020.

Kwality Electronics, 73, Port Mills Rd., Perambur, Madras 600011.

Lal Bros., 2, Ritchie St., Madras 600002.

Mac Electronics, 18, Steel Mould Indl. Estate, Nagarvel Hanuman Rd., Sukhramnagar, Ahmedabad 380023.

Mandelia Electronics Pvt. Ltd., Century Bhavan, Dr. A. Besant Rd., Bombay 400025.

Mecotronics Pvt. Ltd., 11A/1, Mount Rd., Madras 600002.

Orient Visision Ltd., 16, Haddows Rd., Madras 600006.

Polestar Electronics Pvt. Ltd., 71/11, Mowbrays Rd., Alwarpet, Madras 600018.

Sona Electronics Pvt. Ltd., Type 11/24, V.S. Instronic Estate, Madras 600041.

Sudarshan Electronic Corpn., 28, Jolly Maker Chamber 1, Nariman Point, Bombay 400021.

Suman Electronics, 24, Daryaganj, New Delhi 110002.

Sundarsons Electronics, Vijay Vihar, C. S. T. Rd., Bombay 400071.

Superna Vision Pvt. Ltd., Type 11/24, V.S.Instronic Estate, Madras 600041.

Telerad Pvt. Ltd., Chandivali, Saki Vihar Rd., Bombay 400072.

Televisco (Eastern) Pvt. Ltd., 2, Waterloo St., Calcutta 700069.

Television & Components Pvt. Ltd., G. I. D. C. Ind. Area, Naroda, Ahmedabad 382330.

Televista Electronics Pvt. Ltd., 79, Dr. A. Besant Rd., Bombay 400018.

Uptron Anand Ltd., 21/24, Shri Dwarkadish Rd., Kanpur 208001.

Weston Electroniks Ltd., 243, Okhla Ind. Estate, New Delhi 110020.

TESTING MACHINES & TEMPERATURE CONTROL INSTRUMENTS

Adept Laboratories, 24/1, Karve Rd., Pune 411004.

Agronic Services, 201, Shiv Shakti Indl. Estate, LBS Mrg., Ghatkopar West, Bombay 400086.

Arun Electronics Pvt. Ltd., B-125/126, Anand Indl. Estate, Saki Vihar Rd., Bombay 400072.

Avery India Ltd., 8, N. Morarjee Mrg., Bombay 400038.

Blue Steel Engrs. Pvt. Ltd., 144-A-Z, Ind Est., Fergusson Rd., Bombay 400013.

Conin Prakriti Instrumentation, 16, Rajindra Nagar, Indl. Estate, Mohannagar, Ghaziabad 201007. U.P.

Control Dynamics Co., 1008, Raheja Centre, N. Point, Bombay 400021.

Fuel Instruments & Engrs. Pvt. Ltd., Ichalkaranji 416115. (Kolhapur Dist.).

Kaybee Instruments & Equipment Corpn., Arun Chambers, Tardeo, Bombay 400034.

Precision Instruments & Electronics (Madras) Pvt. Ltd., 50-B, Lattice Bridge Rd., Adyar, Madras 600020.

S.S. Industries, D-22, Udyog Sadan 2, Opp. Marol Bus Depot, Chakala, Bombay 400093.

Skandia Engrs. Pvt. Ltd., Post Box No. 80, Pune 411001.

Solid State Controls, 21, Patva Chambers, 104/108, Clive Rd., Dana Bunder, Bombay 400009.

Yamuna Digital Electronics Pvt. Ltd., 8-2-269, Rd. No., 1, Banjara Hills, Hyderabad 500034.

TEXTILE AUXILIARIES

Gujarat

Alipo Chemicals, 49, GIDC Indl. Estate, Makarpura Rd., Vadodara 390010.

Darshan & Co., A/6, Jaltan Flats, Ellis Bridge, Ahmedabad 380006.

Gujchem Distillers India Ltd., 6-8, National Chambers, Ashram Rd., Ahmedabad 380009.

New India Ind. Ltd., Jetalpur Rd., Vadodara 390001.

Ojas Corpn., New Cotton Mills Compound, Ahmedabad 380001.

Sardesai Bros. Pvt. Ltd., P. O. Sardesai Factory 396380, Bilimora.

Suhrid Geigy Ltd., P. O. Box 48, Vadodara 390001.

Ultra Colour Corpn., Opp. Old Khadia Chowky, Sir Chunibhai Rd., Ahmedabad 380001.

Maharashtra

Ahura Chemical Products Pvt. Ltd., 84, Sion Rd., Sion (East), Bombay 400022.

Altex Pvt. Ltd., 147, M. Gandhi Rd., Bombay 400023.

Associated Chemicals, 12-A, Mahendra Industrial Estate, Sion East, Bombay 400022.

Bhagwati Trading Co., 61, Churchgate Recl., Bombay 400020.

C.D.Corpn. 32, R. Kamani Mrg., B.Estate, Bombay 400038.

Calico Ind. Engrs., Chakala Rd., Andheri, Bombay 400093.

Cauxichem, 12, Bhavana Bldg., 422, V. Savarkar Mrg., Bombay 400025.

Chemicals & Allied Products, Beside Besant Pictures, Kolwada Borla Rd., Chembur, Bombay 400074.

Chemicals & Auxiliaries Services Pvt. Ltd., 813, Raheja Centre, 214, N. Point, Bombay 400021.

Chemiplast Inds., 404, Rewa Chambers, New Marine Lines, Bombay 400020.

Chemox Ind. Corpn., A/9, S. A. Brelvi St., Bombay 400001.

Collinson & Co. Pvt. Ltd., Standard Bldg., Dr. D. N. Rd., Bombay 400001.

Columbia Chemi-Colour Ind. Pvt. Ltd., Plot No. 81, Dr. A. Besant Rd., Bombay 400018.

Creative Chemicals Pvt. Ltd., 39/3, Shankersheth Rd., Pune 411009.

Crescent Dyes & Chemicals Ltd., Crescent House, Ballard Estate, Bombay 400038.

Dr. Yajnik's Kemicolour Inds. Pvt. Ltd., Post Box No. 11357, Bombay 400001.

Dai-Ichi Karkaria Pvt. Ltd., Liberty Bldg., New Marine Lines, Bombay 400020.

Das & Co., Das Chambers, Dalal St., Bombay 400023.

Enterprise & Management Pvt. Ltd., 89, Medows St., Bombay 400023.

Eskay Chemical Corpn., 22-D, Parsi Bazar St., Bombay 400001.

Fibrolite Auxiliaries, Shamnagar, Jogeshwari, Bombay 400060.

Gandhi Parekh Investment Corpn. Pvt. Ltd., Maker Bhavan No. 2, 18, New Marine Lines, Bombay 400020.

Gems Inds., A-30, MIDC, Marol Ind. Area, Mahakali Caves Rd., Andheri East, Bombay 400093.

Gifar Inds., 175, Vidya Nagri Mrg., Kalina Castle, Bombay 400098.

H. D. Nariman & Sons, 104, Waterfield Rd. Extn., Bombay 400050.

Hazrat & Co., Warden House, Sir P. M. Rd., Bombay 400001.

Hico Products Pvt. Ltd., Mogul Lane, Mahim, Bombay 400016.

Hoechst Dyes & Chemicals Ltd., Hoechst House, 193, Backbay Recl., Bombay 400021.

Indian Gum Industries Ltd., Shroff Bhuvan, 157, P. D'Mello Rd., Bombay 400001.

Indokem Ltd., Fort House, 221, Dr. D. Naoroji Rd., Bombay 400001.

Kumudchandra & Co., 29, Dalal St., Bombay 400023.

L. N. Chemical Inds., 296, Samuel St., Bombay 400003.

Mahavir Chemical Inds. Pvt. Ltd., 3, Savla Chambers, 40-A, Cawasji Patel St., Bombay 400001.

Mather & Platt Ltd., 8, Graham Rd., Ballard Estate, Bombay 400038.

Mazda Ind. Chemicals Pvt. Ltd., Mazda Ind. House, Off Haines Rd., Worli Naka, Bombay 400018.

Mill Factors Corpn., Advani Chambers, Sir P. Mehta Rd., Bombay 400001.

Modern Chemical Corpn., 59, Vijay Estate, Bandar Gully, Mahim, Bombay 400016.

Modern Chemical Works, 22, Janki Niwas, N. C. Kelkar Rd., Dadar, Bombay 400028.

New India Trading Corpn., 8/10, Tamarind Lane, Bombay 400023.

Ormerods (I) Pvt. Ltd., Bank of Baroda Bldg., Apollo St., Bombay 400023.

Parekh Dyechem Industries Pvt. Ltd., Mafatlal House, Backbay Recl., Bombay 400020.

Parimal Inds., 337, Raviwar Peth, Pune 411002.

Refind Products Corpn., 10, Bell Building, Sir P. Mehta Rd., Bombay 400001.

Sandoz (I) Ltd., (Dyes & Chemical Division), P. B. No. 6596, Worli, Bombay 400018.

Sardesai Bros. Ltd., 82, Advent, 12-A, Gen. J. Bhosle Marg, Bombay 400021.

Sunbeam Monochem Pvt. Ltd., 339/41, Samuel St., Bombay 400003.

Surfactant Ltd., 401/405, Jolly Bhavan, 10, New Marine Lines, Bombay 400020.

Tarsema Textile Traders, 11, Noble Chambers, S. A. Brelvi Rd., Bombay 400001.

Texspan, 9/E, Elphinstone Rd., Parel, Bombay 400012.

Victor Trading & Engg. Co., Victor House, Jacob Circle, Bombay 400011.

Vijaya Textiles, Dr. A. Nair Rd., Bombay 400011.

West Bengal

Crescent Dyes & Chemicals Ltd., 34, Chowringhee, Calcutta 700071.

TEXTILE MACHINERY

Andhra Pradesh

Swastik Bobbins Manufg. Co. (Pvt.) Ltd., 7/1, Azamabad Ind. Area, Hyderabad 500001.

Gujarat

Ahmedabad Victoria Iron Works Co. Ltd., Dudheshwar Rd., Ahmedabad 380001.

Allied Textile Leather Inds., 25, Harsidh Chambers, Ashram Rd., Ahmedabad 380013.

Amee Engg., Jal Darshan, Ashram Rd., Ahmedabad 380009.

Ara Ind., Opp. Chisti Chambers, Outside Shahpur Gate, Ahmedabad 380001.

Bhagvati Undercasing Manufg. Works, Tavdipura Rd., Ahmedabad 380004.

Bhagwati Inds., 56, Shrimali Socy., Navrangpura, Ahmedabad 380002.

Bharat Ind., Girdhar Chambers, Gandhi Rd., Ahmedabad 380001.

C. B. Sutaria Bros., Cross Lane, Ahmedabad 390002.

Cambay Saw Mills, Madan Zampa Rd., Vadodara 390001.

Himson Textile Engg. Ind., Hiralal Colony, Ashwanikumar Rd., Surat 395003.

Honest Trading Co., Mahadev Nagar, Bilimora 396321.

Huns Engg., Plot No. 7/8, Rd. No. 8-A, P. B. No. 2, Indl. Estate, Udhna 394210.

Indequip Engg. Ltd., Nr. Indl. Trg. Instt., Naroda, Ahmedabad 382325.

Indian Textile Engrs., 105, Navnit Bhuvan, Maninagar, Ahmedabad 380008.

Indl. Machinery Manufrs. Pvt. Ltd., Near Ahmedabad New Cotton Mills, Off Amraiwadi Rd., Ahmedabad 380008.

Jaydev Engg. & Co., 10, Anant Indl. Estate, N.H. Rd., Rakhilal, Ahmedabad 380023.

Karsandas Bachardas & Sons, Jaldarshan, Ashram Rd., Ahmedabad 380009.

National Machinery Mfg. Works, Panchal Indl. Colony, Shahibaug, Ahmedabad 380004.

Pears Ind. Engineers Pvt. Ltd., Station Rd., Navsari 396445.

Pioneer Engg. Works, Amdupura, Naroda Rd., Ahmedabad 380002.

Sarabhai Machinery Division, C/o Bakubhai Ambalal Pvt. Ltd., Shantisadan Estate, Mirzapur Rd., Ahmedabad 380001.

SUESSEN TEXTILE BEARINGS LIMITED

Registered Office and Factory:

Bombay-Ahmedabad National Highway No. 8,
Baroda 390010.
Tel.: 4081-2-3-4 Telex: 217

Head Sales Office:

12/13, ' ADVENT ', 12-A, Foreshore Road,
Bombay 400 021.
Tel.: 230829 & 243672 Telex: 3350

Manufacturers of:

Textile Spinning Machinery Components in technical collaboration with Messrs. Spindelfabrik Suessen, Schurr, Stahlecker & Grill GmbH, Suessen, West Germany and Water Pump Bearings for Automobiles, etc.

Board of Directors:

A. N. Lalbhai (*Chairman*)
S. M. Mehta
(*Vice-Chairman*)
Hans Stahlecker
(*Vice-Chairman*)
H. C. Mahindra
J. P. Thacker
Ramesh Pai
M. C. Shah
H. G. Dalal
P. T. Munshaw
C. P. Shah
S. M. Patil
R. M. Mehta
F. J. Princz
R. A. Shah
(*Alternate Director*)
R. A. Jahagirdar
(*Alternate Director*)

Sen & Mettenheimer Pvt. Ltd., Cama Hotel Bldg., Khanpur, Ahmedabad 380001.

Shri Dinesh Mills Ltd., P. B. No. 65, Padra Rd., Vadodara 390005.

Shri Madhusudan Textiles, A. P. Ind. Estate, Near Gujarat Housing Colony, Ahmedabad 380021.

Standard Materials Co., Narottam Bldg., Kapasia Bazar, Ahmedabad 380002.

Suessen Textile Bearings Ltd., National Highway No. 8, Vadodara 390010.

Swastik Bansidhar Engg. Pvt. Ltd., Amraiwadi, Ahmedabad 380008.

Swastik Engg. & Manufg. Co. Pvt. Ltd., Bahucharaji Rd., Vadodara 390001.

Swastik Textile Trading Co. Pvt. Ltd., 23, M. Hirabai Market, Railwaypura, Ahmedabad 380002.

Tarkes Engg. Works, H. A. Market, Kapasia Bazar, Ahmedabad 380002.

Textile Appliances & Instruments Co. Pvt. Ltd., 81, Alkapuri, Vadodara 380001.

Textile Machinery Mfg. Co., Nr. Kamdar Maidan, Gomtipur Rd., Ahmedabad 380021.

Vasant Engg. Ltd., Shree Yamuna Mills Rd., Pratapnagar, Vadodara 390004.

Venus Engg. Co., Near Vora's Roja, Kankaria Rd., Ahmedabad 380022.

Winding Spares Machinery Co., 4, Textile Technicians Society, Navrangpura, Ahmedabad 380009.

Karnataka

Mysore Machinery Manufrs. Ltd., 5th Mile, Mysore Rd., Bangalore 560026.

Stumpp Schuele & Somappa Pvt. Ltd., Hosur Rd., Bangalore 560034.

Vijay Bobbins Ind. Pvt. Ltd., 54/27, Khader Sheriff Gardens, Bangalore 560027.

Madhya Pradesh

Central India Machinery Manufg. Co. Ltd., P. O. Birlanagar, Gwalior 474004.

Maharashtra

Ambica Mfrs., B-13, Noble Chambers, Ghoga St., Bombay 400001.

Amritalakshmi Machine Works, Warden House, Sir P. M. Rd., Bombay 400001.

Associated Bearing Co. Ltd., Mahatma Gandhi Memorial Bldg., Subhas Rd., Bombay 400002.

Batliboi & Co. Ltd., Apeejay House, Dr. V.B. Gandhi Mrg., Bombay 400023.

Benelon Inds., Sir Vithaldas Chambers, Apollo St., Bombay 400023.

Binani Machinery Corpn., Andheri-Kurla Rd., J. B. Nagar, Andheri East, Bombay 400059.

Calico Ind. Engrs., Chakala Works, Andheri, Bombay 400093.

Casablancas Gannon Engg. Ltd., Opp. Indl. Colony, Shastri Marg, Bombay 400078.

Commonwealth Textiles, Great Western Bldg., 130/132, Bombay Samachar Mrg., Bombay 400001.

Cooper Engg. Ltd., 658, J. Maharaj Rd., Pune 411004.

Copper Rollers Pvt. Ltd., Gupta Mills Estate, Darukhana, Reay Rd., Bombay 400010.

D. Parikh Engg. Works, 115, Marol Co-op. Indl. Est., M. Vissanji Rd., Bombay 400059.

Dalal Engg. Ltd., 36/37, Jolly Bhavan, 11, Nariman Point, Bombay 400021.

Damodar Sons Pvt. Ltd., Saheb Bldg., 195, Dr. D.N. Rd., Bombay 400001

Daver-NGM Pvt. Ltd., 70, Lakshmi Insurance Bldg., Sir P. Mehta Rd., Bombay 400001.

Electronic & Engg. Co., Bhatawadekar Bros. Bldg., Shantinagar, Vakola, Santa Cruz East, Bombay 400055.

Garlic Engg., 414, S. Bapat Marg, Bombay 400013.

Guest, Keen, Williams Ltd., L. B. Shastri Marg, Bhandup, Bombay 400078.

Harish Enterprises, 19, Parsi Panchayat Rd., Andheri East, Bombay 400069.

Hazarat & Co., Warden House, Sir P. M. Rd., Bombay 400001.

Inarco Ltd., Advent, 12-A, Foreshore Rd., Bombay 400021.

Indian Card Clothing Co. Ltd., Bombay-Pune Rd., Pimpri, Pune 411018.

Kisi-Chem Dyestuffs. (Engg. Divn.), 33, Hedavkarwadi, Gokhale Rd., Dadar, Bombay 400028.

Machinery Manufrs. Corpn. Ltd., Eucharistic Congress Bldg. No. 2, 5, Convent St., Bombay 400001.

Mafatlal Engg. Industries Ltd., Mafatlal Centre, Nariman Point, Bombay 400021.

Marchon Textile Inds. Pvt. Ltd., Saheb Bldg., 195, Dr. D. N. Rd., Bombay 400001.

Mather & Platt Ltd., Post Box 327, Bombay 400038.

National Electrical Inds. Ltd., Ind. Estate, Lalbaug, Bombay 400012.

New Standard Engg. Co. Ltd., N.S.E. Estate, Ram Mandir Rd., Goregaon East, Bombay 400063.

Premier Ind. Works, 45, Taikalwadi Lane, Off L. Jamshedjee Rd., Mahim, Bombay 400016.

Primatex Machinery Pvt. Ltd., Post Box 5, Manpada Rd., Dombivli 421204. Thane Dt.

Ronson Indl. Engrs. Pvt. Ltd., 126, Delisle Rd., Lower Parel, Bombay 400013.

Sardar Textile Engrs. Pvt. Ltd., Seksaria Indl. Estate, S.V. Rd., Malad, Bombay 400061.

SBM Group of Industries, 136, Great Western Bldg., N. Master Rd., Extn., Bombay 400023.

Shakti Textile Engrs. Pvt. Ltd., Manohar Ind. Estate, Chincholi Bunder Rd., Malad, Bombay 400064.

Special Steels Ltd., Dattapada Rd., Borivli East, Bombay 400066.

Standard Fabricators (I) Pvt. Ltd., Co-op. Insurance Bldg., Sir P. Mehta Rd., Bombay 400001.

Star Textile Engg. Works Ltd., Dhanraj Mahal, C. M. S. Marg, Bombay 400039.

T. Maneklal Manufg. Co. Ltd., Vaswani Mansion, D. Vachha Rd., Bombay 400020.

Tarsema Textile Traders, 11, Noble Chambers, S. A. Brelvi Rd., Bombay 400001.

Texind Corpn. Pvt. Ltd., Kermani Bldg., Sir P. Mehta Rd., Bombay 400001.

Texspares Traders, B 16/18, Noble Chambers, S. A. Brelvi Rd., Bombay 400001.

Textile Supplies Syndicate (I) Pvt. Ltd., India House, Opp. G. P. O., Bombay 400001.

Venus Textile Engineers, 40, Alka, B Rd., Churchgate, Bombay 400020.

Voltas Ltd., Elphinstone Bldg., 6, V. Nariman Rd., Bombay 400001.

Zell-Ate Ltd., Indian Globe Chambers, Fort St., Bombay 400001.

Punjab

Pearl Mechanical Engg. & Foundry Works Pvt. Ltd., 425-427, Indl. Area A, Ludhiana 141003.

S. R. K. Textiles, 193, East Mohan Nagar, Amritsar 143001.

Tamil Nadu

Allied Engg. Ind., 27A, Bharathi Park Rd., Coimbatore 641011.

Kunal Engg. Co., 22 Ind. Estate, Ambattur, Madras 600058.

Lakshmi Automatic Loom Works Ltd., Hosur Indl. Complex, Hosur 635126.

Lakshmi Card Clothing Manufg. Co. Pvt. Ltd., P. O. Kuppuswamy Naidupuram 638662, Palladam Taluk, Coimbatore Dist.

SHAKTI
TEXTILE ENGINEERS
PVT. LTD.

—the first and foremost name
for the largest range of high quality

TEXTILE WET PROCESSING
& FINISHING MACHINERY

★ Rotary & Flat bed Screen Printing Machines ★ Dye-Jiggers
★ Drying Ranges ★ Sizing Machines ★ Mangles ★ Polymerising/Curing
Chamber Machines ★ Decatizing Machines ★ Soaping & Washing Ranges
★ Carbonising Ranges

Modpub-ST-105A

Manufacturers:
SHAKTI TEXTILE ENGINEERS
PVT. LTD.,
Shakti House, 31 Nadiadwala Colony No. 1,
S. V. Road, Malad, Bombay-400 064.
Phone: 691684/684555.
Works: 691929/684751.
Grams: 'SHAKTI, Bombay-400 064.
Telex: 011-6621 SKTI IN

Selling Agents:
COMMONWEALTH TEXTILES
512/514, Raheja Chambers, 5th Floor,
213, Nariman Point, Bombay-400 021.
Telex: CTEX IN 011-4912.
Phones: 245018, 245068, 245148.
Grams: GOOLMACK.
Also at Ahmedabad. Phone 78887
& Delhi. Phone: 670656

Lakshmi Machine Works Ltd., Perianaickenpalayam, P.O. S.R.K. Vidyalaya, Coimbatore 641020.

Madras Spindle Co. Ltd., 3, C. V. Raman Rd., Alwarpet, Madras 600018.

Texmaco Ltd., 333, Avanashi Rd., Coimbatore 641018.

Uttar Pradesh

Lohia Machines Pvt Ltd., C-3, Panki Ind. Estate, Kanpur 208022.

West Bengal

Machinery Mfrs. Corpn., P61/B, Circular Garden Reach Rd., Calcutta 700043.

Nipha Machinery Manufrs. Pvt. Ltd., 25, N. Subhas Rd., Calcutta 700001.

Spin-Well Pvt. Ltd., 6, Dilarjang Rd., Cossipore, Calcutta 700002.

Textile Machinery Corpn. Ltd., P. O. Belgharia, Calcutta 700056.

TEXTILE MACHINERY & SPARES

Delhi

Indicators Mfg. Co., 4636, Deputyganj, S. Bazar, Delhi 110006.

Gujarat

Anant Inds., 10, Shri Indl. Estate, Tavdipura, Shahibagh, Ahmedabad 380004.

Bhagwati Industries, 56, Shrimali Socy., Navrangpura, Ahmedabad 380002.

Bharadia Inds. Behind Shree Bansidhar Mills, Naroda Rd., Ahmedabad 380025.

Bharat Techno Mech. Ind. Pvt. Ltd., Maneklal Rd., Navsari 396445.

Bharat Textile Works, Nagarwel Hanuman Rd., Rakhial, Ahmedabad 380023.

Chandabhai & Sons, 2058, Dariapur, Dabgarwad, Ahmedabad 380001.

Climax Engg. Co. Pvt. Ltd., Naroda Rd., Ahmedabad 380002.

Continental Engg. Inds. Pvt. Ltd., Pushpak, Khanpur, Ahmedabad 380001.

Delux Machinery Mfrs. Pvt. Ltd., Tramway Rd., Wadhwan City 363030.

Erhardt Leimer (India) Ltd., Survey No. 320, Odhav Rd., Ahmedabad 382410.

Gujarat Bobbins Inds., Rupavri Rd., Bhavnagar 364001.

Gujarat Corpn. India Pvt. Ltd., Naroda Rd., Ahmedabad 380002.

Gujarat Pickers Inds., Nari Rd., Bhavnagar 364001.

H. Mansuri & Sons, Dariapur, Dabgarwad, Ahmedabad 380001.

Indequip Engg. Ltd., Naroda, Ahmedabad 382325.

India Reeds Manufg. Co., Rakhial Rd., Ahmedabad 380021.

Jayantilal S. Gandhi & Co. (Machinery Dn.), Railwaypura, Ahmedabad 380002.

Jeckswell Engg. Works, 17, Gujarat Udyognagar Bardolpura, Ahmedabad 380016.

K. K. Engg. Works, Tawdipura, Shahibaug, Ahmedabad 380004.

Kothari Textile Inds., Post Box No. 4, Surendranagar 363001.

Loom Drop Pins Manufg. Co., Kapasia Bazar, Ahmedabad 380002.

M. K. Spindle Mfrs. P. Ltd., 1, Ahmedabad Audyogic Vasahat, Dudheswar Rd., Ahmedabad 380001.

Mashruwala & Bros., Vohra Bldg., Kapasia Bazar, Ahmedabad 380002.

Metal Moulders Pvt. Ltd., Dudheswar Rd., Ahmedabad 380001.

Metro Wood & Engg. Works Pvt. Ltd., "NK" House, Ashram Rd., Navrangpura, Ahmedabad 380009.

Mistry Ambalal Jetharam Iron & Brass Factory, Ghee Kanta Rd., Ahmedabad 380001.

N. I. F. Mechanical Works, Near Thakarbapa Ashram, Chhapara Rd., Navsari 396445.

N.P. Kanirwala Pvt. Ltd., 148, Mukti Medan, Maninagar, Ahmedabad 380008.

National Machinery Manufg. Works, Tawdipura, Ahmedabad 380004.

New Ambica Engg. Works, 30, Suprabhat Ind. Estate, Bardolpura, Ahmedabad 380016.

New India Ind. Ltd., Jetalpur Rd., Vadodara 390005.

New India Pickers Works, Near Khandni Sheri, Jamalpur, Ahmedabad 380001.

Paramount Textile Agency, H. A. Cloth Market, Kapasia Bazar, Ahmedabad 380002.

Pickers Ltd., Ellis Bridge, Ahmedabad 380006.

Prominent Textile Engg. Co. Pakhaji's Kuva Compound, Tadvipura, Shahibaug, Ahmedabad 380004.

Ranpur Inds., Ranpur 363610, Ahmedabad Dist.

Shreeji Engg. Works, 1628/102, O/S Dariapur Gate, Jubilee Mills Rd., Ahmedabad 380010.

Usha Industrial Corpn., Dr. Ajit Mills, Rakhial Rd., Ahmedabad 380023.

Venus Engg. Co., Nr. Vora's Roka, Kankaria Rd., Ahmedabad 380022.

Vijay Mechanic Works, R. Vardhaman Rd., Wadhwan City 363030.

Vora Inds., 19, Udyognagar, Surendranagar 363001.

Wispmac Pvt. Ltd., AMI Technicians Socy., Near Gandhi Bridge, Ahmedabad 380009.

Zenith Engg. Works, Tramway Rd., Wadhwan City 363030.

Haryana

Kwality Indl. Works, 17G, Indl. Area, N. I. T., Faridabad 121002.

Swastika Engg. Works, G. T. Rd., Panipat 132103.

Karnataka

Lakshmi Automatic Loom Works Ltd., Unity Bldg. Annexe, 72, Mission Rd., Bangalore 560027.

Mysore Machinery Mfrs. Ltd., 5th Mile, Mysore Rd., Bangalore 560026.

Sunrise Industrials, 5th Main Rd., Sriramapuram, Bangalore 560021.

Kerala

Bharath Engg. Inds., Marathakkara 680320. (Trichur Dist.).

Madhya Pradesh

Central India Machy. Mfg. Co. Ltd., Birlanagar, Gwalior 474004.

Maharashtra

Bakubhai Ambalal, Kaiser-I-Hind Bldg., B. Estate, Bombay 400038.

Benelon Ind., Sir Vithaldas Chambers, Apollo St., Bombay 400023.

Bharat Ind., R. No. 320, Bharat Ind. Estate, Jivraj Rd., Sewree, Bombay 400015.

Calico Indl. Engrs., Chakala Works, Andheri, Bombay 400093.

Continental Healds Mfg. P. Ltd., Flat 140, 23, Bakehouse Lane, Bombay 400001.

D. Parikh Engg. Works, 115, Co-op. Ind. Estate, M. Vissanji Rd., Bombay 400059.

Dalal Engg. Ltd., 36/37, Jolly Maker Bhavan II, Nariman Point, Bombay 400021.

Dodia Engrs., 8, Apurva Ind. Estate, 88, Makwana Rd., Andheri East, Bombay 400059.

Eck-Haubold Laxmi Ltd., Sir Vithaldas Chambers, Bombay Samachar Mrg., Bombay 400023.

Eastern Card Clothing Co, Pvt. Ltd., Nirmal Ind. Estate, 29th Road, Bombay 400022.

Engg. & Agencies Pvt. Ltd., French Bank Bldg., Homji St., Bombay 400001.

Engineer Bros., Sir Vithaldas Chambers, Apollo St., Bombay 400023.

Hind-Soka Enterprises, Hind Saurashtra Ind. Estate, Marol Naka, Bombay 400059.

Hindtex Engrs. Pvt. Ltd., Janmabhoomi Bhavan, Ghoga St., Bombay 400001.

John T. Hardaker (I) Pvt. Ltd., G. Kadam Mrg., Lower Parel, Bombay 400013.

MOST MODERN CHEMICAL PLANTS

WITH...
CENTRIFUGES
REACTION VESSELS,
PRESSURE VESSELS,
CONDENSERS,
CRYSTALLISERS,
NUTCHE FILTERS,
MS/SS FABRICATION.

MANUFACTURED IN INDIA BY

TEXTILE ART MACHINERY
ASSOCIATE CONCERN : HYDROCHEM ENGINEERS
Office : 145, Adarsh Industrial Estate, Sahar Road,
Chakala, Andheri (East), Bombay-400 093. India.
Telephone : 562721 • Gram : 'TAMHYDRO'

ADMEDIA

KUMUDCHANDRA & CO.

(MFR-E-MER)
Estd. 1938

Office : 29, Dalal Street,
Examiner Press Building,
Fort, Bombay 400 023.
Telephones : 271127 & 271320.
Grams : " VERYGOOD "

Works : C. K. Industries, Kopergaon Estate,
Mazgaon, Bombay 400 010.
Telephone : 895458.

●

Items manufactured Exported

Textile machinery and spares. Creels and Stop Motions for Warping.

Achievements

Received twice awards for Import Substitution from Association of Merchants & Manufacturers of Textile Stores & Machinery, Bombay.

Kumudchandra & Co., Examiner Press Bldg., 29, Dalal St., Bombay 400023.

Laxmi Paper Box Works, 49, Krishna Nagar, Parel, Bombay 400012.

Mahaveer Textile Traders, 98A, A. Dady St., C. P. Tank, Bombay 400004.

Marathe Engg. Ind., Ind. Estate, Miraj 416410.

Marchon Textile Ind. Pvt. Ltd., Saheb Bldg., 195, Dr. D. N. Rd., Bombay 400001.

Mather Greaves Ltd., Hamilton House, Graham Rd., Bombay 400038.

Modern Engg. & Marketing Enterprises, 234, Jaygopal Indl. Estate, 510, Bhavani Shankar X Rd., Dadar, Bombay 400028.

National Wire Heald Works Pvt. Ltd., Sir Vithaldas Chambers, 8, Homi Mody St., Bombay 400023.

Navbharat Inds., Lad Nivas, 42-62, Ardeshir Dady St., Bombay 400004.

New Nagauri Card Can Mfg. Co., 97-E, Morland Rd., Naya Nagar, Bombay 400008.

New Standard Engg. Co. Ltd., NSE Estate, Rammandir 'Rd., Goregaon (East), Bombay 400063.

Prabhat Engg. Co., 52/54, Popatwadi, Kalbadevi Rd., Bombay 400002.

Precision Textile & Engg. Components Pvt. Ltd., Rajabahadur Compd., Opp. Allahabad Bank, Apollo St., Bombay 400023.

Primatex Machinery Pvt. Ltd., Dhanraj Mahal, C.M.S. Mrg., Bombay 400039.

Sarvodaya Reeds Mfg. Co., 137/41, Samuel St., (Khoja Galli), Bombay 400009.

Shakti Textile Engrs. Pvt. Ltd., Manohar Indl. Estate, Malad, Bombay 400064.

Texspares Machine Works, B-16/18, Noble Chambers, Ghogha St., Bombay 400001

Timbco Textile Ind., 22, Bombay Timber Mkt., Reay Rd., Bombay 400010.

Usha Textile Inds., 451, Sakhar Peth, Solapur 413002

Western India Tanneries Ltd., 2A, Dharavi Rd., Bombay 400017.

Punjab

Astra Engg. Inds., E-28, Focal Point, Ludhiana 141010.

Sachdeva Engg. Works, P.O. Rayon Silk Mills, Chheharta, Amritsar 143001.

Tamil Nadu

Guruprasad Textile Engrs., 9/8, Ramarkovil St., Ramnagar, Coimbatore 641009.

Jayalakshmi Engg. Mfrs. Pvt. Ltd., P. B. No. 5306, Coimbatore 641029.

L. G. Balakrishna & Bros. Ltd., Ganapathy Works, Coimbatore 641006.

Madras Rings & Travellers Mfg. Co., 4, East Spurtank Rd., Chetput, Madras 600031.

Nathan Inds., Ganapathy, Coimbatore 641006.

Premier Synthetics (India) Pvt. Ltd., 5/5, Headquarters Rd., Coimbatore 641018.

Ramakrishna Industrials Pvt. Ltd., Peelamedu, Coimbatore 641004.

Textool Co. Ltd., P.O. Ganapathy, Coimbatore 641006.

Universal Machine Works, 8/76-A, 100 Ft. Rd., Tatabad, Coimbatore 641012.

West Bengal

Bharat Ind. Corpn. Pvt. Ltd., 13, N. Kar Lane, Salkhia, Howrah 711106.

Indian Pin Manufg. Co Pvt. Ltd., World Trade Centre, 14/1B, Ezra St., Calcutta 700001.

Jumac Spares Mfg. Corpn., 3, Princep St., Calcutta 700013.

Kingsley Corpn. Pvt. Ltd., 7, C. R. Ave., Calcutta 700072.

Machinery Mfrs. Corpn. Ltd., P61/B, Circular Garden Reach Rd., Calcutta 700043.

Ravi Machine Tools & Engg. Works, 12/1, Chintamoni Dey Bathing Ghat Rd., Ramakrishnapur, Howrah 711101.

Spinning Accessories Pvt. Ltd., Laha Point House, 7, Chittaranjan Ave., Calcutta 700013.

TEXTILE MILLS

Andhra Pradesh

Abirami Cotton Mills Pvt. Ltd., Sulurpeta 524121 (Nellore Dist.).

Adoni Spg. and Wvg. Co., P. B. No. 42, Adoni 518301.

Andhra Co-op. Spinning Mills Ltd., P. B. No. 36, Timmancherla, Guntakal 515802, Anantapur Dist.

Andhra Cotton Mills Ltd., Shriniwasa Nagar, Proddatur 516360 (Cuddapah Dist.).

Azam Jahi Mills, Narsampet Rd., Warangal 506002.

Chirala Co-op. Spg. Mills Ltd., Chirala 523155, Guntur Dist.

Chittoor Textiles Ltd., Madras-Bangalore Trunk Rd., Chittoor 517001.

Dewan Bahadur Ramgopal Mills Ltd., Elchiguda, Secunderabad 500003.

Hemalatha Textiles Ltd., Pedakakani, Guntur 522509.

Jayanti Ramchandrappa Shetty Mills Pvt. Ltd., Raydurg 515865.

Karimnagar Co-op. Spinning Mills Ltd., Ramagundam 505208.

Madanapalle Spg. Mills Ltd., C.T.M. P.O. 517319, Chittoor Dist.

Natraj Spg. & Wvg. Mills, Nirmal 504106 (Adilabad Dist.).

Netha Spg. Mills, 608, Elchiguda, Secunderabad 500003.

Penguin Textiles Ltd., Tarnaka, Uppal, Hyderabad 500039.

Rayalaseema Mills Ltd., Rayanagar, Adoni 518301.

Sarvaraya Textiles Ltd., Beach Rd., Kakinada 533001.

Sree Akkamamba Textiles Ltd., Venkatarayapuram, Tanuku 534211.

Sree Satya Narayana Spg. Mills Ltd., P. B. No. 3, Venkatarayapuram, Tanuku 534211.

Sri Venkatachalapathi Mills Ltd., Padmavathinagar, Tirupati 517501.

Super Spg. Mills Ltd., Kirikera 515211, Anantpur Dist.

Suryalakshmi Cotton Mills Ltd., 77, M. Gandhi Rd., Secunderabad 500003.

Telangana Spinning & Weaving Mills Ltd., Balanagar, Hyderabad 500003.

Yemmiganur Spinning Mills Ltd., Yemmiganur 518360. (Bellary Dist.).

Assam

Assam Cotton Mills, Singlimara Rd., Chariduwar, Darang 784111.

Associated Ind. (Assam) Ltd., Chandrapur 781150 (Kamrup Dist.).

Bihar

Bihar Co-op. Weavers Spg. Mills Ltd., Mokameh 803302.

Bihar Cotton Mills Ltd., Phulwarishariff, Patna 801505.

Dumraon Textiles Ltd., Dumraon 802119.

Mahalakshmi Fibres & Ind. Ltd., Ormanjhi 835219.

Delhi

Ajudhia Textile Mills, Azadpur, P.O. Ajudhia Mills, Delhi 110033.

Birla Cotton Spinning & Weaving Mills Co. Ltd., Birla Lines, Delhi 110007.

Delhi Cloth & General Mills Co. Ltd., Bara Hindu Rao, Delhi 110006.

Swatantra Bharat Mills Ltd., Najafgarh Rd., New Delhi 110015.

Goa

Chowgule Textile Mills Ltd., Quepem 403705.

Goa Textiles Ltd., Marmagao 403601.

Gujarat

Ahmedabad Advance Mills Ltd., Outside Delhi Gate, Ahmedabad 380001.

Ahmedabad Cotton Manufg. Co. Ltd., No. 17, Outside Sarangpur Gate, Ahmedabad 380001.

Ahmedabad Kaiser-I-Hind Mills Co. Ltd., Outside Raipur Gate, Ahmedabad 380022.

Ahmedabad Laxmi Cotton Mills Co. Ltd., Outside Raipur Gate, Ahmedabad 380022.

Ahmedabad Manufg. & Calico Printing Co. Ltd., (Calico Mills), Outside Jamalpur Gate, Ahmedabad 380022.

Ahmedabad New Cotton Mills Co. Ltd., Near Khokhra Mehmedabad, Ahmedabad 380008.

Ahmedabad New Textile Mills Co. Ltd., Outside Raipur Gate, Ahmedabad 380022.

Ahmedabad Shri Ramakrishna Mills Co. Ltd., Gomtipur Rd., Ahmedabad 380021.

Ajit Mills Ltd., Rakhial Rd., Ahmedabad 380021.

Aruna Mills Ltd., Naroda Rd., Ahmedabad 380002.

Arunoday Mills Ltd., Morvi 363641.

Arvind Mills Ltd., Naroda Rd., Ahmedabad 380002.

Aryodaya Ginning & Manufg. Co. Ltd., Asarva Rd., Ahmedabad 380016.

Aryodaya Spinning & Weaving Co. Ltd., Asarwa Rd., Ahmedabad 380016.

Asarwa Mills Ltd., Asarwa Rd., Ahmedabad 380016.

Asoka Mills Ltd., Naroda Rd., Ahmedabad 380002.

Baroda Spinning & Weaving Co. Ltd., Near Badra Pani Gate, Vadodara 390001.

Bechardas Spinning and Weaving Mills Co. Ltd.,. Rakhial, Ahmedabad 380021.

Bhalakia Mills Co. Ltd., Kankaria Rd., Ahmedabad 380008

Bharat Suryodaya Mills Co. Ltd., Amraiwadi, Ahmedabad 380008.

Bharat Vijaya Mills Ltd., Seven Garnala, Kalol 382721.

Bihari Mills Ltd., Mithipur Khokhra, Mehmedabad, Ahmedabad 380008.

Broach Textile Mills Pvt. Ltd., M. Gandhi Rd., Bharuch 392001.

Commercial Ahmedabad Mills Co. Ltd., Near Idgah Chowki, Asarwa, Ahmedabad 380016.

Gaekwar Mills Ltd., Bilimore 396321.

Gandhidham Spg. & Manufg. Co. Ltd., Adipur 370205, Kutch.

Girdhardas Harivallabdas Mills Ltd., Near Girdhanagar Rly. Crossing, Ahmedabad 380016.

Jupiter Textile Mills, Dadhechi Rd., Ahmedabad 380001.

Kanti Cotton Mills Pvt. Ltd., Mill Rd., Surendranagar 363001.

Mafatlal Fine Spinning & Manufg. Co. Ltd., Vejalpur Rd., Navsari 396445.

Mahalaxmi Mills Ltd., Vartej Rd., Bhavnagar 364001.

Maharana Mills Pvt. Ltd., Probandar 360575.

Mahendra Mills Ltd., Kalol, N. Gujarat 382721.

Maheshwari Mills Ltd., Shahibag Rd., Ahmedabad 380004.

Maneklal Harilal Spinning & Manufg. Co. Ltd., Saraspur, Ahmedabad 380018.

Manjushri Textiles, Shahibag, Ahmedabad 380004.

Marsden Spinning & Manufg. Co. Ltd., Rakhial Rd., Ahmedabad 380021.

Mihir Textiles Ltd., Mithipur, Ahmedabad 380008.

Monogram Mills Co. Ltd., Rakhial Rd., Ahmedabad 380021.

Nagri Mills Co. Ltd., Rajpur Rd., Ahmedabad 380021.

Navjiwan Mills Pvt. Ltd., Kalol 382721.

Navsari Cotton & Silk Mills Ltd., Vejalpore Rd., Navsari 396445.

New Asarwa Mills Pvt. Ltd., Saraspur, Ahmedabad 380018.

New Commercial Mills Co. Ltd., Naroda Rd., Ahmedabad 380002.

New Gujarat Cotton Mills Ltd., Outside Dariapur Gate, Ahmedabad 380016.

New Jehangir Vakil Mills Co. Ltd., Nilambag Rd., Bhavnagar 364001.

New Maneckchowk Spinning and Weaving Co. Ltd., Opp. Idgah Gate, Post Asarva, Ahmedabad 380016.

New Rajpur Mills Co. Ltd., Gomtipur Rd., Ahmedabad 380021.

New Shorrock Spinning & Manufg. Co. Ltd., Asarwa Rd., Ahmedabad 380016.

New Swadeshi Mills of Ahmedabad Ltd., Naroda Rd., Ahmedabad 380002.

Niranjan Mills Pvt. Ltd., Falsawadi Rd., Surat 395003.

Nutan Mills Ltd., via Vora's Roja, Anin Rd., Ahmedabad 380002.

Patel Mills Co. Ltd., Gomtipur Rd., Ahmedabad 380021.

Petlad Textile Mills, Opp. Petlad Station, Petlad 388450.

Raipur Manufg. Co. Ltd., Outside Saraspur Gate, Ahmedabad 380021.

Rajkot Textile Mills, Karansinghji Cross Rd., Rajkot 360001.

Rohit Mills Ltd., Khokhra Mehmedabad, Ahmedabad 380008.

Rustom Jehangir Vakil Mills Co. Ltd., Dudheshwar Rd., Ahmedabad 380001.

Sadhana Textile Mill Pvt. Ltd., Ranjit Sagar Rd., Jamnagar 361001.

Sarangpur Cotton Manufg. Co. Ltd., Outside Raipur Gate, Ahmedabad 380022.

Saraspur Mills Ltd., Saraspur Rd., Ahmedabad 380018.

Saurashtra Co-op. Spinning Mills Ltd., Limbdi 363421.

Sayaji Mills, Near Old Rly. Stn., Vadodara 390003.

Shri Ambika Mills Ltd., Kankaria, Ahmedabad 380008.

Shri Arbuda Mills Ltd., Rakhial Rd., Ahmedabad 380021.

Shri Bansidhar Spinning & Weaving Mills Ltd., Naroda Rd., Ahmedabad 380002.

Shri Prithvi Cotton Mills Ltd., M. Gandhi Rd., Bharuch 392001.

Shri Shubhlaxmi Mills Ltd., Station Rd., Cambay 388620.

Shri Vivekanand Mills Ltd., Rakhial Rd., Ahmedabad 380021.

Shri Yamuna Mills Co. Ltd., Pratapnagar, Vadodara 390004.

Sidhpur Mills Co. Ltd., Bindu Sarovar Rd., Sidhpur 384151.

Silver Cotton Mills Co. Ltd., Near Jaganath Mahadev, Amraiwadi Rd., Ahmedabad 380008.

Soma Textiles, Rakhial Rd., Ahmedabad 380021.

Surat Cotton Spinning & Weaving Mills Pvt. Ltd., Nawabwadi, Surat 395001.

Surat District Co-op. Spinning Mills, Varachha Rd., Surat 395003.

Surat Textile Mills Ltd., Varachha Rd., Surat 395003.

Tarun Commercial Mills Ltd., Outside Kalupur Gate, Railwaypura, Ahmedabad 380002.

Vijaya Mills Co. Ltd., Naroda Rd., Ahmedabad 380002.

Vikram Mills Ltd., Outside Saraspur Gate, Rajpur, Ahmedabad 380021.

Haryana

Bhiwani Textile Mills, Birla Colony, Bhiwani 125021.

Elsons Cotton Mills Pvt. Ltd., 23rd Milestone, Mathura Rd., Ballabgarh 121004.

Gopichand Textile Mills Ltd., Hissar Rd., Sirsa 125055.

Hissar Textile Mills, Hissar 125002.

Mohan Spg. Mills, Circular Rd., Rohtak 124001.

Rohtak Textile Mill Ltd., Circular Rd., Rohtak 124001.

Technological Institute of Textiles, Bhiwani 125021.

Shree Saraswati Spinning Mills, P.O. Birla Colony, Bhiwani 125021.

Usha Spinning & Weaving Mills Ltd., 12/1, Milestone, Mathura Rd., Faridabad 121001.

Jammu & Kashmir

Chenab Textile Mills, Jammu Main Rd., Kathua 184101.

Karnataka

Bellary Spinning & Weaving Co. Ltd., Vinayaknagar, Hospet Rd., Bellary 583101.

Bhadra Spinning Mills Pvt. Ltd., Magadi Rd., Dasarahalli, Bangalore 560010.

Bijapur Co-op. Spinning Mills Ltd., Near Bijapur Rly. Stn., Bijapur 586101.

Binny Ltd., No. 1, Agraharam Rd., Bangalore 560023.

Davangere Cotton Mills Ltd., P. B. No. 201, Davangere 577002.

Gokak Mills Ltd., Gokak Falls 591308, Belgaum Dist.

Mahaboob Shahi Kulbarga Mills, Gulbarga 585101.

Mahadev Textile Mills, P. B. No. 35, Hubli 580020.

Minerva Mills, Magadi Rd., Bangalore 560023.

Nandi Hasbi Textile Mills Ltd., Nargund 582207, Dharwar Dist.

Ramkumar Mills Pvt. Ltd., No.1, Subramanyapuram, Bangalore 560011.

Ramkumar Mills Pvt. Ltd., No. 2, Rajajinagar, Bangalore 560010.

Shree Ganesar Textile Mills Ltd., P. B. No. 23, Davangere 577001.

Shree Kathiresan Spinning Mills, Garehatti, Chitradurga 577501.

Sree Chandrodaya Mills Ltd., Chitradurga Rd., Davangere 577001.

Sree Siddeswara Textile Mills Pvt. Ltd., P. B. No. 78, Davangere 577001.

Sree Suryodaya Mills Pvt. Ltd., Yeshwantpur, Bangalore 560022.

Sri Anjaneya Cotton Mills Pvt. Ltd., Davangere 577001.

Sri Krishnarajendra Mills Ltd., Bangalore Rd., Mysore 570003.

Sujata Textile Mills, Nanjangud 571301.

Kerala

Alagappa Textiles (Cochin) Ltd., Alagappanagar 680302, Trichur Dist.

Asok Textiles Pvt. Ltd., Asokapuram, Alwaye 683101.

Calicut Modern Spinning & Weaving Mills Ltd., Somasundarapuram, Chelambra, Kozhikode 673634.

Cannanore Co-op. Spinning Mills Ltd., Cannanore 670006.

Cannanore Spg. & Wvg. Mills Ltd., P. B. No. 204, Cannanore 670002.

Chakolas Spinning & Weaving Mills Ltd., Alwaye 683104.

G. T. N. Textiles Ltd., P. B. No. 101, Alwaye 683101.

Kanthimathy Mills, Ind. Estate, Trivandrum 695019.

Kathayee Cotton Mills Ltd., Post Box No. 6, Alwaye 683011.

Kerala Laxmi Mills Ltd., Pullazhi, Trichur 680001.

Kerala Spinners Ltd., Post Box No. 211, Komalapuram, Aryad North, Alleppey 682001.

Kottayam Textile Ltd., Vedagiri, Kurumallore, Via Ettumanur 686631.

Madras Spinners Ltd., Pampanppallam, Palghat 678007.

Malabar Spg. & Wvg. Co. Ltd., P. B. No. 11, Kallai, Calicut 673003.

Parvathi Mills Ltd., Quilon 691001.

Premier Cotton Spinning Mills Ltd., Kanjikode West, Palghat 678623.

Sitaram Textiles, Trichur 680002.

Sri Bhagvathi Textiles Ltd., Chittur 678101.

Tiruvepathi Mills Pvt. Ltd., Post Box No. 17, 90, Mill Rd., Cannanore 670013.

Trivandrum Spg. Mills Ltd., Balarampuram 695501, Trivandrum Dist.

Vanaja Textiles Ltd., Kurichikara, Trichur 680001.

Vijayamohini Mills Ltd., Thirumala, Trivandrum 695006.

Western India Cotton Mills Ltd., Pappinisseri 670561, Cannanore Dist.

Madhya Pradesh

Avanti Spg. Mill, Sanawad 451111.

Bengal Nagpur Cotton Mills, Rajnandgaon 491441.

Bharat Commerce & Ind. Ltd., Birlagram, Nagda 456335.

Bilaspur Spinning Mills & Ind. Ltd., Bilaspur 495001.

Binod Mills Co. Ltd., Ujjain 456001.

Burhanpur Tapti Mill, Lalbag, Burhanpur 450331.

Gwalior Rayon & Silk Mfg. (Wvg.) Co. Ltd., (Staple Fibre Divn.), Birlanagar, Gwalior 474004.

Hira Mills, Ujjain 456001.

Hope Textiles Ltd., Snehlataganj Main Rd., Indore 452003.

Hukamchand Mills Ltd., Shilnath Camp, Indore 452003.

Indore-Malwa United Mills, New Dewas Rd., Indore 452003.

Indore Textiles Ltd., Ujjain 456001.

Jiyajeerao Cotton Mills Ltd., Birlanagar, Gwalior 474004.

Kalyanmal Mills, 15, Shilnath Camp, Indore 452003.

Mandsaur Textile Mills, Mandsaur 458001.

Motilal Agarwal Mills Pvt. Ltd., Ind. Area, Birlanagar, Gwalior 474004.

New Bhopal Textile Mills, Chandbarh, Bhopal 462010.

Nimar Textiles Ltd., Indore Rd., Khandwa 450001.

Phoenix Mills Ltd. (No. 2), Ujjain 456001.

Rai Bahadur Kanhaiyalal Bhandari Mills, Malgodown Road, Indore 452003.

Rajkumar Mills Ltd., 7, New Dewas Road, Indore 452003.

Shree Sajjan Mills Ltd., Ratlam 457001.

Spinning Mill, Sanawad 451111.

Century's
Fashion Fabrics

For 100% Cotton Textiles

The Century Spinning and Manufacturing Company Limited, Bombay

Sobhagya/CM/78/3

Standard Mills Co. Ltd., Balgarh, Dewas 455001.

Swadeshi Cotton & Flour Mills, 7, Shilnath Camp, Indore 452003.

Maharashtra

Amravati Growers Co-op. Spinning Mills Ltd., Badnera Road, New Ind. Estate, Amravati 444601.

Apollo Textile Mills, N.M. Joshi Marg, Bombay 400011.

Aurangabad Mills Ltd., Kotwalpura, Aurangabad 431001.

Barshi Textile Mills, Barsi 413401.

Bharat Textile Mills, Fergusson Road, Lower Parel, Bombay 400013.

Bombay Dyeing & Manufacturing Co. Ltd., Neville House, Graham Road, B. Estate, Bombay 400038; *Spring Mills*, Naigaum Road, Bombay 400014; *Textile Mills*, Elphinstone Road, Bombay 400013; J. Bhatankar Marg, Bombay 400025; *New Bleach Works*, Elphinstone Road, Bombay 400013.

Bombay Textile Mills (Processing House), Suryodaya Mills Compound, Tardeo, Bombay 400034.

Bradbury Mills Ltd., M. Azad Road, Jacob Circle, Bombay 400011.

Century Spinning & Manufg. Co. Ltd., Pandurang Budhkar Marg, Bombay 400025.

Chalisgaon Textile Mills, Chalisgaon 424101.

Coorla Spinning & Weaving Co. Ltd., Old Agra Road, Kurla, Bombay 400070.

Crown Spinning & Manufg. Co. Ltd., Gokhale Road (South), Bombay 400028.

Dawn Mills Co. Ltd., Fergusson Road, Lower Parel, Bombay 400013.

Deccan Co-op. Spinning Mills Ltd., Ichalkaranji 416115.

Digvijay Spg. & Wvg. Co., Lalbaug, Bombay 400033.

Elphinstone Spinning & Weaving Co. Ltd., Elphinstone Road, Bombay 400013.

Empress Mills, Nagpur 440001.

Finlay Mills Ltd., 10/11, Dr. S.S. Rao Road, Bombay 400012.

Gold Mohur Mills Ltd., Dadasaheb Phalke Road, Dadar, Bombay 400014.

Hindoostan Spinning & Weaving Mills Co. Ltd., Jacob Circle, Bombay 400011.

India United Mills : *No. 1 Mill*, Ambedkar Road, Bombay 400012; *No. 2 & 3 Mills*, Bhogale Marg, Bombay 400033; *No. 4 Mill*, T.B. Kadam Marg, Bombay 400033; *No. 5 Mill*, Chinchpokhli X Lane, Bombay 400027; *Dyeworks*, Savarkar Marg, Bombay 400028.

Jam Manufacturing Co. Ltd., Lalbaug, Bombay 400012.

Jam Shri Ranjitsinghji Spinning and Weaving Mills Co. Ltd., Station Road, Solapur 413001.

Jawahar Co-op. Spinning Mills Ltd., Nanded Road, Latur 413512. Osmanabad Dist.

Jawahar Sahakari Kapus Utpadak Soot Girni Maryadit, Latur 413512.

Jupiter Textile Mills, Carroll Road, Bombay 400013.

Kamala Mills Ltd., Tulsipipe Road, Bombay 400013.

Khandesh Spg. & Wvg. Mills Co. Ltd., Jalgaon 425001.

Khatau Makanji Spinning and Weaving Co. Ltd., B. Jagtap Marg, Byculla, Bombay 400027.

Kiran Spinning Mills, Kolshet Road, Thane 400601.

Kohinoor Mills Co. Ltd., Naigaum Cross Road, Dadar, Bombay 400014.

Kolhapur Sahakari Zilla Setkari Vinkar Soot Girni Ltd., Yadrav Shirol, Kolhapur 416001.

Laxmi-Vishnu Cotton Mills Ltd., Solapur 413001.

Madhavnagar Cotton Mills Ltd., Madhavnagar 416404. Sangli Dist.

Mafatlal Fine Spinning & Manufg. Co. Ltd., Mount Estate, Mazgaon, Bombay 400010.

Marathe Textile Mills, Near Rly. Stn., Miraj 416410.

Marathwada Co-op. Spinning Mills Ltd., Wajegaon Taluka, Nanded 431601.

Model Mills (Nagpur), Umrer Road, Nagpur 440018.

Modella Textile Industries Pvt. Ltd., Modellagram, Thane 400601.

Modern Mills Ltd., 29, K. Khadye Marg, Bombay 400011.

Morarjee Gokuldas Spinning & Weaving Co. Ltd., Dr. Ambedkar Road, Parel, Bombay 400012.

Mukesh Textile Mills, Victoria Bunder Road, Colaba, Bombay 400005.

Mumbai Textile Mills, S. Bapat Marg, Bombay 400013.

Nagpur Vinkar Sahkari Soot Girni Maryadit, Umrer Road, Nagpur 440018.

Nanded Textiles Mills, Mill Rd., Nanded 431601.

Narsinggirjee Mills, Station Road, Solapur 413001.

New City of Bombay Manufg. Co. Ltd., 63, T. B. Kadam Marg Bombay 400033.

New Great Eastern Spinning & Weaving Co. Ltd., Dr. Ambedkar Road, Bombay 400027.

New Hind Textile Mills, Rambhau Bhogle Mrg., Bombay 400033.

New Pratap Spg., Wvg. & Manufg. Co., Nr. Rly. Stn., Dhule 424001.

Osmanshahi Mills, Mill Road, Nanded 431601.

Phoenix Mills Ltd., Senapati Bapat Marg, Lower Parel, Bombay 400013.

Piramal Spinning & Weaving Mills Ltd., Fergusson Road, Bombay 400013.

Podar Mills Ltd., N.M. Joshi Marg, Bombay 400011.

Prakash Cotton Mills Pvt. Ltd., Fergusson Road, Lower Parel, Bombay 400013.

Pratap Spinning, Weaving & Manufacturing Co., Amalner 425401.

Pulgaon Cotton Mills Ltd., Pulgaon 442302.

R. B. Bansilal Amirchand Spinning & Weaving Mills (U.R.S.), Main Road, Hinganghat 442301.

R.S. Rechchand Gopaldas Mohota Spinning & Weaving Mills, (U.A.C.), Akola 444001.

R. S. Reckchand Mohota Spinning and Weaving Mills, Hinganghat 442301, Wardha Dist.

Raghuvanshi Mills Ltd., 11B, Jagtap Marg, Bombay 400013.

Raja Bahadur Motilal Poona Mills Ltd., 5, Raja Bahadur Motilal Road, Pune 411001.

Rajen (Textile) Mills Pvt. Ltd., Barsi 413401.

Rajesh Textile Mills Ltd., Fergusson Road, Lower Parel, Bombay 400013.

Ruby Mills Ltd., Lady Jamshedji Road, Dadar, Bombay 400028.

Savatram Ramprasad Mills, Akola 444001.

Sayaji Mills Ltd., Fergusson Road, Lower Parel, Bombay 400013.

Sholapur Sahakari Soot Girani Niyamit, Akalkot Road, Solapur 413001.

Shree Balaji Spg. & Wvg. Mills, Shivajinagar, Sangli 416416.

Shree Madhusudan Mills Ltd., Globe Mill Passage, N.M. Joshi Marg, Bombay 400013.

Shree Niwas Cotton Mills Ltd., 402, S. Bapat Marg, Bombay 400013.

Shree Ram Mills Ltd., Fergusson Road, Bombay 400013.

Shree Sitaram Mills Ltd., N.M. Joshi Marg, Bombay 400011.

Shri Shahu Chhatrapati Mills, Shahupuri, Kolhapur 416002.

Simplex Mills Co. Ltd., 30, Clerk Road, Jacob Circle, Bombay 400011.

Standard Mills Co. Ltd., New Prabhadevi Road, Lower Parel, Bombay 400025.

Swadeshi Mills Ltd., Old Agra Road, Kurla, Bombay 400070.

Swan Mills Ltd., Tokarsi Jivraj Road, Sewri, Bombay 400015.

Tata Mills Ltd., Dr. Ambedkar Road, Dadar, Bombay 400014.

Universal Textiles Pvt. Ltd., 22, Rifle Range, Shastri Marg, Bombay 400086.

Victoria Mills Ltd., Globe Mill Passage, Off N.M. Joshi Marg, Bombay 400013.

Vidarbha Mills Berar (U.R.S.), Achalpur 444805, Amravati Dist.

Western India Spinning and Manufacturing Co. Ltd., Dattaram Lad Marg, Parel Tank, Bombay 400033.

Orissa

Bhaskar Textile Mills Ltd., Jharsuguda 768201.

Orissa Textile Mills Ltd., Choudwar 754025, Cuttack Dist.

Pondicherry

Anglo-French Textiles Ltd., Cuddalore Road, Pondicherry 605004.

Pondicherry Co-op. Spg. & Wvg. Mills Ltd., 62, 2nd Cross Rd., Venkatanagar, Pondicherry 605011.

Soundaraja Mills Pvt. Ltd., Nedungadu 609603, Near Kariakal.

Sri Bharathi Mills Ltd., Mudaliarpeth, Pondicherry 605004.

Swadeshi Cotton Mills, Post Box No. 19, Pondicherry 605001.

Punjab

Bharat Commerce & Ind. Ltd., Ind. Area, Rajpura 140401.

Dayalbagh Spinning & Weaving Mills, Putlighar, Amritsar 143001.

Jagatjit Cotton Textile Mills Ltd., G.T. Road, Phagwara 144401.

Kharar Textile Mills, Kharar 140301, Near Chandigarh.

Modern Textile Mills Ltd., Verka, Amritsar 143001.

Shree Bhawani Cotton Mills, Ganganagar Road, Abohar 152116, Firozepur Dist.

Vardhman Spinning & General Mills Ltd., Chandigarh Road, Ludhiana 141003.

Rajasthan

Aditya Mills Ltd., Madanganj, Kishangarh 305802.

Banswara Textile Mills Ltd., Indl. Area, Dohad Rd., Banswara 327001.

Edward Mills, Beawar 305901.

Jagatjit Cotton Textile Mills Ltd., Sri Ganganagar 335001.

Jaipur Spinning & Weaving Mills Ltd., Podar Puri, Power House Road, Jaipur 302006.

K. J. Textile Mills, Kokil Kunj, Srinagar Road, Ajmer 305001.

Krishna Mills Ltd., Beawar 305901.

Mahalakshmi Mills, Beawar 305901.

Maharaja Kishangarh Samyog Mills Co. Ltd., Madanganj, Kishangarh 305802.

Maharaja Shree Umaid Mills, Pali-Marwar 306401.

Marwar Textile Works, Ratnadashiv Road, Jodhpur 342001.

Mewar Textile Mills, Bhilwara 311001.

Rajasthan Spg. & Wvg. Mills, Bhilwara 311001.

Rajasthan Textile Mills, Bhawanimandi 326502.

Sudarshan Textiles, Rangpur Road, Kota 324002.

Udaipur Cotton Mills, Pratapnagar, Udaipur 313001.

Tamil Nadu

Alagappa Cotton Mills, Nagammai 625019, Ramnad Dist.

Asher Textiles Ltd., Post Box 154, Gandhinagar, Tirupur 638603.

Ayyappan Textiles Ltd., 143/E, Post Box 12, Ramanathapuram 641009.

Bhavani Mills Ltd., 362, Pollachi Road, Coimbatore 641021.

Bhojaraj Textiles-Mills Ltd., Theni, Madurai 625004.

Binny Ltd., Perambur Barracks, Madras 600012.

Cambodia Mills Ltd., Ondiputhur, Coimbatore 641016.

Cauvery Spinning & Weaving Mills Ltd., Cauvery Nagar 622501.

Chandra Textiles Pvt. Ltd., Peelamedu, Coimbatore 641004.

Coimbatore Cotton Mills Ltd. & Coimbatore Cotton Jubilee Mills, Uppilipalayam, Coimbatore 641015.

Coimbatore Dist. Co-op. Spinning Mills Ltd., Post Box 8, Dharapuram 638656.

Coimbatore Murugan Mills Ltd., Mettupalayam Road, Coimbatore 641002.

Coimbatore Pioneer Mills Ltd., Peelamedu. Coimbatore 641004.

Dhanalakshmi Mills Ltd., 56, B.S. Sundaram Road, Tirupur 638601.

Ganga Textiles, 2/249, Avanashi Road, Coimbatore 641018.

Gnanambikai Mills Ltd., Coimbatore 641029.

Gobald Textiles Pvt. Ltd., 144, Easwaran Koil Street, Tirupur 638601.

Gomathy Mills, Viravanallur 627426, Tirunelveli Dist.

Janardhana Mills Ltd., Uppilipalayam, Coimbatore 641015.

Jawahar Mills Ltd., Shevapet, Post Box 514, Salem 636005.

Jayaram Mills Ltd., Samsikapuram Road, Rajapalayam 626117.

Jothi Mills, Jothipuram, Coimbatore 641019.

Kadri Mills (C.B.E.) Ltd., Odderpalayam, Ondiputhur, Coimbatore 641016.

Kaleeswarar Mills, Post Box 977, 10/8, Anupparpalayam, Coimbatore 641009.

Kancheepuram Kamakshiamman Co-op. Spinning Mills Ltd., Vaiyavoor, Post Box 2, Kancheepuram 631501.

Kandasamy Spinning Mills, Suriyampalayam, Bhavani 638301, *via* Erode.

Kanyakumari District Co-op. Spinning Mills Ltd., P.O. Aramboly 629301.

Karur Mills Ltd., Karur 639005.

Kothari (Madras) Ltd., K. Vadamadurai, Coimbatore 641017.

Krishnaveni Textiles Ltd., Trichy Road, Uppilipalayam, Singanallur, Coimbatore 641005.

Kumaran Mills Ltd., Peelamedu, Coimbatore 641004.

Kwality Spinning Mills Pvt. Ltd., Udumalpet Road, Pollachi 642003.

Lakshmi Mills Co. Ltd., P. Box 1301, Pappanaickenpalayam, Coimbatore 641018.

Lotus Mills Ltd., Sundarapuram, Podanur, Coimbatore 641024.

Loyal Textile Mills Ltd., Kovilpatti 621701.

Madura Coats Ltd., Ambasamudram 627401.

Madura Coats Ltd., Madurai 625001.

Madura Coats Ltd., Tuticorin 628001.

Madurai Dist. Co-op. Spinning Mills Ltd., Post Box 1, Melur 625106.

Mettur Beardsell Ltd., Mettur Dam 636402.

Mettur Spinning Mills, Mettur Dam 636402.

Nagammai Mills Ltd., Kaliancaud, Nagercoil 629003.

North Arcot Dist. Co-op. Spinning Mills Ltd., Ariyur, Vellore 632002.

Palani Andavar Mills Ltd., Dhally Road, Udumalpet 642126.

Premier Mills (Cbe.) Ltd., Pulankinar, Udumalpet 642126.

Pulliccar Mills Ltd., Post Box 7, Tiruchengode 637211.

Radha Krishna Mills Ltd., Peelamedu, Coimbatore 641004.

Rajalakshmi Mills Ltd., Post Box 853, Singanallur, Coimbatore 641005.

Rajapalayam Mills Ltd., Post Box 1, Rajapalayam 622602.

Rajaratna Mills Pvt. Ltd., Neikarapatty, Palni 624601.

Ramalinga Mills Pvt. Ltd., 53, Great Cotton Road, Aruppukottai 626101.

Raveendra Mills Ltd., Post Box 859, Singanallur, Aerodrome Road, Coimbatore 641005.

Salem Co-op. Spinning Mills Ltd., Post Box 1, Ammapet, Salem 636014.

Saroja Mills Ltd., Singanallur, Coimbatore 641005.

Sholingur Textiles Ltd., Arkonam Road, Sholingur 631102, N. Arkot Dist.
Sivananda Mills Ltd., Sravanampatti, Coimbatore 641006.
Somasundaram Mills Pvt. Ltd., Coimbatore 641009.
Soundararaja Mills Pvt. Ltd., Post Box 15, Dindigul 624006.
South Arcot Dist. Co-op. Spinning Mills Ltd., P.O. Saram 604307.
South India Co-op. Spinning Mills Ltd., P.O. Pettai, Tirunelveli 627010.
Southern Textiles Ltd., Sulur 641402, Coimbatore Dist.
Sree Ayyangar Spinning & Weaving Mills Ltd., Mallanginar 626109, Ramnad Dist.
Sree Meenakshi Mills Ltd., Tirupparankundram Road, Madurai 625001.
Sree Rajendra Mills Ltd., Gandhi Nagar, Salem 636009.
Sree Sanmugar Mills, Rajapalayam 626117.
Sree Sivakami Mills Ltd., Thenur 620017, Madurai Dist.
Sree Visalakshi Mills Ltd., Vilangudi 614715, Madurai Dist.
Sri Bharathi Cotton Mills, Post Box 6, Rajapalayam 626117.
Sri Hari Mills Pvt. Ltd., Ondipudur 641016.
Sri Kannapiran Mills Ltd., Souripalayam, Coimbatore 641004.
Sri Kartikeya Spg. & Wvg. Mills Pvt. Ltd., Uppilipalayam 641015.
Sri Karunambikai Mills Ltd., Somanur, Coimbatore 638668.
Sri Kothandaram Spinning Mills, 29, Venkatapathi Iyengar Street, Madurai 625001.
Sri Natesar Spg. & Wvg. Mills Ltd., 147/148, Perundurai Rd., Erode 638001.
Sri Ramakrishna Mills Ltd., Sathiamangalam, Coimbatore 641006.
Sri Ramalinga Choodambikai Mills Ltd., 59A/15, B.S. Sundaram Road, Tirupur 638601.
Sri Ramnarayan Mills Ltd., Perianaickenpalayam, Coimbatore 641018.
Sri Ranga Vilas Ginning, Spinning & Weaving Mills, Peelamedu, Coimbatore 641004.
Sri Rani Lakshmi Ginning, Spinning & Weaving Mills Pvt. Ltd., Arasur, Palladam 638664. (Coimbatore Dist.)
Sri Sakthi Textiles Pvt. Ltd., Post Box No. 36, Pollachi 642001.
Sri Sarada Mills, Podanur, Coimbatore 641023.
Sri Venkatesha Mills Ltd., Palni Road, P.O. Venkatesha Mills, Udumalpet 642126.
Sri Venkatesha Mills Ltd., Kathirvedu, Madras 600066.
Srivilliputhur Co-op. Spinning Mills Ltd., Post Box 13, Srivilliputtur 626125.
Sundarsanam Spinning Mills, Post Box 2, Rajapalayam 626112.
Sundaram Textiles Ltd., Nambinagar, P.O. Nanguneri 627108, Tirunelveli Dist.
Surya Prabha Mills Pvt. Ltd., Kuniamuthur, Coimbatore 641008.
Swamiji Mills Ltd., Meenakshipuram, Annaikutam Post, Sattur 626203.
Thanjavur Dist. Co-op. Spinning Mills Ltd., Manalmedu 609202.
Thanjavur Textiles Ltd., Thanjavur 613005.
Thiagarajar Mills, Kappalur, Thirumangalam 626706, Madurai Dist.
Thirunagal Mills Ltd., Katpadi Road, Gudiyattam 632602.
Tiruchendur Co-op. Spinning Mills Ltd., Nazareth, Tirunelveli 628617
Tirupur Cotton Spinning & Weaving Mills Ltd., Perumanallur Road, Tirupur 628602
Trichy Dist. Co-op. Spinning Mills Ltd., Malaikovilur, Karur 639001.
Trichinopoly Mills Ltd., Ramjeenagar, Tiruchirapalli 620009
Tuticorin Spg. Mills Ltd., 106, Palayamcottai, Tuticorin 628003.
[illegible] Mills Ltd., Rajagambeeram, Post Box 5, Man- [illegible]
Vasanta Mills Ltd., Trichy Road, Singanallur, Coimbatore 641005.
Vijayakumar Mills Ltd., P.O. Kalayamputhur, Palni 624615, Madurai Dist.
Vijayalakshmi Mills Ltd., Kuniyamuthur, Coimbatore 641008.
Vijayshree Spg. Mills Pvt. Ltd., Trichy Rd., Dindigul 624009.

Uttar Pradesh

Ajanta Textiles Ltd., Loni Road, Ind. Area, Ghaziabad 201001.
Amitabh Textile Mills Ltd., Prem Nagar, Dehra Dun 248001
Antherton Mills, Anwarganj, Kanpur 208003.
Bijli Cotton Mills, Mendu Road, Hathras City 204101.
Cawnpore Textiles Ltd., Cooperganj, Kanpur 208003.
Co-op. Textile Mills Ltd., Sahakarinagar, Bulandshahr 203001.
Elgin Mills Co. Ltd., Civil Lines, Kanpur 208001.
Hindon River Mills, Dasna, Ghaziabad 201001.
J.K. Manufacturers Ltd., Kamla Tower, Kanpur 208001.
Juggilal Kamlapat Cotton Spinning & Weaving Mill Co., Ltd., Kamla Tower, Kanpur 208001.
Lakshmirattan Cotton Mills, Kalpi Road, Kanpur 208012.
Lord Krishna Textile Mills, Nakur Road, Saharanpur 247001.
Modi Spinning & Weaving Mills Co. Ltd., Modinagar 201201, Ghaziabad Dist.
Moradabad Spinning & Weaving Co. Ltd., Kundanpur, Moradabad 244001.
Muir Mills, Civil Lines, Kanpur 208001.
N. K. Cotton Mills, Hathras City 204101.
New Victoria Mills, 14/1, Civil Lines, Kanpur 208001.
Prem Spg. & Wvg. Co. Ltd., Station Road, Ujhani 243639, Budaun Dist.
Raebareli Textile Mills, Rae Bareli 229001.
Raza Textiles Ltd., Jwalanagar, Rampur 244901.
Swadeshi Cotton Mills, Hamirpur Road, Juhi, Kanpur 208014.
Swadeshi Cotton Mills, Naini 211008, Allahabad Dist.
U.P. Co-op. Spinning Mills Ltd., Mainpuri Road, Etawah 206001.

West Bengal

Anantapur Textile Mills, 161, Netaji Subhas Road, Calcutta 700001.
Arati Cotton Mills Ltd., Dassnagar 711105.
Bangodaya Cotton Mills Ltd., 64/65, Stephen House, B.B.D. Bag (East), Calcutta 700001.
Basanti Cotton Mills Ltd., 1 & 2, Old Court House Corner, Calcutta 700001.
Bengal Luxmi Cotton Mills Ltd., 7, Chowringhee Road, Calcutta 700013.
Bengal Textile Mills Ltd., 5, Old Court House Street, Calcutta 700001.
Bhagyalaxmi Cotton Mills Ltd., 36, J.L. Nehru Road, Calcutta 700016.
Bhaskar Textile Mills Ltd., 2, Biplabi Trailokya Maharaj Sarani, Calcutta 700001.
Bowreah Cotton Mills Co. Ltd., 21, Strand Road, Calcutta 700001.
Dunbar Mills Ltd., 21, Strand Road, Calcutta 700001.
Eastern Spinning Mills Ltd., P-46A, Radhabazar Lane, Calcutta 700001.
Hada Textile Industries Ltd., 4, Govt. Place (North), Calcutta 700001.
Hindusthan Cotton Mills Ltd., 10, Pollock St., Calcutta 700001.
India Jute Co. Ltd., (Cotton Mill Sec.), 16 Strand Road, Calcutta 700001.
India Linoleum Ltd. (Victoria Dvn.), Ghusury 711107. (Howrah Dist.).
Jatia Cotton Mills Ltd., 18, Netaji Subhas Road, Calcutta 700001.

Jaya Shree Textile & Ind. Ltd., P-46A, Radhabazar Lane, Calcutta 700001.

Kalyani Spinning Mills Ltd., 67, Bentinck St., Calcutta 700001.

Kesoram Ind. & Cotton Mills Ltd., 9/1, R.N. Mookherjee Road, Calcutta 700015.

Madura Mills Ltd., Serampore, Hooghly 712201.

Mayurakshi Cotton Mills Ltd., 19, R.N. Mookherjee Road, Calcutta 700001.

Mohini Mills Ltd. No.2, 22, B.R.B.B. Rd., Calcutta 700001.

Poddar Projects Ltd., Hong Kong House, 31, B.B.D. Bag, Calcutta 700001.

Rampooria Cotton Mills, 8/B, Lal Bazar Street, Calcutta 700001. 700001.

Shaktigarh Textiles & Ind,, 4, Govt. Place (North), Calcutta 700001.

Shri Hanuman Cotton Mills Ltd., 46, Strand Road, Calcutta 700007.

Shri Mahalaxmi Mills, Palta, 24 Parganas Dist.

Sri Annapoorna Cotton Mills Ltd., P-10, New Howrah Bridge Approach Road, Calcutta 700001.

Sri Durga Cotton Spinning & Weaving Mills Ltd., 135, B.R.B.B. Road, Calcutta 700001.

Vidyasagar Cotton Mills Ltd., 11, Collotolla St., Calcutta 700012.

West Bengal Co-op. Spg. Mills Ltd., 25, G.C. Avenue, Calcutta 700013.

TEXTILE SHUTTLES

Gujarat

Mahesh Inds., 626/7, Vora Bldg., Kapasia Bazar, Ahmedabad 380002.

Metro Wood & Engg. Works Pvt. Ltd., Ashram Road, Navrangpura, Ahmedabad 380009.

National Shuttle Manufg. Works, 1288, Vakharia Building, Kapasia Bazar, Ahmedabad 380002.

Swastik Textile Trading Co. Pvt. Ltd., Motilal Haribhai Market, Railwaypura Post, Ahmedabad 380001.

Maharashtra

Acme Bobbins & Shuttles Pvt. Ltd., 315, S. V. Savarkar Marg, Dadar, Bombay 400028.

Bharat Timber Ind. (Bombay) Pvt. Ltd., 522, Sayani Road, Bombay 400025.

Bombay Shuttle Manufg. Co., 21, Dalal Street, Bombay 400023.

Central India Machinery Manufg. Pvt. Ltd., 80, S. Vivekanand Road, Jogeshwari, Bombay 400060.

Indequip Ltd., 127, M. Gandhi Road, Bombay 400023.

Indian Shuttle Co. Pvt. Ltd., 105, Apollo St., Bombay 400023.

John Roberts & Co. Pvt. Ltd., Sewree Fort Road, Bombay 400015.

Swastik Textile Trading Co. Pvt. Ltd., 16, Apollo Street, Bombay 400023.

Tarsema Textiles Traders, 11, Noble Chambers, Parsee Bazar Street, Bombay 400001.

Tradeco (India), 29, Raghunath Dadaji Street, Bombay 400001.

Punjab

Virdi Inds. (Shuttles) Pvt. Ltd., 211, East Mohan Nagar, Sultanwind Road, Amritsar 143001.

West Bengal

Chakravarti & Co., P-10, New Howrah Bridge Approach Road, Calcutta 700001.

Shalimar Inds. Pvt. Ltd., 25, G.C. Avenue, Calcutta 700013.

TEXTILES—EMBROIDERED

Delhi

Krishna Embfasteners, Sunlight Bldg., Asaf Ali Road, P.B. 528, New Delhi 110002.

Shiv Silk Mills, 71/A, Najafgarh Road, New Delhi 110015.

Haryana

Hemla Embroidery Mills Pvt. Ltd., Hemla Nagar, Mathura Road, Faridabad 121001.

Sovrin Knit Works, 20/4, Mathura Road, Faridabad 121001.

Karnataka

Bangalore Embroidery Works Pvt. Ltd., 57/1, Hebbal Road, Bangalore 560024.

Maharashtra

Allovers & Lace Pvt. Ltd., 534, Kalbadevi Road, Bombay 400002.

Bombay Fancy Textile Co., 132, Fergusson Road, Bombay 400013.

Cameo Fabrics Pvt. Ltd., 16, MIDC Estate, Thana-Belapur Road, Thane 400601.

Doshi Ind. Corpn., Ghatkopar, Opp. Indo-Nippon Chemical Co. Ltd., Bombay 400077:

Embroteks Pvt. Ltd., 98, Vivekanand Road, Thane 400601.

Fancy Corpn. Ltd., 16, Apollo St., Bombay 400023.

Hitex Emb. Pvt. Ltd., Hitex Indl. Estate, Vivekanand Road, Bombay 400068.

Jasmine Mills Pvt. Ltd., Dharavi, Bombay 400017.

Jyoti Embroidery Pvt. Ltd., Neel Kanth, 98, Marine Drive, Bombay 400002.

Leela Scottish Lace Pvt. Ltd., Leela Baug, M. Vasanji Road, Bombay 400069.

Pravin & Co. Pvt. Ltd., Jasmine Mills Compound, Dharavi, Bombay 400017.

Shiv Embroidery Manufg. Co., Mira, Vivekanand Road, Bombay 400068.

Shree Krishna Textiles, Near Bhor Industries, Borivli East, Bombay 400092.

Swiss Embroidery Pvt. Ltd., Kashmira Indl. Estate, S. Vivekanand Road, Bombay 400068.

Vadilal Embroidery Unit, Dalamal Chambers, New Marine Lines, Bombay 400020.

Woodcraft Products Ltd. (Embroidery Division), Kolshet Road, Thane 400601.

Punjab

Indo Knit & Emb. Pvt. Ltd., 8, The Mall, Amritsar 143001.

Tamil Nadu

S.S.M. Brothers Pvt. Ltd., P.B. 8, P.O. Komarapalayam 638183. Via Erode.

Veena Textiles Pvt. Ltd., P.B. 110, 9, Raja Street, P.O. Komarapalayam 638183 Via Erode.

Uttar Pradesh

Lalco, 13/45, Pashupateshwara, Varanasi 221001.

THERMOMETERS (INDUSTRIAL)

Jain & Glass Instrumentation, 2, Sheila Mahal, Colaba, Bombay 400005. *Works:*C-47, N Industrial Area, Lawrance Rd., New Delhi 110035.

THREAD — SEWING

(See Under 'Sewing Thread' in this list.)

TIME RECORDER

Anglo-Swiss Watch Co., 14, Plaza Bldgs., Connaught Place, New Delhi 110001.

TIN PRINTERS & BOX MANUFACTURERS

All India Metal Box Co., 181, Katra Baryan, Fatehpuri, Delhi 110006.

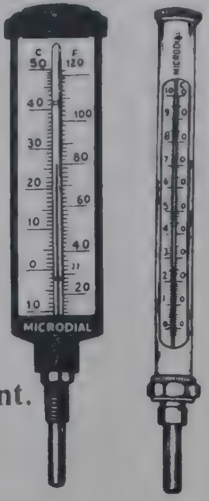
Ambica Metal Box Inds. Pvt. Ltd., 25/26, Gujarat Vepar Mahamandal Indl. Estate, Odhav 382410 (Ahmedabad Dist.)

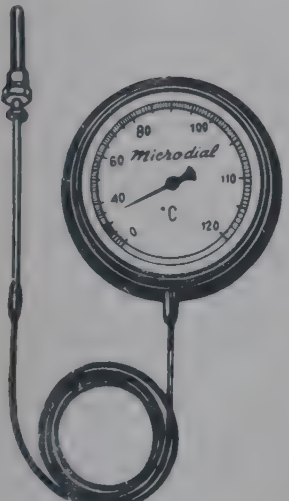
Apollo Engg. Co., 12, Portuguese Church St., Calcutta 700001.

Bharat Metal Inds., 681, Haines Road, Bombay 400011.

INDUSTRIAL THERMOMETERS

- MERCURY IN STEEL
- VAPOUR PRESSURE
- MERCURY IN GLASS
- BIMETAL





Northern India's Most Advanced Expertise on Heat Measurement.
Quality and Accuracy.

Manufacturers :

JAIN GLASS & INSTRUMENTATION

C-47, Industrial Area,
Lawrence Road,
New Delhi-110 035 (India).
Phone: 714233.

Binjusaria Metal Box Co., C-1 & 2, Govt. Ind. Estate, Chandulal Baradai, Hyderabad 500264.

Central Tin Works, Chinchpokli X Lane, Bombay 400027.

H. A. H. Bachooalli Tin Factory, 117-119, Mohamed Ummer Kokil Marg, Dongri, Bombay 400009.

Indian Tin Box Mfg. Co., 55/I/N, Tiljala Road, Calcutta 700046.

Kiv Trading Co., 1st Parsiwada, Khetwadi, Bombay 400004.

Kotecha Investment Corpn. Pvt. Ltd., 231, Dr. D.N. Road, Bombay 400001.

Kwality Containers & Closures, 46, Kika St., Bombay 400004.

Metal Box India Ltd., Deonar, Bombay 400081.

Metal Printers Co., Aga Khan Building, Dalal Street, Bombay 400023.

Metal Seamers & Printers Ltd., 81/3, Harish Chatterjee Street, Calcutta 700025.

Metal Stamping Co., A-35, Wagle Indl. Estate, Thane 400604.

Navrang Tin Printers, Kamal Process Studio, K.C. Ind. Estate Subhas Rd., Jogeshwari (E), Bombay 400060.

Oriental Containers Ltd., 1076, Dr. E. Moses Road, Worli, Bombay 400018.

Poysha Ind. Co. Ltd., Tiecicon House, Dr. E. Moses Road, Bombay 400011

Shyamnagar Tin Factory Pvt. Ltd., 62, Nagendra Nath Road, Calcutta 700028.

Tin Box of Calcutta, 73, Belgachia Road, Calcutta 700037.

Zenith Tin Works Pvt. Ltd., Clerk Road, Mahalaxmi, Bombay 400034.

TINPLATE & STEEL FABRICATORS

Bihar

Hind Engg. Co., Laknani Bigha, P.O. Khagaul 801105, Patna Dist.

Delhi

H. P. Industries, 69, Ind. Area, Najafgarh Road, New Delhi 110015.

Harichand Kashmirilal, Naya Bazar, Delhi 110006.

Mohan Industry, 953, Mali Wada, Delhi 110006.

Gujarat

New Digvijaysinhji Tin Factory, Grain Market, Jamnagar 361001.

Karnataka

India Tin Industries Pvt. Ltd., Old Madras Road, P.O. Durvaninagar, Bangalore 560016.

Madhya Pradesh

Ashoka Containers, 25/36, Ind. Estate (Pologround), Indore 452001.

Maharashtra

Azad Tin Factory, Azad House, 75/76, Reay Rd., Bombay 400010.

Shilay Inds., 8, Udyog Nagar, Goregaon West, Bombay 400062.

Standard Tin Works, Udyog Mandir, Kurla-Andheri Rd., Bombay 400072.

Uttar Pradesh

Associated Indl. Corpn., 39, Factory Area, Fazalganj, Kanpur 208001.

G. G. Industries Pvt. Ltd., 8/390, Bheron, Belanganj, Agra 282004.

Hindustan Tin Works Pvt. Ltd., Post Box No. 1, G. T. Rd., Ghaziabad 201001.

United Chemical & Metal Works Pvt. Ltd., 7/109, Lal Bangalow, Swaroop Nagar, Kanpur 208001.

West Bengal

Balgopaldas Iron & Steel Co. Pvt. Ltd., 5, Gopal Doctor Rd., Kidderpore, Calcutta 700023.

Bengal Tin Box Manufg. Co. Pvt. Ltd., 1, Jadu Mitra Lane, Calcutta 700004.

Bharat Barrel & Drum Manufg. Co. Pvt. Ltd., 2, Garstin Place, Calcutta 700001.

Bharat Tin & Enamel Co. Pvt. Ltd., 2A, Shakespeare Sarani, Calcutta 700016.

Color Printing & Hollowwares Ltd., 243, Acharya P. Chandra Rd., Calcutta 700006

Containers & Closures Ltd., 19, N. S. Rd., Calcutta 700001.

D. G. Industries Pvt. Ltd., 15 G. C. Ave., Calcutta 700013.

Dhur Galvg. Works (1955) Pvt. Ltd., 92, Ultadanga Main Rd., Calcutta 700004.

Ganga Tin Factory, 5, Raja Rajkissen St., Calcutta 700006.

Hind Enamel Co., 12, Madhuray Bye Lane, Calcutta 700006.

Hind Galvg. & Engg. Co. Pvt. Ltd., 96, Garden Reach Rd., Calcutta 700023.

Hind Tin Industries, 107-A, Raja Dinendra St., Calcutta 700006.

Hindusthan Metal Products Syndicate, 243, Acharya P. Chandra Rd., Calcutta 700006.

Industrial Containers Ltd., P-4/1, Oil Installation Rd., Paharpur, Calcutta 700043.

Khemchand Rajkumar, 46/C, Chowringhee Rd., Calcutta 700016.

Kohinoor Manufg. Corpn. Pvt. Ltd., 5/1, Rosemary Lane, Howrah 711101.

M. L. Day & Co., 36, Chittaranjan Ave., Calcutta 700013.

Metal Products & Engg. Co., 124, M. Gandhi Rd., Calcutta 700007.

Metal & Tin Box Co. (I.) Pvt. Ltd., 233, G. L. Tagore Rd., Barnagore, Calcutta 700036.

Metal Wares & Printing Works, 3, Jagmohan Lane, Calcutta 700007.

National Alloy & Metal Works Pvt. Ltd., 17, N. C. Das Lane, Sinthee, Calcutta 700050.

Shyamnagar Tin Factory Pvt. Ltd., 62, Sri Nagendranath Rd., Satgachhi, Dum Dum, Calcutta 700028.

Sree Gopal Tin Factory Pvt. Ltd., 109B, Raja Dinendra St., Calcutta 700004.

Tinplate Co. of India Ltd., 4, Bankshall St., Calcutta 700001.

TOOLS — CARBIDE — DIAMOND

Accumax Engg., 21-B, Noble Chambers, S.A. Brelvi Rd., Bombay 400001.

Bharat Diamond Ind., Nagin Mahal, V. Nariman Rd., Bombay 400020.

Bukhanvala Diamond Tools Pvt. Ltd., Medows House, N. Master Rd., Bombay 400023.

Dagger Frost Tools Ltd., First Pokhran Rd., Thane 400606.

Diamond Cutting & Trdg. Co. Pvt. Ltd., Daya Mandir, Mumbadevi, Bombay 400003.

Diamond Tools Industries, Karamchand Mansion, Barrack Rd., Bombay 400020.

Doongursee Diamond Tools Pvt. Ltd., 127, Mahatma Gandhi Rd., Bombay 400023.

Engg. Tooling Equipment Co., Chunilal Est., Chinchpokhli X Lane 2, Bombay 400027.

Forbes, Forbes Campbell & Co. Ltd., Forbes Bldg., Home St., Bombay 400001.

Greaves Cotton & Co. Ltd., (Diamond Products Divn.), M.I.D.C. Estate, Plot B-5, St. No. 6, Off Mahakali Caves Rd., Marol, Andheri (East), Bombay 400093.

Harish Products Pvt. Ltd., 218, GIDC Chitra, Bhavnagar 364004.

Industrial Diamond & Tool Co., 4, Bhagavatlal Lane, Madras 600003.

Industrial Diamond Tools Co., 7-B, Sagar Vihar, Kulapati M. Munshi Mrg., Bombay 400007.

J. K. Engineering (Diamond Works), Jivraj Nivas, 408, L. B. S. Marg, Kurla, Bombay 400070.

J. N. Marshall & Co., Marshall Lodge, 97, Cumballa Hill, Bombay 400036.

Killick Ind. Ltd., Killick Bldg., Home St., Bombay 400001.

L. M. Van Moppes Diamond Tools India Ltd., Tiger Hill Rd., Coonoor 643101, T. Nadu.

L. & T. Drilling Equipment Ltd., L. & T. House, Narottam Morarji Mrg., Bombay 400038.

Macneill & Magor Ltd., Mackinnon Mackenzie Bldg., Ballard Estate, Bombay 400038.

New India Hardware Mart, 152, N. Dhuru St., Bombay 400003.

P. Orr & Sons Pvt. Ltd., 200, Mount Rd., Madras 600002.

Sikkim Jewels Ltd., Jewel House, Gangtok 737101 (Sikkim).

Sneva Diamond Tools Pvt. Ltd., 40, Errabalu Chetty St., Madras 600001.

Star Diamond Tools, 60, Sir P. Mehta Rd., Bombay 400001.

Super Tool Co. Pvt. Ltd., S. G. Barve Rd., Kalina, Santacruz (E), Bombay 400029.

Voltas Ltd., Graham Rd., B. Estate, Bombay 400038.

TOOLS—CUTTING, MILLING CUTTERS, PRECISION CUTTERS, REAMERS, TWIST DRILLS

Andhra Pradesh

Chowgule Matrix Hobs Ltd., 5-9-22/1, Hill Fort Rd., Hyderabad 500004.

Delhi

Himco Tools & Engg. Works, 673, Katra Neel, Chandni Chowk, Delhi 110006.

Indian Tool Manufrs. Ltd., 2/11, Ansari Rd., Darya Ganj, New Delhi 110002.

Laldee Pvt. Ltd., Vijaya Press Bldg., Naya Bazar, Delhi 110006.

Machine Tools (India) Pvt. Ltd., D-24, South Extn. Part II, N. Delhi 110049.

Rib Tapes (India) Pvt. Ltd., 399, Old P.O. St., Delhi 110006.

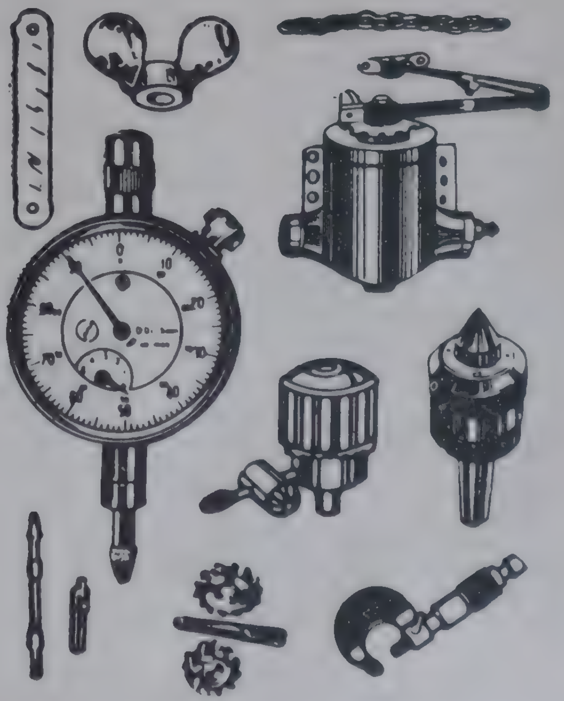
Tools & Equipment Pvt. Ltd., 6-13, Ind. Area, New Delhi 110015.

Panchsheel Engineering Corporation

Sales Office :
55, Raj Baug Estate,
Pydhonie,
Bombay 400 003.
Phones : Office : 349173 — 342760
Resi. : 685593 — 696383

●

Dealers In :
**ENGINEERING TOOLS,
CUTTING TOOLS,
GARAGE TOOLS, MEASURING
TOOLS & INDUSTRIAL GENERAL
SUPPLIERS.**



NOW...
SUPERIOR QUALITY

Technis®

HACKSAW BLADES, SEGMENTAL SAWS AND
METAL CUTTING BAND SAW BLADES

TECHNIS INDUSTRIES

20-A, NOBLE CHAMBERS
S. A. BRELVI ROAD, FORT, BOMBAY 400 001.
Tel. : 250529 ● 254476
Telex : 011-4066 Grams : "CUTWELL"

Karnataka

Bharat Fritz Werner Pvt. Ltd., Peenya, Bangalore 560022.

Cimotec, 44-B, Seshadripuram, Bangalore 560020.

Jairamdas Udyog Pvt. Ltd., 111/118, Silver Jubilee Park Rd., Bangalore 560002.

Omicron Tool Works, IV Main Rd., 15th Cross, Malleswaram, Bangalore 560003.

Maharashtra

Bharat Tool Manufg. Co. Pvt. Ltd., Swastik Mill Compound, Fergusson Rd., Bombay 400013.

Consolidated Pneumatic Tools Co. (India) Ltd., 301/302, Agra Rd., Mulund, Bombay 400080.

Crystal Tools Centre, 72-80, Nagdevi X Lane, Bombay 400003.

Dagger Frost Tools Ltd., 1st Pokhran Rd., Thane 400601.

Empire Industries Ltd. (Garlick Engg. Divn.), B. Jagtap Marg, Sant Gadge Maharaj Chowk, Bombay 400011.

Ex-Cell-O India Ltd., 78-B, Dr. A. Besant Rd., Worli, Bombay 400018.

Gannon Dunkerley & Co. Ltd., Chartered Bank Bldg., Bombay 400001.

Greaves Cotton & Co. Ltd., Dr. V. B. Gandhi Marg, Bombay 400023.

Kala Industries (Bombay), 78, Nagdevi St., Bombay 400003.

New Standard Engg. Co. Ltd., Ram Mandir Rd., Goregaon, Bombay 400063.

Panchsheel Engg. Corpn., 55, Raj Baug Estate, Pydhonie, Bombay 400003.

Profile Gauges & Tools Ind. Pvt. Ltd., 6-7-8, Anupam Ind. Estate No. 2, LBS Mrg., Mulund (W), Bombay 400080.

Rapicut Tools Pvt. Ltd., T-144, MIDC Estate, Bhosari, Pune 411026.

Repetitions Parts Pvt. Ltd., Agra Rd., Bhandup, Bombay 400078.

S. S. Miranda Ltd., Ashok Rd., Kandivli East, Bombay 400067.

Sandvik Asia Ltd., Pimpri, Pune 411018.

Super Surface Tools Co., B117, Ghatkopar Indl. Estate, Bombay 400086.

Super Tools Pvt. Ltd., Kalina, Santa Cruz, Bombay 400029.

Tata Engg & Locomotive Co. Ltd., Bombay House, Homi Mody St., Bombay 400023.

Technis Inds., 20-A, Noble Chambers, S. A. Brelvi St., Bombay 400001.

Voltas Ltd., 19, Graham Rd., B. Estate, Bombay 400038.

Voras Exclusive Tools Pvt. Ltd., Old Ashram, Sir M.V. Rd., Andheri East, Bombay 400093.

Punjab

Basal Tool Co., 23, Factory Area, Patiala 147001.

Tamil Nadu

Addison & Co. Ltd., 803, Anna Salai, Madras 600002.

Orient Tools & Gauges Ltd., 65, N. M. Mudaliar Rd., Aminjikarai, Madras 600029.

P. S. G. Indl. Instt., Peelamedu, Coimbatore 641004.

S. R. P. Tools Ltd., Lattice Bridge Rd., Madras 600041.

Synthetic Cutting Tools Mfg. Co., No. 6, MIT Gate Rd., Madras 600044.

Threadwell Gauges & Tools Co., G-14, Ind. Estate, Madras 600058.

Tool Room Services Pvt. Ltd., B-21, Ind. Estate, Madras 600058.

West Bengal

A. K. Bhattacharya & Sons Pvt. Ltd., 44/8 A, Garcha Rd., Dalhousie Sq., Calcutta 700019.

Binani Metal Works Ltd., 103/24/1, Foreshore Rd., Shibpur, Howrah 711101.

Hada Tools Ltd., 27-A, Camac St., Calcutta 700016.

Harbanslal Malhotra & Sons Ltd., 12, New CIT Rd., Calcutta 700012.

Small Tools Manufg. Co. of India Ltd., P-17, Ganesh Chandra Ave., Calcutta 700013.

Taps & Dies Ltd., P-17, Mission Row Extn., Calcutta 700013.

TOOLS—DRILLING

Indian Minidrills Pvt. Ltd., 8, J. C. Rd., Bangalore 560002.

Indian Tool Manufrs. Ltd., 101, Sion Rd., Sion, Bombay 400022.

Ingersoll-Rand (India) Pvt. Ltd., Maybaker House, S. K. Ahire Mrg., Worli, Bombay 400025.

Jairamdas Udyog Pvt. Ltd., 157-159, N. Dhuru St., Bombay 400003.

LMP Precision Engg. Co. Pvt. Ltd., Bilimora 396321.

TOOLS—HAND & OTHER MISC. SMALL TOOLS

Andhra Pradesh

Praga Tools Corpn. Ltd., Secunderabad 500003.

Bihar

Tata Iron & Steel Co. Ltd., Jamshedpur 831001.

Delhi

Eljay Industries, 6662, Khari Bhaoli, Delhi 110006.

Gedore Tools India Pvt. Ltd., 151, Golf Links, New Delhi 110003.

Hindustan Everest Tools Ltd., Dohil Chambers, 46, Nehru Place, New Delhi 110019.

Haryana

Dhanda Engrs. Pvt. Ltd., Ind. Area, Faridabad 121003.

Ratanchand Hanjasrai (Mouldings) Pvt. Ltd., 54, Ind. Area, Faridabad 121003.

Karnataka

Mysore Implements Factory, Hassan 573201.

Omicron Tool Works, Yeshwantpur, Bangalore 560010.

Maharashtra

Ace Tools Pvt. Ltd., B-5, Co-op. Ind. Estate, Nasik 422001.

Accurate Engineering Co. Pvt. Ltd., 67, Hadapsar Ind. Estate, Post Bag No. 1202, Pune 411013.

Asha Bros. Pvt. Ltd., 1-B, Patel Rd., Goregaon, Bombay 400063.

Bahco Taparia Tools Ltd., 20, S. Bhagat Singh Rd., Bombay 400023.

Blue Steel Engrs. Pvt. Ltd., 144, A—Z Indl. Estate, Fergusson Rd., Bombay 400013.

Chandulal Mehta & Co. Pvt. Ltd., Sakla House, M. Parmanand Marg, Bombay 400004.

Eagle Mfg. Co., C-19, Ghatkopar Ind. Estate, LBS Mrg., Bombay 400086.

Echjay Ind. Pvt. Ltd., Kanjur Village Rd., Bombay 400078.

Lal-Roe Measuring Tools Pvt. Ltd., Darshan Apartment, Mount Pleasant Rd., Bombay 400006.

Mapa Tools Pvt. Ltd., Fibre Box Compd., Gamdevi Rd., Bombay 400078.

Mohanlal Ghanshamdas, 74, Nagdevi Cross Lane, Bombay 400003.

Proto Machine Tools Manufg. Co. Pvt. Ltd., Dinesh Mills Compd., Agra Rd., Bhandup, Bombay 400078.

Rallis India Ltd., Ralli House, 21, Raveline St., Bombay 400001.

Shivaji Works Ltd., Tikekarwadi 413225. Solapur Dist.

Taparia Tools Ltd., 20, S. Bhagat Singh Rd., Bombay 400023.

Tools & Components Combine Pvt. Ltd., 10, Dhanaji St., Bombay 400003.

Punjab

Doaba Hand Tools, Tanda Rd., Jullundur 144001.

Patiala Tools Corpn., 1-A, Ind. Estate, Patiala 147001.

Raj San Deeps Pvt. Ltd., 320. Indl. Area A, Ludhiana 141003.

Sigma Steel Inds. (Regd.), B-23, Indl. Focal Pt., Ludhiana 141010.

Tamil Nadu

All Tools Pvt. Ltd., Singanallur, Coimbatore 641005.

Orient Tools & Gauges Ltd., 65, N. M. Mudaliar Rd., Madras 600029.

S. S. Engineering Works, 301, Tiruvottiyur High Rd., Madras 600021.

Technical & Engg. Products Co., C-37, Ind. Estate, Guindy, Madras 600032.

Tepco India, C-37, Ind. Estate, Madras 600032.

Uttar Pradesh

Delhi Iron & Steel Co. Ltd., Grand Trunk Rd., Ghaziabad 201001.

Mascot (India) Tools & Forgings Pvt. Ltd., A-2, Indl. Area, Meerut Rd., Ghaziabad 201003.

West Bengal

Agarwal Hardware Works Pvt. Ltd., 3A, Shakespeare Sarani Ave., Calcutta 700071.

Alfred Herbert India Ltd., 13/3, Strand Rd., Calcutta 700001.

Barson & Co., 138, B. R. B. B. Rd., Calcutta 700001.

Bengal Tools Ltd., 251-1, Nagendranath Rd., Calcutta 700028.

Bhagchandka Inds. 57/6, Barrackpore Trunk Rd., Calcutta 700002.

Bharat Shovel Works Pvt. Ltd., 15-1, Jorabagan St., Calcutta 700006.

Dominion Hardware Stores, 40, Strand Rd., Calcutta 700001.

East Coast Enterprises Ltd., 33, Brabourne Rd., Calcutta 700001.

Harbanslal Malhotra & Sons Pvt. Ltd., 18, N. Subhas Rd., Calcutta 700001.

Jay Engg. Works Pvt. Ltd., 183, P. Anwarshah Rd., Calcutta 700001.

Metal Box Co., of India Ltd., 59-C, Chowringhee St., Calcutta 700020.

Stamping & Tools Pvt. Ltd., 8, M. G. Rd., Calcutta 700041.

Sudson Pvt. Ltd., 3, Esplanade East, Calcutta 700001.

Tools & Engg. Co. Pvt. Ltd., 2, Dalhousie Sq. East, Calcutta 700001.

TOOLS—MACHINE

Andhra Pradesh

Hindustan Machine Tools Ltd., Balanagar, Hyderabad 500037.

Indo Hacks Ltd., "Saikrupa", B-4, IDA Phase I, Pattancherru 502319. Medak.

Delhi

Ameteep Machine Tools Pvt. Ltd., 503, Surya Kiran Bldg., 19, K. Gandhi Marg, New Delhi 110001.

Ashok Bros. Pvt. Ltd., Post Box 305, New Delhi 110001.

Ashoka Machine Tools Corpn., 8712-13, Aram Ganj, Roshanara Rd., Delhi 110007.

Elbre Machine Tools Pvt. Ltd., 6/10, Kirti Nagar Ind. Area, New Delhi 110015.

Globe Engg. Co., 7/27, Ind. Area, Kirtinagar, New Delhi 110015.

Indudyog Co. Pvt. Ltd., 40, Okhla Ind. Estate, Okhla, New Delhi 110020.

Machine Tools (India) Ltd., D-24, South Extn. Part II, New Delhi 110049.

Motor & Machinery Manufrs. Ltd., 8, Sunder Nagar, New Delhi 110003.

Power Tools & Appliances Co., Kashmere Gate, Delhi 110006.

Prem Engg. Works, 22, Okhla Ind. Estate, New Delhi 110020

United Machine Tools Corpn., B-44, Mayapuri Phase I, New Delhi 110027.

Gujarat

Gandhi Group Ind., F-4, Ind. Township, Naroda, Ahmedabad 382330.

Gujarat Machine Tools Ind., 1/10, Ind. Estate, Vadodara 390003.

Kant Machine Tools. 45. Digvijay Plot, Jamnagar 361001.

Laxmi Vijay Brass & Iron Works, 647, Gheekanta Rd., Ahmedabad 380001.

Yo-tana Machine Tools, C1/10, GIDC Ind. Estate, Odhav, Ahmedabad 380021.

Haryana

Beco Engg. Co. Ltd., 23/7, Delhi Mathura Rd., Ballabgarh 121004.

Precision Metal Works (India) Pvt Ltd., Railway Rd., Gurgaon 122001.

Karnataka

Bharat Fritz Werner Pvt. Ltd., Peenya, Bangalore 560022.

Craft Tools Pvt. Ltd., Industrial Estate, Yantrapur 577602. (Harihar).

Hindustan Machine Tools Ltd., Jalahalli, Bangalore 560031.

Jyothi Ind., A-18, H. M. T. Ind. Estate, Bangalore 560031.

Sharnann Machine Tools, C-208, Ind. Estate, Peenya, Bangalore 560058.

Sri Venkateshwara Enterprises, B-09, H. M. T. Ind. Estate, Bangalore 560031.

Subbiah Machine Tools Ltd., B-17, Peenya Indl. Estate, Bangalore 560058.

Maharashtra

Accurate Machine Tools, 14-B, Kurla Indl. Estate, LBS Mrg., Ghatkopar, Bombay 400085.

Alex Machine Tools, 2, Sidhpura Ind. Estate, S. Vivekanand Rd., Goregaon West, Bombay 400062.

Alfred Herbert (I) Ltd., Kaiser-i-Hind Bldg., Sprott Rd., Ballard Estate, Bombay 400038.

Bharat Fritz Werner Pvt. Ltd., D-27, Commerce Centre, Tardeo, Bombay 400034.

Bharat Tool Manufg. Co. Pvt. Ltd., Fergusson Rd., Lower Parel, Bombay 400013.

Bubber Machine Tools, Bishen Udyog Premises, LBS Marg, Mulund, Bombay 400080.

Chowgule Engrs. & Machines Ltd., Bakhtawar, Nariman Point, Bombay 400021.

Cooper Engg. Ltd., Chinchwad, Pune 411019.

Industrial Machinery & Tools Corpn., Gokhale St., Bombay 400004.

Industrial Machinery Manufrs., 14-B, Kurla Ind. Estate, Agra Rd., Ghatkopar, Bombay 400077.

Machinery Manufg. Corpn., 68, Medows St., Bombay 400023.

Macphil & Co. Pvt. Ltd., B-3, Wagle Ind. Estate, Panchpakhadi, Thane 400604.

Power Tools & Appliances Co., Mangesh Bldg., Avantikabai Gokhale St., Bombay 400004.

Quality Machine Tools, 25, Hamam St., Bombay 400001.

R. B. M. Poona Mills Ltd., Engg. Divn., 5, R. B. M. Rd., Pune 411001.

Super Tool Co. Pvt. Ltd., Kalina, Santa Cruz, Bombay 400029.

Tekma Ind., 48B, Saki Vihar Rd., Saki Naka, Bombay 400072.

Thakoor Machines & Tools Pvt. Ltd., "Yojana", M. Vasanji Rd., Marol Naka, Andheri East, Bombay 400059.

XLO India Ltd., 78-B, Dr. A. B. Rd., Worli, Bombay 400018.

Y. A. Hazare & Bros., 1st Panjrapole Lane, Bombay 400004.

Punjab

Auto Machine Tools (Regd.) G.T. Rd., Millerganj, Ludhiana 141003.

Patiala Tools Corpn., 1-A, Ind. Estate, Patiala 147001.

R. K. Machine Tools Pvt. Ltd., Industrial Area A, Ludhiana 141003.

Sharda Foundry & Engg. Works, G. T. Rd., Batala 143505.

Tamil Nadu

Alfa Machine Tools, 8, Second Line Beach, Madras 600001.

Easun Engg. Co. Ltd., 5-7, Second Line Beach, Madras 600001.

Machine Tools & Accessories Pvt. Ltd., 10/9, Ambattur Ind. Estate, Madras 600058.

PSG Industrial Instt., Coimbatore 641004.

Power Tools & Appliances Co., 323, Thambu Chetty St., Madras 600001.

Shiv Machine Tools, 286, Linghi Chetty St., Madras 600001.

Sri Lakshmi Engineers, 123, Cross Cut Rd., Gandhipuram, Coimbatore 611012.

Sumathi Machine Tools, Avanashi Rd., Peelamedu, Coimbatore 641004.

West Bengal

ABMTM Pvt. Ltd., 21, Camac St., Calcutta 700016.

Alfred Herbert India Ltd., 13/3, Strand Rd., Calcutta 700001.

Asia Engg. Supply Stores Pvt. Ltd., P-15, Bentinck St., Calcutta 700007.

Barson & Co., 138, Canning St., Calcutta 700001.

Boyd Smiths Pvt. Ltd., B-5, Gillanders House, N. Subhas Rd., Calcutta 700001.

Continental Plant Machinery Co. Pvt. Ltd., 16, Hare St., Calcutta 700001.

G. R. Inds., 10, Jessore Rd., Calcutta 700028.

Hi-Hi-Go Machine Tools Pvt. Ltd., 40-A, Gariahat Rd. South, Calcutta 700031.

India Machinery Co. Ltd., Dassnagar, Howrah 711105.

Industrial Plants Ltd., "Industry House", 10, Camac St., Calcutta 700017.

Jessop & Co. Ltd., 63, N. Subhas Rd., Calcutta 700001.

Machine Tools & Appliances India Co., 12-B, N. Subhas Rd., Calcutta 700001.

Maya Engg. Works Pvt. Ltd., 200/A, S. P. Mookherjee Rd., Calcutta 700026.

National Ind. Impex Corpn., 35, Stephen House, Calcutta 700001.

Oriental Electric & Engg. Co., National Tobacco Bldg., 1, Old Court House Corner, Calcutta 700001.

Pathal Inds., 117, G.T. Rd., Howrah 711106.

Paul's Engg. Co., P-7, N. Paul Rd., Howrah 711105.

Power Tools & Appliances Co., 2, B. B. D. Bag East, Calcutta 700001.

Universal Machine Tools Mfg. Co., 542, N Block, 1st Flr., New Alipore, Calcutta 700053.

TOOLS—AIR COMPRESSORS, PNEUMATIC EQUIPMENT AND SPARES

Andhra Pradesh

Nucon Industries Pvt. Ltd., 5-2175/1, Rashtrapati Rd., Secunderabad 500003.

Shriram Refrigeration Ind. Ltd., P. O. Balanagar Township, Hyderabad 500037.

Delhi

Didwania Bros. Pvt. Ltd., 9, Raj Niwas, Delhi 110006.

Industrial & Mining Equipment Co. Pvt. Ltd., Municipal Corpn. Bldg., Chowk, Shakti Nagar, Delhi 110007.

K. G. Khosla & Co. Pvt. Ltd., 1, D. Gupta Rd., New Delhi 110055.

Pneumatic Spares Ind., 1778, Lal Kuan, Delhi 110006.

Gujarat

Engg. Corpn. of India Ltd., Sidhpur 384151.

S. L. M. Maneklal Ind. Ltd., Vatva 382440. Ahmedabad Dist.

Maharashtra

Air Control & Chemical Engg. Co. Ltd., Khetan Bhavan, J. Tata Rd., Bombay 400020.

Atlas Copco (India) Ltd., M. Gandhi Memorial Bldg., N. Subhas Rd., Bombay 400002.

Consolidated Pneumatic Tool Co. (I) Ltd., 301/302, Agra Rd., Mulund, Bombay 400080.

Hindustan Engineers, 501-A, Commerce House, N. Master Rd., Bombay 400023.

Indo Air Ind., 49, Municipal Ind. Estate, Off E. Moses Rd., Worli, Bombay 400018.

Ingersoll-Rand (India) Pvt. Ltd., Maybaker House, S. K. Ahire Mrg., Bombay 400025.

Iron & Metal Traders Pvt. Ltd., P. B. 6210, Bombay 400010.

Kirloskar Pneumatic Co. Ltd., Hadapsar Ind. Estate, Pune 411013.

New Standard Engg. Co. Ltd., N. S. E. Estate, Goregaon (E), Bombay 400063.

Shubh Ind., 128, Jaygopal Ind. Estate, B. Shankar Cross Rd., Bombay 400028.

Spectro Ind. Pvt. Ltd., Shantinagar Estate, Vakola, Bombay 400055.

Taj Engg. Works, 3-3A, 1st Ghorapdeo Cross Rd., Reay Rd., Bombay 400010.

Rajasthan

Hydor India Ltd., Kota 324001.

Tamil Nadu

Elgi Equipment Pvt. Ltd., Ind. Estate, Podanur 641023.

K. N. D. Tool & Equipment Co., Mettupalayam Rd., P. O. Saibaba Mission, Coimbatore 641011.

West Bengal

Boyd Smiths Pvt. Ltd., B-5, Gillanders House, N. Subhas Rd., Calcutta 700001.

Hindustan Gas & Ind. Ltd., 22, New Tangra Rd., Calcutta 700016.

Holman-Climax Manufrs. Ltd., Titaghur 743188. 24-Parganas.

Industrial & Mining Equipment Co. Pvt. Ltd., 26 R. N. Mukherjee Rd., Calcutta 700001.

Tecalemit (Hind) Ltd., Gopalpur, P. O. Sarkarpul, 24-Parganas Dist.

TOOLS—TAPS, DIE TOOL, JIGS, FIXTURES ETC.

Andhra Pradesh

Electro Mechanical Inds., 176, Nehru Nagar, 26, W. Maredpally, Secunderabad 500003.

Hyderabad Tools Pvt. Ltd., Uppal Ind. Area, Hyderabad 500039.

Delhi

Bhartia Cutler-Hammer Ltd., 1101, New Delhi House, 27, Barakhamba Rd., New Delhi 110001.

Gujarat

Premier Diecasting & Engg. Co. Ltd., Maninagar, Ahmedabad 380008.

Karnataka

Diamond Dies, Post Box 73009, Bangalore 560003.

Tiwac Inds. Ltd., Dharwar 580003.

Widia (India) Ltd., Tumkur Rd., Bangalore 560022.

Maharashtra

Afco Ltd., 253, A-Z Ind. Estate, Fergusson Rd., Bombay 400013.

Arifta Die & Tool Engrs., Plot A-20, Marol Ind. Area, Off Mahakali Caves Rd., Andheri East, Bombay 400059.

Asha Bros. Pvt. Ltd., 1-B, Patel Rd., Bombay 400063.

Bahco Taparia Tools Ltd., 20, S. Bhagat Singh Rd., Bombay 400001.

Bombay Burmah Trading Corpn. Ltd. (Electronics Divn.), Plot No.2, Kanjur Village Rd., Kanjur Mrg. (East), Bombay 400078.

Electro Slush Co. Pvt. Ltd., Janmabhoomi Bhavan, Ghogha St., Bombay 400001.

Fit Tight Nuts & Bolts Ltd., Old Ashram, M. Vasanji Rd., Bombay 400069.

Forbes, Forbes Campbell & Co. Ltd., Forbes Bldg., Home St., Bombay 400001.

Gannon Norton Metal & Diamond Dies Ltd., Bank of Baroda Bldg., Bombay Samachar Marg, Bombay 400023.

Gleitlager Pvt. Ltd., 2nd Pokhran Rd., Thane 400606.

Guest Keen Williams Ltd., Shastri Mrg., Bombay 400078.

Gujarat Industrial Trucks Ltd., Post Box 1894, Bombay 400001.

Horstman India Pvt. Ltd., Nagar Rd., Pune 411014.

Keming Tools Co. Pvt. Ltd., 165/1, Kolshet Rd., Thane 400601.

KIV Group Ind., Sun Mill Compound, Lower Parel, Bombay 400013.

Nanavati Dies & Tools Pvt. Ltd., P. B. No. 6854, Bombay 400057.

Pitty Bros. Pvt. Ltd., 20, Hamam St., Bombay 400001.

Poona Measuring Tools Co., 60, East Kirkee, Pune 411002.

Precision Taps & Dies Pvt. Ltd., 294-3, C.S.T. Rd., Kalina, Bombay 400029.

Shrenik Inds., 142-146, S.V. Rd., Jogeshwari, Bombay 400060.

Star Textile Engg. Works Ltd., Planet Mill Lane, Kadam Mrg., Bombay 400013.

Steel-Smith, 8, Sethi Ind. Estate, Suren Rd., Andheri East, Bombay 400093.

Super Automats, 27, Nand Deep, Opp. Marol Bazar, Andheri (East), Bombay 400059.

Tata Burroughs, Air India Bldg., 11th Flr., Nariman Point, Bombay 400021.

Tamil Nadu

Addison & Co., Pvt. Ltd., 158, Mount Rd., Madras 600002.

Armcess Engrs. Pvt. Ltd., A Super 8 & 9 Indl. Est., Guindy, Madras 600032.

J. Stead & Co. Pvt. Ltd., D-19, Ambattur Ind. Estate, Madras 600058.

Kerry Jost Tools Ltd., 8, Avadi Rd., Ambattur, Madras 600053.

NITF Tool Room, Vellore 632006.

Presmac Inds., Ambattur, Madras 600058.

Uttar Pradesh

Buckeye Machines Pvt. Ltd., Ind. Estate, Aligarh 202001.

Harig (India) Pvt. Ltd., G. T. Rd., Mahannagar, Ghaziabad 201001.

Precision Moulds and Dies, 8/4-C, Ind. Area No. 4, Sahibabad, Ghaziabad 201005.

West Bengal

Burn & Co. Ltd., 12, Mission Row, Calcutta 700001.

Dies & Tools Ltd., 11, R. N. Mukherjee Rd., Calcutta 700001.

Guest Keen Williams Ltd., 3A, Shakespeare Sarani, Calcutta 700016.

Holman Climax Manufrs. Ltd., Titaghur 743188

New Dominion Engg. Works, 1/B, Pottery Rd., Calcutta 700015.

Nipha Machinery Manufrs. Pvt. Ltd., 26, N. Subhas Rd., Calcutta 700001.

Precision Products of India, 10-A, Creek Lane, Calcutta 700014.

Precision Tools India Ltd., 4, Synagogue St., Calcutta 700001.

Taps & Dies Pvt. Ltd., P-17, Mission Row Extn., Calcutta 700013.

TOOLS—TUNGSTEN CARBIDE

Addison & Co. Pvt. Ltd., 158, Mount Rd., Madras 600002.

Asian Tools Trdg. Co., 24, Nagdevi Cross Lane, Bombay 400003

GANNON NORTON METAL & DIAMOND DIES LTD.

(In technical collaboration with M/s. Wire Drawing Dies (Manchester) Ltd., U.K.)

★

Manufacturers of :—

(1) Tungsten Carbide Dies.: For drawing wire, bars — rounds, squares, hexagons and for special profile.

(2) Diamond Dies.

(3) Extrusion Dies.

(4) Other precision dies.

Office :
Bank of Baroda Building, 5th Floor,
12, Bombay Samachar Marg,
Fort, Bombay 400 023.
Phones : 255434-35.

Factory :
Old B.P.T. Road,
Mahul,
Bombay 400 074.
Phone : 521927.

Telex : 011-5632. Grams : " RAMSHEAD "

Carbide Tools India, Ayyanthole, Trichur 680003.

Champion Engg. Works Pvt. Ltd., S. Vivekananda Rd., Bombay 400062.

Dies & Tools Ltd., 35, Jessore Rd., Calcutta 700028.

Drillco Metal Carbides Ltd., 1187/59, Jangli Maharaj Rd., Shivajinagar, Pune 411005.

Engg. Tools Syndicate, 111, N. Dhuru St., Bombay 400003.

Ferrous Castings & Engg. Pvt. Ltd., 340, G. T. Rd., Shahdara, Delhi 110032.

Ferrous Casting & Engg. Pvt. Ltd., 33, C.R. Ave., Calcutta 700012.

Gitanjali Tubes Pvt. Ltd., Madras 600081.

India Hard Metals Ltd., 49/1, Gariahat Rd., Calcutta 700019.

Indian Tools Manufrs. Ltd., 101, Sion, Bombay 400022.

Indicarb Ltd., 64, Palace Rd., Vasanth Nagar, Bangalore 560052.

Micro Tools Ltd., 153, A. Salai, Madras 600002.

P. Orr & Sons Pvt. Ltd., 200, Mount Rd., Madras 600002.

Powder Metals & Alloys Pvt. Ltd., Plot A-30, Rd. No. 10, Wagle Estate, Thane 400604.

Precitools, Krishna Nivas, 305, Yusuf Meheralli Rd., Bombay 400003.

Rapicut Carbides Ltd., Plot No. 7-B, Shivaji Co-op. Housing Society Ltd., Pune 411016.

Sandvik Asia Ltd., Pimpri, Pune 411018.

Shama Forge Co. Ltd., Belasia Rd., Bhopal 462001.

Usha Forging & Stamping Ltd., 3, Parliament St., New Delhi 110001.

Widia (India) Ltd., Kakad Chambers Extn., 132, Dr. A. B. Rd., Bombay 400018.

TOWER PACKINGS

Bassein Ceramics Pvt. Ltd., Cooks Bldg., 324, Dr. D. Naoroji Rd., Bombay 400001.

Kevin Enterprise, Plot 11, St. No. 10, MIDC, Bombay 400093.

Luthra Import Substitute Industries, A-26, Shalimar Ind. Estate, Matunga, Bombay 400019.

Pennar Ceramic & Gen. Inds., Panipat 132103.

Topack Inds., 7, 1st, Panjrapole Lane, 1st Flr., Bombay 400004.

West Coast Engg. Works Pvt. Ltd., 301, Udyog Mandir No. II, 7-C, Pitamber Lane, Mahim, Bombay 400016.

TOYS

Anand Toys Inds., 10795, Jhandewalan Rd., New Delhi 110055.

Electronic Toys (India), 37, B. T. Compd., Malad West, Bombay 400064.

Etak Corpn. Ltd., 101, Lady Jamshedji Rd., Mahim, Bombay 400016.

Govel Plastics Pvt. Ltd., 5/G, Veerabadrier St., Nungambakkam, Madras 600034.

Joy Toy Inds. Pvt. Ltd., 3B, Eldams Rd., Madras 600018.

Lakshmi Toys Inds., 2388, Farashkhanna, Delhi 110006.

Metal Stamping Co., Plot No. A35, Road No. 10, Wagle Ind. Estate, Thane 400604.

Plastifoams Pvt. Ltd., 4, Meher Bldg., Chowpatty, Bombay 400007.

Raja Mechanical Co. Pvt. Ltd., 33, Deputy Gunj, Delhi 110006.

Rubina Toys Inds., 1014, Kishanganj, Delhi 110006.

Tina Toys Inds., 807/8, Gali Mahaveer, Gandhinagar, Delhi 110031.

United Importers Corpn., 15/2, Palton Rd., Bombay 400001.

Vinmold Pvt. Ltd., 11/A, T. K. Ind. Estate, A. Donde Marg (Cross Lane), Sewree, Bombay 400015.

Vohra Toys Inds., 10250, Gali Millwali, Library Rd., Azad Mkt., Delhi 110006.

TRACTORS & SPARE PARTS

Delhi

Agarwal Engg. Co., 11-A-36, Lajpatnagar, Link Rd., New Delhi 110024.

Eicher Tractors India Ltd., 79-80, Nehru Place, New Delhi 110019.

Escorts Ltd., 11, Scindia House, Connaught Circus, New Delhi 110001.

Harsha Tractors Ltd., 42, Janpath, New Delhi 110002.

Siyaram-Kumar Engg. Works Pvt. Ltd., 41, DLF Indl. Area, Kirtinagar, New Delhi 110016.

United Auto Tractors Ltd., 30, Rani Jhansi Rd., New Delhi 110055

Verma Trdg. Co., S. P. Mukherji Marg, Delhi 110006.

Gujarat

Hindustan Tractors Ltd., Vishwamitri, Vadodara 390001.

Rexroth Maneklal Industries, Shafi Manzil, Ashram Rd., Ahmedabad 380009.

Haryana

Eicher Tractors India Ltd., Faridabad 121001.

Escorts Ltd., Sector-13, Faridabad 121001.

Karnataka

Bharat Earth Movers Ltd., Unity Bldgs., Jayachamarajendra Rd., Bangalore 560002.

Hindustan Machine Tools Ltd., Bangalore 560052.

V. S. T. Tiller Tractors Ltd., M. Gandhi Rd., Bangalore 560001.

Maharashtra

Business Combine Ltd., 78-B, Dr. A.B. Rd., Worli, Bombay 400018.

International Tractor Co. of India Ltd., Akurli Village, Kandivli, Bombay 400067.

Kirloskar Tractors Ltd., Thermal Power Stn. Rd., Nasik 422101.

Maharashtra Co-op. Engg. Soc. Ltd., Shiroli, Kolhapur 416001.

Naren Kumar Machinery Co., 9, Oak Lane, Bombay 400023.

Pioneer Industrial & Engineering Co., Sardar Griha Bldg., 198, Carnac Rd., Bombay 400002.

Pittie Tools Pvt. Ltd., 37/1B, Vadgaonsheri, Off Nagar Rd., Pune 411014.

Tata Engg. & Loco. Co. Ltd., Bombay House, Homi Mody St., Bombay 400023.

Tractor Engrs. Ltd., Saki-Vihar Rd., Powai, Bombay 400072.

Vasudha Farm Tools Pvt. Ltd., C-26, MIDC Ind. Area, Chikalthana 431210 (Aurangabad Dist.).

Punjab

G.N.A. Enterprises Pvt. Ltd., G.T. Rd., Goraya 144409.

Punjab Tractors Ltd., S.A.S. Nagar, Chandigarh 160051.

Tamil Nadu

Kirloskar Tractors Ltd., 7/3, Pattulos Rd., Madras 600002.

Madras Tractors & Motors, 96, Mount Rd., Nandanam, Madras 600035.

Mashino India, 211, Dr. Natesan Rd., Madras 600005.

Trac Ind. & Components Ltd., 12, Cenotaph Rd., Madras 600018.

Tractors & Farm Equipment Ltd., Huzur Gardens, Sembiam, Madras 600011.

Uttar Pradesh

Tractparts of India Ltd., 4, Indl. Area, Govindnagar, Kanpur 208022.

West Bengal

Emar (India) Pvt. Ltd., 135, B. R. B. B. Rd., Calcutta 700001.

Tractors India Ltd., 1, Taratolla Rd., Calcutta 700024.

TRAILERS & TROLLIES

(See under Material Handling Equipment).

TRANSFORMERS

Andhra Pradesh

Andhra Mechanical & Elecl. Industries Ltd., 173, Fateh Maidan, North Rd., Secunderabad 500003.

Andhra Pradesh Electl. Equipment Corpn., Sanatnagar, Hyderabad 500018.

Electric Transformer & Equipment Co. Pvt. Ltd., B-29/30, Indl. Estate, Sanatnagar, Hyderabad 500018.

Electro Magnetic Devices, 82, Main Guards Rd., Secunderabad 500003.

Electronic Instrumentation, Craftsmen Guild, Mallepally, Hyderabad 500028.

South Eastern Equipment Co., 6-1-285/12, Padmaraonagar, Secunderabad 500025.

Suchitra Electronics, 1100/5, Raj Bhavan Rd., Somajiguda, Hyderabad 500004.

Bihar

Electric Equipment Factory, Punaichak, Patna 800001.

Delhi

Bharat Heavy Electricals Ltd., H. T. House, 18-20, K. Gandhi Marg, New Delhi 110001.

Kukreja Transformer Mfg. Co., A-9, Wazirpur Indl. Area, Delhi 110052.

United Electrical Ind., 14, Najafgarh Rd., New Delhi 110015.

Gujarat

Amul Transmission Line Hardware Pvt. Ltd., Parikh Estate, Dabhoi Rd., Vadodara 390004.

Continental Electronics, 177/4, Naroda Indl. Estate, Naroda, Ahmedabad 382330.

Gujarat Transformers Pvt. Ltd., 46, Sampatrao Colony, R.C. Dutt Rd., Vadodara 39005.

Johnson Electric Co., Fatehganj, Chhani Rd., Vadodara 390002.

Transasia Transformers Pvt. Ltd., 86, Ind. Estate, Naroda, Ahmedabad 382330.

Transformer Mfg. Industries, Kapeli Dhar, Dhrangadhra 363310.

Voltamp Transformers Pvt. Ltd., Post Box 186, Vadodara 390001.

Karnataka

Electric Power Devices Co., Canara Mutual Bldg., 4, Residency Rd., Bangalore 560025.

Government Electric Factory, Mysore Rd., Bangalore 560026.

Kirloskar Electric Co. Ltd., Ind. Suburb, Rajajinagar, Bangalore 560010.

NGEF Ltd., Byappanahalli, Off Old Madras Rd., Bangalore 560038.

Swicon Pvt. Ltd., 87/16, 4th Cross K. Palayam New Extn., Bangalore 560002.

Kerala

Kerala Electric & Allied Engg. Co. Ltd., Mamala, Cochin 682305.

Transformers & Electricals India Ltd., Angamali South 683573 (Ernakulam Dist.).

Maharashtra

Advani-Oerlikon Electrodes Pvt. Ltd., Radia House, 6, Rampart Row, Bombay 400023.

Apex Electricals Pvt. Ltd., Drive in Theatre Campus, 14, Kala Nagar, Bandra East, Bombay 400051.

Argo Transformers Co. Pvt. Ltd., 187, Dr. D. Bhadkamkar Rd., Bombay 400007.

Bajaj Electricals Ltd., 45-47, V. Nariman Rd., Bombay 400023.

Bharat Bijlee Ltd., Electric Mansion, Nr. Century Bazar, Bombay 400025.

Bombay Electronics Co. Pvt. Ltd., 381, Dr. D. N. Rd., Bombay 400001.

Bombay Suburban Electric Supply Ltd., Plot No. E-7, M.I.D.C. Area, Marol, Andheri East, Bombay 400093.

C. T. R. Manufg. Ind. Ltd., Nagar Rd., Pune 411014.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

Emco Electricals Pvt. Ltd., 106, North Kolwada Stn. Rd., Bombay 400022.

Gandhi & Co., 106, Ind. Area, Sion, Bombay 400022.

Hindustan Brown Boveri Ltd., Brown Boveri House, 264-265, Dr. A. Besant Rd., Bombay 400025.

Hindustan Instruments, 7/9, Bell Lane, Bombay 400001.

Indcoils Transformers Pvt. Ltd., 21, Steelmade Estate, M. Maroshi Rd., Andheri, Bombay 400059.

Kirti Electricals Pvt. Ltd., Shembekar Ind. Comp., Chinchwad, Pune 411019.

Metrogold Electric Stores, 60, Lohar Chawl, Bombay 400002.

Murray & Co., 106 Industrial Area, Sion, Bombay 400022.

National Electrical Ind. Ltd., Ind. Estate, Lalbaug, Bombay 400012.

Nissen Transformers Pvt. Ltd., 12A, Marol Rd., Andheri East, Bombay 400059.

Pace Electronics Pvt. Ltd., 237, A-Z, Indl. Estate, Fergusson Rd., Lower Parel, Bombay 400013.

Power & Control Transformer Ind. Pvt. Ltd., Feltham House, Graham Rd., B. Estate, Bombay 400038.

Power-Pack Enterprises, Old Nagardas Rd., Andheri (East), Bombay 400069.

Pragati Electricals Pvt. Ltd., 280/3, 2nd Pokhran Rd., Thane 400601.

Precision Instruments Corpn., 101, Arun Chambers, Tardeo, Bombay 400034.

POWER PACK

POWER-PACK
ENTERPRISES

Manufacturers of :

TRANSFORMERS

Specialised in

MANUFACTURING ALL TYPES OF TRANSFORMERS OF H.T.L.T., STEP UP, STEP DOWN, AUTO TRANSFORMERS FOR MOTOR STARTERS (ATS), SPECIAL FURNACE TRANSFORMERS, C.T., P.T., IGNITION & VACUUM IMPREGNATED HIGHLY ACCURATE CONTROL TRANSFORMERS & SOLENOIDS

OLD NAGARDAS ROAD, ANDHERI (EAST)
BOMBAY-400 069

PHONE : **577908, 565189**

Star Delta Electricals, Bharat Coal Compd., Bail Bazar, Kurla, Bombay 400070.

Sukson Ind., 16/3, Jawaharnagar, Road No. 2, Goregaon (West), Bombay 400062.

Swastik Electric & Engg. Co., 7/73, Bhaudaji Rd., Bombay 400019.

Tata Merlin & Gerin Ltd., Off 2nd Pokhran Rd., Thane 400601.

Technosynd Engrs., A-192, Rd. A, Wagle Estate, Thane 400604.

Trans Electric, 15/11, Jai Pushpa Milan Socy., Sant Ramdas Rd., Mulund East, Bombay 400081.

Punjab

Beegee Corpn., Pvt. Ltd., 25, Factory Area, Patiala 147002.

Tamil Nadu

Elahi Electronics, 5, Madduvankarai St., Madras 600016.

Hackbridge Hewittic & Easun Ltd., 5-7, Second Line Beach, Madras 600001.

Kappa Electricals, 10, Mount Rd., Madras 600015.

Meenakshi Electronics, 1, Ritchie St., Madras 600002.

Transformers and Switchgears Ltd., 2, Lattice Bridge Rd., Madras 600020.

Uttar Pradesh

Darbari Inds., 24, Canning Rd., Allahabad 211001.

West Bengal

Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta 700001.

Associated Trades, 1, Chandni Chowk St., Calcutta 700013.

Biecco Lawrie Ltd., 21, N. Subhas Rd., Calcutta 700001.

Brentford Electric (I) Pvt. Ltd., 8, Clive Row, Calcutta 700001.

Cieco Pvt. Ltd., 2/1, B. T. Rd., Calcutta 700050.

Dey's Electl. Engg. Works, 11/B, Rahim Ostagar Rd., Calcutta 700045.

East India Electricals, 38, N. Subhas Rd., Calcutta 700001.

Electric Construction and Equipment Co. Ltd., 9, K. Singhee Rd., Calcutta 700002.

Elvoc Pvt. Ltd., 36, Panditia Rd., Calcutta 700029.

General Electric Co. of India Ltd., Magnet House, 6, Chittaranjan Ave., Calcutta 700013.

Hengers India Pvt. Ltd., Narayani, 59-B, Chowringhee Rd., Calcutta 700020.

Hooghly Marine & Engg. Co., 27/2C, Strand Rd., Calcutta 700001.

India Radio Manufg. Co., 18, Chandni Chowk, St., Calcutta 700013.

Kanubhai Engrs. Pvt. Ltd., 3, Mangoe Lane, Calcutta 700001.

Marson's, 4, Chandni Chowk St., Calcutta 700013.

Radio and Accessories (India) Pvt. Ltd., 3, Madan St., Calcutta 700013.

Tarit Appliances & Equipment Pvt. Ltd., IOB, Ekdalia Place, Calcutta 700019.

Transformers & Electricals (India), 83, Chowringhee Rd., Calcutta 700020.

Voltamp Electricals Pvt. Ltd., P-15, New C. I. T. Rd., Calcutta 700073.

TUBES, PIPES & FITTINGS

(Also see Steel Tubes & Pipes & Fittings).

Andhra Pradesh

Triniti Metal Ind., A-5,. Co-op. Ind. Estate Ltd., Balanagar, Hyderabad 500037.

Ushasri Ind., C-12, Co-op. Ind. Estate, Balanagar, Hyderabad 500037.

Assam

Assam Tubes Ltd., Sibsagar 785640.

Bihar

Hathwa Metals & Tubes Ltd., Hathwa House, Patna 800001.

Indian Tube Co. Ltd., P. B. No. 481, Jamshedpur 831001.

Stewart & Lloyds of India Ltd., Jamshedpur 831007.

Delhi

Ajanta Tubes Ltd., D-20, Con. Place, New Delhi 110001.

Bharat Steel Tubes Ltd., Allahabad Bank Bldg., 17, Parliament St., New Delhi 110001.

Century Tubes Ltd., 4-D, Hansalaya, 15, Barakhamba Rd., New Delhi 110001.

Delhi Tubes Pvt. Ltd., 23, South Extn., New Delhi 110003.

G. F. R. & Co. Pvt. Ltd., 8200/XIV Chimy Mill St., Bara Hindu Rao, Delhi 110006.

Jain Tube Co. Ltd., Jain Bhavan, Hauz Qazi, Delhi 110006.

Jindal Ind. Pvt. Ltd., 15/1, A. Ali Rd., New Delhi 110002.

Karori Engg. Works, 16, Najafgarh Rd., New Delhi 110015.

Pearl Engg. Works, 1669-B, Dakni Rai St., Daryaganj, New Delhi 110002.

Prakash Tubes Ltd., 21 A, Kirti Nagar, New Delhi 110010.

Super Tubes Pvt. Ltd., D-18, Conn. Place, New Delhi 110001.

United Steel Ind., X-242, Near Delhi Gate, Delhi 110006.

Wazir Singh & Co., 10/5, Jhilmil Indl. Area, Shahdara, Delhi 110032.

Gujarat

Baroda Rolling Mills Pvt. Ltd., Chhani Rd., Vadodara 390002.

Dandy Valve Mfg. Co., 12, GIDC Ind. Estate, Phase 1, Vatva, Ahmedabad 382445.

Enterton Systems, D-6, Ind. Estate, Vadodara 390003.

Foldage Ind. Pvt. Ltd., Dhebarbhai Rd., Rajkot 360001.

Gujarat Steel Tubes Ltd., Kali Village, Sabarmati, Ahmedabad 380005.

Shri Ambica Tubes, Kankaria Loco Siding, Ahmedabad 380008.

Zaverchand Gaekwad Pvt. Ltd., Padra Rd., Vadodara 390001.

Haryana

Prakash Tubes Ltd., Prakash Nagar, Bahadurgarh 124507.

Madhya Pradesh

Steel Tubes of India Pvt. Ltd., 27-34, Ind. Estate, Indore 452001.

Maharashtra

Ajanta Tubes Ltd., Arcadia, 7th Flr., N. Point, Bombay 400021.

Ashoka Pipe Manufg. Co., 134, D. Parikh Marg, Kalbadevi, Bombay 400002.

Bombay Tubes & Poles Co., 2nd Lane, Darukhana, Mazgaon, Bombay 400010.

Dodsal Pvt. Ltd., Mafatlal House, Backbay Recl., Bombay 400020.

Exceltube Traders, 134, Reay Rd., Bombay 400033.

Gupta Tubes & Pipes Pvt. Ltd., 37, Baroda St., Bombay 400009.

Heavy Metal & Tubes, 629, Panchratna, M. Parmanand Mrg., Bombay 400004.

Hindustan Tubes, Plot No. 345, Section 4-B, Copper Smith St., Dockyard Rd., Bombay 400010.

Impex Tube Manufg. Co. Pvt. Ltd., Gharwadi, L. Jamshedji Cross Rd., No. 1, Bombay 400016.

India Tube Mills & Metal Industries Ltd., Shastri Marg, Opp. Powai Lake Rd., Bombay 400083.

Jayant Dalal Ltd., A-4/B-2, MIDC Ind. Area, Marol, Bombay 400093.

Kamani Tubes Ltd., Kamani Chambers, 32, Ramjibhai Kamani Marg, Ballard Estate, Bombay 400038.

Khandelwal Mfg. Corpn. Pvt. Ltd., Khandelwal Nagar, Bhandup, Bombay 400078.

Lu Bra Diz, 2-B, Bibijan St., Bombay 400003.

M. J. Patel & Co. Pvt. Ltd., 116, P. D'Mello Rd., Bombay 400009.

M. M. Ebrahimji & Co., 147, Nagdevi St., Bombay 400003.

Manufacturers of
Non-ferrous pipes, tubes, rods
and sections

KAMANI TUBES LTD.

Office:
Kamani Chambers, 32, Ramjibhai Kamani Marg,
Ballard Estate, Bombay 400 038.
Phones: 266437, 264186
Grams: "KAMATUBES", Bombay

Factory:
Lal Bahadur Shastri Marg, Kurla (North),
Bombay 400 070.
Phone: 555561 Telex: 011-2574
Grams: "KAMATUBES", Kurla

Maheshwari Enterprises, 142, A-Z, Industrial Estate, Fergusson Rd., Bombay 400013.

Metal Distributors Ltd., Udyog Bhavan, W. Hirachand Mrg., B. Estate, Bombay 400038.

Metal Extruders (India) Pvt. Ltd., Kamani Chambers, Nicol Rd., B. Estate, Bombay 400038.

Mini Tube Inds., Shanta Nivas, Block 2, Dixit Rd. Extn., V. Parle East, Bombay 400057.

Pressure Tube Inds., BPT Plot 345, Copper Smith St., Dockyard Rd., Bombay 400010.

Process Control & Chemical Engg. Pvt. Ltd., Taj Bldg., Dr. D.N. Rd., Bombay 400001.

Rasiklal Kantilal & Co., 145, Kika St., Bombay 400004.

Standard Engg. Works, Hadis Subedar Ind. Estate, Kuresh Nagar, Kurla East, Bombay 400070.

Subedar Inds., 48A, Magazine St., Bombay 400010.

Sumeep Enterprises, 192/206, A. Rehman St., Bombay 400003.

Surendra Inds. Bombay Pvt. Ltd., 24, Baroda St., Bombay 400009.

Surindra Engg. Co. Pvt. Ltd., Safed Pool, M. V. Rd., Bombay 400072.

Teekay Tubes P. Ltd., 315/17, Navrattan, P. D'Mello Rd., Bombay 400009.

Tubes India, 78/80, Kika St., Bombay 400004.

Zenith Steel Pipes Ltd., Moti Mahal, 195, Churchgate Recl., Bombay 400020.

Orissa

Kalinga Tubes Ltd., Rasulgarh, Bhubaneswar 751010

Rajasthan

Ahuja Industries, B-85, Ind. Estate, Bais Godown, Jaipur 302006.

Indo-Flex Pvt. Ltd., Jaipur 302001.

Tamil Nadu

Aoollo Tubes Ltd., 730, Anna Salai, Madras 600006.

K.C.P. Ltd., Mount Rd., Madras 600006.

Khandelwal Tubes, 23, Mooker Nallamuthu St., Madras 600001.

Kwality Industries, B/4, Industrial Estate, Ambattur, Madras 600058.

Madras Tube Co. Ltd., 7, Boat Club Rd., Madras 600028.

Tube Investment of India Ltd., N. Beach Rd., Madras 600001.

Tubes & Malleables Ltd., 99, Armenian St., Madras 600001.

Tube Products of India Ltd., 52-53, Jehangir St., Madras 600001.

Uttar Pradesh

Ajanta Tubes Ltd., Jain Ind. Estate, 38 Km., Delhi Hapur Rd., Ghaziabad 201001.

Quality Steel Tubes Pvt. Ltd., 133/1, Juhi Gaushala, Kanpur 208004.

Reliable Water Supply Services of India Ltd., 17, Gokhale Marg, Lucknow 226001.

West Bengal

Apeejay Tubes Pvt. Ltd., 47, Hide Rd., Calcutta 700027.

Bharat Steel & Metal Ind., 14/2, Old China Bazar St., Calcutta 700001.

Castings Corpn. (India) Pvt. Ltd., 45, M. P. Chowdhury Lane, Howrah 711101.

Crawley & Ray (Founders & Engrs.) Pvt. Ltd., 32, Foreshore Rd., P.O. Botanic Gardens, Howrah 711103.

Hind Overseas (Pvt.) Ltd., 7, N. P. Babu Lane, Calcutta 700016.

Indian Tube Co. Ltd., 43, Chowringhee Rd., Calcutta 700016.

Jindal India Pvt. Ltd., Liluah 711204, Howrah Dist.

Kalinga Tubes, 44, J.L. Nehru Road, Calcutta 700071.

Kamala Sheet Metal Ind. Pvt. Ltd., 98 & 99, Beliaghata Main Road, Calcutta 700010.

Kedarnath Parsothamdas & Co. Pvt. Ltd., 37, N. Subhas Road, Calcutta 700001.

Kesoram Spun Pipes & Foundries, Industry House, 10, Camac Street, Calcutta 700017.

Khandelwal Tubes, 5/2, Russel St., Calcutta 700071.

Laxmi Trdg. Co., 192, J. Bajaj St., Calcutta 700007.

M. Chandra & Co., 22, Rabindra Sarani, Calcutta 700001.

Miller & Co. (Calcutta) Pvt. Ltd., 24, N. Subhas Road, Calcutta 700001.

Orr Dignam & Co., Ltd., 29, N. Subhas Road, Calcutta 700001.

Patcon Pvt. Ltd., 7A, Elgin Road, Calcutta 700020.

Planter's Stores & Engg. Co., Mercantile Bldg., 9, Lalbazar Street, Calcutta 700001.

Rajasthan Pipes Pvt. Ltd., Bochhraj Road, Nimta, Calcutta 700049.

Satish Chandra Karuri & Sons, 10/6, B. Mullick Lane, Howrah 711101.

Shree Hanuman Steel Works, 30-H/1, Canal (E.) Road, Calcutta 700011.

Shree Inds., 2, G. C. Avenue, Calcutta 700013.

Stewarts & Lloyds of India Ltd., 41, Chowringhee Road, Calcutta 700016.

TUBEWELL MACHINERY & ACCESSORIES

Allied Tubewell Development Corpn., P-296, Darga Road, Calcutta 700017.

Associated Tubewells India Pvt. Ltd., 9/1, Darga Road, Calcutta 700017.

Calcutta Filter Manufg. Co., 62/1A, N. Subhas Road, Calcutta 700001.

Delhi Engg. Works Pvt. Ltd., 454, Azadpur, Delhi 110033.

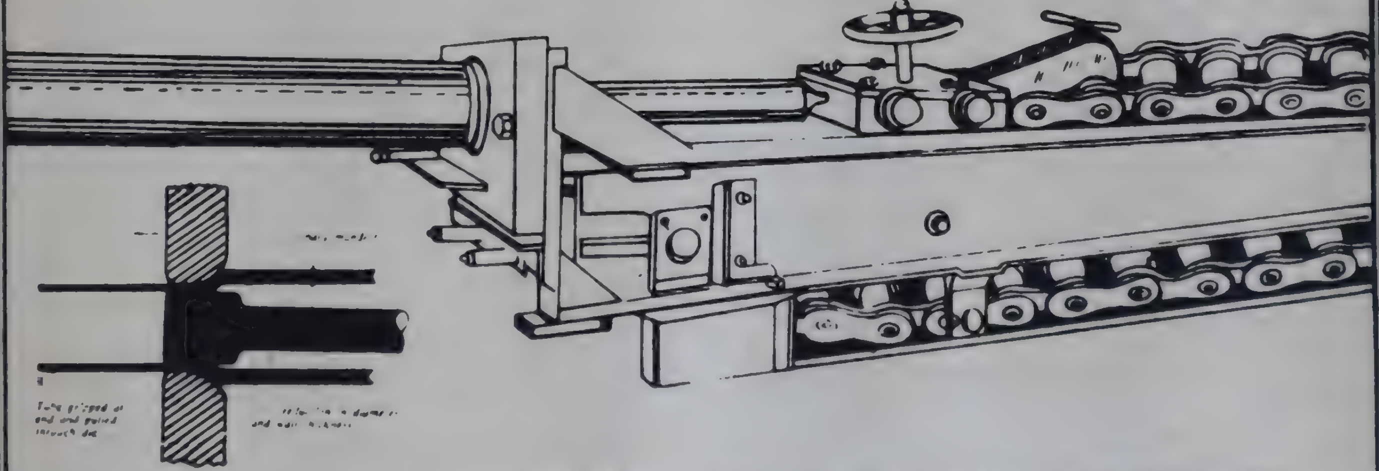
EL.P.EM. Industrials, 393, Mettupalayam Rd., Coimbatore 641002. (T. Nadu).

EVERY 'DRAWN' PIECE OF PIPE & TUBE A GUARANTEED PIECE WITH GRADE-I ACCURACY

We specialise in drawing, straightening
and reconditioning of light, medium and heavy duty

PIPES & TUBES

WITH ADVANCED
TECHNOLOGY AND TESTED
ACCURACY.



WHAT IS COLD DRAWING?
ORIGINAL PIPES DIAMETERS CAN BE REDUCED OR EXPANDED AS PER CUSTOMER'S REQUIRED SIZE WITHOUT CHANGING THE THICKNESS e. g. 4" INSIDE DIAMETER X 5' OUTSIDE DIAMETER CAN BE CONVERTED TO 3 INSIDE DIAMETER X 4" OUTSIDE DIAMETER BY DRAWING AND THE SAME TUBE CAN BE MADE 5" INSIDE DIAMETER X 6 OUTSIDE DIAMETER BY EXPANDING

CAPACITY :—
DRAWING/STRAIGHTENING CAPACITY FOR M. S. PIPES 10 MM O. D. X 1 MM THICK TO 170 MM O. D. X 10 MM THICK WITH DRAWING TOLERANCE OF DIAMETERS 0.001"

WHAT WE DO :—
COLD DRAWING AND EXPANDING THE DIAMETERS WITH GUAGE (THICKNESS) CONTROLLED OF M. S SEAMLESS PIPES. BOILER TUBES, E R. W PIPES, HYDRAULIC PIPES STAINLESS STEEL PIPES COPPER, BRASS, ALUMINIUM PIPES AND RODS SQUARE, RECTANGULAR & SPECIAL REQUIRED SECTION IN PIPES ARE DRAWN

PICKLING :—
PICKLING (ACID BATH FACILITY I E CLEANING THE DRAWN - ANNEALLED PIPES & TUBES IN SOLUTION OF ACID & WATER MIXTURE AT CERTAIN TEMPERATURE) FOR MAKING BRIGHT FINISHED PRECISION TUBES.

PHYSICAL PROPERTIES AFTER DRAWING
PHYSICAL PROPERTIES OF PIPES & TUBES REMAIN SAME AFTER DRAWING OR EXPANDING AS ORIGINAL MAKE REQUIRED TENSILE & ELONGATION OF RE-DRAWN PIPES CAN BE CONTROLLED BY PROPER ANNEALING & COOLING

I. B. R. TESTS .—
FLATTENING, CRUSHING, CONE, BENDING & HYDRAULIC TESTS STANDS 100% O. K. DRAWN PIPES & TUBES STANDS I. B. R. TESTS.

STANDARD ENGINEERING WORKS.

Hadis Subedar Industrial Estate, Kuresh Nagar, Kurla (East), BOMBAY - 400 070. TELEPHONE : 522363

F. Husain & Bros., 28, Strand Road, Calcutta 700001.

Ganapathi Engg. Manufrs., Ganapathi, Coimbatore 641006.

Hyderabad Alloy Foundries Pvt. Ltd., 7-1-79, Ameerpet, Hyderabad 500016.

Imperial Tubewell Co., 161/1, M.G. Road, Calcutta 700007.

Indian Drilling & Mining Co. Pvt. Ltd., 67B, N. S. Road, Calcutta 700001.

International Strainer Co. Pvt. Ltd., 161/1, M. G. Road, Calcutta 700007.

Kadakia Trdg. Corpn., 3, Bibijan St., Bombay 400003.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Life Tubewells Pvt. Ltd., 166, C.S.T. Road, Vidyanagari Marg, Bombay 400098.

Pioneer Tubewell Inds. Pvt. Ltd., 7, R. S. Mullick Sqr., Calcutta 700013.

Reliable Water Supply Service of India Pvt. Ltd., 1/11, E. Patel Nagar, New Delhi 110008.

Universal Borewells & Agencies, 17/4, Cambridge Rd., Ulsoor, Bangalore 560008.

Wellwater Services Pvt. Ltd., P. K. Law Bldg., 63, Radha Bazar St., Calcutta 700001.

TUBULAR STRUCTURES & PRODUCTS

Buildworth Ltd., G. S. Road, Dispur, Gauhati 781005.

Cobit Engg., Blue Pearl, S. Bapat Mrg., Dadar, Bombay 400028.

Khandelwal Mfg. Corpn. Pvt. Ltd., Khandelwalnagar, Bhandup, Bombay 400078.

Oms Engineering, No. 3, St. Xavier's St., Broadway, Madras 600001.

P.G. & W. Sawoo Pvt. Ltd., 28-A, Galif St., Calcutta 700004.

P.P. Engg. Co. Pvt. Ltd., 40, Cawasji Patel St., Bombay 400001.

Patcon Pvt. Ltd., 7A, Elgin Road, Calcutta 700020.

Steelfab Engg. Corpn., 5, Rustom Bldg., 29, V. Nariman Rd., Bombay 400023.

Steelite Engg. Corpn., 8, Nanabhai Lane, Bombay 400001.

Stewarts & Lloyds of India Ltd., 41, Chowringhee Road, Calcutta 700071.

Union Steel, 2nd Flr., Capital Cinema (Rear Side), Waudby Rd., Bombay 400001.

TURPENTINE & ROSIN

Dujodwala Resins & Terpenes Pvt. Ltd., 812/815, Tulsiani Chambers, 8th Flr., W. Wing, 212, N. Point, Bombay 400021.

Empee Corpn. Pvt. Ltd., 44, Cawasji Patel Street, Bombay 400001.

Himachal Govt. Rosin & Turpentine Factory, Nahan 173001.

Hindustan Rosin Industries, 137/141, Samuel St., Bombay 400009.

Jammu Rosin & Turpentine Factory, Miransahib, Jammu 180001.

Prabhat General Agencies, 195, Kalbadevi Road, Bombay 400002.

Prabhat Terpenes & Synthetics Pvt. Ltd., Indl. Estate, Baribrahmna, Jammu 180001. (J.K. State).

TYPEWRITERS & ACCESSORIES

Facit Asia Ltd., Perungudi, Madras 600096.

Godrej & Boyce Manufg. Co. Pvt. Ltd., Lalbaug, Bombay 400012.

Hindustan Teleprinters Ltd., Guindy, Madras 600032.

Kores (India) Ltd., Plot No. 10, Off Dr. E. Moses Road, Worli, Bombay 400018.

Rai & Sons Pvt. Ltd., 9-19, Connaught Place, New Delhi 110001.

Rayala Corpn. Madras Pvt. Ltd., 25A, Mount Road, Madras 600032.

Remington Rand of India Ltd., Remington House, 3, Council House Street, Calcutta 700001.

Sumathi Industries, 57A, Mount Road, Madras 600015.

KORES (INDIA) LIMITED

Manufacturers of :

Duplicating Stencils and Inks, Carbon Papers, Ribbons for use on Typewriters, Computers and other Business machines, Teleprinter and Adding Machine Rolls, Stamp Pad and Stamp Pad Inks, Ink Tablets, Barium Carbonate and Sodium Sulphide

and Marketers of :

Duplicating Paper, Writing Instruments, " Halda " Typewriters and their spare parts, Doyleys, Paper Napkins, Photocopying Machines and their accessories.

Regd. Office : **Plot No. 10, Off Dr. E. Moses Rd., Worli, Bombay 400 018.**

Phones : 370686 (4 lines), 378645.

Admn. Office & Factory : **1st Pokhran Rd., Thane 400 606 (Maharashtra).**

Phone : 594101 (7 lines). Telex : 2380.

Chairman and Managing Director : S. K. Thirani.
President : B. L. Arukia.
Vice-President : R. B. Deora.
Secretary : C. L. Banthia.
Sales Manager : L. N. Khanna.
Works Manager : P. N. Gandhi.
Production Manager : A. M. Wagh.
Materials Manager: J. K. Somani.

TYRE RETRADING MACHINERY

Indian Tyre Retreading Co., 21-A, Najafgarh Road, Ind. Area, New Delhi 110015.

ULTRASONIC CLEANING SYSTEMS

Vibronics Pvt. Ltd., 4, Kurla Indl. Estate, Ghatkopar, Bombay 400086.

UMBRELLAS & UMBRELLA FITTINGS

Arco Agencies, Arco House, Gunbow Street, Bombay 400001.

Bombay Umbrella Mart, 75, Imamwada Road, Near Moghal Masjid, Bombay 400009.

Champion Engg. Works Pvt. Ltd., S. Vivekanand Road, Bombay 400062.

Crescent Tools Corpn., 48-A, Govindpura Ind. Area, Raisen Road, Bhopal 462001.

Ebrahim Currim & Sons, 251, N. Subhas Road, Madras 600001.

Hind Umbrella Manufg. Co., 201, Chakla St., Bombay 400003.

M.L. Mansukhani & Co. Pvt. Ltd., 69, S. Gandhi Marg, Bombay 400002.

Nagjee Purushotham & Co. Pvt. Ltd., 94/96, Princess Street, Bombay 400002.

Rajputana Traders, 65, Babu Genu Road, Bombay 400002.

Royal Umbrella Mart, 284, A. Rehman St., Bombay 400003.

VACUUM FLASKS

Ajanta Vacuum Flask Manufg. Co., M. Mohantola St., Calcutta 700005.

Eagle Vacuum Glass Ltd., New Ind. Township, Faridabad 121001.

J.G. Vacuum Flask Pvt. Ltd., Bombay Poona Road, Pimpri, Pune 411018.

Shree Gobindo Glass Works, 9; Ezra St., Calcutta 700001.

Victory Flask Co. Pvt. Ltd., Kachwadi, Govandi, Bombay 400071.

VALVES & COCKS

Andhra Pradesh

Narne Tulaman Manufrs. Pvt. Ltd., Balangar Township, Hyderabad 500037.

Ushasri Ind. Ind. Estate, Balanagar, Hyderabad 500037.

Delhi

R.D. Varma & Co. P. Ltd., 28, Barakhamba Road, New Delhi 110001.

Tiger Locks Ltd., 119, Ansal Bhawan, 18, K. Gandhi Marg, New Delhi 110001.

Gujarat

Abdul Samad Abdul Kadar & Sons, 1839, Panchpatti, Kalupur, Ahmedabad 380001.

Dandy Valve Mfg. Co., 12, GIDC Indl. Estate, Phase I, Vatva, Ahmedabad 382445.

Everest Ind. Corpn. Pvt. Ltd., Pratapnagar, Dabhol Road, Vadodara 390004.

Geeta Iron & Brass Works Pvt. Ltd., Bajuva 309310. Vadodara Dist.

Hitvic Engg. & Mfg. Co. Pvt. Ltd., 9/2, Vithal Udyognagar, Vallabh Vidyanagar 388120.

Kamal Valve & Engg. Works, C-5, M.P. Shah Muni, Udyognagar, Saroo Section Rd., Jamnagar 361002.

Kumar Engg. Co., Behind Sukhram Nagar, Ahmedabad 380021.

M.H. Bros., Post Box 81, Kalupur Road, Ahmedabad 380001.

Mascot (India), 166/167, G.I.D.C., Naroda, Ahmedabad 382330.

Vikram Valves, C1-33, Ajit Ind. Estate, Rajkot 360003.

Welknown Bros., Near Zakaria Masjid, Relief Road, Ahmedabad 380001.

Karnataka

Myer (India) Pvt. Ltd., 16, Queen's Rd., Bangalore 560001.

Triton Valves Ltd., 27, K.H. Road, Bangalore 560027.

Vijay Engg. & Trdg. Co., 3/2, St. Marks Road, Bangalore 560001.

Maharashtra

Acme Manufg. Co., Ltd., Antop Hill, Wadala, Bombay 400031.

Akay Inds., A Block, Shivsagar Estate, Dr. A.B. Road, Bombay 40018.

Aksons Mechanical Enterprises, 104/105, Todi Indl. Estate, 314, N.M. Joshi Mrg., Bombay 400011.

Allied Hydro-Pneumatic Equipment, 2/A, Banaji Street, Bombay 400001.

Alloys Indl. Products, 133/7, Sion West, Bombay 400022.

Associated Techno Enterprises, Plot 95, Rd., 16, Marol MIDC Area, M. Caves Rd., Bombay 400092.

Asvik Inds., Patanwala Estate, Agra Road, Ghatkopar, Bombay 400086.

Audco India Ltd., L & T. House, B. Estate, Bombay 400038.

Automech Engrs. Pvt. Ltd., 1st Pokhran Rd., Jekegram, Thane 400606.

Avcon Tools Pvt. Ltd., 23/24, Nandu Ind. Estate, Mahakali Caves Road, Andheri East, Bombay 400093.

Bal Associates, Plot No. 6, Sewree Cross Road, Bombay 400015.

Bird & Co. Pvt. Ltd., United Bank of India Bldg., 25, Sir P. Mehta Road, Bombay 400001.

Blanden Cole, Rang Udyan, S.T. Road, Mahim, Bombay 400016.

AUDCO INDIA LIMITED
(Larsen & Toubro Limited in collaboration with
Serck Limited of U.K.)
Registered Office :
L&T House, Ballard Estate, Bombay 400 038.
Factory :
**Mount Poonamallee Road, Manapakkam,
Madras 600 089.**
Phone : 432323. Telex : 7197. Grams : "AUDCOSEAL"

Manufacturers of : Industrial Valves, Lubricated Plug Valves in cast iron, steel, stainless steel and audcoloy-austenitic cast iron and high pressure Type 'H' plug valves; Gate, Globe and Check Valves in carbon steel, alloy steels, steels for low temperature sub-zero services and stainless steel ; and Ball Valves in carbon steel and stainless steel.

Directors : N. M. Desai, H. Holck-Larsen, U. V. Rao, B. G. N. Patel, K. S. S. Mani, J. M. Pinckard, F. O. Spitzer, D. A. K. Cooper, D. J. Nation, H. Harold.

Selling Agents in India :
**Larsen & Toubro Limited, Valve Division,
P. O. Box 304, Bombay 400 021.**
Phone : 230506. Telex : 011-2669. Grams : "LANDTISALE".

Bombay Metal & Alloy Mfg., Co. Pvt. Ltd., Off Magazine St., Near Reay Rd., Stn., Bombay 400010.

BSJ Shau Mfrs. (India), A-6, MIDC Area, Hingna Road, Nagpur 440016.

Crescent Valves Mfg. Co. Ltd., Bajaj Bhavan, Nariman Point, Bombay 400021.

Electron Inds., Sonawala Cross Rd., Goregaon East, Bombay 400063.

Electro-Gasolenes, 28, Hari Kunj, 2nd Carter Rd., Borivli East, Bombay 400066.

Fouress Engrs. (India) Pvt. Ltd., Mahalaxmi Chambers, 2, B. Desai Road, Bombay 400026.

Globe Engg. Corpn., Rajgor Chambers, P.B. No. 5191, Bombay 400009.

Greaves Light Engg. Divn., Mercantile House, Magazine St., Reay Road East, Bombay 400010.

Hawa Inds. Pvt. Ltd., BMC Indl. Estate, Parsuram Pupala Mrg., Bombay 400008.

Hydro Steam Engg. Co., 70-C, Mohammedali Road, Bombay 400003.

Industrial Marketing Services, Jiji House, 1st Flr., Ravelin St., Bombay 400001.

Industrial Valves Mfg. Co., 96, Hamid Bldg., M. Azad Road, Bombay 400011.

Janata Mechanical Works Pvt. Ltd., Janata House, Ramchandra Lane Extn., Malad (W), Bombay 400064.

K. Avinash VKE Inds., S-10, Ram Mandir Road, Goregaon West, Bombay 400058.

Kirloskar Brothers Ltd., Udyog Bhavan, Tilak Rd., Pune 411002.

Kosan Metal Products Ltd., Laxmi Insurance Bldg., Sir P. Mehta Road, Bombay 400001.

Kulkarni Foundries Ltd., L & T House, Ballard Estate, Bombay 400038.

Liberty Engg. Works, 23, Deven Indl. Estate, I.B. Patel Rd., Goregaon East, Bombay 400063.

M.J. Patel & Co. Pvt. Ltd., 116, P.D'Mello Road, Bombay 400009.

Mascot Engg. Co., 130/132, Apollo St., Bombay 400023.

Mevada Engg. Works Pvt. Ltd., 9, Mistry Family Trust Indl. Estate, I.B. Patel Road, Goregaon (East), Bombay 400063.

Niton Inds., C-138, Ghatkopar Indl. Estate, LBS Mrg., Ghatkopar, Bombay 400086.

Perfect Engg. Products Pvt. Ltd., D-9, Rd. No. 32, Wagle Indl. Estate, Thane 400604.

Perry Valve Mfg. Co., 184, Samuel St., Bombay 400009.

Pratap Pvt. Ltd., Chikalthana 431201. Aurangabad Dist.

Precipneum Valve Mfrs., Pirmal Ind. Estate, Vivekanand Road, Bombay 400062.

Premier Valves & Rubber Industries, A/11, Ghatkopar Indl. Estate, L.B. Shastri Marg, Bombay 40086.

Pressure Tubes & Valves Co., 119, Nagdevi St., Bombay 400003.

R. & D. Multiples, United Ind. Estate, Mogul Lane, Mahim, Bombay 400016.

Sakhi Engrs., 99-A, Mital Chambers, Nariman Point, Bombay 400021.

Schrader-Scovill Duncan Ltd., Mulund, Bombay 400080.

Shavo Norgren Ind. Pvt. Ltd., Mittal Chambers, Backbay Recl., Bombay 400020.

Spun Casting & Engg. Co., Pvt. Ltd., 60, Mahavir Darshan, Bhandari St., Bombay 400003.

Teleflo Instrument Co. Pvt. Ltd., Pokar Mansion, Chembur Govandi Road, Chembur, Bombay 400071.

Vanaz Engrs. Pvt. Ltd., 396, Savarkar Marg, Bombay 400025.

Punjab

Apeejay Steels Pvt. Ltd., Tanda Road Jullundur City 144001.

Bir Engg. Works, G.T. Road, Jullundur 144001.

Leader Valves Pvt. Ltd., Indl Town, Jullundur 144004.

Tamil Nadu

British & Eastern Engg. Co., 16, Gen. Patters Rd., Madras 600002.

Engine Valves Ltd., 19, Cathedral Road, Madras 600086.

Industrial Valves & Equipments, 8, Kamdar Nagar, Madras 600034.

Kar Valves Ltd., 20, Second Line Beach, Madras 600001.

Ramnath Metal Forging, S-29, Ind. Estate, Guindy, Madras 600032.

SHI Engineers, 46, SIDCO Indl. Estate, Coimbatore 641021.

Telace Plants & Equipments Pvt. Ltd., Mount Poonamalee Road, Ramapuram, Madras 600089.

Tiger Sales Corpn., 1, Kellys Road, Madras 600010.

West Bengal

Ajanta Valves & Rubber Ind., 11, Pollock Street, Calcutta 700001.

Bestobel India Ltd., 21, Camac St., Calcutta 700016.

Bhutoria Engg. Works Ltd., 8, Lindsay Street, Calcutta 700016.

Bishnu Engg. Works, 16, Banaras Road, Salkia, Howrah 711106.

Calsens Pvt. Ltd., 6/1A, British Indian St., Calcutta 700069.

City Engg. Co., 18, Raja Woodmunt St., Calcutta 700001.

Dey's Industries, 115, N. Subhas Road, Calcutta 700001.

Eastern Millstores Corpn., 113-G, N. Subhas Road, Calcutta 700001

Howrah Light Casting Co. Pvt. Ltd., 27/2C, Strand Road, Calcutta 700001

Hydromatic Engg. Pvt. Ltd., 9/15, Swinhoe Lane, Calcutta 700042.

Indian Iron Sluice Valves Mfg. Co., 69/C, Behiatola Street, Calcutta 700005.

Indian Valve Co., 4, Fairlie Place, Calcutta 700001.

K.L. Puri & Sons, 207, Belilious Rd., Howrah 711101.

Lakshmi Engg. Works, 77/6/1, Banaras Road, Howrah 711101.

Macneill & Magor Ltd., 2, Fairlie Place, Calcutta 700001.

N.K. Inds., 146, B.K. Paul Avenue, Calcutta 700005.

Pelican Valves & Engg. Works, 10, Canning Street, Calcutta 700001.

Shiva Durga Iron Works Pvt. Ltd., 17, R. Ram Das Lane, Howrah 711101.

Shiva Engg. Works, 2, India Exchange Place, Calcutta 700001.

T.P. Bhattacharjee & Co., 20, N. Subhas Road, Calcutta 700001.

Tubes & Valves Mfg. Co., 83/85, Netaji Subhas Rd., Calcutta 700001.

Upadhaya Valves Mfrs. Pvt. Ltd., 23-A, Netaji Subhas Rd., Calcutta 700001.

Victor Corpn., 113/B, Monohardas Chowk, Calcutta 700007.

VARNISH COATING PLANTS

Metworks Methods, C-8, Nand Dham Ind. Estate, Marol, Bombay 400059.

Wellman Incandescent India Ltd., 8, Harrington Street, Calcutta 700016.

VENEER

Southern Veneers & Wood Works Ltd., Post Box 35, Tellicherry 670101.

Veneers & Laminations (India) Ltd., M.G. Rd., Post Box 1009, Cochin 682011.

VENETIAN BLINDS

Acrolux Venetian Blinds Mfg. Co., 5, Malcha Mrg. Mkt., Chanakyapuri, New Delhi 110021.

Alfab Mfg. & Trading Co., R.B. Gupta Prasad Bldg., XIV/4350, Pahari Dhiraj, S. Bazar, Delhi 110006.

Anand Venetian Blinds, 89, Sampige Road, Malleswaram, Bangalore 560003.

Ankool Corpn., 139-C, Bhuleshwar Rd., 2nd Flr., R. No. 121, Bombay 400002.

Atlantic Venetian Blinds, Pawar House, Umarkhadi, 2nd Cross Lane, Bombay 400009.

B.S. Mohindar & Co., 45-1, August Kranti Marg, Bombay 400026.

Chaudhry Bros., Acharya Ind. Estate, Wadavli, Chembur, Bombay 400074.

Das & Co. 57, General Patters Rd., Madras 600002.

Instruments Techniques Pvt. Ltd., B-2, C.I.E. Balanagar, Hyderabad 500037.

J.K. Engg. Supplies, 3, Loha Bhavan, P. D'Mello Rd., Bombay 400009.

M.V. Matthew & Co., 9, Byrasandra Rd., Jayanagar, Bangalore 560011.

Parag Corpn., 56/57, Nagdevi X Le., Bombay 400003.

Prafullakumar & Co., P. Box 7361, Andheri, Bombay 400058.

Premier Venetian Blinds Mfg. Co., 56, Pedder Rd., Bombay 400026.

Softile Venetian Blinds Mfg. Co., P. Box 8715, Andheri (E), Bombay 400069.

Sunderdas & Co., B/2, Atlas Mills Compd., Reay Rd., Bombay 400010.

Sunderdas Trading & Mfg. Co., 8, State Bank St., Madras 600002.

Sunder's Corpn., 162, Reay Rd., Bombay 400010.

Sunflex Venetian Blinds, 26, 6th Flr., Tardeo A/C Mkt., Bombay 400034.

Unicrafts Corpn. (India), 11, V.N. Purav Mrg., Khajuri Chunabhatti, Kurla East, Bombay 400070.

Veneflex, 2/2, Poddar Bldg., Dr. Moisheri Rd., Bombay 400009.

Venetian Blinds Mfg. Co., 5, Malcha Mrg. Mkt., Chanakyapuri, New Delhi 110021.

VOLTAGE STABILISER

Air Sales Agencies, 49-51, Lohar Chawl, Bombay 400002.

Agrogen India, B-4, E.E.I. Estate, Balanagar, Hyderabad 500037.

Aristo (India) Corpn., Ashani House, 10-A, Rajindra Place, Pusa Rd., New Delhi 110008.

Continental Electronics, 177/4, Naroda Indl. Estate Naroda 382330. (Ahmedabad Dist.).

Emcon Electronics, 16C, Seven Tanks Lane, Calcutta 700030.

Frank Sudhachand & Co., Post Box 6825, Bombay 400055.

Jivan Electro Instruments, 394, GIDC, Makarpura, Vadodara 390010.

Mecotronics Pvt. Ltd., 11A/1, Mount Rd., Madras 600002.

Motwane Pvt. Ltd., 127, M. Gandhi Rd., Bombay 400023.

National Radio & Electronics Co. Ltd., Wallace Flour Mill Compd., Tardeo, Bombay 400007.

Opto Electronic Inds., 8/4/1, National Library Ave., Calcutta 700027.

Paramount Inc., 1, Mangesh St., T. Nagar, Madras 600017.

Prajay Electronics, 30, Vembuli Subedar St., Madras 600019.

PMT Metrology & Electronics Pvt., Ltd., Bell Bldg., Sir P.M. Rd., Bombay 400001.

S.C. Shah, 36, Mount Rd., Madras 600002.

Sakthi Electronics, Type L/13, V.S. Instronic Estate, Madras 600041.

Sanghavi Enterprises, 653-A, Girgaon Rd., Dhobi Talao, Bombay 400002.

Sen & Pandit Ltd., 168, Lake Rd., Calcutta 700029.

Servoelec, 'Girija', 4/3, Karve Rd., Pune 411004.

Suman Electronics, 17-A, Electronic Complex, Kushaiguda, Hyderabad 500762.

Triple Star Electronics, 11/1, B.T. Rd., Calcutta 700056.

WASHING MACHINES

Arvind Mechanical & Electl. Works Pvt. Ltd., New Sun Mill Compd., Lower Parel, Bombay 400013.

Harrison Engg. Works Pvt. Ltd., 99/1, Beliaghata Main Rd., Calcutta 700010.

Heco Electronics Pvt. Ltd., 35, Mount Rd., Madras 600002.

National Products (Regd.), 10, Nursery Rd., Model Town, Jullundur 144003.

WATCH & CLOCK JEWELS

Sikkim Jewels Ltd., Jewel House, Gangtok 737101. (Sikkim).

WATCH STRAPS & BRACELETS

A.J. & Co., Ravapar Rd., P. Box No. 16, Morvi 363641.

Amar Products Pvt. Ltd., 202, Navjivan Soc., Lamington Rd., Bombay 400008.

Apollo Straps Pvt. Ltd., B/22, Sriram Indl. Est., 13, G.D. Ambedkar Rd., Wadala, Bombay 400031.

Collins & Co., Bentex Bldg., Tulsiwadi, Bombay 400034.

Desai Trading Co., 189, A. Rehman St., Bombay 400003.

Empee Enterprises, 94, Jolly Maker Chambers, N. Point, Bombay 400021.

Empire Time Ind. Pvt. Ltd., 15, Radha Bazar St., Calcutta 700001.

H. Pankaj & Co., 142/15, Mount Rd., Mazgaon, Bombay 400010.

Hira Straps Corpn., Unique Indl. Est., Unit No. 413, Prabhadevi, Bombay 400025.

Kiran Plastic Works, 2/3, Anees Chambers, Carnac Rd., Bombay 400001.

Madhu & Usha, 211, Bharat Indl. Est., T. Jivraj Rd., Sewree, Bombay 400015.

Mahendra Inds., Takurwadi, G.B. Rd., Dahisar, Bombay 400068.

Pahlaj Bajaj & Co. (Novelties) Pvt. Ltd., 63, Jolly Maker Chamber 1, Nariman Point, Bombay 400021.

Prakash Straps Mfg. Co., C/o Swiss Trading Corpn., 28, Gobind Mahal, 86-B, N. Subhas Rd., Bombay 400002.

Sadhana Rhodium Plating Works, Empire Bldg., Room No. 34, Dr. D.N. Rd., Bombay 400001.

Tressa Straps Inds. (India), Dhanraj Indl. Est., Unit No. 101 & 104, Sun Mill Rd., Lower Parel, Bombay 400013.

Vawaco Enterprises, 326, Allied Indl. Estate, Bombay 400016.

Vcg & Co., Empire Bldg., Dr. D. Naoroji Road, Bombay 400001.

WATCHES—ALARM CLOCKS (ELECTRONIC), DESK TIME PIECES

Anglo Swiss Watch Co., 6, Dalhousie Sq. East, Calcutta 700001.

Bush India Ltd., Sukh Sagar, N.S. Patkar Mrg., Bombay 400007.

Cetus Electronics Pvt. Ltd., 16, G.T. Rd., Bhadreswar 712124 (Hooghly Dist.), W. Bengal.

WATCHES AND CLOCKS
IMPORTERS, DISTRIBUTORS
and
DEALERS
LAWRENCE WATCH CO.
150, Dr. D. N. Road,
Empire Bldg. (Mahendra Chamber),
Fort, Bombay 400 001.
Telephones : 264318/269324/268416/260130.
Estd. 1942.
Grams : " HAIRSPRING ".
●
SALES & SERVICE FOR :
All Kinds of Watches & Clocks.
Approved Govt. Contractors & Railways.
Registered Dealer for **Favre Leuba & Co.**
Authorised Sales & Service Agent for **HMT Watches.**

Chronomatic Ind. Pvt. Ltd., Prakash Mills Comp., Off Globe Mills Passage, Bombay 400013.

Cop-Wud Arts, 118/120, Satguru Nanik Ind. Estate, W. Express Highway, Goregaon East, Bombay 400063.

Eastern Watch Co., 231-3, Dr. D.N. Road, Bombay 400001.

Express Watch Co., 78, A. Rehman St., Bombay 400003.

Favre Leuba & Co. Ltd., 221, Dr. D. Naoroji Rd., Bombay 400001.

G.A. Tanwani Time Inds., 211, Arun Chambers Tardeo Rd., Bombay 400034.

Gravity Instruments Pvt. Ltd., Gravity House, Rakhial, Ahmedabad 380023.

HES Ltd., Jogeshwari Estate, S. Vivekanand Rd., Bombay 400060.

Jayna Time Ind. Pvt. Ltd., 7/25, Daryaganj, New Delhi 110002.

K.I.A. Watches & Novelties, 229, Arun Chambers, Tardeo Rd., Bombay 400034.

Lawrence Watch Co., Empire Bldg., 150, Dr. D. Naoroji Rd., Bombay 400001.

M. Vaman Nayak & Sons, O.B. No. 508, Mangalore 575002.

Master Clock & Watch Works Pvt. Ltd., Saki Vihar Rd., Powai, Bombay 400072.

Mukkanickal Electronic Instrument Co., Post Box 8, N. Parur 683513. (Kerala State).

Prestige International, A-4, Mayapuri Phase 1, New Delhi 110064.

Prex Miniclocks Pvt. Ltd., Post Box 10261, Calcutta 700019.

Sainak Watch Co., 60-A, Abdul Rehman St., Bombay 400003.

Scientific Clock Mfg. Co., Station Rd., Morvi 303641.

South Indian Watch Inds. Pvt. Ltd., 4, Ready Money Terrace, Bombay 400018.

Tiwac Ind. Pvt. Ltd., Hattikola, Dharwar 580001.

West End Watch Co., M. Gandhi Rd., Bombay 400023.

WATCHES—WRIST—STOP

Allina Ind. Pvt. Ltd., 127, Ind. Area A, Ludhiana 141001.

Amar Watches Pvt. Ltd., A-1-843, G.I.D.C., Makarpura Indl. Estate, Vadodara 390010.

G.S. Parewal & Associates Pvt. Ltd., Kasauli Rd., Dharampur 175040. Simla Hills, Himachal Pradesh.

Goa Time Movers Ltd., Shree Saraswati Mandir Bldg., 18th June Rd., Panaji 403001 (Goa).

Hindustan Machine Tools Ltd., (Watch Divn.), Jalahalli, Bangalore 560052.

Indian Time Inds., GIDC Godown Unit No. 6, Ankleshwar 393 002. (Gujarat).

Indo French Time Ind. Ltd., Udyognagar, S. Vivekanand Rd., Bombay 400062.

Indo-Swiss Time Ltd., A-23 New Shopping Complex, Defence Colony, New Delhi 110024.

Jayna Time Inds. Pvt. Ltd., 7/25, Daryaganj, New Delhi 110002.

Khanna Watches Ltd., 759, Sector 8B, Chandigarh 160017.

Monica Electronics Pvt. Ltd., 87, DSIDC, Okhla Complex, Phase II, New Delhi 110020.

Nasa Watches Pvt. Ltd., Sylvex Cable Compound, Saki Vihar Rd., Bombay 400072.

Packard Agencies, 4736/23, Ansari Rd., New Delhi 110002.

Pancholi Watch Co., Opp. Rly Stn., Chembur , Bombay 400071.

Raghav Electronic Ind. Pvt. Ltd., Solan 173211. H.P.

Sandoz (India) Watch Industries, B-20, Jhilmil Indl. Area, Shahdara, Delhi 110032.

Sarwa Time Inds., Chandni Chowk, Delhi 110006.

Sondhi Tressa Time Ind. Pvt. Ltd., 1139, Chandni Chowk, Delhi 110006.

Tata Hedge & Golay Ltd., Shreeshyla, Bangalore 560011.

Towa Clock & Tools Pvt. Ltd., City Stn. Rd., Raipur 492001.

WATER COOLERS, HEATERS & FILTERS, ETC.

Aarko Mfg. Co., 3-C, Ind. Estate, Jullundur 144004. (Punjab).

Ahmed & Co., 69-71, Lohar Chawl, Bombay 400002.

Air Conditioning Corpn. Ltd., 17, Taratolla Rd., Calcutta 700053.

Aluminium & Glassware Emporium, 289, N.S.C. Bose Rd., Madras 600001.

American Refrigerator Co. Ltd., 13-C, Russel St., Calcutta 700016.

Associated Marketing Agencies, Bharat Bldg., 93, Mount Rd., Madras 600002.

Blue Star Ltd., Kasturi Bldg., J. Tata Rd., Bombay 400020.

Cances Corpn., 51/1, First Main Rd., Raja Annamalaipuram, Madras 600028.

D.S. Trading Co. 28, Old China Bazar St., Calcutta 700001.

Ditz Electricals India Ltd., 29, Malkaganj Rd., Delhi 110007.

Everest Inds., 210, Jolly Bhuwan No. 2, 7, New Marine Lines, Bombay 400020.

Gem India Ltd., 2/90, Connaught Circus, New Delhi 110001.

Kantilal Chunilal & Co., 80/82, Vithalwadi, Bombay 400002.

Lektrik, XXX/1495, M. G. Rd., Ernakulam 682011. Kerala State.

Lloyd Sales Corpn., 386, V. Savarkar Mrg., Prabhadevi, Bombay 400025.

Majidia Tin Works, 2nd Mohammed Omer Kokil Path, Bombay 400009.

Metals Mfg. Co., P.B. No. 16215, Mazgaon, Bombay 400010.

Muktanand Corpn., Clark House, 8, Wodehouse Rd., Bombay 400039.

Nat Steel Equipment Pvt. Ltd., G.D. Ambekar Mrg., Dadar, Bombay 400014.

Nischa Deep Enterprises, 8, Victoria Crescent, Egmore, Madras 600105.

Panchmal Indl. Corpn., Ghatkopar Guest House, Opp. Rly. Stn., Bombay 400086.

Paragon Products, 205, New Okhla Indl. Blocks, Phase 1, New Delhi 110020.

Refrigerators & Home Appliances Co. Pvt. Ltd., 36, Mount Rd., Madras 600002.

Richardson & Cruddas Ltd., 1st Line Beach, Madras 600001.

Sanco Inds., N.C. Kelkar Rd., Bombay 400029.

Shantilal & Bros., 50-52, Lohar Chawl, Bombay 400002.

Solray Appliances Pvt. Ltd., 29/2, Kharadi Village, Off Pune-Nagar Rd., Pune 411014.

Spencer & Co. Ltd., 153, Mount Rd., Madras 600002.

Sur Industries P. Ltd., 163, Acharya J. Bose Rd., Calcutta 700014.

Trading Engineers, (Consumer Products Dn.) 3/4-A, Asaf Ali Rd., New Delhi 110002.

Tropical Refrigeration Inds., Kangra Bhuvan, 2, Dr. A. Besant Rd., Bombay 400025.

Union Co. (Motors) Pvt. Ltd., 118, Mount Rd., Madras 600002.

Veena Plastic Products Mfg. Co., C-35, Royal Ind. Estate, 5-B, Naigaum Cross Rd., Wadala, Bombay 400031.

Victor Equipments Pvt. Ltd., 1, Amar Indl. Estate, Kurla-Andheri Rd., Saki Naka, Andheri, Bombay 400072.

Voltas Ltd., 19, Graham Rd., Ballard Estate, Bombay 400038.

WATER FILTERS (PRESSURES/STORAGE TYPES)

Balsara Hygiene Products, 43, Nagindas Master Rd., Bombay 400023.

WATER METERS & WATER FITTINGS

Anand Water Meter Mfg. Co. Pvt. Ltd., M.G. Rd., Ernakulam, Cochin 628011.

Capstan Meters India Ltd., 104, Marine Chambers, New Marine Lines, Bombay 400020.

Dashmesh Engg. Works, 35, East Mohannagar, Amritsar 143001.

Easland Combines, Post Bag No. 2, P.O. Karamana, Trivandrum 695002. (Kerala State).

Kadakia Trading Corpn., 3, Bibijan St., Bombay 400003.

Kaycee Industries Ltd., 10, Elgin Rd., Calcutta 700020.

Mowcow Meters, 1,, Pollock St., Calcutta 700001.

Peter Atutokits Pvt. Ltd., Makwana Lane, Marol Naka, Sir M.V. Rd., Andheri East, Bombay 400059.

Rajkamal Water Meter Manufg. Co., 75, N. Subhas Rd., Calcutta 700001.

Scientific Electricals Sales Pvt. Ltd., Shalibanda, Hyderabad 500002.

Vasi Shums & Co., Vasi Bldg., Nagdevi St., Bombay 400003.

WATER TREATMENT PLANTS & WATER TANKS

Delhi

Capstan Meters (India) Ltd., 52, Janpath, New Delhi 110002.

D. Ionic India Pvt. Ltd., 50, Rani Jhansi Rd., New Delhi 110055.

Strait Engg. Co. (N.D.), K-21, H. Khas Enclave, New Delhi 110016.

Gujarat

Paramount Pollution Control Corpn., 76, Viswas Colony, Alkapuri, Vadodara 390005.

Sinter Plast Containers, Plastics Divn., Bharat Vijay Mills Ltd., Kalol 382721.

Madhya Pradesh

Jash Engg. Industries, Ind. Estate, Polo Ground, Indore 452003.

Maharashtra

A I Industries, M. Vasanji Rd., J.B. Nagar, Andheri East, Bombay 400059.

Bird & Co. Pvt. Ltd., United Bank of India Bldg., 25, Sir P. Mehta Rd., Bombay 400001.

Candy Filters (India) Ltd., Mahalaxmi Chambers, 22, B. Desai Rd., Bombay 400026.

Chloro Control Equipment Co., 384, V. Savarkar Mrg., Bombay 400025.

Dynatron Pvt. Ltd., Western Express Highway, Chakala, Andheri (E), Bombay 400069.

Environmental Systems, Mahalaxmi Chambers, 22, B. Desai Rd., Bombay 400026.

Grovers Pvt. Ltd., 223-231, Kaliandas Udyog Bhavan, Nr. Century Bazar, Bombay 400025.

Indian Hume Pipe Co., Ltd., Construction House, W. Hirachand Mrg., Bombay 400038.

ION Exchange (India Ltd., Tiecicon House, Dr. E. Moses Rd., Bombay 400011.

Komal Inds. 307, Goradia House, 100/104, Kazi Sayed St., Bombay 400003.

New Standard Engg. Co. Ltd., NSE Estate, Goregaon East, Bombay 40063.

Starit Water Treatment Co. Pvt. Ltd., 22, B. Desai Rd., Bombay 400026.

Wanson (India) Pvt. Ltd., Water Treatment Divn., Chinchwad, Pune 411019.

Westend Trading Co., 210, Dr. D.N. Rd., Bombay 400001.

Tamil Nadu

Arudra Engrs. Pvt. Ltd., 134, Angappa Naicken St., Madras 600001.

Water Treatment Co., 48-A, Sivanar Chetty No. 3 St., Salem 636006.

West Bengal

Indexel Betamatic, 354/1, Raja Ram Mohan Roy Rd., Calcutta 700008.

Jewell Engg. Corpn., 6, Old Post Office St., Calcutta 700001.

N.K. Inds., 146, B.K. Paul Ave., Calcutta 700005.

Waterman India Pvt. Ltd., 6A, Commerce House, 2, G.C. Ave., Calcutta 700013.

Zeolite India, 344/5, N.S.C. Bose Rd., Calcutta 700047.

WATERPROOF PAPER

Crescent Paper Waxers, 14, G.C. Ave., Calcutta 700013.

Industrial Paper Co., 715, Narayan Peth, Laxmi Rd., Pune 411030.

Madras Paper Inds., 356, T.H. Rd., Madras 600021.

Neptune Waterproof Mfg. Co., 105, Churchgate Chambers, New Marine Lines, Bombay 400020.

New Kwality Paper Waxers, 96, M. Babu St., Calcutta 700007.

Packing Materials Corpn., K.S. Gadgil Marg (East), Off Gokhale Rd., Bombay 400025.

Standard Paper Inds. Corpn., 151, Broadway, Madras 600001.

WATERPROOFING MATERIAL

Associated Small Inds., 11/2, Maharani Rd., Indore 452007.

Bitumen Products (India), 90A, Biren Roy Rd. (East), Calcutta 700041.

Britex Chemical Inds., Shree Mahavir Chambers, 1/5, Banaji St., Bombay 400001.

Chemisol Inds., 41, Princess St., Bombay 400002.

Hindustan Laminators, 130, Cotton St., Calcutta 700007.

Pacific Chemicals, P.O. Box 2532, Kalbadevi Rd., Bombay 400002.

Roman Inds., J.B. Nagar, Andheri East, Bombay 400059.

Shalimar Tar Products, 6, Lyons Range, Calcutta 700001.

WAX & WAX PRODUCTS

Bhattad Chemical Complex, 272/273, Angappa Naicken Streetl Madras 600001.

Chemofine Inds., 366, Salem Sorai, Allahabad 211001.

Esabhai Valimohamed & Co., 282-284, Samuel St., Bombay 400003.

Fateh Inds., 313, Samuel St., Bombay 400003.

Hindustan Candle Mfg. Co., Khatau Bldg., S.S. Rao Rd., Bombay 400012.

Indian Wax Ind., 4, Haresh Chambers, 313, Samuel St., Bombay 400003.

Jains Colour Mfg. & Supplies, 9/2692, Gali No. 17, Kailash Nagar, Delhi 110031.

Kedia Shellac Inds., Raniganj 824210 (Gaya).

Kirti Kumar Chandulal & Co., 50, Issaji St., Bombay 400003.

Mahatha Petrochemicals, Sree Meenakshi Gardens, Kizhakattalai, Madras 601303.

Mansaram & Co., 315/317, Abdul Rehman St., Bombay 400003.

National Sealing Wax Manufrs., 315/317, A. Rehman St., Bombay 400003.

Selvam Chemical Inds. P. Ltd., Sivakasi 626123. (Tamil Nadu).

United Industries, 364/370, Samuel St., Bombay 400003.

Waxoils Pvt. Ltd., Mahavir Darshan, R. No. 14, Bhandari St., Bombay 400003.

WEIGHING MACHINES & SCALES

Andhra Pradesh

Narne Tulaman Manufrs. Pvt. Ltd., Balanagar Township, Hyderabad 500037.

Bihar

Shankar Wire Products Inds., B. Deoghar 814112. (Santhal Parganas).

Delhi

Aval Scales Inds. Pvt. Ltd., G-10, Vishal Bhavan, Nehru Place, New Delhi 110024.

Avon Scales Co., 28, Motia Khan, Jhandewalan Rd., New Delhi 110055.

Precision Machinery Co. Pvt. Ltd., 3428, D. B. Gupta Rd., New Delhi 110055.

Gujarat

Eagle Scale Mfg. Works, Behind Vimal Mills, Opp. Indl. Area, Naroda, Ahmedabad 382330.

Karnataka

Venkateswara Weighing Services, 306, R.P.C. Bldg., Old Tharagupet, Bangalore 560063.

Maharashtra

A.M. Master & Co., 179, Janikar St., Bombay 400003.

Accurate Weighing Machines Co., Motishaw Rd., Bombay 400027.

Acme Scales Co., 324-C, Grant Rd., Bombay 400007.

Avery India Ltd., 8, Narottam Morarjee Marg, Ballard Estate, Bombay 400038.

Crown Scales, M. Vasanji Rd., Makwana, Marol Naka, Bombay 400059.

Emkay Weighing Equipments, Post Box 880, Bombay 400001.

Francis Klein & Co., (Bombay) Pvt. Ltd., Shale Bldg., Bank St., Bombay 400023.

Gramtom Equipments Co., A-5, Anuradha, 36, Moghul Lane, Bombay 400016.

Hindustan Scale Co., 186/188, Janjikar St., Bombay 400003.

Libra Ind., Jeevan-Sahakar, Sir P. Mehta Rd., Bombay 400001.

National Metal Ind., 15 A, Parel Village Rd., Bombay 400012.

Petzru (India), 72, Mistry Ind. Complex, M.I.D.C., Chakala, Andheri East, Bombay 400093.

St. Joseph Engg. Works, 260/18-20, Sane Guruji Marg, Jacob Circle, Bombay 400011.

Vaid Enterprises, 215-A, Moulana Azad Rd., Bombay 400008.

Vigilant Scales & Services, Janta Mkt., LBS Mrg., Bhandup, Bombay 400078.

Tamil Nadu

C.K.P. Industries (Regd.), 14, Madhavaram High Rd., Madras 600060.

Equipments India, 459, Bharathiar Rd., P.N. Palayam, Coimbatore 641037.

Everest Scales Co., 262, Trichy Rd., Coimbatore 641018.

Giri Bros., 51, N. Beach Rd., Madras 600001.

Meena Scales Co., 475-A, Chetty St., Coimbatore 641001.

Sarda Scales Co., 275, Thambu Chetty St., Madras 600001

Sri Venkateswara Scales Co., 79. Acharappan St., Madras 600001.

West Bengal

Asiatic Machinery Corpn. Pvt. Ltd., 10/1, K. Chandra Lane, Howrah 711104.

Avery India Ltd., 28/2, Waterloo St., Calcutta 700069.

Bharat Weighing Scales & Engg. Syndicate, 75/1, K. Nundy Lane, Howrah 711101.

Bharati Scales & Engg. 4/1, Haldarpara Le., Howrah 711101.

Eastern Scales Pvt. Ltd., 12, Gurusaday Rd., Calcutta 700019.

George Salter India Ltd., Chartered Bank Bldg., Calcutta 700001.

Howrah Tdg. & Engg. Co., 96/98, Narsingh Dutta Rd., Howrah 711106.

India Machinery Co. Ltd., Dassnagar, Howrah 711105.

N.C. Das & Bros., 10/13, B. Mullick Lane, Howrah 711101.

Rovus India Machinery Mfg. Co., 33, M. Bhattacharjee Rd., Howrah 711104.

W.B. Scales Co. Pvt. Ltd., 10K. Chandra Lane, Howrah 711104.

WELDING & SAFETY EQUIPMENT, ELECTRODES, ETC.

Andhra Pradesh

Electric Transformer & Equipment Co., B-29/30, Indl. Est., Sanatnagar, Amirpet, Hyderabad 500018.

Prefab Gratings Ltd., 44/3 RT, Sanjeevareddy Nagar, Hyderabad 500018.

Southern Electrodes Pvt. Ltd., Moula Ali, Hyderabad 500017.

Delhi

A.S. Jain Electrodes, 12/50008, Hauz Qazi, Delhi 110006.

Bharat Electric Works, 22, Qutab Rd., Delhi 110006.

Chawla Arc Welding Transformers, 1478, S.P. Mukherjee Marg, Delhi 110006.

H.S. Balbir & Bros., A-14, Rana Pratap Bagh, Delhi 110007.

Jai Gopal Engg. Works, P-3/7, Krishna Nagar, Delhi 110051.

Kapoor Electrodes Pvt. Ltd., 1E-18, Jhandewalan Extn., New Delhi 110055.

Prakash Ind., 171-A, Ramnagar Extn., Delhi 110051.

Rajindra Electric Works, 3539, Qutab Rd., Delhi 110006.

Sham Ravindra & Co., 23, New Qutab Rd., Delhi 110006.

Tejindra Electric Works, 24, New Qutab Rd., Delhi 110006.

Weldmaster Electrical Co. (India), Weldmaster House, Church Rd., Kashmere Gate, Delhi 110006.

Goa

Goa Super Electrodes Pvt. Ltd., SA-10, Indl. Estate, Zuarinagar 403726.

Gujarat

Axon Controls, E/2, Ind. Estate, Gorwa Rd., Vadodara 390003.

Bharat Forge & Press Ind., Plot No. 35, G.I.D.C. No. 2/A1, Makarpura Ind. Estate, Vadodara 390009.

Cema Pvt. Ltd., Opp. D.Cabin, Chhani Rd., Vadodara 390001.

Kobe Steels Pvt. Ltd., 4, Parimal Park, Behind Delux Socy., New Chhani Rd., Vadodara 390002.

Welding Rods Manufg. Co., Ind. Estate, Udhna 394210.

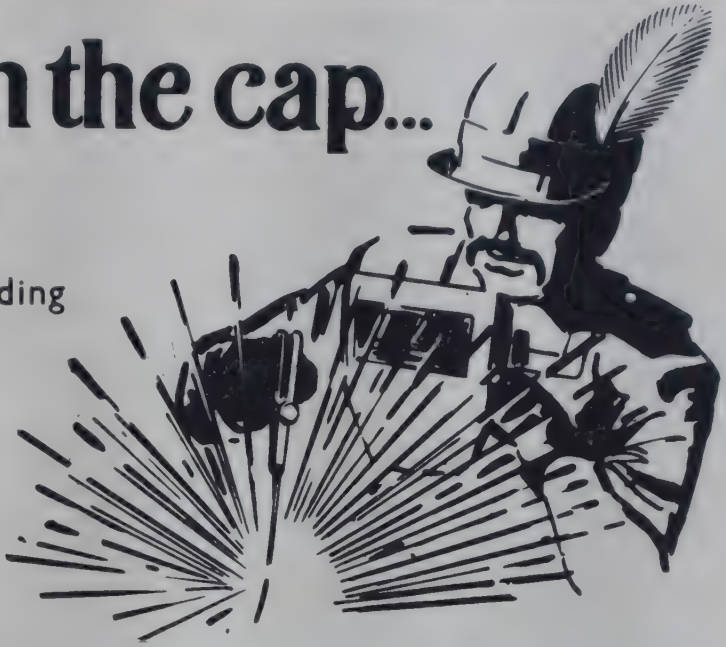
Haryana

Special Machines, Byepass, Kunjpura Crossing, Karnal 132001.

Karnataka

F. Fibre (Bangalore) Pvt. Ltd., A-83, Ind. Estate, Rajajinagar, Bangalore 560044.

a feather in the cap...



ARC BRAZER has bagged the
Transworld Trade fare
Gold Medal Award for outstanding
Performance for Welding at
Silver Jubilee Session 1980-81
held on 15th March, 1981
at Madras

(A SIX STAR CONCERN)

Hon'ble Minister for Industries, Govt. of Tamilnadu Shri S. Thirunavukkarasu presenting the Gold Medal to Shri Indernath Sharma, Chairman and Managing Director of Arc Brazer Pvt. Ltd.

TRANSWORLD TRADE FARE
GOLD MEDAL
SELECTION AWARD

All Welding needs under one roof

ARC BRAZER PVT. LTD.

Regd. Office : Showroom/Sales
20, Jackeria Bunder Road,
Cotton Green, Bombay - 400 033
Phone : 395731/32
Grams : 'ARCBRAZER'
Telex : 011-4793 'ARCBRZR'

Sales Office :
84, R. S. Nimbkar Marg,
Opp. Municipal Workshop
Bombay - 400 008
Ph : 378898-374443

IAS

The most advanced welding technology is yours for the asking—Philips

Philips have an electrode for virtually every application you can think of! For today's vast range of welding jobs, often extremely exacting, Philips provide an unrivalled choice of electrodes—each thoroughly researched and exclusively formulated.

Fact is, Philips command the world's latest electrode technology. Through the last three and a half decades, searching for new and better answers to welding problems, Philips have made contributions of worldwide significance. And the quest goes on incessantly...

More, Philips engineers have done the 'impossible' in solving welding problems, again and again, setting an unmatched record in technical service, Deploying the most advanced facilities. Philips can help solve your specific application problems.

Just get in touch

Peico Electronics & Electricals Limited
Welding Division, Block 'A', Shivsagar Estate,
Worli, Bombay 400 018

Philips welding—Philips always find a better weld

PHILIPS

OBM 3210

PHILIPS
PHILIPS
I-D
I-D

Phone Nos. : **256781, 295409 & 319432.**
After Office Hours : **527992.**

Grams :
" METASAFE ".

METASAFE trading corporation

Manufacturers, Importers, Exporters, Stockists & Suppliers of :

ARC & GAS WELDING ACCESSORIES & INDUSTRIAL SAFETY EQUIPMENT

G. P. O. Box No. 1793, Bombay 400 001
65, Sonawala Bldg., 2nd Floor, Apollo Street, Fort,
BOMBAY 400 023.

WELDING ACCESSORIES & SAFETY EQUIPMENT

MODERN WELDING MACHINES :

All types of WELDING Transformers, SPOT Welder, ARGON-ARC UNIT (TIG) RECTIFIERS, GENERATOR, PROFILE CUTTING MACHINE.

ARC WELDING ACCESSORIES :

SUPERFLEXO Superior Quality WELDING CABLE, Electrode Holder, Earthing Clamp, Earthing Cable, Fibre Hand Screen & Helmets, Arc Welding Goggles, Chipping Hammer, Lugs (Sockets), imported WELDING GLASSES. Also we are undertaking Guaranteed Repairing Job of Welding Machine, Cutting Torch & Regulators.

GAS WELDING ACCESSORIES :

OXYGEN Regulator, ACETYLENE Regulator, ARGON, Chlorine, Nitrogen, Medical Regulators, BLACK & RED Hose Pipe for Welding & Cutting, Hose Clips as per ISI, Cylinder Trolley, Cylinder Opening & Closing Key, Spark Lighter, Steel Wire Brush, Stainless Steel Brushes, Circular Steel Wire Brush, Hose Pipe Connection, Regulator Nut, Hose Protector & all types of Parts for Regulator & Cutters.

SPECIAL ELECTRODES & GAS WELDING RODS :

Cast Iron Electrodes, Stainless Steel, Hard Facing, High Manganese Steel, Bronze, Copper, Brass Brazing Rods, Copper (Pure), Copper Coated Mild Steel, Cast Iron Super Silicon, Aluminium (Pure), Aluminium 5% & 10% Silicon, Stainless Steel for ARGON ARC WELDING.

SAFETY EQUIPMENT & PROTECTIVE CLOTHING :

Various types of Hand Gloves, Aprons, Sleeves, Leg-guard (Asbestos, Chrome, Sheepskin, Canvas, Rubber), Hood, Boot, Suit, Jacket, Face Mask, P. V. C. (Oil, Acid & Alkali Proof) Suits, DUST & GAS MASK, Respirator, Safety Goggles, Safety Belts, Shock-proof Hand Gloves upto 25,000 Volts, Shock-proof Mattings, INDUSTRIAL HEAVY DUTY GUMBOOTS, Safety Shoes, P. V. C. Fibre, Fibre Glass & Aluminium Helmets & First Aid Box.

P. V. C. WELDING TORCH & RODS :

P. V. C. Welding Torch complete in Box, High Density Polythene Welding Rods, Polypropylene Welding Rods, Rigid P. V. C. Rods, P. V. C. Cements, P. V. C. Welding & Leaking Tester, SPARE HEATING & PORCELAIN ELEMENTS for P. V. C. Welding Torch.

SGS/KEPL/2/79

KEARC

WELDING EQUIPMENT

FOR
MODERN
WELDING
SHOPS

FOR ALUMINIUM, ALLOY STEEL
AND HIGH QUALITY WELDING
MANUAL OR SEMI-AUTOMATIC

ALSO VERSATILE AC OR DC WELDING
POWER SOURCES, DOUBLE AND
MULTI-OPERATED WELDING TRANSFORMERS
AND RECTIFIERS; AND RANGE OF
RESISTANCE WELDERS FOR SPOT, WIRE
OR BUTT WELDING.

KE KANUBHAI ENGINEERS PVT. LTD.
Regd. Office: 3 Mangoe Lane,
Calcutta 700 001. Phone: 23-8507/8.
Gram: INDENTERS Telex: 021-3532

BRANCHES:

117, Bajaj Bhavan, Nariman Point,
Bombay 400 021. Phone: 233237/233320
Gram: TEKNOWELD Telex: 011-4763

5, Smith Road, Madras 600 002.
Phone: 87596 Gram: WELDTEKNIK

30 Motia Khan, Jhandewalan Road
New Delhi 110 055. Phone: 513292-522863

Kirloskar Electric Co. Ltd., Ind. Area, Bangalore 560010.

Widia (India) Ltd., 8/9th Mile, Tumkur Rd., Bangalore 560022.

Madhya Pradesh

D & H Secheron Electrodes Pvt. Ltd., 44/46, Indl. Estate, Kila Maidan, Indore 452006.

Maharashtra

Advani-Oerlikon Pvt. Ltd., Radia House, 6, K. Dubash Mrg., Bombay 400001.

Alps Trdg. Co., 49-57, Bibijan St., Bombay 400003.

Apar Pvt. Ltd., 24, S.A. Brelvi Rd., Bombay 400023.

Arc Brazer Pvt. Ltd., 20, Jackeria Bunder Rd., Cotton Green, Bombay 400033.

Asian Metal Inds., 91, Kika St., Gulalwadi, Bombay 400004.

Automatic Elec. Pvt. Ltd., Rectifier House, Wadala, Bombay 400031.

Chemi Weld Inds., 187, Dr. D.N. Rd., Near Central Camera, Bombay 400001.

Daga Udyog, 32, Dr. Wilson St., Bombay 400004.

Deepak Inds., 17, Sitafaldi, Dr. Mascarenhas Rd., Mazgaon, Bombay 400010.

Dowell's Elektro Works, Satguru Estate, Off Aarey Rd., Goregaon (East), Bombay 400063.

EBY Industries, Bldg. No. 2, Tank St., Nagpada, Bombay 400008.

Electroweld Inds., Opp. Navjivan Socy., Mahul Rd., Chembur, Bombay 400074.

Estiwelding Corpn., 254, Nagdevi St., Bombay 400003.

Ewac Alloys Ltd., L. & T. House, B. Estate, Bombay 400038.

Faethchand & Co., 118, Arun Chambers, Tardeo Rd., Bombay 400034.

General Electrodes & Equipment Ltd., Jiji House, Ravelin St., Bombay 400001.

General Engg. Corpn., Samroz Ind. Estate, Bombay 400062.

Hasmukh Traders, 8, Jawahar Nagar, S.V. Rd., Goregaon, Bombay 400062.

Hind Rectifiers Ltd., Lake Rd., Bhandup, Bombay 400078.

Indian Oxygen Ltd., L.B. Shastri Marg, Ghatkopar West, Bombay 400086.

Indian Smelting & Refining Co. Ltd., LBS Mrg., Bhandup, Bombay 400078.

Indl. Manufg. Syndicate, 22D, Zaveri Bldg., 12, Khetwadi, Bombay 400004.

Jai Balaji & Co., Opp. A.C. Mkt., 84, AB, Tardeo Rd., Bombay 400034.

Jaya Hind Sciaky Ltd., D-1 Block, Plot No. 181, Chinchwad, Pune 411019.

Jitendra Metal Inds., 11, Anupam Ind. Estate No. 2, Opp. Ralliwolf, Agra Rd., Bombay 400080.

Kayjay Engineers, 123, Mahatma Gandhi Rd., Bombay 400023.

Kearc Welding Equipment, 117, Bajaj Bhavan, Nariman Point, Bombay 400021.

Kejee Electric Co., A-121, H. Block, M.I.D.C., Pimpri, Pune 411018.

Khosla Engg. Pvt. Ltd., 43, Aundh Rd., Kirkee, Pune 411003.

Larsen & Toubro Ltd., L & T House, Ballard Estate, Bombay 400038.

Malik & Co., 157/78, Maulana Shwkatali Rd., Two Tanks, Bombay 400004.

Malik Electricals Pvt. Ltd., Tejpaul's Compd., Kurla-Andheri Rd., Saki Naka, Bombay 400072.

Mechelonic Welders Pvt. Ltd., 18, Govt. Indl. Estate, Kandivli West, Bombay 400067.

Metasafe Trading Corpn., 65, Apollo St., Bombay 400023.

Miraj Electl. & Mechanical Corpn., M.N.D'Souza Compd., Kherani Rd., Sakinaka, Bombay 400072.

Parekh Bros. Pvt. Ltd., 65, M. Gandhi Rd., Bombay 400023.

Peico Electronics & Electricals Ltd., Welding Divn., Shivasagar Estate, Block A, Worli, Bombay 400018.

Power Pack Enterprises, Old Nagardas Rd., Andheri East, Bombay 400069.

Sap Inds., 167 Vidyanagari Marg., Kalina, Bombay 400098.

Shree Shamalji Ind., 15-D, Agiary Lane, Kalbadevi, Bombay 400002.

Sparkweld, 34, Balaram Bhawan, 350-52,, Grant Rd., Bombay 400007.

Steelweld Inds., 65, Apollo St., Bombay 400023.

Supreme Electric & Engg. Works, Acharya Indl. Estate, Wadavali, Chembur, Bombay 400074.

Technical Auto Welding Works, 362, V.P. Road, Bombay 400004.

Trade (India) Corporation, 7, Annes Chambers Annexe, Carmac Rd., Bombay 400001.

Tradeweld, 7, Kakad Chambers, 132, Dr. A. Besant Rd., Worli, Bombay 400018.

Universal Agencies, 250, Reay Rd., Bombay 400010.

Universal Welding & Engg. Co., Wagle Ind. Estate, Bombay-Agra Rd., Thane 400604.

Vishwa Bharati Trdg. Co., 45, Mint Rd., Bombay 400001.

Weldaid Ind., 58/59, Goa St., Near G. P. O., Bombay 400001.

Weldwell Electrodes Pvt. Ltd., Tardeo Bldg., Tardeo Rd., Bombay 400007.

Punjab

Berco Welding & Electrical Pvt. Ltd., G. T. Rd., Bye-Pass, Jullundur 144004.

Tamil Nadu

Ahura Welding Electrodes Manufrs. Ltd., 6-10, Trichy Rd., Coimbatore 641018.

Annamalai Electric Co., 34, S. Chetty St., Madras 600002.

Asiatic Engg. Services, 28-F, Wallers Rd., Madras 600002.

D. & H. Electrodes, Khivraj Estate, 624, Anna Salai, Madras 600006.

Industrial Enterprises, 57, General Patters Rd., Madras 600002.

Mardia Ind. Corpn., Ind. Estate, Vyasarpadi, Madras 600039.

Rockweld Electrodes India Ltd., 29, Indl. Estate, Ambattur, Madras 600058.

Shenoy Electl. Inds., K-2, Vyasarpadi Ind. Estate, Erukancheri High Rd., Madras 600039.

Uttar Pradesh

Maheshwari Ind. Corpn., Sarrafa, Meerut 250001.

Modi Arc Electrodes, Modinagar 201204 (Meerut Dist.).

West Bengal

Asiatic Oxygen Ltd., 8, Dalhousie Sq. East, Calcutta 700001.

Basmall & Co. (India) Pvt. Ltd., 56-D, Beadon St., Calcutta 700006.

Biswa Trading Corpn., 85, Netaji Subhas Rd., Calcutta 700001.

Daga Udyog, 418, Brajodulal St., Calcutta 700006.

Dey's Electl. & Engg. Works, 11/B, Rahim Ostagar Rd., Calcutta 700045.

Electrodes (India) Pvt. Ltd., 74, Beliaghata Rd., Calcutta 700010.

Guest, Keen William Ltd., 3A, Shakespeare Sarani, Calcutta 700016.

Indian Oxygen Ltd., Oxygen House, P-34, Taratolla Rd., Calcutta 700053.

Industrial Gases Ltd., 138, Canning St., Calcutta 700001.

Industrial Protectives & Equipments, 62, Bentick St., Calcutta 700001.

Industrial Steel & Hardware Stores, 85, N. Subhas Rd., Calcutta 700001.

Jai Hanuman Indl. Corpn., 1, Bonefield Lane, Calcutta 700001.

Jindal Traders, 89, N. Subhas Rd., Calcutta 700001.

Kanubhai Engineers Pvt. Ltd., 3, Mangoe Lane, Calcutta 700001.

New Dominion Engg. Works, 1/B, Pottery Rd., Calcutta 700015.

Planters' Stores & Engg. Co., Mercantile Bldg., 9, Lallbazar St., Calcutta 700001.

Sur Iron & Steel Co. Pvt. Ltd., 15, Convent Rd., Calcutta 700014.

Vomex (India) Corpn., 85, N. Subhas Rd., Calcutta 700001.

Weldman Gloves & Inds., 30, Sir Hari Ram Goenka St., Calcutta 700007.

WINCHES & HOISTS

C.K.P. Engg. Works, 111, A. Dady St., Bombay 400004.

Construction Machinery Corpn., 32, G. Chandra Ave., Calcutta 700001.

(Also see Material Handlings—Cranes, Pulleys, Hoists in this list.)

WIRE—COPPER

(See Copper Wire in this list.)

WIRE DRAWING MACHINES

Ajitsaria Ind., 43, Cotton St., Calcutta 700007.

Associated Engg. Inds., Near H.M.T., Beawar Rd., Ajmer 305003.

Associated Machinery Corpn., P. B. No. 40, Ghaziabad 201001 (U.P.)

Bombay Furnaces Pvt. Ltd., Stadium House, V. Nariman Rd., Bombay 400020.

Hind Engg. Works, 2, Kundan Lane, Liluah 711204, Howrah Dist.

Keshavlal & Sons, P.B. No. 222, Jamnagar 361001.

Khemka Instruments Pvt. Ltd., 21A, Shakespeare Sarani, Calcutta 700017.

Novelty Engg. Co., B. Lahiri Lane, Santragachhi 711104, Howrah Dist.

Promain Ltd., Kanchanjunga, 18, Barakhamba Rd., New Delhi 110001.

S.E.A. Corpn. India Pvt. Ltd., P-22, Swallow Lane, Calcutta 700001.

Wire Machinery Corpn. Ltd., 1/A, Vansittart Row, Calcutta 700001.

WIRE NETTING

(See 'Wire Products' in this list.)

WIRE PRODUCTS

Andhra Pradesh

Vishaka Wire Ropes Ltd., D-15 & 16, E.E.I. Estate, Vishakapatnam 530012.

Bihar

Wire Products (India), Station Rd., Chutia, Ranchi 834001.

Delhi

Accurate Wire Industries, 3392, H. Baqua St., Hauz Khas, Delhi 110006.

Jainsons Steel Rand & Metal Industries, 294, Inside Ajmeri Gate, Delhi 110006.

Gujarat

Industrial Fasteners of Gujarat Pvt. Ltd., Maneja, Vadodara 390013.

National Wire Products, 6, Rajput Para, Rajkot 360001.

Navsari Processing Ind. Pvt. Ltd., Near Rly. Stn., Maroli 396436.

Tensile Steel Ltd., Lalkuva, Vishwamitri Rd., Vadodara 390001.

Haryana

Industrial Cables (India) Ltd., Lalchand Nagar, P. O. Julana 126101, Dt. Jind.

Ratna Industries, 24, K.M. Mathura Road, Faridabad 121003.

Karnataka

Canara Wire & Wire Products Pvt. Ltd., Azeezzuddin Rd., Mangalore 575001.

Deccan Wires Ltd., Post D. R. Coll., Bommanahalli, Bangalore 560029.

Fasteners & Formers, Dyvasandra Indl. Area, Whitefield Rd., Bangalore 560048.

Mysore Wire & Metal Inds., 13, 4th Cross, Magadi Rd., Bangalore 560023.

South India Electrical Corpn., 229, New Mkt., Chickpet, Bangalore 560053.

Madhya Pradesh

Vora Wire, Sanwer Rd., Indl. Estate, Sector A, Indore 452003.

Maharashtra

A.A. Morbiwalla & Co., 109-111, A. Rehman St., Bombay 400003.

Abdulhusein Peerbhoy & Sons, 66/67, Bhandari St., Bombay 400003.

Ajit Wire Industries Pvt. Ltd., 58, M. Vissanji Rd., Bombay 400059.

B.R. Wire Nails Pvt. Ltd., Vaswani Mansion, Dinshaw Vachha Rd., Bombay 400020.

Bharat Engineering & Wire Products, 24, 2nd Bhoiwada, Bombay 400002.

Bhilai Wires Ltd., 103, Loha Bhavan, P. D'Mello Rd., Bombay 400009.

Bombay Nails Pvt. Ltd., 11, Horniman Circle, 2nd Flr., Bombay 400023.

Bombay Wire Netting Co., B. M. C. Chawl, Sabu Siddique Rd., Bombay 400001.

Bombay Wire Ropes Ltd., Jolly Bhavan No. 1, New Marine Lines, Bombay 400020.

Bohra Metal & Wire Ind., Opp. Premier Automobiles, Off Agra Rd., Kurla, Bombay 400070.

Eldee Wire Ropes, 3, Broach St., Bombay 400009.

Evergreen Wirecloth Factory Pvt. Ltd., 3-D, Maker Bhavan No. 2, New Marine Lines, Bombay 400020.

Great India Net Industry, 10, Homi Mody St., Bombay 400023.

Harishchandra & Co., Jaliwala, 233, A. Rehman St., Bombay 400003.

Hindustan Transmission Products, Shree Niketan, F Block, Shiv Sagar Estate, Worli, Bombay 400018.

India Steel Inds., 134, N. Dhuru St., Bombay 400003.

J.J. Wire Cloth Inds., 105/107, Abdul Rehman St., Bombay 400003.

Jeetmul Jaichandlal Pvt. Ltd., 105/107, A. Rehman St., Bombay 400003.

Laxmi Wire & Metal Industries, 202, Arun Chambers, 2nd Flr., Tardeo Rd., Bombay 400034.

EVERGREEN WIRECLOTH FACTORY PRIVATE LIMITED

Leading Manufacturers of :

Gava Separators (Demister — Mist Eliminator), HYFLUX Column Packings, Welded Wiremesh for general use and for Reinforcement for Wired Glass and suppliers of other wire products — Stainless Steel, Ferrous & Non-Ferrous Wire Mesh, Industrial Screens, Air Filter Wire Mesh, Chain Link Fencing etc., etc.

Laxmidas J. Thakkar *(Chairman)*
Chandrakant L. Kharam *(Mg. Director)*
Ajit L. Thakkar *(Director)*

Regd. Office :

3-D, Maker Bhavan No. 2, 18, New Marine Lines, P.B. No. 11100, Bombay 400020.
Phones: 312461/312706. Grams: " WIREMESH ".
Telex: 011-3244. Code: "MESH IN".

Manco Sales Corpn., 256/58, N. Natha St., Bombay 400009.

Metal Perforators, 43, A. Rehman St., Bombay 400003.

Mohatta & Heckel Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

Multiweld Wire Co. Pvt. Ltd., 59, Marol Maroshi Rd., Bombay 400059.

N.J. Metal Screens Manufrs. Pvt. Ltd., 134, N. Master Rd., Bombay 400001.

National Wire & Metal Industries, Sonawalla Rd., Goregaon (East), Bombay 400063.

National Wire & Wire Products, 36, Tamarind Lane, Bombay 400023.

National Wire Heald Works Pvt. Ltd., Vithaldas Chambers, Homi Mody St., Bombay 400023.

Nemat Wire Netting Products, 145, Nagdevi St., Bombay 400003.

New Ea Trading Agency, Kotkar Indl. Estate, Goregaon East, Bombay 600063.

Prakash Engg. Works, Tarun Plastic Compound, Nagardas Rd., Mogra, Andheri (E), Bombay 400069.

Rainbow Iron Works, 113, A. Rehman St., Bombay 400003.

S. Mehta & Co., Anees Chambers, Near Carnac Bridge, Bombay 400001.

Shah Steels Inds. Pvt. Ltd., Post Box No. 7722, Bombay 400092.

Shree Ganesh Wire Ind., 26/28, Bapu Khote Crosslane, Bombay 400003.

Shree Wire Rope Mfg. Co., Hanuman Silk Mills Compd., Opp. Dock Yard Colony, Bhandup, Bombay 400078.

Siriram & Co., 97, N. Dhuru St., Bombay 400003.

Standard Wire Products, 83, Maharshi Karve Marg, Bombay 400020.

Suprasteel Inds. Inc., C-202, Prakashnagar, Mogul Lane, Bombay 400016.

United Wire Ropes Ltd., Vulcan Ins. Bldg., V. Nariman Rd., Bombay 400002.

Zenith Iron Works, 46, Abdul Rehman St., Bombay 400003.

Pondicherry

Pondy Welded Mesh, Valudavur Rd., Muthirapalayam, Pondicherry 605010.

Tamil Nadu

A. V. J. Wires Pvt. Ltd., 35, Sembudoss St., Madras 600001.

Chain Link & Wire Netting Ind., 23, Gantz Rd., Madras 600012.

Globe Industrial Corpn., 171/173, Nainyappa Naicken St., Madras 600003.

Indian Reinforcing Co., 4, Mount Poonamalee Rd., Madras 600089.

Indian Steel Rolling Mills Ltd., Tiruninravur 602024. (T. Nadu.)

Indian Wire Products Inds., 104, N. Naicken St., Madras 600003.

Jeetmull Jaichandlall, 171/173, Nainyappa Naicken St., Post Box No. 509, Madras 600003.

Kiran Wire Netting Co., 260, Rasappa Chetty St., Madras 600003.

Madras Wire Products Ltd., 9/6, Madras Avadi Rd., Ambattur, Madras 600053.

Precisa Wire Cloth Co. Pvt. Ltd., 45/1, Athipet, Madras 600058.

Rama Metal Industries, 70-B, Rama Naicken St., Madras 600013.

Shalimar Wires & Inds. Ltd., 8, Kondi Chetty St., Madras 600001.

Swiss Welded Mesh Co. Pvt. Ltd., A-7, Ind. Estate, Madras 600058.

Wirenetting Industries Corpn., 17, Randalls Rd., Vepery, Madras 600007.

Uttar Pradesh

Arkay Wires Pvt. Ltd., 117/491, Pandunagar, Kanpur 208005.

Hemkunt Steel & Wires Pvt. Ltd., 48, Indl. Area, Site No. IV, Sahibabad, Ghaziabad 201010.

West Bengal

Bengal Sheet Metal Works, 19-B, B. B. Ganguly St., Calcutta 700012.

Bengal Wire Syndicate, 63, Sir Hariram Goenka St., Calcutta 700001.

Bharat Wire Netting Factory, 113, N.Subhas Rd., Calcutta 700001.

Birani & Co., 89, N. Subhas Rd., Calcutta 700001.

Fort William Co. Ltd., 14, N. Subhas Rd., Calcutta 700001.

Hind Wire Craft Ind., 156, J. Bajaj St., Calcutta 700007.

Hind Wire Industries Ltd., P-16, Kalakar St., Calcutta 700007.

Hindustan Wire Products Ltd., 14, N. Subhas Rd., Calcutta 700001.

Hindustan Wires Ltd., 3A, Shakespeare Sarani, Calcutta 700013.

India Commerce & Industries Corpn., 32, Armenian St., Calcutta 700001.

Indian Steel & Wire Products Ltd., 7, Wellesley Place, Calcutta 700001.

Indo-American Electricals Ltd., 21, Old Court House St., Calcutta 700001.

Industrial Metal & Wiremesh (Engg.) Co., 18, R.N. Mukherjee Rd., Calcutta 700001.

International Wirenail Mfg. Co., 196-B, Chittaranjan Ave., Calcutta 700007.

J & K Steel & Inds. Ltd., 7, Council House St., Calcutta 700001.

Jeetmull Jaichandlall, 109, N. Subhas Rd., Calcutta 700001.

Kanji Pannachand Pvt. Ltd., 33, Armenian St., Calcutta 700001.

Karfa & Co., 115, N. Subhas Rd., Calcutta 700001.

Kiran Wirenetting Co., 18, Raja Woodmunt St., Calcutta 700001.

M. S. Industries, P-10, New Howrah Bridge Approach Rd., Calcutta 700001.

Murarka (Overseas) Co., 137, N.S. Rd., Calcutta 700001.

National Rolling & Steel Ropes Ltd., 'Nicco House', 2, Hare St., Calcutta 700001.

Novelty Engg. Works, Brojnath Lahiri Lane, Santragachi 711104. Howrah Dist.

Rajesh Udyog, 4/1, Madan St., Calcutta 700013.

Shalimar Wires & Inds. Ltd., 27A, Camac St., Calcutta 700016.

Sonthalia & Co., 71, Jamunalal Bajaj St., Calcutta 700007.

Standard Metal Co., 101, N. Subhas Rd., Calcutta 700001.

Steel & Wire Products (India), 38, B. K. Paul Ave., Calcutta 700005.

Sterling Products Co., 1/4C, K. Chatterjee Rd., Calcutta 700002.

Sushil Wire Inds., 116, Stephen House, Calcutta 700001.

Thisa (India) Pvt. Ltd., E-2, Gillander House, 8, N. Subhas Rd., Calcutta 700001.

Usha Martin Black (Wire Ropes) Ltd., 14, Princep St., Calcutta 700072.

Wire Crafts Ltd., 8, Lyons Range, Calcutta 700001.

WIRELESS EQUIPMENT

Globe Engg. Corpn., 2547, Rajguru Rd., Paharganj, New Delhi 110055.

WIRES, CABLES & ACCESSORIES

Andhra Pradesh

Gangappa Cables Ltd., Uppal Rd., Hyderabad 500039.

Mazda Cable Co., 7A, Vengalrao Nagar, Hyderabad 500890.

Minicon Insulated Wires Pvt. Ltd., A-6, Ind. Estate, Sanatnagar, Hyderabad 500018.

Radiant Cables Pvt. Ltd., B1 & 2, Indl. Estate, Sanatnagar, Hyderabad 500018.

Reshma Cable Ind., Lakdikapul, Hyderabad 500004.

Delhi

Aggarwal Cable Works, 3303, Bazar Sitaram, Delhi 110006.

Allied Agencies, 1399, Pahari Imli, Jama Masjid, Delhi 110006.

Bharat Cable Manufg. Co., 1051, Bazar Sita Ram, Delhi 110006.

Biren Manufg. & Co., 25, River Apartments, 45, Sham Nath Marg, New Delhi 110007.

Chowdhry Instrumentation, 105/110, Model Basti, New Delhi 110005.

Delton Cable Ind. Pvt. Ltd., 'Delton House', 24 Daryaganj, New Delhi 110002.

Diamond Electronic Inds., Plot No. 171A, Lane No. 8, Friends Colony, Ind. Estate, Shahdara, Delhi 110032.

Evershine Electrical Works (I), 11/61, Ind. Area, Kirti Nagar, New Delhi 110015.

Galaxy Power Cables Ltd., A/23, New Shopping Complex, Defence Colony, New Delhi 110024.

Grandlay Cables, 3/4, Asaf Ali Rd., New Delhi 110002.

Indo Cables (India), Bhagirath Palace, Delhi 110006.

Kaycee Electricals, 1854, Bhagirath Palace, Delhi 110006.

Kaytee Cables, 1815, Bhagirath Palace, Chandni Chowk, Delhi 110006.

Lakshmi Cable Co., A/6, Jhilmil Tahirpur Ind. Area, Grand Trunk Rd., Shahadara, Delhi 110032

Maharaja Cables, 1024, V. & P.O. Mahipalpur, New Delhi 110037.

Mazda Cable Co. (India), Bhagirath Palace, Delhi 110006.

Meryfur Industries, Behind State Bank, Chandni Chowk, Delhi 110006.

Myco Electrical Inds., D-240, Okhla Indl. Area, Phase I, New Delhi 110020.

Netco Cable Inds., 1777, Bhagirath Palace, Chandni Chowk, Delhi 110006.

Premier Cable Co. Ltd., 14/15-F, Connaught Place, New Delhi 110001.

Promain Cable Inds., 24-25, New Wazirpur Indl. Complex, Delhi 110052.

Siemens India Ltd., B-5, Jangpura, Mathura Rd., New Delhi 110014.

Standard Metal Wires Pvt. Ltd., A-26, Naraina Indl. Area, Phase 1, New Delhi 110028.

Victor Cables Corpn., 802, Joshi Rd., Delhi 110005.

Gujarat

General Electricals & Mechanical Corpn., Ind. Estate, Vadodara 390007.

Mahendra Electricals Ltd., Kamla Mission Rd., Nadiad 387001.

Power Cables Pvt. Ltd., 40, Alkapuri, Vadodara 390001.

Shramik Winding Wires Pvt. Ltd., D-46, Sardar Udyognagar, Ajwa Rd., Vadodara 390001.

Haryana

Hindustan Kokoku Wire Ltd., 12/2, Milestone, Mathura Rd., P. O. Amar Nagar, Faridabad 121003.

Skytone Electricals (India), 43, Ind. Area, Faridabad 121001.

Karnataka

Aluminium Cables & Conductors, A-82, Ind. Estate, Rajinagar, Bangalore 560044.

Deccan Wires Ltd., Bommanahalli, Bangalore 560029.

Deepak Insulated Cable Corpn., Ltd., 8th Mile, Tumkur Rd., Dasarahalli, Bangalore 562139.

Farcom Systems, Post Box 171, Vasanthnagar, Bangalore 560052.

Flexilink Electronics, Kamadhenu Complex, M.G. Rd., Bangalore 560008.

Mohan Aluminium Pvt. Ltd., P. O. Virgonagar, Bangalore 560049.

Mysore Wire & Metal Ind., 13, IVth Cross, Magadi Rd., Bangalore 560023.

Kerala

Aluminium Ind. Ltd., No. 1, Ceramic Factory Rd., Kundara 691501.

Premier Cable Co. Ltd., Karukutty, Angamally 683572.

Madhya Pradesh

Bhilai Wires Ltd., Indl. Est., Bhilai 490001.

Gwalior Cables & Conductors, Indl. Area, Birlanagar, Gwalior 474004.

Universal Cables Ltd., P.O. Birla Colony, Satna 485005.

Maharashtra

Ajit Wire Ind. Pvt. Ltd., 58, Sir M. Vissanji Rd., Andheri East, Bombay 400059.

All-India Electrical Engg. Co., 199, Princess St., Bombay 400002.

Asian Cables Corpn. Ltd., Nirmal, 241/242, Nariman Point, Bombay 400021.

Associated Cables Pvt. Ltd., Shop No. 2, Raote Bldg., 85-A, J.S. Road, Girgaum, Bombay 400004.

B. R. Steel Products Pvt. Ltd., 29-30, Vaswani Mansion, Dinshaw Vachha Rd., Bombay 400020.

Bhandary Metallurgical Corpn. Pvt. Ltd., Bhandary Estate, Sion-Chembur Rd., Kurla East, Bombay 400070.

Bharat Cables Pvt. Ltd., Sadan Wadi, Bhandup, Bombay 400078.

Bharat Insulation Co. , Plot No. B-32, Rd. No. 18, Wagle Ind. Estate, Thane 400604.

Brooks Cable Works, 32, Vithaldas Rd., Lohar Chawl, Bombay 400002.

Cable Corpn. of India Ltd., Laxmi Bldg., 6, Ballard Rd., Bombay 400038.

Crompton Greaves Ltd., Kanjur, Bombay 400078.

Devidayal Cable Ind. Ltd., Reay Rd., Bombay 400010.

Finolex Cables Ltd., 25/27, Bombay Pune Rd., Pimpri, Pune 411018.

Fort Gloster Inds. Ltd. (Cable Dn.), 121/122, Mittal Chambers, Nariman Point, Bombay 400021.

Henley Cable India Ltd., Henley House, Ballard Estate, Bombay 400038.

Hindustan Transmission Products, Shree Niketan, Shiv Sagar Estate, Dr. A. Besant Rd., Bombay 400018.

Markeel Pvt. Ltd., Shreeji Bhavan, Lohar Chawl, Bombay 400002.

Mechno-Plast, 8, Heera Compd., Opp. Navjivan Colony, Chembur, Bombay 400074.

Oriental Power Cables Ltd., Narang House, 34, C. S. M. Mrg., Bombay 400039.

Plasticables Pvt. Ltd., 36, Dalal St., Bombay 400023.

Power Cables Pvt. Ltd., Mahul Village, Bombay 400078.

Record Electricals Pvt. Ltd., 'Record House', 30, Ind. Estate, M. Gandhi Rd., Kandivli (West), Bombay 400067.

Remsons Cables Pvt. Ltd., 88-B, Govt. Indl. Estate, Kandivli (West), Bombay 400067.

Shakti Insulated Wires Pvt. Ltd., 22, Apollo St., Bombay 400023.

Shamsher Sterling Cable Corpn. Ltd., Kirol Rd., Ghatkopar, Bombay 400077.

Siemens India Ltd., 134-A, Dr. A. Besant Rd., Worli, Bombay 400018.

Special Steels Ltd., Dattapada Rd., Borivli East, Bombay 400066.

Sterlite Cables Ltd., 7, Kirol, Vidyavihar, Bombay 400086.

Sylvex Cable Co. Pvt. Ltd., Saki-Vihar Rd., Bombay 400072.

Todi Ind. Pvt. Ltd., Todi Estates, Lower Parel, Bombay 400013.

Udey Pyrocables Pvt. Ltd., 167, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

Orissa

Hira Cable Works, P.O. Hirakud 768016.

Pondicherry

Trikona Industrials Pvt. Ltd., A-16, Ind. Estate, Thattanchavadi 605009.

Tamil Nadu

Madras Electrical Conductors Pvt. Ltd., 37, Arcot Rd., Madras 600006.

Omega Cables Ltd., 1, Moores Rd., Madras 600006.

Uttar Pradesh

Indian Aluminium Cables Ltd., Ghaziabad 201001.

West Bengal

Aluminium Cables & Conductors (U.P.) Pvt. Ltd., 2-A, Shakespeare Sarani, Calcutta 700016.

Asiatic Wires Ltd., 12, Govt. Place (E), Calcutta 700001.

Bright Wires Ltd., 1/A, Vansittart Row, Calcutta 700001.

Calcutta Wire Works, 6, Tiljala Rd., Calcutta 700046.

Electrical Ind. Corpn., 49/1, Gariahat Rd., Calcutta 700019.

Everlite Insulating Ind. Pvt. Ltd., 137, B. Roy Rd. West, Calcutta 700061.

Express Cables Pvt. Ltd., 51, Stephen House, 4, B. B. D. Bagh, Calcutta 700001.

Fort Gloster Ind. Ltd., 31, Chowringhee Rd., Calcutta 700016.

Hind Wire Industries Ltd., P-16 Kalakar St., Calcutta 700007.

Hind Wirecraft Inds., 156, J. Bajaj St., Calcutta 700007.

Hindustan Wires Ltd., 3-A, Shakespeare Sarani, Calcutta 700016.

Indian Cable Co. Ltd., 9, Hare St., Calcutta 700001.

Indo-American Electricals Ltd., 21, Old Court House St., Calcutta 700001.

J. K. Steel & Industries Ltd., Rishra 712248. Hooghly Dist.

Jai Bharat Industries, 94, B. K. Paul Ave., Calcutta 700005.

M. S. Inds., P-10, New Howrah Bridge Approach Rd., Calcutta 700001.

Much Engg. Pvt. Ltd., 7, Lake Rd., Calcutta 700029.

National Insulated Cable Co. of India Ltd., 2, Hare St., Calcutta 700001.

Novelty Engg. Works, B. Lahira Lane, Santragachi, Howrah 711104.

Novoflex Cable Inds., 3B, Camac St., Calcutta 700016.

Power Cables & Electricals. Ltd., 20A, Camac St., Calcutta 700016.

Power Electric Cables Co., 2, G.C. Avenue, Calcutta 700013.

Universal Cables Ltd., 15, India Exchange Place, Calcutta 700001.

WOOD TREATMENT PLANTS

Ascu Hickson Ltd., 7A, Elgin Rd., Calcutta 700020.

WOOD WORKING MACHINERY & SPARES

Hiralal & Co. (Mfg.), 2, Vithaldas Rd., Devkaran Mansion, Bombay 400002.

Janata Machine Tools Ltd., Majiwada, Thane 400601.

Osahar Engg. Works, G.T. Rd., Ram Talai, Amritsar 143001.

WOOLLEN TEXTILES

Delhi

Premier Woollen Mills, 38, D. L. Ind. Area, Najafgarh Rd., New Delhi 110015.

Gujarat

Dinesh Mills Ltd., P. B. 65, Padra Rd., Vadodara 390001.

Shree Digvijaya Woollen Mills Ltd., Aerodrome Rd., Jamnagar 361001.

Haryana

Raj Woollen Ind., G. Trunk Rd., Panipat 132103.

Shakti Woollen & General Mills, Panipat 132103.

Jammu & Kashmir

Government Spinning Mills, Nowshehra, Srinagar 190001.

Government Woollen Mills, Shirin Baugh, Srinagar 190001.

Karnataka

Binny Ltd., Agraharam Rd., Bangalore 560023.

Karnataka Woollens Ltd., 3rd Flr., Blumoon Blocks, M. G. Rd., Bangalore 560001.

Maharashtra

Ahmed Woollen Mills, Karim Bldg., 56, Mohamedali Rd., Bombay 400003.

Bombay Woollen Mills Pvt. Ltd., 20, Hamam St., Bombay 400001.

C. Ramon & Co. Pvt. Ltd., 169, Backbay Recl., Bombay 400020.

Castle Mills, Shastri Marg, Thane 400604.

Dani Wooltex Corpn., Ganesh Bhuvan, M. J. Market, Bombay 400002.

Dhruva Woollen Mills Pvt. Ltd., New Dun Mills Comp., Sun Mill Rd., Lower Parel, Bombay 400013.

Gokalchand Rattanchand Woollen Mills Pvt. Ltd., L. B. Shastri Marg, Ghatkopar, Bombay 400086.

Kay Kay Woollen Mills, M. Sunderji Rd., Naupada, Thane 400602.

Kishanchand Spinning Mills, Jolly Bhavan No. 2, New Marine Lines, Bombay 400020.

Modella Woollens Ltd., 4-C, Vulcan Insurance Bldg., V. Nariman Rd., Bombay 400020.

Nagpal Woollen Mills No. 3, Atlas Mills Comp., Reay Rd., Bombay 400010.

Raymond Woollen Mills Ltd., J.K. Bldg., N. Morarjee Marg, Bombay 400038.

Shree Krishna Woollen Mills Pvt. Ltd., Behind Cemetery, Shastr Mrg., Bombay 400078.

Simplex Woollen Mills, Sadhana Rayon House, Dr. D.Naprpjo Rd., Bombay 400001.

Wellman (Ind.) Pvt. Ltd., Neville House, Graham Rd., Ballard Estate, Bombay 400038.

Woollen & Textile Ind. Pvt. Ltd., Lake Rd., Bhandup, Bombay 400078.

Punjab

Angora Spinning Mills, Civil Lines, Ludhiana 141001.

Essma Woollen Mills, G.T. Rd., Putlighar, Amritsar 143001.

Fine Spinners Pvt. Ltd., Kashmir Rd., Amritsar 143001.

G.M. Worsted Spinning Mills, G. Trunk Rd., Chheharta 143105.

Himalaya Woollen Mills, G. Trunk Rd., Chheharta 143105.

International Woollen Mills, 131, Ind. Area 'A', Ludhiana 141003.

Kanpur Spinning Mills, G. Trunk Rd., Amritsar 143001.

M. H. Spinners, Kashmir Rd., Amritsar 143001.

Mahavir Woollen Mills, Ind. Area 'A', Ludhiana 141003.

New Egerton Woollen Mills, Dhariwal 143519.

Oswal Spg. & Wvg. Mills Ltd., Oswal Rd., Ind. Area 'A', Ludhiana 141003.

Oswal Woollen Mills Ltd., Miller Ganj, Ludhiana 141003.

Padam Das & Co., Ferozepur Rd., Ludhiana 141001.

Prabhat Woollen Mills, 238, Ind. Area 'A', Ludhiana 141003.

Punjab Woollens, G. Trunk Rd., Chheharta 143105.

Supreme Woollen Mills, 424, Ind. Area 'A', Ludhiana 141003.

Swadeshi Manufg. Syndicate Pvt. Ltd., Civil Lines, Syndicate Bldgs., Ludhiana 141003.

Rajasthan

Bikaner Woollen Mills, Ind. Area, Bikaner 334001

Rajasthan Woollen Mills, Gajner Rd., Bikaner 334001.

Rajasthan Worsted Spg. Mills Ltd., K-18, Durga Das Path, Malaviya Marg, C-Scheme, Jaipur 302001.

State Woollen Mills, Bikaner 334001.

Uttar Pradesh

Cawnpore Woollen Mills Ltd., Civil Lines, Kanpur 208001.

General Fibre Dealers Pvt. Ltd., P. B. No. 87, Woollen Mills, Bhadohi 224101.

West Bengal

Bengal National Textile Mills Ltd., 23, Brabourne Rd., Calcutta 700001.

Bharat Woollen Mills Ltd., 11, Esplanade Estate East, Calcutta 700001.

Jayshree Textiles & Ind. Ltd., Rishra 712248. Hooghly Dist.

Kusum Wool & Woollen, 74, Beliaghata Main Rd., Calcutta 700010.

Woolcombers of India Ltd., Duncan House, 31, N. Subhas Rd., Calcutta 700001.

X-RAY MACHINES

(See under Medical Equipment).

YARN—NYLON & POLYESTER

(See under Nylon & Polyester Filament Yarn in this list).

ZINC OXIDE

Bansal Metalic Oxides, Poonamallee High Rd., Numbal, Madras 600077.

Kamani Metallic Oxides Pvt. Ltd., Lal Bahadur Shastri Marg, Kurla, Bombay 400070.

Pigments & Chemical Products, 17, G.C. Ave., Calcutta 700013.

Waldies Ltd., A-1, Gillander House, N. Subhas Rd., Calcutta 700001.

Zinc & Chemical Distributors, 16, S. Bhagatsingh Rd., Bombay 400023.

Zinc India Products, 141, Belgola Indl. Area, K.S.R. Rd., Metgalli, Mysore 570016.

ZIP FASTENERS

Apollo Chain Zips Pvt. Ltd., D-3 & D-12, Ind. Estate, Moula Ali, Secunderabad 500040.

Apollo Zipper Co. Pvt. Ltd., 20, British Indian St., Calcutta 700069.

Dilip Trading Co., 5, Shamsheth St., Bombay 400002.

Fleet Fasteners Pvt. Ltd., Delstar, Hughes Rd., Bombay 400026.

JC Inds., 234, Adharyu Indl. Estate, Sun Mill Lane, Lower Parel, Bombay 400013.

Madhu Snap Fasteners Manufg. Co. Pvt. Ltd., Udyog Bhavan, A. Besant Rd., Bombay 400025.

Nylo Plast Ind. Pvt. Ltd., 254, Dr. A. Besant Rd., Bombay 400018.

Zip Ind. Pvt. Ltd., 119, Mint St., Madras 600001.

Fasten your faith on us
JC

JC ZIP is Durable & Long Lasting
Components are made of Brass – also in Aluminium.
JC ZIP is specially crafted for
Leather-Plastic & Garment items.

JC ™ INDUSTRIES
Manufacturers of Quality Zip Fastners

234 Adhyaru Industrial Estate
Sun Mill Compound, Lower Parel
Bombay 400 013.
Phone 372627
Cable: 'EKTAZIPS' Bombay-400 013.
P.O. Box No. 16331;
Lowerparel, Bombay-400 013.

DEALERS

ABRASIVES, GRINDING WHEELS ETC.

Abrawheel Pvt. Ltd., 107, Sarang St., Bombay 400003.
Ahmedally Hassanally & Co., 4/153-D, Broadway, Madras 600001.
Amar Agencies, 115, Nagdevi St., Bombay 400003.
Ashok Industrial Traders, 42, Nagdevi St., Bombay 400002.
Associated Agents & Merchants , 86, Armenian St., Madras 600001.
Bharat Engg. Stores, 113, Nagdevi St., Bombay 400003.
Bhogilal M. Pandit & Co., 28, Apollo St., Bombay 400023.
Business Centre, 115, Nagdevi St., Bombay 400003.
Chandrakant Shah & Co., 248, Nagdevi St., Bombay 400002.
Chetan Trading Co., 65, Sarang St., Bombay 400003.
Commercial Combines Co., No. 16, 14th Flr., 3, Navjivan Socy., Lamington Rd., Bombay 400008.
East India Abrasives & Tools Co., 67-B, N. Subhas Rd., Calcutta 700001.
Empee Corpn. Pvt. Ltd., 44, Cawasji Patel St., Bombay 400001.
Engg. Equipment Corpn., 44, Nagdevi X Lane, Bombay 400003.
Ghanshamdas & Sons, 78, Nagdevi Cross Lane, Bombay 400003.
Industrial Trade Corpn., 39, Nagdevi Crosslane, Bombay 400003.
M. Desai & Co., Relief Rd., Ahmedabad 380001.
M. Desai & Co., 163, N. Dhuru St., Bombay 400003.
Modern Machine Tools Co., 88, Nagdevi X Lane, Bombay 400003.
Parekh Engg. Corpn., 152, Narayan Dhuru St., Bombay 400003.
Raj Abrasives, 7, 1st Panjrapole Lane, Bombay 400004.
Shah & Parekh Traders, 91, Nagdevi Cross Lane, Bombay 400003.
Sri Varu Enterprises, 25, S. J. Park Rd., Bangalore 560002.
V. Pesh & Co., Airdun Bldg., Dhobi Talao, Bombay 400002.
Vazirbun Trading, 164A, Broadway, Madras 600001.

ACID RESISTING BRICKS & CEMENTS

A. N. Bhaskar Sons, Ishwar Nagar, New Delhi 110020.
Datson Raviraj & Co. Pvt. Ltd., 43, Tamarind St., Bombay 400023.
S. K. Gupta, Refractory House, L. B. Shastri Marg, Kurla, Bombay 400070.

ACOUSTIC INSULATIONS

Lloyd Insulations (India), 386, V. Savarkar Marg, Bombay 400025.
Newkem Insulations, Hargangamahal, Khodadad Circle, Bombay 400014.
Supersil Acoustic Ind. Pvt. Ltd., 134-A, S. Memon St., Bombay 400002.

ADDRESSING & LISTING MACHINES

National Cash Register Co., Steelcrete House, D. Vachha Rd., Backbay Recl., Bombay 400020.

AIR/GAS COMPRESSORS

Compressor Parts Co., 93, Bombay Samachar Mrg., Bombay 400023
Evergreen Trading Corpn., 107/108, Green House, Green St., Bombay 400023
International Machine Tools Corpn., 5, Bank St., Bombay 400023.
Nav Bharat Engrs., Savitri Bhavan, Mahul Rd., Chembur, Bombay 400074.
Nova Rental Service, 364/370, Samuel St., Bombay 400003.
Oriental Enterprises, P-46A, CIT Scheme, XLV, Radhabazar Lane, Calcutta 700001
Pneumatic Equipments Corpn., 35, Bhawani Dutta Lane, Calcutta 700073
Recicom Spares & Services Corpn., 253, Kaliandas Udyog Bhavan, 1082, Near Century Bazar, Prabhadevi, Bombay 400025.
Standard Material Corpn., 64, Podar Chambers, S.A. Brelvi Rd., Bombay 400001.
Vikas Engg. Co., 11, Bank St., Bombay 400023.

AIRCONDITIONERS, REFRIGERATORS, ETC.

Accurate Air-Conditioning Co., 307, Y. Meheralli Rd., Bombay 400003.
Banthiya & Co. Pvt. Ltd., Station Rd., Ajmer 305001.
Bel Refrigeration Co., 4-C, Nungambakkam High Rd., Madras 600034.
Bombay Cycle & Motor Agency Ltd., Industry Manor, Near Century Bazar, Bombay 400025.
Bombay Engg. & Elec. Co., Motia Park, Bhopal 462001.
Bombay Garage (Ahmedabad) Ltd., Shahibaug Rd., Ahmedabad 380004.
Electro Air Conditioning Corpn., Opp. I.A.C. Office, 1754, Mirzapur Rd., Ahmedabad 380001.
Faradays, Lentin Chambers, Dalal St., Bombay 400023.
Frigsales (India) Pvt. Ltd., 204, Commerce House, N. Master Rd., Bombay 400023.
General Equipment Merchants, 2/90, Connaught Circus, New Delhi 110001.
J. N. Marshall & Co., Taj Bldg., 210, Dr. D. Naoroji Rd., Bombay 400001.
Maharashtra Electronics, 93, Ibrahim Rahimtulla Rd., Bombay 400003.
Paramount Indusirial Stores, 15, Ropewalk St., Bombay 400001.

ALL
UNDER ONE ROOF
FRIGSALES
Offer

- ★ Refrigerants 11, 12 & 22.
- ★ Thermostats & Relays.
- ★ Driers & Capacitors.
- ★ Open Type and Sealed Compressors & Condensing Units.
- ★ Controls & Valves.
- ★ Brassomatic Compression tube & flare fittings.
- ★ Danfoss Refrigeration & Industrial Controls.
- ★ Freezer Plates & Tools.
- ★ Ammonia Compressors, Valves & fittings for Cold Storages, Freezers & Chilling Plants etc.
- ★ Bermaco I.B.R. and non-I.B.R. Valves.

FRIGSALES (INDIA) PVT. LTD.

204, Commerce House, Nagindas
Master Road, Fort, Bombay 400 023.
Phones : 272330, 207694 & 273018.
Telex : 011-3414.

Pearl Trading Co., A-25, Defence Colony, New Delhi 110024.
Scient-Air, 29, M. Parmanand Mrg., Bombay 400004.
Western Refrigeration Pvt. Ltd., 4, Readymoney Terrace, Dr. A. B. Rd., Bombay 400018.

AIRCONDITIONING & REFRIGERATION EQUIPMENT

Atlas Refrigeration Sales, J.K. Bldg., No. 6, Shop No. 10. H. Goregaumkar Rd., Gamdevi, Bombay 400007.
Boulton Trading Co., 7, Lentin Chambers, Dalal St., Bombay 400023.
C. Sethia & Co., 59, Forbes St., Bombay 400023.
Durga Refrigeration Co., 6, Bell Lane, Bombay 400001.
G.C.Seal & Co., 30. G.C.Ave., Calcutta 700013.
Gorakhram Haribux, 4, Apeejay House, 130, Bombay Samachar Marg. Bombay 400001.
Jain Enterprises, Agra Bldg., 2nd Flr., 121, M. Gandhi Rd., Bombay 400023.
Khaitanfrige Pvt. Ltd., 'Everest', 18th Flr., 46-C, J. L. Nehru Rd., Calcutta 700001.
Kumar Refrigeration, 1544, David St., Daryaganj, New Delhi 110002.
Kundalia Refrigerations. 7. Netaji Subhas Mrg., New Delhi 110002.
Mahler Sales Corpn., 105, Great Western Bldg., 23, N. Master Rd., Bombay 400023.
S. Khaitan & Co., 18, Rabindra Sarani, Calcutta 700001.
Sah & Sanghi, 11, C.N.S. Patkar Marg, Bombay 400007.
Spencer & Co. Ltd., Spencer's Bldg., Forjett St., Bombay 400036.
Universal Commercial Co., 301/A, Commerce House, Medows St., Bombay 400023.
Venus Engineering Service, Land Mark Chambers Ltd., S. B. Mrg., Mahim, Bombay 400016.

For your requirements of :

Aluminium, Brass and Copper Rods, Pipes, Sheets, Sheathing, Strips, Plates, Rivets, Washers, Wires, Aluminium Coils, Foils and Copper Lightning Arresters.

Distributors for :

"INDAL" Extruded Aluminium Sections.

★

Please Contact :

RAMESHCHANDRA LTD.

235, Kika Street,
Bombay 400 002.

Phones :
333928 332478.

Grams :
"METALHOUSE".

ALUMINIUM PRODUCTS

Andhra Pradesh

Aluminium India, 4-3-41, Hill St., Secunderabad 500002.

Delhi

Mahavir Metal Works Pvt. Ltd., 477, Bartan Market, Sadar Bazar, Delhi 110006.
Prem Metal & Hardware Store, 4835, Sadar Bazar, Delhi 110006.

Gujarat

Gujarat Metal Industries, Harkuwer's Haveli Patasa Pole, Ahmedabad 380001.

Karnataka

Bangalore Aluminium Co., No. 2, Journalists' Colony, Bangalore 560002.
P. C. Malpani & Co., 14/1, J. C. Rd., Bangalore 560002.

Maharashtra

Ajit Metal Corpn., Kansara Chawl, Kalbadevi Rd., Bombay 400002.
Alco Metal Corpn., 38, 1st Bhoiwada, Bombay 400002.
Allied Aluminium, 46, Bhuleshwar Rd., Bombay 400002.
Aluminium Extrusion Centre, 60, Kansara Chawl, Kalbadevi Rd., Bombay 400002.
Aluminium Extrusions, 115, Tambakanta, Bombay 400003.
Aluminium Traders, 96, Masjid St., Bombay 400003.
Amratlal Girdharlal, 71, Kansara Chawl, Kalbadevi Road, Bombay 400002.
Atul Metal Corpn., 86, Kansara Chawl, Kalbadevi Rd., Bombay 400002.
Bansal Aluminium Co., 415, Prasad Chambers, Swadeshi Mills Compound, Bombay 400004.
Gupta Agencies, 96, Masjid St., Bombay 400003.
Gupta Aluminium Corpn., 21, Lotus Bldg., 59, Mohamedali Rd., Bombay 400003.
Jugraj Tejraj, 151, Bapu Khote St., Bombay 400003.
Kiran Metal Corpn., 207, Kika St., Bombay 400002.
Margesh Metal Corpn., 51, Khadikar Rd., Near C.P. Tank. Bombay 400004.
Metal Corpn., 7/11, Kolsa St., Chunawala Bldg., Bombay 400003.
Moolchand Manmal & Co., 162, Kika St., Bombay 400004.
Pankaj Metal Corpn., 55-C, 1st Khattarali Lane, Thakurdwar, Bombay 400002.
Rajesh Aluminium Corpn., 71, Kansara Chawl, Kalbadevi Rd., Bombay 400002.
Rameshchandra Ltd., 235, Kika St., Bombay 400002.
Rolex Metal Corpn., 127, Dadyseth Agiary Lane, Bombay 400002.
Sanghi Bros., 52, A. Rehman St., Bombay 400003.
Satpal & Co., 136, Girgaum Rd., Bombay 400004.
Shuja Metal Centre, 55-57, Nakhoda St., Bombay 400003.
Sudarshan Chokhani & Co., 26, Nariman Bhavan, 227, Nariman Point, Bombay 400021.
Swastik Metal Corpn., 7/11, Kolsa St., Bombay 400003.

Tamil Nadu

Allied Import Co., 11/3, Singanna Naicken St., Madras 600001.
Aluminite Pvt. Ltd., 25-A, Casa Major Rd., Madras 600008.
Aluminium Semis & Alloys Co., 6, Venkatarayan Lane, Madras 600003.
Engg. & Commercial Agency, 4, Smith St., Madras 600002
Globe Ind. Corpn., 171/173, Nanjappa Naicken St., Madras 600003.

India (Aluminium) Trdg. Co., 8, Ekambareswarar Agraharam, Mint St., Madras 600001.

Motichand Sivaraj, 89, Perumal Mudali St., Madras 600001.

Ohm Indl. Corpn., 1-D, Naickemar St., Mambalam West, Madras 600033.

P. C. Malpani & Co., 7, Venkatamaistry St., Madras 600001.

Premier Metal & Engg. Corpn., 69, Perumal Mudali St., Madras 600001.

Rajesh Trading Co., 4, Ramanan St., Madras 600001.

Tamilnad Metals, 221/222, Rasappa Chetty St., Madras 600003.

West Bengal

Aluminium Sales & Trading Co., 23A, N. Subhas Rd., Calcutta 700001.

Bengal Aluminium Stores Pvt. Ltd., 55/14, Canning St., Calcutta 700001.

Durlabhaji Bhurabhai Metalware Pvt. Ltd., 162, Old China Bazar St., Calcutta 700001.

Hindustan Trading Syndicate, 33, Brabourne Rd., Calcutta 700001.

Jugraj Tejraj, 2, Portuguese Church St., Calcutta 700001.

Madhab & Co., 54/1, Canning St., Calcutta 700001.

Rameswarlal Dedraj & Co., 4, Middleton St., Calcutta 700016.

Ratanlal & Bros., 58, N. Subhas Rd., Calcutta 700001.

ARMS & AMMUNITION

A. T. Daw & Co., Ranihat, Cuttack 753001.

B. R. Sawhney & Co., Chandni Chowk, Delhi 110006.

Bombay Armoury, 331, Abdul Rehman St., Bombay 400003.

Capital Gun House, Delite Bldg., A. Ali Rd., New Delhi 110002.

Delhi Armoury, 12C, Nizamuddin West, New Delhi 110013.

Delhi Gun House, Kashmere Gate, Delhi 110006.

Eastern Arms Co., 18-B, A. Ali Rd., New Delhi 110002.

Garg Armoury Pvt. Ltd., 1526, K. Darwaza, Delhi 110006.

Manton & Co., Ltd., 13, Old Court House St., Calcutta 700001.

Narendra & Co., Hanuman Chowk, Dehra Dun 248001.

National Rifles Ltd., Village Vinzol, Nr. Vatva Rly. Stn., Taluka Dascroi, Ahmedabad Dist. 382440.

National Stores, 13B, Connaught Place, New Delhi 110001.

Oriental Arms & Ammunition Co., Opp. Fire Brigade, Connaught Circus, New Delhi 110001.

R. B. Rodda & Co. Ltd., 4K, Connaught Circus, New Delhi 110001.

Singh Bros. (1925) Regd., Kashmere Gate, Delhi 110006.

Singh Gun House, 14/3, A. Ali Rd., New Delhi 110002.

ARTIST'S AIRBRUSH

Bombay Stationery Mart, 7-A, Sir. P. Mehta Rd., Bombay 400001.

M. Baker & Co., 35, Nagdevi St., Bombay 400003.

ASBESTOS & ASBESTOS PRODUCTS

Asbestos Cement Distributing Co., 305-A, Green House Green St., Bombay 400023.

Asbestos (India), 189, Nagdevi St., Bombay 400003.

Asbestos Textiles & Packings, 45, Nagdevi X Lane, Bombay 400003.

Babulal & Bros., 26, Nagdevi X Lane, Bombay 400003.

Bharat Asbestos & Rubber Co., 137, N. Dhuru St., Bombay 400003.

Bombay Machine Store Co., 43, Nagdevi X Lane, Bombay 400003.

C. Vadilal & Co., 40, N. Cross Lane, Bombay 400003.

Central Engg. Co., 125, Nagdevi St., Bombay 400003.

Devva Traders, 10, Ganesh Baug, 187, Dadyseth Agiary Lane, Bombay 400002.

BHARAT ASBESTOS & RUBBER CO.

137, Narayan Dhuru Street, BOMBAY 400 003.
Telephone: 321765.

Authorised Wholesale Dealers for:

HINDUSTAN FERODO LIMITED

★

Manufacturers of:

"FIREFLY" Brand Asbestos Packing Ropes, Yarns, Cloths, Lagging Ropes, Asbestos Mill-boards.

"FIREFLY/PERMANITE" Brands Compressed Asbestos, Fibre Jointing Sheets, Metallic Wire-woven Steam Jointings and also B.A. Brake Linings for Industrial Purposes.

"KLINGERIT" Steam Jointings—Metallic & Non-Metallic for High Pressure & Temperature.

Also Stockists of:

- Rubber Canvas Insertions & Sheets for Commercial & Steam purpose.
- Neoprene Rubber Sheets for Heat & Oil purpose.
- Leather & Rubber Beltings; Vulcanised Fibre Sheets & Rods; Ebonite Sheets & Rods & Allied Accessories.

Excelite Insulations Pvt. Ltd., Neelam, 108, Worli Seaface Rd., Bombay 400018.

F. Pestonji & Co., 94, Nagdevi St., Bombay 400003.

Gujarat Asbestos, 52, N. Dhuru St., Bombay 400003.

Industrial Sales Corpn., 26, Strand Rd., Calcutta 700001.

J. K. Marker & Sons, 115, Nagdevi St., Bombay 400003.

J. Khushaldas & Co. 77/83, Nagdevi St., Bombay 400003.

Ochhavlal Chhotalal & Co., 207-209, Nagdevi St., Bombay 400003.

Orient Engg. Stores, 109, Y. Meherally Rd., Bombay 400003.

R. Mohanlal & Co., 38, Bibijan St., Bombay 400003.

R. Ochavlal & Co., 86, Nagdevi St., Bombay 400003.

Raj Tools Corpn., 50, Bibijan St., Bombay 400003.

Rangoon Mill Stores, 1/157, Broadway, Madras 600001.

Real Hardware Mart, 295, Nagdevi St., Bombay 400003.

Surendra Trading Co., 129, N. Dhuru St., Bombay 400003.

Supreme Mill Stores, 36, Bhajipala Lane, Bombay 400003.

Union Asbestos & Allied Products, 40, Strand Rd., Calcutta 700001.

Velhari Trdg. Co. Pvt. Ltd., Sangli Bank Bldg., Peri Nariman St., Bombay 400001.

AUTOMOBILES SPARE PARTS & ACCESSORIES

Andhra Pradesh

Bharat Automobiles, Rajagopalachari St., Vijayawada 520001.

Hyderabad Auto Service Ltd., M. Gandhi Rd., Secunderabad 500003.

Jai Agencies, 15-1-503/A/5 & 6, Ashok Mkt., Feelkhana, Hyderabad 500012.

Mahesh Motors, Feelkhana, Hyderabad 500012.

Prabhat Automobiles, 15-9-622, J. Nehru Rd., Hyderabad 500012.

Patny & Co. Pvt. Ltd., 87, Sarojini Devi Rd., Secunderabad 500003.

Telephones : 324312 321954

Grams : JEKHUSHAL

ASBESTOS PRODUCTS

J. KHUSHALDAS & CO.,
" JK " Chambers,
77/83, Nagdevi Street,
Bombay 400 003.

Chief Distributors & Authorised Stockists of :

" CHAMPION " brand Asbestos products

" GARWARE " Nylon products

" CHARMINAR " Asbestos Insulation materials

" SKF " Ball and Roller Bearings

" GOODYEAR " Industrial Rubber products

" HARDCO " Graphite Powder Flakes

" BELTING " Hair & Leather Beltings, Cotton Conveyor Belting etc.

Secunderabad Commercial Co., 8570-A, Rashtrapati Rd., Secunderabad 500003.

Assam

Jesraj Jiwanram Pvt. Ltd., Assam Trunk Rd., Jorhat 785001.

Jyoti Motors, Jorhat 785002.

National Motors, Commercial Bldg., Assam Trunk Rd., Gauhati 781001.

Bihar

Auto Distributors Ltd., Exhibition Rd., Patna 800001.

Kamal & Co., Upper Bazar, Ranchi 834001.

Sungha Motors, Haji Gunj, Patna 800001.

Delhi

Aggarwal Motor Co., Gandhi Motor Market, K. Gate, Delhi 110006.

Allied Motors Pvt. Ltd., Scindia House, New Delhi 110001.

Anand Motors, 78, Tolstoy Lane, New Delhi 110001.

Asian Motors India, Minerva Bldg., K. Gate, Delhi 110006.

Asu Traders Pvt. Ltd., Minerva Bldg., K. Gate, Delhi 110006.

Atlantic Auto Dealers Pvt. Ltd., 3-E/7, Jhandewalan Extn., Dr. Ambedkar Marg, New Delhi 110055.

Auto Lines (India), Peareylal Motor Mkt., Kashmere Gate, Delhi 110006.

British Motor Car Co. (1934) Ltd., Connaught Circus, New Delhi 110001.

Byford Ltd., M-5, NDSE-II, New Delhi 110049.

Conwest Pvt. Ltd., K. Gate, Delhi 110006.

Delhi Automobile Pvt. Ltd., 3/15-A, Asaf Ali Rd., New Delhi 110002.

Howrah Motors Co. Pvt. Ltd., K. Darwaza, Delhi 110006.

J.J. Motor Corpn., 2/E-9, Jhandewalan Extn., New Delhi 110055.

Jullundur Motor Agency (Delhi) Pvt. Ltd., K. Gate, Delhi 110006.

Kamal & Co. (Jaipur) Pvt. Ltd., 48/9, E. Patel Nagar, New Delhi 110006.

Khera Automobiles, Roshanara Rd., Delhi 110007.

Prem Nath Motors Pvt. Ltd., Scindia House, New Delhi 110001.

Rajiv Motors Pvt. Ltd., 11/90, Connaught Circus, New Delhi 110001.

Star Auto Industries, 336/4, Punja Sharif, Kashmere Gate, Delhi 110006.

Supreme Motors Pvt. Ltd., 13/3, Asaf Ali Rd., New Delhi 110002.

Triveni Automobiles, 2785, Kashmere Gate, Delhi 110006.

Universal Auto Traders, Kashmere Gate, Delhi 110006.

Karnataka

Addison & Co. Ltd., St. Marks Rd., Bangalore 560001.

Associated Agencies, 58, Kengal Hanumanthaiah Rd., Bangalore 560027.

Associated Auto Parts Pvt. Ltd., Fort Rd., Belgaum 590001.

Bharat Automobiles, 1/4, Narasimharaja Rd., Bangalore 560003.

George Oakes Ltd., Sri Narasimharaja Square, Bangalore 560002.

Hindustan Automobiles, Milagres Centre, Hampankatta, Mangalore 575001.

Industrial Engg. & Trdg. Co. (M) Pvt. Ltd., 11, A.M. Rd., Journalist Colony, Bangalore 560002.

Karnataka Automobiles, Reddy Janasangha Bldgs., J.C. Rd., Bangalore 560002.

Khivraj Motors, 135/1, Residency Rd., Bangalore 560025.

Modern Auto Parts, 22/1, Sri Narasimharaja Rd. Cross, Bangalore 560002.

Motor Inds. Co. Ltd., P.B. No. 3000, Bangalore 560030.

Popular Automobiles, 69, S.J. Park Rd., Bangalore 560002.

Sundaram Motors, 2-2A, Kasturba Rd., Bangalore 560001.

Supreme Automobiles, 73/16, Reddy Janasangha Bldg., J.C. Rd., Bangalore 560002.

United Automobiles, Nehru Rd., Shimoga 577201.

Universal Automobiles, Traffic Island, P.B. Rd., Hubli 580021.

Kerala

Popular Automobiles, Banerji Rd., Cochin 682011.

Popular Automobiles, Court Rd., Calicut 673001.

Madhya Pradesh

Dawar Bros., Hamidia Rd., Bhopal 462001.

Globe Automobiles, Hamidia Rd., Bhopal 462001.

Jain Co., Hamidia Rd., Bhopal 462001.

Maharashtra

Allena (India) Agencies, 363-D, S.V. Patel Rd., Bombay 400004.

Asian Motor Car Co., 481, S.V. Patel Rd., Bombay 400004.

Associated Auto Parts Pvt. Ltd.,445, Dr. Bhadkamkar Marg, Bombay 400004.

Batavia Auto Parts, 30/4, D.D. Sathye Marg, Bombay 400004.

Bhagwan Motor Co., 69, J. Shankar Sheth Rd., Bombay 400004.

Bharat Automobiles, 404, V.P. Rd., Congress House, Bombay 400004.

Bharat Auto Parts, 11A, Prasad Chambers, Opera House, Bombay 400004.

Bombay Cycle & Motor Agency Ltd., 534, S.V. Patel Rd., Bombay 400007.

Central Automobiles Pvt. Ltd., 466, S.V. Patel Rd., Bombay 400004.

Chandulal Mehta & Co. Pvt. Ltd., 9, N. Queen's Rd., Bombay 400004.

Conwest Pvt. Ltd., 448, Lamington Rd., Bombay 400004.

Dadajee Dhackjee & Co. Pvt. Ltd., Shree Pant Bhuvan, Mamasaheb Vanerbai Bridge, Bombay 400007.

Diamond Motors (India), 77-A, Girgaum Rd., Bombay 400004.

George Oakes Ltd., Swadeshi Mills Estate, Mama Paramanand Marg, Bombay 400004.

NISSAN
Jonga, 1 Ton
leyland
600/680
bharat
auto parts
SPARES FOR
LEYLAND
HIPPO BEAVER
370 : 400 : 600 : 680
Engine Spares
SHAKTIMAN
ENGINE SPARES
381627 ■ 355745 ■ 350084
11A, Prasad Chambers,
Bombay 400 004.

ELECTRO
MAGNETIC
★ CLUTCHES & D.C. BRAKES.
★ Multiple Disc Type Clutch & Brakes for Machine Tools.
★ Spring loaded(Fail safe)Disc/Shoe Type A.C. & D.C. Brakes.
★ Clutch Brake Combination.
●
PETHE INDUSTRIAL MARKETING
CO., PVT. LTD.
69, S. K. Bole Road, Dadar,
Bombay-400 028.
Phone : 454898. Grams : "MAG BRAKE"

International Impex Corpn., 16, Kiln Lane, Bombay 400007.

J.C. Vora & Co., Saraswati Sadan, Benham Hall Cross Lane, Bombay 400004.

Pethe Industrial Marketing Co. Pvt. Ltd., 69, S.K. Bole Rd., Dadar, Bombay 400028.

Pioneer Auto Spares, Nanik Niwas, Benham Hall Lane, Bombay 400004.

Popular Motor Car Co., 3, Mathew Rd., Bombay 400004.

Raj Kumar Khanna & Son, 11, Parekh Mkt., Kennedy Bridge, Bombay 400004.

Sah & Sanghi, Giri Kunj, 11-C, N.S. Patkar Marg, Bombay 400007.

Sethi Auto Spares, 428, Raval Bldg., No.1, Lamington Rd., Bombay 400007.

Shree Krishna Auto & General Suppliers, 5, Africa House, Topiwala Lane, Lamington Rd., Bombay 400007

Unity Auto Inds., Rajabahadur Bansilal Bldg., 64D, J. Shanker Sheth Mrg., Bombay 400004.

Vijay Commercial Corpn., Rajabahadur Bansilal Bldg., Girgaum Rd., Bombay 400004.

Vora Bros., Fateh Manzil, Nr. Opera House, Bombay 400004.

Punjab

Allied Trading Corpn., Nehru Garden Rd., Jullundur City 144001.

British Motor Car Co. Pvt. Ltd., G.T. Rd., Jullundur City 144001.

Jullundur Motor Agency, Nehru Garden Rd., Jullundur City 144001

Narankari Auto Agency, Outside Gandhi Gate, Amritsar 143001.

National Corpn. Pvt. Ltd., Nehru Garden Rd., Jullundur 144001.

Ved & Co., (Ludhiana), Cinema Rd., Ludhiana 141001.

Grams : " WELCOMECORP "
Phones : 353922/352734

Unity Auto Industries

5-B, Rajabahadur Bansilal Bldg.,
64-D, Jagannath Shankar Sheth Marg,
(Girgaon Road),
Opera House,
BOMBAY 400 004.

★

Authorised Jobbers for :

ASHOK LEYLAND SPARES
350, 370, 400, 600, 680 ENGINES
COMET, ROYAL, TIGER, TITAN,
BEAVERS & HIPPO MODELS
TUSKER-TAURUS

Tamil Nadu

Anand Automobiles, 24, Gen. Patters Rd., Mount Rd., Madras 600002.

Auto Sales Co., 42, Gen. Patters Rd., Madras 600002.

Bharat Motors, 35, Mount Rd., Madras 600002.

Bharat Tractor Agencies, No. 59-B, Dr. Nanjappa Rd., Coimbatore 641018.

Bombay Motor House, 28, Gen. Patters Rd., Madras 600002.

Central Motors, 9, Gen. Patters Rd., Madras 600002.

Coimbatore Automobiles, 137-F, Dr. Nanjappa Rd., Coimbatore 641018.

Em Em Automobiles, No. 17/29, Mill Rd., Coimbatore 641001

George Oakes Ltd., 32-A, Greames Rd., Madras 600006.

Jai Motors, 10 & 12, Begum Sahib 2nd Lane, Madras 600002.

K C. Auto Parts, No.201-B, Dr. Nanjappa Rd., Coimbatore 641018.

L.G. Balakrishnan & Bros., Trichy Rd., Coimbatore 641018.

Pandyan Automobiles (Pvt.) Ltd., By Pass Rd., Madurai 625016.

Popular Automobile Accessories, No. 138, Dr. Nanjappa Rd., Coimbatore 641018.

Southern Auto Parts, No. 10/196-D, Dr. Nanjappa Rd., Coimbatore 641018.

Stanes Motors (S.I.) Ltd., No. 497, Trichy Rd., Coimbatore 641018.

T.V. Sundaram Iyengar & Sons Pvt. Ltd., Mettupalayam Rd., Coimbatore 641011.

Uttar Pradesh

Aggarwal Bros., The Mall, Kanpur 208001.

Byramjee Framjee & Co., The Mall, Kanpur 208001.

Jullundur Motor Agency (Delhi) Ltd., 63/3, The Mall, Kanpur 208004.

Kanpur Auto Centre, The Mall, Kanpur 208001.

M. Narain & Co., 62, N. Subash Marg, Allahabad 211001.

United Motors, 3, Vidhan Sabha Marg, Lucknow 226001.

West Bengal

Auto India International, 4, Sooterkin St., Calcutta 700072.

Auto Parts Co., 11/1, Sooterkin St., Calcutta 700072.

Bengal Auto Distributors, 25-B, Park St., Calcutta 700016.

Bharat Motors, 6, Mangoe Lane, Calcutta 700001.

East India Automobiles, P-24, Mission Row Ext., Calcutta 700072.

Howrah Motor Accessories Agency Pvt. Ltd., 128, Hazra Rd., Calcutta 700026.

Howrah Motor Co. Ltd., 16, R.N. Mookherjee Rd., Calcutta 700069.

India Motor Parts & Accessories Ltd., 13, Camac St., Calcutta 700017.

Makin Bros., 5, A. Mukherjee Rd., Calcutta 700020.

Metal Specialities Pvt. Ltd., 6/1, Saklat Place, Calcutta 700013.

National Automobiles, 20, British India St., Calcutta 700069.

Oriental Motor Accessories Agency Pvt. Ltd., 28. Chittaranjan Ave., Calcutta 700072.

S.P. Singh & Co., 62, G. Chandra Ave., Calcutta 700072.

BADGES, EMBLEMS & MONOGRAMS

(See Under Metal Labels in Manufacturers list.)

BALL, ROLLER & NEEDLE BEARINGS

Delhi

Bearing Sales Corpn., 1/603, Zorawar Singh Marg, Delhi 110006.

Capital Machinery Co., 75, Shradhanand Marg, Delhi 110006.

Central Bearing Corpn., 2423, Shradhanand Marg, Delhi 110006.

Madan Lal & Co., 5336, Sadar Thana Rd., Delhi 110006.

SPARE PARTS FOR
Leyland
350, 370, 600,680 Engines
Comet, Royal Tiger, Titan,
Beavers & Hippo Models
and
C.A.V.
Fuel Injection Parts &
Electrical Parts
Vijay Commercial Corporation
5-B, Rajabhadur Bansilal Bldg.
64-D, Jagannath Shanker Shet
Marg (Girgaum Road),
Opera House, Bombay-400 004
PHONE : 353922 GRAMS : WECOMECORP

Satish Bearing House, 641, Shradhanand Marg, 77, G.B. Rd., Delhi 110006.

Talwar Bearing Co., 1/633, Zorawar Singh Marg, Delhi 110006.

Gujarat

Kamal Engineering Co., 21, Vijay Plot, Gondal Rd., Rajkot 360002.

Packwell Corpn., Sheth C.G. Bungalow, Lal Darwaja, Ahmedabad 380001.

Sharad Bros. & Co., Parasram Chambers, Relief Rd., Ahmedabad 380002.

Karnataka

Ashoka Sales Corpn., 94, S.J.Park Rd., Bangalore 560002.

Auto Bearing Co., D-28, 6th Main Rd., Gandhi Nagar, Bangalore 560009.

Bantwal Bros., 48, Journalist Colony, Bangalore 560002.

Belt-O-Bearings, 24, S.J. Park Rd., Bangalore 560002.

Chitlangia Enterprise, 63, J.C.Rd., Bangalore 560002.

Milak & Co., 73, J.C. Rd., Bangalore 560002.

Rollman Trading Co., 17-1A, Ali Asker Rd., Bangalore 560002.

Kerala

United Bearing Co., Pulikkal Bldg., M.G. Rd., Ernakulam, Cochin 682011

Maharashtra

Active Traders, 109/111, Nagdevi St., Bombay 400003.

Advance Bearing Corpn., 101, Nagdevi X Lane, Bombay 400003.

Amco Bearing Corpn., 139A, Abdul Rehman St., Bombay 400003.

Anil Bearing Stores, 163, Narayan Dhuru St., Bombay 400003.

Ashok Trading Corpn., 63/69 Nagdevji Crosslane, Bombay 400003.

Associated Industrial Traders, 416, Commerce House, N. Master Rd., Bombay 400023.

Associated Trade Impex, 25, Bibijan St., Bombay 400003.

B. Kolben (India), 43, Dhanji St., Bombay 400003.

Bali Bearing & Machinery Corpn., 172-174, Nagdevi St., Bombay 400003.

Ball Bearing & Toos Traders, 357 Shukrawarpeth, Pune 411002.

Ball & Roller Bearing Co., G.P.O. Box No. 1104, Bombay 400001.

Bhagirath Trading Co., 107, Abdul Rehman St., Bombay 400003.

Bharat Trading Co., 69, Nagdevi X Lane, Bombay 400003.

Bombay Bearing Centre, 39, Nagdevi St., Bombay 400003.

Chunilal Prabhudas & Co. (Bombay) Pvt. Ltd., 55/57, Nagdevi X Lane, Bombay 400003.

Commercial Trading Corpn., 39, Sarang St., Bombay 400003.

Convest Corpn., 110, N. Dhuru St., Bombay 400003.

Desai Brothers, 391, V.P. Rd., Badamwadi, Bombay 400004.

Dhirajlal & Co., 15, New Queen's Rd., Bombay 400004.

Dhiren Engg. Stores, 51-53, Nagdevi X Lane, Bombay 400003.

Doshi Bros., 11, Narayan Dhuru X Lane, Bombay 400003.

Eastern Engg. Co., 278, Dr. D.N. Rd., Bombay 400001.

Enaco Bearing Corpn., 25, Bibijan St., Bombay 400003.

Everest Bearing Corpn., 91, Nagdevi X Lane, Bombay 400003.

Hemani Bros.. 30, Princess St., Bombay 400002.

J. Industrial Corpn., 17, Nagdevi Crosslane, Bombay 400003

K.K. Poonja & Sons, 19/21, Dalal St., Bombay 400023.

Laxmi Engg. Co., 72/80, Nagdevi Crosslane, Bombay 400003

Machine Tools & Implements, 93/95, N. Dhuru St., Bombay 400003.

Mahavir Trading Corpn., 137A, Nagdevi St., Bombay 400003.

Masrani Mill Gin Stores, 46, Nagdevi Cross Lane, Bombay 400003.

Mehta Agencies, 107, Marine Chambers, 43, New Marine Lines, Bombay 400020

NKS Bearing Co., 145, N. Dhuru St., Bombay 400003

Navnit Trading Corpn., 163, Narayan Dhuru St., Bombay 400003.

Nitesh Enterprises, 91-93, Girgaum Rd., Bombay 400004.

Pankaj Mill Gin Corpn., 92, Nagdevi St., Bombay 400003.

Pradeep Trading Corpn., 43, Nagdevi Crosslane, Bombay 400003.

Purushottam Somabhai & Co., 36, Sarang St., Bombay 400003.

Radiant Bearing Co., 212, Yusuf Meherali Rd., Bombay 400003.

Rajesh Trading Corpn., 55/57, Nagdevi X Lane, Bombay 400003.

Rajkumar & Co., 157/159, N. Dhuru St., Bombay 400003.

Rajnikant & Co., 19, Bibijan St., Bombay 400003.

Ramesh Trading Co., 51-53, Nagdevi Crosslane, Bombay 400003.

Roller Bearing Co., 7, Crescent Chambers, Tamarind Lane, Bombay 700023.

S. Mohanlal & Co., Tawawala Bldg., 34, Pathakwadi, Bombay 400002.

Sanghavi Bearing Corpn., 155, N. Dhuru St., Bombay 400003.

Shagun Traders, 77/83, Nagdevi St., Bombay 400003.

Shah Bearing Corpn., 216, Kalbadevi Rd., Bombay 400002.

Shah Bros., 524, V. Patel Rd., Bombay 400004.

Shah Engineering Enterprise, 4, Bibijan St., Bombay 400003.

Swastik Sales Corpn., 95/97, Bhandari St., Bombay 400003.

Vijay Bearing Co., 155, N. Dhuru St., Bombay 400003.

Widerange Ball Bearing Co., 94-96, Nagdevi St., Bombay 400003.

Punjab

Ball Bearing & Machinery Traders, G.T. Rd., Jagraon Bridge, Ludhiana 141003.

Gupta Ball Bearing Agencies, Opp. Jagraon Bridge, G.T. Rd., Ludhiana 141003.

Tamil Nadu

Gunvantrai & Sons, 10/58, All Souls Lane, Coimbatore 641009.

Prakash Trading Co., 107, Armenian St., Madras 600001.

Radiant Bearing Co., 62, Thambu Chetty St., Madras 600001.

Sales Service Co., P.B. 1872, Madras 600001.

Uttar Pradesh

New Bearing Traders, Asha Bldg., 80/91, Latouche Rd., Kanpur 208001.

West Bengal

Adapters & Bearing Corpn., 138, BRBB Rd., Calcutta 700001.

Ashoka Bearing Corpn., 25, Strand Rd., Calcutta 700001.

Associated Bearing Enterprises, 27/2D, Strand Rd., Calcutta 700001.

Atlas Bearing Corpn., 5/1, Clive Row, Calcutta 700001.

Ball Bearing & Engg. Co., 52, Netaji Subhash Rd., Calcutta 700001.

Bearing Supply & Engg. Co., 138, BRBB Rd., Calcutta 700001.

Bearing Supply Syndicate, 71A, Netaji Subhash Rd., Calcutta 700001.

Central Trading Co., 137, Canning St., Calcutta 700001.

General Bearing & Engg. Co., 10, Canning St., Calcutta 700001.

Indian Ball Bearing Stores, 34, Strand Rd., Calcutta 700001.

Industrial Bearing Centre, 10, BRBB Rd., Calcutta 700001.

Kanji Shivji Parekh (Cal.) Pvt. Ltd., 55, BRBB Rd., Calcutta 700001.

Mill Stores & Bearing Co., 10, BRBB Rd., Calcutta 700001.

Nandlal Inderchand Pvt. Ltd., 10, BRBB Rd., Calcutta 700001.

Norfolk Asea Traders, 10, Canning St., Calcutta 700001.

Onkar Bearing Co., 138, BRBB Rd., Calcutta 700001.

Overseas Bearing Agency, 37, BRBB Rd., Calcutta 700001.

Sanjay Enterprises, 33, BRBB Rd., Calcutta 700001.

Shriudyog Mktg. Pvt. Ltd., 3A, Shakespeare Sarani, Calcutta 700071.

Sikkim Commercial Corpn.. 138, Canning St., Calcutta 700001.

United Supply Agency Pvt. Ltd., 38, Strand Rd., Calcutta 700001.

Vikas Trading Co., 40, Strand Rd., Calcutta 700001.

SKF FAG rhp fafnir STEYR INA ZKL Koyo NBC

Direct Importers & Stockists of
ALL KIND OF MOST
UTILITY RANGES OF
BALL, ROLLER,
NEEDLE ROLLER
& TAPER ROLLER
BEARINGS

DEALERS IN
ERW, HYDRAULIC SEAMLESS PIPES,
VEE-BELT (SPECIAL SECTIONS),
ENDLESS VARISPEED VEE-BELT,
MILD STEEL & STAINLESS STEEL
BOLT NUTS, RALLI WOLF GOODS,
& CONVEYOR BELTS.

AVAILABLE
SKF, FAG, RHP, INA,
TORRIGTON, FAFFNIR,
SEAL MASTER, ABC,
SKF (INDIA), NBC,
NORMA & KOYO INDIA
BEARINGS

FAG

PHONE :
338439

SKF

PANKAJ MILL-GIN CORPORATION
92, NAGDEVI STREET, GROUND FLOOR, BOMBAY-400 003.

BELTING & V BELTS

Arun (India), 152, Nagdevi St., Bombay 400003.
Auto Spares (India), Purshottam Bldg., Opp. Opera House, Bombay 400004.
Chetan Trading Co., 65, Sarang St., Bombay 400003.
Diwan Bros., 57, Nagdevi St., Bombay 400003.
Electro-Steel Engg. Co., Swadeshi Mkt., 2nd Flr., Kalbadevi Rd., Bombay 400002.
Gemini Corpn., 99, Surat St., Bombay 400009.
Godberg India Pvt. Ltd., 348, V.P. Road, Behind Imperial Cinema, Bombay 400004.
Greentose Pvt. Ltd., 24, Dalal St., Bombay 400023.
Kalpesh Traders, 71, Nagdevi Crosslane, Bombay 400003.
Kaybee & Co., 526, Arun Chambers, Tardeo, Bombay 400034.
Motilal Kaliandas & Co., 80, Nagdevi St., Bombay 400003.
National Enterprises, 53-B, Futnani Chambers, Calcutta 700013.
P. Ratilal & Co., 43 Dhanji St., Bombay 400003.
Paradise Trading Corpn., 4A, Ali Chambers, Homi Mody Cross St. No. 2, Bombay 400023.
Pierce Leslie India Ltd., Race Course Rd., Coimbatore 641018.
Sanjay Traders, 407, Sala House, 279, Narsi Natha St., Bombay 400009.
T. Brothers Jawadwalla, 189, Mutton St., Bombay 400003.
Tushar Enterprises, 116, Nagdevi St., Bombay 400003.
Vikram & Co., 258, Nagdevi St., Bombay 400003.

BLADES—SAFETY RAZOR

Crystal Co., 23, Narindra Place, New Delhi 110001.
Geoffery Manners & Co., Magnet House, Ballard Estate, Bombay 400038.
Herbertsons Ltd., Ewart House, Homi Mody St., Bombay 400023.
Lala Gopikrishna Gokuldas, 11, Western India House, Sir P.Mehta Rd., Bombay 400001.
Muller & Phipps (India) Pvt. Ltd., Queen's Mansion, Bastion Rd., Bombay 400001.

BOLTS, NUTS, SCREWS & RIVETS

A.A. Dengamwala & Co. Pvt. Ltd., 58, Khokha Bazar, Bombay 400003.
Ansons Corpn., 40/42, Nagdevi St., Bombay 400003.
Arul Agencies, 48, Linghi Chetty St., Madras 600001.
Asha Trading Co., 184, Janjikar St., Bombay 400003.
Baria Tube & Hardware Mart, 110, N. Dhuru St., Bombay 400003.
Bharat Corpn., 51, Bibijan St., Bombay 400003.
C. Amichand & Co., 46-A, Abdul Rehman St., Bombay 400003.
C. Manilal & Co., 155, Narayan Dhuru St., Bombay 400003.
C.N. Shah & Co., 263A, Nagdevi St., Bombay 400003.
Free India Metal Products Co., 48, Sarang St., Bombay 400003.
India Hardware Stores, 69, Durgadevi St., Kumbharwada, Bombay 400004.
Indo-Foreign Hardware Stores, 193, Nagdevi St., Bombay 400003.
Jayesh Trading Co., 86, Durgadevi St., Kumbharwada, Bombay 400004.
Kantilal & Sons, 150, N. Dhuru St., Bombay 400003
M.A. Bros., 79, Nagdevi St., Bombay 400003.
M. Ochhavlal & Co., 51, Bibijan St., Bombay 400003.
Maharashtra Hardware Stores, 94, Sarang St., Bombay 400003.
Manher Trading Co., 86, Gulalwadi, Bombay 400003.
Mohanlal & Co., 144, Diamond Bldg., Lohar Chawl, 33, Pathakwadi, Bombay 400002
Nagardas & Co., 65, Durgadevi St., Kumbharwada, Bombay 400004.
National Tools Syndicate, 77/83, Nagdevi St., Bombay 400003.
North South Commercial Corpn., Mooker Nallamuthu St., Madras 600001
Pankaj Industrial Traders, 70, Narayan Dhuru St., Bombay 400003
Radvic Enterprises, 155, Narayan Dhuru St., Bombay 400003
Rajaram Premnath & Co., 96, Bhajipala Lane, Bombay 400003
S. Mohanlal & Co., Tawawala Bldg., 34, Pathakwadi, Bombay 400002

DUNLOP
RUBBER BELTS, VEE BELTS, RUBBER HOSES
- Unbrako Socket set Screws
- Ajay Cast Iron Valves
- Quiset Air Hose Fittings
- KLIPCO Wormdrive Hose Clips
- Cosmos Suction & Delivery Hoses.
- Neoprene Sheets & Rubber Insertion • Vicoplast Transparent Plastic Pipes
- All types of Mill-Gin Stores Pipe Fittings & General Hardware.

VIKRAM
VIKRAM & CO.
258, NAGDEVI STREET, BOMBAY-3.
PHONE: 322981, 326175, TELEX:011-4253

Super Fasteners Corpn., 138/140, Narayan Dhuru Cross Lane, Bombay 400003.
Supreme & Co., 17, Camac St., Calcutta 700017.
Trade Link Agencies, 55, Sutar Chawl, Bombay 400003.
Vinod Gandhi & Co., 158/7, Nagdevi St., Bombay 400003.

BOOKSELLERS & PUBLISHERS

Andhra Pradesh

Navodaya Publishers, Eluru Rd., Vijayawada 520002.
Pothukuchi Agencies & Publicities, 208, New Bhoiguda, Secunderabad 500003.
Srimukha Publications, 18/2, R.T., Chandulal Baradari Hyderabad 500002.
Vidyarthi Publishers, 2, Lalbahadur Shastri Stadium, Hyderabad 500001.

Assam

Lawyer's Book Stall, Pan Bazar, Gauhati 781001.

Delhi

A.H. Wheeler & Co. Pvt. Ltd., 411, Surya Kiran Bldg., New Delhi 110001.
Affiliated East West Press Pvt. Ltd., 9, Nizamuddin East, New Delhi 110013.
Allied Publishers Pvt. Ltd., 13/14, Asaf Ali Rd., New Delhi 110002.
Akalank Publications, 3622, Mori Gate, Delhi 110006.
Arnold-Heinemann Publishers (India) Pvt. Ltd., AB/9, Safdarjang Enclave, New Delhi 110016.
Asia Publishing House, Indra Palace, Connaught Circus, New Delhi 110001.
Associated Book Centre, C/32, B.K. Dutt Colony, New Delhi 110003.
Associated Publishing House, 7717, New Market, Karol Bagh, New Delhi 110005

**In the race for business,
let these Business Press publications
give you a headstart . . .**

imprint

offers the best of reading every month—the finest fiction and non-fiction books, short stories, reports and articles of intelligent adult interest.
Single Copy: Rs.3.50. Annual Subscription: Rs.36.

The Indian Textile Journal

published monthly since 1890 is devoted to news, reports, articles, features on all aspects of the Textile and allied industries written by professionally qualified editors.
Single Copy: Rs.12. Annual Subscription: Rs.120.

Industrial Products Finder

published every month is India's Number One product news magazine that covers all manner of industrial products and processes developed in India and abroad.
Single copy price of each of the 12 monthly issues of IPF is Rs.6 and that of the IPF ANNUAL Number is Rs.75.
Annual subscription is Rs.100 for 12 monthly issues of IPF and 1 IPF ANNUAL Number.

PRODUCTS FROM INDIA

published bi-monthly is devoted to news and information about all kinds of consumer and industrial products of Indian origin that are exported or that have export potential.
Single Copy: Rs.10. Annual Subscription: Rs.50.

CHEMICAL PRODUCTS FINDER

published quarterly carries news and information about all kinds of Basic Chemicals, Chemical Processes and Products, Dyestuff, Chemical Plant and Equipment.
Single Copy: Rs.10. Annual Subscription: Rs.36.

The Architectural & Building Directory of India

published yearly is a single-volume source of business information about everything connected with the Architectural and Building trade in India.
Single Copy: Rs.100.

All India Textiles Directory

published yearly is a massively complete reference volume for business information on the Textile and allied industries in India.
Single Copy: Rs.75.

PREPRINT

published quarterly is devoted to reviews of books on business and industry, and general interest titles.
Single Copy: 75p. Annual Subscription: Rs.2.

For details write to:

BUSINESS PRESS PRIVATE LIMITED, Maker Tower 'E', 18th Floor, Cuffe Parade, Bombay 400 005.
Telephone: 211752 211861 217415 Cable: IMPRINTMAG

Atma Ram & Sons, Kashmere Gate, Delhi 110006.
B.I. Publications, 54, Janpath, New Delhi 110001.
Bajaj Publications, United India Life Bldg., F-Block, Connaught Place, New Delhi 110001.
Bansal & Co., K-16, Navin Shahdara, Delhi 110032.
Bharatiya Jnanpith, B/45, Conn. Place, New Delhi 110001.
Cambridge Publishing House, D-36, South Extn., Part 1, New Delhi 110049.
Delhi Book Co., M-12 Connaught Circus, New Delhi 110001.
D.K. Publishers' Distributors, 1, Ansari Rd., Daryaganj, New Delhi 110002.
Dhanwantra Medical & Law Book House, 592, Lajpatrai Mkt., Delhi 110006.
Dims Twentieth Century Publication, 301, Akashdeep, Barakhamba Rd., New Delhi 110001.
Educational Book Agency (India), 5D, Kamlanagar, Delhi 110007.
English Book Store, 7L, Connaught Circus, New Delhi 110001.
Frank Bros. & Co. (Publishers) Pvt. Ltd., 4675-A, Ansari Rd., Daryaganj, New Delhi 110002.
Hemkunt Press (Publishers), 1-E/15, Patel Rd., New Delhi 110008.
Hind Pocket Books Pvt. Ltd., 36C, Conn. Place, New Delhi 110001.
Impex India, 2/18, Ansari Rd., Daryaganj, New Delhi 110002.
India Book Depot, 2937, Bahadur Garh Mrg., Nr. Deputyganj, Delhi 110006.
India Book House, 'Himalaya House', 23, K.Gandhi Mrg., New Delhi 110001.
Indian Book Co., G.T. Rd., Delhi 110032.
J.M. Jaina & Bros., Mori Gate, Delhi 110006.
Jain Book Agency, C-9, Connaught Place, New Delhi 110001.
Lalvani Bros., 4 Darya Ganj, Ansari Rd., New Delhi 110002.
Lyall Book Depot, 23 Darya Ganj, New Delhi 110002.
Macmillan Co. of India Ltd., 2/10, Ansari Rd., Darya Ganj, New Delhi 110002.
Metropolitan Book Co. Pvt. Ltd., 1, Netaji Subhas Mrg., Darya Ganj, New Delhi 110002.
Milind Publications Pvt. Ltd., 6E, Rani Jhansi Rd., New Delhi 110055.
Navayug Traders, Desh Bandhu Gupta Rd., New Delhi 110005.
Neeta Prakashan, A-4, Ring Rd., South Extn., Part 1, New Delhi 110049.
New Book Depot, Connaught Place, New Delhi 110001.
New Light Publishers, Salwan School Marg, Rajinder Nagar, New Delhi 110060.
Orient Longmans Ltd., B 3/7, Asaf Ali Rd., New Delhi 110002.
Oriental Publishers, 1488, Pataudi House, New Delhi 110002.
Oxford & IBH Publishing Co., 66, Janpath, New Delhi 110001.
Oxford Book & Stationery Co. Pvt. Ltd., Scindia House, Connaught Circus, New Delhi 110001.
Peoples' Publishing House Pvt. Ltd., Rani Jhansi Rd., New Delhi 110055.
Premier Book Co., 4792/23, Darya Ganj, New Delhi 110002.
Prentice-Hall of India Pvt. Ltd., M-97, Connaught Circus, New Delhi 110001.
Radha Krishna Prakashan, 2, Ansari Rd., Daryaganj, New Delhi 110002.
Rajkamal Prakashan Pvt. Ltd., 8, N. Subash Marg, New Delhi 110002.
Rajpal & Sons, Kashmere Gate, Delhi 110006.
Rekha Printers Pvt. Ltd., A-102/1, Okhla Indl. Estate, Phase-II, New Delhi 110020.
Researchco, 1865, Tri Nagar, Delhi 110035.
Rupa & Co., Pataudi House Rd., Daryaganj, New Delhi 110002.
S. Chand & Co. Pvt. Ltd., Ram Nagar, New Delhi 110055.
Small Business Publications, SBP Bldg., 4/45, Roopnagar, Delhi 110007.
Star Publications Pvt. Ltd., 4/5-B, A. Ali Rd., New Delhi 110002.
Sterling Publishers Pvt. Ltd., AB/9, Safdarjang Devpt. Area, New Delhi 110016.
Sudha Publications Pvt. Ltd., 604, Prabhat Kiran, Rajendra Place, New Delhi 110008.
Tata McGraw Hill Publishing Co., Ltd., 12/4, Asaf Ali Rd., New Delhi 110002.
Taxmann Publications Pvt. Ltd., 1871, Khari Bhaoli, Delhi 110006.
Thomson Press (I) Ltd., K. Block, Conn. Circus, New Delhi 110001.
UBS Publishers' Distributors Pvt. Ltd., 5, Ansari Rd., New Delhi 110002.
Universal Book Distributors Pvt. Ltd., 5, Ansari Rd., New Delhi 110002.
Universal Book & Stationery Co., 16, Netaji Subhas Mrg., New Delhi 110002.
Universal Book Traders, 80, Gokhale Mkt., Delhi 110006.
V.K. Publications, 36, Toodarmal Rd., New Delhi 110001.
Varma Bros., 21, Shankar Mkt., New Delhi 110001.
Vikas Publishing House Pvt. Ltd., 5, Daryaganj, Ansari Rd., New Delhi 110002.
Wiley Eastern Pvt. Ltd., AB/8, Safdarjang Enclave, New Delhi 110016.

Gujarat

Ananda Book Depot, Gandhi Rd., Ahmedabad 380001.
Bal Govind Kuberdas & Co., Near Fernandez Bridge, Ahmedabad 380001.
C. Jamnadas & Co., Tilak Rd., Ahmedabad 380001.
Jayant Book Depot, 106/2, Gandhi Rd., Ahmedabad 380001.
Kumar Karyalaya Ltd., 1454, Raipur, Ahmedabad 380001.
Navjivan Trust, P.O. Navjivan, Ahmedabad 380014.
Navyug Book Depot, Balahanuman, Ahmedabad 380001.
New Order Book Co., Ellis Bridge, Ahmedabad 380006.
R. R. Sheth & Co., Fuvara, Gandhi Rd., Ahmedabad 380001.

Jammu & Kashmir

Chopra & Bros., Pucca Danga Bazar, Jammu-Tawi 180001.
Hind Book Shop, Residency Rd., Srinagar 190001.
Jay Kay Book House, Residency Rd., Srinagar 190001.
Radha Krishan Anand & Co., Pucca Danga, Jammu-Tawi 180001.

Karnataka

Allied Publishers Pvt. Ltd., Javdeva Hostel Bldg., 5th Main, Gandhinagar, Bangalore 560009.
Bangalore Paper & Board Co., Sultanpet, Bangalore 560053.
Bangalore Printing & Publishing Co. Ltd., 88, Mysore Rd., Bangalore 560018.
Bhushan & Co., Basavanagudi, Bangalore 560004.
Higginbothams Pvt. Ltd., 17-A, M. Gandhi Rd., Bangalore 560001.
Hindusthan Paper & Boards, Sulthanpet, Bangalore 560053.
India Book House, 30/1, 5th Main, Gandhinagar, Bangalore 560009.
Janatha Publications, 14 Cross, Malleswaram, Bangalore 560003.
Karnataka Paper & Board Co., 240/1, Sulthanpet, Bangalore 560003.
Kumar Agencies, C/o Rajashree Printers, Mamulpet, Bangalore 560053.
Mysore Press Pvt. Ltd., 14/1, North Anjaneya Temple St., Basavanagudi, Bangalore 560004.
Mysore Sales Corpn., Sharada Movies Bldgs., Gandhinagar, Bangalore 560009.
Mysore Vanijya Pvt. Ltd., 31, Mariswamappa Lane, S.J.P. Rd. Cross, Bangalore 560002.

DIRECTORY OF MIDDLE EAST IMPORTERS

YOUR GUIDE TO OVER 15,000 BUSINESS PROSPECTS IN THE MIDDLE EAST

Covering **BAHRAIN, EGYPT, IRAN, IRAQ, ISRAEL, JORDAN, KUWAIT, LEBANON, OMAN, QATAR, SAUDI ARABIA, SYRIA, UNITED ARAB EMIRATES AND YEMEN.**

* *ALL DATA IS UP-TO-DATE AND ESPECIALLY COMPILED FOR THE 1982 EDITION.*
* *MORE THAN 15,000 ENTRIES OF ACTIVE IMPORTING FIRMS.*
* *COMPLETELY INDEXED ACCORDING TO COMMODITY.*
* *THE DIRECTORY IS SUPPLIED IN A CONVENIENT HARD COVER BINDER. FORMAT 26 cm. × 30 cm.*

DIRECTORY
MIDDLE EAST
IMPORTERS
DIRECTORY OF MIDDLE EAST IMPORTERS

1982 EDITION

This directory has a great variety of uses and can be indispensable to anyone doing business with the Middle East. It is particulary recommended to exporters, manufacturers and trading firms who will find it especially valuable in their sales development efforts, as well as for evaluating marketing and sales opportunities in the entire Middle East and Gulf Region.

The directory is conveniently divided into 14 sections, each covering one country. The importing firms are listed alphabetically under numerous commodity headings. Further, this volume provides authoritative information on population, business climate, imports, economics, foreign trade statistics and much more.

Price : S$400.00 (or US$200.00) including air postage.
Send advance payment by bank draft to :
World-Wide Import-Export Promotion Centre
P.O. Box 503, Marine Parade Post Office,
Singapore, 9144. Republic of Singapore.
Tels: 2943069, 2927550 Cable Address: "COSUNHOTRA"
Banker: Oversea-Chinese Banking Corporation Ltd., East Coast Road Branch.

BUSINESS OPPORTUNITIES
53

"BUSINESS OPPORTUNITIES"

* Published monthly. Tells you where and what to sell and to buy throughout the world.
* Worldwide circulation.
* •6th Year of Publication.

For sample copy please write to.

WORLD-WIDE IMPORT-EXPORT PROMOTION CENTRE,
P.O. Box 503,
Marine Parade Post Office,
Singapore 9144.
Republic of Singapore.

Sobana Trading Co., Sultanpet, Bangalore 560053.

Standard Book Depot, Avenue Rd., Bangalore 560002.

UBS Publishers & Distributors Pvt. Ltd., Gandhinagar, Bangalore 560009.

Vicharasahitya Pvt. Ltd., Balepet, Bangalore 560053.

Vijaya Paper & Boards, Balepet, Bangalore 560053.

Kerala

Current Books, Round West, Trichur 680001.

M.M. Publications Pvt. Ltd., K.K. Rd., Kottayam 686004.

Mangalodayam Pvt. Ltd., Mangalodayam Bldg., Trichur 680001.

Samrdhi Printers & Publishers, X 13/1, Pettah, Trivandrum 695024.

Touring Book Stall, Court Rd., Calicut 673001.

Vidyarambham Press & Book Depot, Alleppey 688001.

Maharashtra

A.H. Wheeler & Co., Pvt. Ltd., Eruchshaw Bldg., 249, Dr. D. Naoroji Rd., Bombay 400001.

Aggarwal Bros. Pvt. Ltd., 6, 2nd Flr., Mahalaxami Indl. Estate, Gandhinagar, Bombay 400013.

Ajantha Book Centre, 433/24, Somwar Peth, Pune 411011.

Allibhoy Sharafally & Co. P. Ltd., Mohamadi Bldg., Gunpowder Rd., Mazagaon, Bombay 400010.

Allied Publishers Pvt. Ltd., 15, Graham Rd., Ballard Estate, Bombay 400038.

Architects Publishing Corpn. of India, 51, Sujata, Quarry Rd., Malad East, Bombay 400064.

Asia Publishing House, Calicut St., Bombay 400038.

Asian Trading Corpn., 310, The Mirabelle, 33/A, New Marine Lines, Bombay 400020.

Astra Publishers Pvt. Ltd., Jeevan Shankar, 1st Flr., Sir P.M. Rd., Bombay 400001.

ALLIBHOY SHARAFALLY & CO.
PRIVATE LTD.
(Established: 1878—Incorporated: 1938)
Printers, Publishers, Booksellers, etc.
Mohamadi Buildings, Gunpowder Road, Mazagon,
Bombay-400 010.
Telegraphic Address: "KORAN."
Telephone Nos. 863728 & 863735.

★

Proprietors of :
Mohamadi Fine Art Litho Works,
Offset & Letterpress Printers and
Carton Manufacturers.

★★

Matba-e-Mohamadi (Mohamadi Litho Press),
Publishers of Holy Quran, Arabic, Persian, and
other calliographed literature.
Shop :
373, Ebrahim Rahimtullah Road, Bombay-400 003.
Telephone: 332711.

Bantinman Books & Sales Corpn., 69/67, Ghoga St., Bombay 400001.

Bharatiya Vidya Bhavan, Kulapati K.M. Munshi Mrg., Chowpatty, Bombay 400007.

Blackie & Son (I) Ltd., Blackie House, 103/5, Walchand Hirachand Mrg., Bombay 400001.

Book Centre Pvt. Ltd., Ranade Rd., Dadar, Bombay 400028.

Charles Lambert & Co., 101, M. Gandhi Rd., Bombay 400023.

Commerce Publications Ltd., 90, Veer Nariman Rd., Bombay 400020.

D. B. Taraporewala Sons & Co., Pvt. Ltd., Taj Bldg., 210, Dr. D. Naoroji Rd., Bombay 400001.

Dastane Ramchandra and Co., 456, Raviwar Peth, Pune 411002.

Doctors' Library, 4-F-2, Court Chambers, 35, Marine Lines, Bombay 400020.

Fidvi Printing Press, 179, A. Rehman St., Bombay 400003.

Goodluck Book Mfg. Co., 166, Chimna Butcher St., Opp. Null Bazar Mkt., Bombay 400003.

Gospel Literature Service, Queens Mansions, Bastion Rd., Bombay 400001.

Hindustan Book Stall, 1914, Blundel Rd., Pune 411001.

India Book House, Mahalaxmi Chambers, 22, B. Desai Rd., Bombay 400026.

India Book House Pvt. Ltd., 29, Wodehouse Rd., Bombay 400039.

Inquilab Publications Pvt. Ltd., 156, D.J. Dadajee Rd., Bombay 400034.

International Book House Pvt. Ltd., Indian Mercantile Mansion (Extn.), Madame Cama Rd., Bombay 400039.

International Book Service, Deccan Gymkhana, Pune 411004.

Jaico Publishing House, 121, M. Gandhi Rd., Bombay 400023.

Jaina Book Agency (India), 649-A, Girgaum Rd., Dhobitalao, Bombay 400002.

Kothari Book Depot, A. Donde Marg, Parel, Bombay 400012.

Lalvani Brothers, 210, Dr. D. Naoroji Rd., Bombay 400001.

Lok Vangmaya Griha Pvt. Ltd., 190-B, Khetwadi Main Rd., Bombay 400004.

Maharashtra Book Depot, Appa Balwant Chowk, Pune 411002.

Majestic Book Stall, 211A, R. M. Roy Mrg., Bombay 400004.

Modern Book Stall, 1-E, East St., Pune 411001.

Mona-Lisa Book Co., Lotus House, 33A, New Marine Lines, Bombay 400020.

N. M. Tripathi Pvt. Ltd., 164, S. Gandhi Mrg., Bombay 400002.

New Book Co., Dr. D. Naoroji Rd., Bombay 400001.

New & Secondhand Bookshop, 526, Kalbadevi Rd., Bombay 400002.

Orient Longmans Ltd., Indian Mercantile Chambers, Nicol Rd., Ballard Estate, Bombay 400038.

Oxford University Press, Oxford House, Apollo Bunder, Bombay 400039.

Peoples Book House, Laxmi Rd., L.I.C. Bldg., Pune 411030.

Popular Book Depot, Dr. Bhadkamkar Rd., Bombay 400007.

Popular Book Depot, 373-74, Narayan Peth, Laxmi Rd., Pune 411030.

Popular Prakashan, 35-C, Tardeo Rd., Bombay 400034.

Progressive Corpn. Pvt. Ltd., Jehangir Wadia Bldg., 51, M. Gandhi Rd., Bombay 400023.

Purchase Publications, 34, Mittal Chambers, N. Point, Bombay 400021.

RDI Print & Publishing Pvt. Ltd., Orient House, Mangalore St., Ballard Estate, Bombay 400038.

Saraswati Grantha Bhandar, 681, Budhwar Peth, Pune 411002.

Sevak Publications, 306, Shri Hanuman Ind. Estate, G.D. Ambekar Rd., Wadala, Bombay 400031.

Somaiya Publications Pvt. Ltd., 172, Naigaum Cross Rd., Bombay 400014.

Thacker & Co., Ltd., 18, Rampart Row, Bombay 400023.

United Asia Publications Pvt. Ltd., 12, Rampart Row, Bombay 400023.

Universal Book Corpn., 546, Jer Mahal, Dhobi Talao, Bombay 400002.

Usha Book Depot, 585/A, J. Shankershet Rd., Bombay 400002.

Vakils, Jeffer & Simons Pvt. Ltd., Hague Bldg., 9, Sprott Rd., Ballard Estate, Bombay 400038.

Vora & Co. Publishers Pvt. Ltd., Round Bldg., Kalbadevi Rd., Bombay 400002.

Writers Emporium Pvt. Ltd., 32, Khorshed Bldg., Sir P. Mehta Rd., Bombay 400001.

Orissa

Cuttack Students Store, Cuttack 753002.

Grantha Mandir, Binodbehari, Cuttack 753002.

Pondicherry

Shri Aurobindo Books Distribution Agency Pvt. Ltd., Pondicherry 605001.

Punjab

Atma Ram & Sons, Sector 14, Chandigarh 160017.

Rajasthan

Best Book Company, Chaura Rasta, Jaipur 302003.

Tamil Nadu

Amudha Nilayam Ltd., 1/45, Royapettah High Rd., Madras 600014.

Association Publishing House, 94/95, New St., Mannady, Madras 600001.

Blackie & Sons (India) Ltd., 2/18, Mount Rd., Madras 600002.

Children World Publications, 5, Seven Wells St., Madras 600001.

Cultural Books Pvt. Ltd., 6, 1st Lane, 94, N. Naicker St., Madras 600002.

Higginbothams Pvt. Ltd., 614, Anna Salai, Madras 600002.

L.B.Publishers & Distributors (Madras) Pvt. Ltd., VI-C, Eldorado, 112, Nungambakkam High Rd., Madras 600034.

Little Flower Co., 8, Ranganathan St., T. Nagar, Madras 600017.

Lotus Publishers, 2, Kondi Chetti St., Madras 600001.

M. Seshachalam & Co., 14, S. Chetty St., Madras 600001.

Macmillan & Co. of India Ltd., 6, Patullos Rd., Madras 600002.

Orient Longmans Ltd., 36 A, Mount Rd., Madras 600002.

Oxford University Press, P.B. No. 1079, Madras 600006.

Paico Publishing House, 35, Mount Rd., Madras 600002.

Sangam Publishers, 11, Sunkurama Chetti St., Madras 600001.

Southern Languages Book Trust, 4, Mandapam Rd., Madras 600010.

Standard Literature Co. Pvt. Ltd., 16, Ritchie St., Madras 600002.

Theosophical Publishing House, Adyar, Madras 600020.

Uttar Pradesh

A.H. Wheeler & Co. Pvt. Ltd., 15, L.B. Shastri Mrg., Alahabad 211001.

Balkrishna Book Co., B-12A, Niralanagar, Lucknow 226007.

English Book Depot, 15, Rajpur Rd., Dehra Dun 248001.

Jugal Kishore & Co., 23-C, Rajpur Rd., Dehra Dun 248001.

Law Book Co., Sardar Patel Mrg., Post Box No.4, Allahabad 211001.

Mitra Prakashan Pvt. Ltd., 281, Muthiganj, Allahabad 211003.

Natraj Publishers, 17, Rajpur Road, Dehra Dun 248001.

Trans World Communications, Civil Lines, Roorkee 247667.

Upper India Publishing Houses Pvt. Ltd., Aminabad. Lucknow 226001.

West Bengal

Ads & Prints, A8, Bonhoogly Ind. Estate (I), Calcutta 700035.

Advaita Ashrama, 5, Delhi Entally Rd., Calcutta 700014.

For
Latest and wide Selection of

Books on

SCIENCES & TECHNOLOGY

MANAGEMENT & INDUSTRIAL ENGINEERING

•

SHANKAR'S BOOK AGENCY

Showroom :
133, Lenin Sarani, Calcutta 700 013.
(Phones : 27-8993, 26-0719).

Office & Sub. Dept. :
1/1, Meredith Street, Calcutta 700 072.
(Phone : 23-7578).
Grams : " BOOXERVICE ", Calcutta.
Subject lists on request.

A.K.B. Publications, Commerce House, 2, G.C. Avenue, Calcutta 700013.

Bookland Pvt. Ltd., 1, S. Ghose Lane, Calcutta 700006.

Eastern Law House Pvt. Ltd., 11, R. S. Mullick Sq., Calcutta 700013.

Indian Publications, 3, Abdul Hamid St., Calcutta 700069.

K. K. Roy Pvt. Ltd., 55, Gariahat Rd., Calcutta 700019.

Kothari Publications, 12, India Exchange Place, Calcutta 700001.

Kwality Book Co., 31, Lenin Sarani, Calcutta 700013.

M. C. Sarkar & Sons Pvt. Ltd., 14, B. Chatterjee St., Calcutta 700012.

Macmillan India Ltd., 294, B.B.Ganguli St., Calcutta 700012.

Maroon Publications Pvt. Ltd., 28, Black Burn Lane, Calcutta 700012.

National Book Agency Pvt. Ltd., 12, Bankim Chatterji St., Calcutta 700012.

Oxford Book & Stationery Co., 17, Park St., Calcutta 700016.

Progressive Publishers, 37A, College St., Calcutta 700073.

Sarat Book House, 18-B, S. C. De St., Calcutta 700012.

Shankar's Book Agency, 1/1, Meredith St., Calcutta 700072.

United Book House, 3, Mangoe Lane, Calcutta 700001.

W. Newman & Co. Ltd., 3, Old Court House St., Calcutta 700001.

World Press Pvt. Ltd., 37, College St., Calcutta 700012.

CALCULATORS

Biscons, 29/A, Naoroji Seth St., Off Queen's Rd., Thakurdwar, Bombay 400002.

Constellation Services, 6, Noble Chambers, S. A. Brelvi Rd., Bombay 400001.

Hindustan Instruments, 7/9, Bell Lane, Bombay 400001.

International Marketing Corpn., Harilela House, Opp. G.P.O., Mint Rd., Bombay 400001

Jagmohandas Mangaldas & Co., 36, Dalal St., Bombay 400023.

K. Jagmohandas & Co., 79, N. Master Rd., Bombay 400001.

Mayfair Services, 71, Moore St., Madras 600001.

Newage Business Systems, 2643, Shadipur West Patel Nagar, New Delhi 110008.

Shilpa Distributors, 10, Krishna Kunj Society, Jetapur Rd., Alkapuri, Vadodara 390005.

Western Electronics, 2038, Sadashivpeth, Kamala Keshav Bldg., Tilak Rd., Pune 411030.

CARPETS & RUGS

Amrapali Carpets, 1, Arun Chambers, Tardeo, Bombay 400034.

Anand Jute Traders, 7, Hastings St., Calcutta 700001.

Ashoka Carpets, 24, Barakhamba Rd., New Delhi 110001.

Bhalla's Carpets, 45, Park St., Calcutta 700016.

Blue Star Carpet Cleaning Co., 105, Adhyaru Ind. Estate, Bombay 400013.

Calcutta Carpet Store, 43, Park St., Calcutta 700016.

Continental Marketing Pvt. Ltd., A-B/35, Safdarjung Devpt. Area Mkt., New Delhi 110016.

Dossa Harjee, 257/259, Y. Meherali Rd., Bombay 400003.

E. Peerbhoy & Sons, Shahru Castle, 64, Mohamedali Rd., Bombay 400003.

India Carpets & Furnishing Co., 11/12, Laxmi Mahal, B. Petit Rd., Bombay 400036.

Kailash Carpets Co., 11F, Connaught Place, New Delhi 110001.

Mehra Carpet Showroom, 79, Dr. A. Besant Rd., Worli, Bombay 400018.

Teenmurthi, 28F, Connaught Place, New Delhi 110001.

Vanjara E. Salemohamed & Son, 81-D, Lehri House, Mohamedali Rd., Bombay 400003.

CHAIN PULLEY BLOCKS

Aarco, 3, Navjivan Colony, 14th Flr., Lamington Rd., Bombay 400008.

Abdulhusein Peerbhai & Sons, 66-68/A, Peerbhai Bldg., Bhandari St., Bombay 400003.

Amratlal Chhaganlal & Co., 143, Nagdevi St., Bombay 400003.

Batliboi & Co. Pvt. Ltd., V.B. Gandhi Mrg., Bombay 400023.

Bharat Engineering Stores, 113, Nagdevi St., Bombay 400003.

C. Bole & Co., 61, Narayan Dhuru St., Bombay 400003.

Crown Bucket Factory, 222, Nagdevi St., Bombay 400003.

Eastern Supply Syndicate, 6, Raja Woodmunt St., Calcutta 700001.

Eastern Trdg. & Engg. Co., 86, Mint Rd., Bombay 400001.

Esoofalli Esmailji Karachiwalla & Co., 43-45, N. R. Koli Mrg., Bombay 400003.

Hemant Tools Trading Co., 33, Bibijan St. (Barbhai Mohalla), Bombay 400003.

Heptoola Nooruddin & Co., 154, Nagdevi St., Bombay 400003.

Jairamdas & Sons, 163, Narayan Dhuru St., Bombay 400003.

Kaiser Corpn., 135, B.R.B.B. Rd., Calcutta 700001.

Machinery Equipments 271-A, Nagdevi St., Bombay 400003.

Raj Tools Corpn., 50, Bibijan St., Bombay 400003.

South Coast (Hardware) Pvt. Ltd., 158-B, Broadway, Madras 600001.

Western India Marine Mills & Engineers, 185, Janjikar Street, Bombay 400003.

CHAINS

Delhi

Moti Ram & Sons, 65/1, Shradhanand Mrg., Delhi 110006.

Prem Nath Nanda & Sons, Hauz Kaz, Delhi 110006.

Maharashtra

Acme Engg. Co., 16/2, Shanker Bari Lane, Chira Bazar, Bombay 400002.

Albro Trading Co., 42, Bhajipala St., Bombay 400003.

Ashton Green & Co., 118, Sir Vithaldas Chambers, 16, Apollo St., Bombay 400023.

Bombay Chain Suppliers, 52, Saifee Jubilee St., Bombay 400003.

Dhiraj Industries, 84, Bombay Samachar Mrg., Bombay 400023.

General Textile Stores, 66, Dhanji St., Bombay 400003.

Mody Textile Traders, 9, Anand Bhavan, Islampura St., Bombay 400004.

Rajkamal Traders, 23, Hamam St., Bombay 400001.

Shah Chain Traders, 5-A, Banaji St., Bombay 400001.

Sony Brothers, 117/119, Mody St., Bombay 400001.

Standard Material Agencies, 45/46, Podar Chambers, P. Bazar St., Bombay 400001.

Unique Agencies, Apeejay House, 30, Bombay Samachar Mrg., Bombay 400023.

Universal Traders, Petit Bldg., Nana Chowk, Bombay 400007.

Wipperdrive Engg., 11, Noble Chambers, Ghoga St., Bombay 400001.

Tamil Nadu

Chains & Allied Concern, 38, Linghi Chetty St., Madras 600001.

Industrial Chain Centre, 37, Linghi Chetty St., Madras 600001.

Prakash Chain Co., 17/18, Errabalu Chetty St., Madras 600001.

South India Roller Chain Stores, 304, Linghi Chetty St., Madras 600001.

West Bengal

Allied Industrial Corpn., 5-1, Clive Row, Calcutta 700001.

Arthur Bagree & Co. (India), 40, Strand Rd., Room No.45, Calcutta 700001.

Blue Star Corpn. (India), 16, Rupchand Roy St., Calcutta 700007.

Continental Tools & Machinery, 3, Saklat Place, Calcutta 700013.

Impex House, 77, N. Subhas Rd., Calcutta 700001.

R. B. Trading Co., 71/A, N. Subhas Rd., Calcutta 700001.

R. N. Nundy Co., 29-B, Bentinck St., Calcutta 700001.

Roy Chain & Hoist Co., 14-A, Galiff St., Calcutta 700007.

S. A. Goolamally & Co., 77, N. Subhas Rd., Calcutta 700001.

Victoria Corpn. (India), 138, B.R.B.B. Rd., Calcutta 700001.

CHEMICALS—AROMATIC

Calcutta Essence Supply Co., Mulchand Mansion, Princess St., Bombay 400002.

M. C. Davar & Co., 143, Princess St., Bombay 400002.

N. R. Shah & Co., Mulchand Mansion, Princess St., Bombay 400002.

CHEMICALS, LABORATORY

(See Laboratory Chemicals in this list.)

CHEMICALS, PHARMACEUTICALS, DYES, ETC.

Andhra Pradesh

Bombay Colour Agency, 1629, Tobacco Bazar, Secunderabad 500003.

Desai Chemicals Co., 43-18-11, Ramaraju Nagar, Visakhapatnam 530004.

Delhi

Chemical Distributors (India) Ltd., 1309, Tilak Bazar, Nai Basti, Delhi 110006.

Chemicals de Centre, 3/15, Asaf Ali Rd., New Delhi 110002.

Sindh Colour Mart, 5170, Rui Mandi, Sadar Bazar, Delhi 110006.

United Trading Co., 12/56, D. B. Gupta Rd., New Delhi 110005.

Gujarat

Chemical Corpn. of India, Brindavan, Hirabag, Ambawadi, Ahmedabad 380006.

Durga Agencies, Durga Estate, N.H. No.8, Chhani Rd., Vadodara 390002.

Tejal Chemicals, Opp. Vayda Pole, Chokhandi, Vadodara 390001.

Karnataka

Mahaveer Chemicals, 16, Arcot Srinivasachar St., Bangalore 560053.

Kerala

Fab Dyekem Pvt. Ltd., XXXIV/2666, Tripunithura Rd., Cochin 682016.

Pampa Trade & Chemicals Pvt. Ltd., XXXVI/435, Mullassery Canal Rd., Ernakulam, Cochin 682011.

Maharashtra

Amar Trading Corpn., 339/41, Samuel St., Rawal Chambers, Bombay 400003.

Amrutlal Bhurabhai & Co., Anand Bhuvan, Princess St., Bombay 400002.

Associated Agencies (Bombay), 5-B, 5th Floor, Fairy Manor, Gunbow St., Bombay 400001.

Associated Chemical Syndicate, 2A, Maker Bhavan No. 2, 18, New Marine Lines, Bombay 400020.

B.P. Chemicals, 120/122, Vir Vithaldas Chandan St., Vadgadi, Bombay 400003.

Bharat Mercantile Co., 98, Princess St., Bombay 400002.

Bharat Trading Co., 226, Samuel St., Bombay 400003.

Capco Pvt. Ltd., Co-op. Insce. Bldg., Sir P. M. Rd., Bombay 400001.

THE METTUR CHEMICAL & INDUSTRIAL CORPORATION LTD.
Mettur Dam 636402, Salem District.

Manufacturers of :
ORGANIC & INORGANIC CHEMICALS

- Methyl Chloride
- Methylene Dichloride
- Chloroform
- Carbon Tetrachloride (Refrigerant Grade)
- Caustic Soda — Lye/Solid/Flakes (Commercial/Rayon Grade)
- Stable Bleaching Powder
- Ethyl Silicate
- Silicon Tetrachloride

Enquiries to :

M/s. ASSOCIATED CHEMICAL SYNDICATE
For Maharashtra & Gujarat
2-A, Maker Bhavan No. 2, 18, New Marine Lines,
Bombay 400 020.
Telephone : 256061.
Telex : 011-3392.

QUALITY – SOLVENTS

ACETONE-BENZENE-XYLENE
TOLUENE-N. HEXANE-METHANOL
ISO-PROPANOL BUTANOL-PINE OIL
ETHER PETROLEUM 40-60, 60-80.
CRESYLIC ACID-TECH PURE.

(For Steel Processing)
BUTYL ACETATE ALCOHOL
AMYL ETHYL METHYL ACETATE.
ISO AMYL ALCOHOL 128° to 132°
TRICHLOROETHYLENE
THINNER No. 1-2-3
& OTHER SOLVENTS IN
BULK & SMALL PACKING.

CSC **CHEMICAL SOLVENT CENTRE**
43, Princess Street,
Bombay 400 002.
Telephones : *Office* : 314293, 313812, 254853,
Resi. : 354061.
Telex : ASIM 011-4145. Grams : "CHESOLVECE"

Chandranil Dyechem Corpn., 98, Princess St., Bombay 400002.

Chem Tech Corpn., 327, Narsi Natha St., Bombay 400009.

Chemical International, 3, Princess St., Bombay 400002.

Chemo Supply Corpn., 511, Himalaya House, Palton Rd., Bombay 400001.

Chemical Solvent Centre, 43, Princess St., Bombay 400002.

Chemox Chemical Inds., 283, Samuel St., 2nd Flr., Vadgadi, Bombay 400003.

Chemox Overseas Corpn., 283, Samuel St., Vadgadi, Bombay 400003.

Chika Ltd., Mehta Chambers, 13, Mathew Rd., Bombay 400004.

Crescent Chemicals, 375, Narsi Natha St., Bombay 400009.

D. K. Lab. Chemicals, 98, Princess St., Bombay 400002.

Damani Dyestuff Ltd., 212/216, Samuel St., Bombay 400003.

Driers Chemicals, 100, D. Phalke Rd., Bombay 400014.

G. V. Agency, 73, Podar Chambers, 109, P. Bazar St., Bombay 400001.

Gem Chemie Inds., 130/140, Govardhan Niketan, 7th Cavel X Lane, Bombay 400002.

Harchem Inds., 212/16, Samuel St., Bombay 400003.

Helm India Pvt. Ltd., Jolly Maker Chambers No. 2, N. Point, Bombay 400021.

Indian Overseas Corpn., 29, A.Gabdhi Mrg., Bombat 400003.

Indokem Pvt. Ltd., 221, Dr. D. N. Road, Bombay 400001.

J. N. Kanth Chemicals & Dyestuff Pvt. Ltd., 5/26, Tardeo Airconditioned Mkt., Bombay 400034.

Jai Chemical Corpn., 503, New Krupa, 118/122, Kazi Syed St., Bombay 400003.

Jak Agencies, Mysore House, First Rd., Chembur, Bombay 400071.

Jayant Dye-Chem Corpn., 8, S. Devji St., Bombay 400003.

Jupiter Dyechem Pvt. Ltd., Ilaco House, Sir P. M. Rd., Bombay 400001.

AVAILABLE AT MOST
COMPETITIVE RATES FROM
AUTHORISED DISTRIBUTORS OF
CHEMICAL AND AUXILIARIES
SERVICES PVT. LTD.

ACETIC ACID

GLACIAL 99%

in

TANKER LOADS
NEW JERRY CANS &
IN YOUR CONTAINERS

Mfgd. by :

**GUJCHEM DISTILLERS
INDIA LTD.**

Chemox

**OVERSEAS
CORPORATION**

283, 2nd Floor, Samuel Street,
Vadgadi, Bombay 400 003.

PHONES : Office : 322674 ● 349997 ● 335620.
Godown : 394249 ● 895898

Cable : " CHEMNOMI "

Telex : CHEM : 011-2195.

SOLVENTS & CHEMICALS
CARBON TETRA CHLORIDE

- ACETONE (C.P.)
- BENZENE (N.G.)
- XYLENE (C.P.)
- TOLUENE (N.G.)
- ACETIC ACID GLACIAL
- N. HEXANE
- TRICHLOROETHYLENE
- CHLOROFORM
- ETHER PETROLIUM
- FORMALDEHYDE 37%
- AMYL ACETATE
- BUTYL ACETATE
- ETHYL ACETATE
- ETHYLENE GLYCOL
- PROPYLENE GLYCOL
- SORBITOL

Available in all required packings 450 ML, 5 lits., 25 lits., 30 lits., 50 lits. & Bulk.

PERFECT CHEMICALS
10, New Navyug Co-op. Housing Society Ltd.,
14, Dhirubhai Parikh Marg (Princess Street),
Bombay 400 002.
Telephones : 250883 & 292915.

Jyoti Trading Co., Berar House, 293/243, A. Rehman St., Bombay 400003.

Narendra Kumar & Co., 77, New Bardan St., Vadgadi, Bombay 400003.

National Solvents Corpn., B-9, Devkaran Mansion, Princess St., Bombay 400002.

Nav Bharat Minerals & Chemicals, 8, Haresh Chambers, 313-319, Samuel St., Bombay 400003.

Neo Dye-Chem Corpn., 6, Keshavji Nak Rd., Bombay 400009.

Nityanand Chemical Corpn., 13, Opp. Bhaichand Textile Mills, L. B. S. Mrg., Bhandup, Bombay 400078.

Perfect Chemicals, 32, Shroff Mansion, Princess St., Bombay 400002.

Poly Chemicals, 94, Kansara Chawl, Kalbadevi Rd., Bombay 400002.

Polystar Chemicals, 22, Babu Genu Rd., Bombay 400002.

Rasayani, 323-325, Abad Bank House, Narsi Natha St., Bombay 400003.

Shreee Enterprises (Chemicals) Pvt. Ltd., 91, Mittal Chambers, N. Point, Bombay 400021.

Shree Prabhadevi Dyes & Chemical Co. Ltd., 287-289, Samuel St., Vadgadi, Bombay 400003.

Techno-Industrial Syndicate, 19-B, Noble Chambers, Parsee Bazar St., Bombay 400001.

Thakkar Chemicals & Fertilisers, 121-127, K. Syed St., Bombay 400003.

Tribhovandas Khimji & Bros., 13, S. Gandhi Mrg., Bombay 400002.

V. Chandulal Dyes & Chemicals, 4/5, Western India House, Sir P. M. Rd., Bombay 400001.

V. Pech & Co., Airdun Bldg., Dhobi Talao, Bombay 400002.

Vijaya Enterprises, 6, Rajendra Bldg., 51, Gokhale Rd., Mulund (East), Bombay 400081.

FOR SODA ASH & SODIUM BICARBONATE FOR SODA ASH &

TATA CHEMICALS LTD.

MAZDA CHEMICALS

DISTRIBUTORS AND SELLING AGENTS

FOR SODA ASH & SODIUM BICARBONATE FOR SODA ASH &
SODIUM BICARBONATE FOR SODA ASH & SODIUM BICARBO
NATE FOR SODA ASH & SODIUM BICARBONATE FOR SODA
ASH & SODIUM BICARBONATE FOR SODA ASH & SODIUM BI
CARBONATE FOR SODA ASH & SODIUM BICARBONATE FOR
SODA ASH & SODIUM BICARBONATE FOR SODA ASH & SODI
UM BICARBONATE FOR SODA ASH & SODIUM BICARBONATE
FOR SODA ASH & SODIUM BICARBONATE FOR SODA ASH &
SODIUM BICARBONATE FOR SODA ASH & SODIUM BICARBO

SODA ASH
SODIUM BICARBONATE

SODIUM BICARBONATE FOR SODA ASH & SODIUM BICARBO
NATE FOR SODA ASH & SODIUM BICARBONATE FOR SODA
ASH & SODIUM BICARBONATE FOR SODA ASH & SODIUM BI
CARBONATE FOR SODA ASH & SODIUM BICARBONATE FOR
SODA ASH & SODIUM BICARBONATE FOR SODA ASH & SODI
UM BICARBONATE FOR SODA ASH & SODIUM BICARBONATE
FOR SODA ASH & SODIUM BICARBONATE FOR SODA ASH &
SODIUM BICARBONATE FOR SODA ASH & SODIUM BICARBO
NATE FOR SODA ASH & SODIUM BICARBONATE FOR SODA
ASH & SODIUM BICARBONATE FOR SODA ASH & SODIUM BI
CARBONATE FOR SODA ASH & SODIUM BICARBONATE FOR
SODA ASH & SODIUM BICARBONATE FOR SODA ASH & SODI

Call or write to:

MAZDA CHEMICALS

Apeejay House, 4th floor, 130, Bombay Samachar Marg, Bombay-400 023.
Tél: 244254 • 225408 • Cable: 'MAZCEM' • Telex: 11-5395 IMEX IN.

SODA ASH & SODIUM BICARBONATE FOR SODA ASH & SODI

Studio Akar/MC/1232

AVAILABLE AT MOST
COMPETITIVE RATES FROM
AUTHORISED STOCKIST OF

**KERALA STATE
INDUSTRIAL PRODUCTS
TRADING CORPORATION
LTD.**

**TITANIUM
DIOXIDE
ANATASE**

ISI/GP

Mfgd. by :

**TRAVANCORE TITANIUM
PRODUCTS LTD.**

Chemox

**CHEMICAL
INDUSTRIES**

**283, 2nd Floor, Samuel Street,
Vadgadi, Bombay 400 003.**

PHONES: Office : 322674 ● 349997 ● 335620.
Godown : 394249 ● 895898.

Cable : " CHEMNOMI ".

Telex : CHEM : 011-2195.

CHEMICALS.

For your requirements such as . . .

- **CHEMICALS AND REAGENTS FOR LABORATORIES.**
- **CHEMICALS AND SOLVENTS FOR INDUSTRIES.**

Manufactured/Repacked by
M/s. 'AMRUT' Industrial Products.

- **DRUGS & PHARMACEUTICAL CHEMICALS.**

Manufactured/Repacked by
M/s. ' GLOBE ' Products.

Please Contact :

AMRUTLAL BHURABHAI & CO.

Dealers of :
Chemicals, Drugs, Intermediates.
Minerals & Solvents.

Anand Bhuvan, Shamaldas Gandhi Marg (Princess St.),
Post Box No. 2379, BOMBAY 400 002.

Phones :
311023, 311024, 311025
319187 & 295235

Grams :
" CHEMDRUGS ", Bombay
Kalbadevi 400 002.

R. C. Advt.

CHEMICALS, PHARMACEUTICALS,
DYES ETC.

◆

Associated Agencies (Bombay)

**5-B, 5th Floor, Fairy Manor,
Gunbow Street,
BOMBAY 400 001**

Grams : " AMONSULPH "—Bombay
Telex : 011-2113 — Bombay
Phones : 296475, 296477 & 298398

Indenters, Manufacturers' Representatives

●

Importers :
Chemicals, Pharmaceuticals & Industrial
Raw Materials

●

Exporters :
Chemicals, Pharmaceuticals, Dyes & Dyes
Intermediates, Crude Drugs, Gums, Starches etc.

Tamil Nadu

Adchem Distributors, 222/223, Pycrofts Rd., Royapettah, Madras 600014.
Aniline Dyes & Chemical Co., 209, Govindappa Naick St., Madras 600001.
Arun Chemicals, 31, North Beach Rd., Madras 600001.
Bansa Chemicals (India), 49, Raghunayakulu St., Madras 600003.
Capco Pvt. Ltd., 16, Armenian St., Madras 600001.
Champa Enterprises, 161, Nyniappa Naick St., Madras 600003.
Gautam Colour Co., 90, Govindappa Naicken St., Madras 600001.
H. Chandanmal & Co., 97, Nyniappa Naick St., Madras 600003.
Jaico Ind. & Traders, 19, Govindappa Naick St., Madras 600001.
Lakshmi Colour Co., 20, Govindappa Naick St., Madras 600001.
Latha Chemical Co., 7, Kumarappa Maistry St., Madras 600001.
Madras Colour Co., 29, Govindappa Naick St., Madras 600001.
Madras Heavy Chemicals, 34, Govindappa Naick St., Madras 600001.
Madras Industrial Chemical Agencies, 7, Second Line Beach Rd., Madras 600001.
Metha Dyechem Corpn., 213, Govindappa Naick St., Madras 600001.
Mysore Chemical Supplies, 31, Govindappa Naick St., Madras 600001.
Ram Nath & Co., 2/266, Angappa Naick St., Madras 600001.
Ravi Chemicals, 10, Ponnappa Chetty St., Madras 600003.
S. Devichand & Co., 164, Govindappa Naick St., Madras 600001.
Scientific Chemicals, 3/5, Iyyah Pillai St., Madras 600003.
South India Dyes Co., 19, Govindappa Naick St., Madras 600001.
Southern Chemical Agencies Ltd., 36, Govindappa Naick St., Madras 600001.
Sri Krishna Dyes & Chemicals, 18, Govindappa Naick St., Madras 600001.
Sunshine & Co., 26, Govindappa Naick St., Madras 600001.

West Bengal

A. G. Bros. & Co., 22, B. R. B. B. Rd., Calcutta 700001.
A. V. M. Sales Corporation, 148, M. Gandhi Rd., Calcutta 700007.
Advance Chemical Co., 42, Strand Rd., Calcutta 700001.
Aurora Trdg. Co., 50, Ezra St., Calcutta 700001.
Capco Pvt. Ltd., 23A, N. Subhas Rd., Calcutta 700001.
Chemicals (India) Co., 132, Cotton St., Calcutta 700007.
Chemico Trdg. Corpn., 7, Swallow Le., Calcutta 700001.
Chempure Pvt. Ltd., 24A, Rabindra Sarani, Calcutta 700073.
Chemtex Corpn., 33, Brabourne Rd., Calcutta 700001.
Deluxe Chemical Ind., 192, J. Bazaz St., Calcutta 700007.
Dyechem (India), 8, B. R. B. B. Rd., Calcutta 700001.
Indian Chemical Co., 43, Lenin Sarani, Calcutta 700013.
Indian Gem & Chemical Co., 135-A, B. R. B. B. Rd., Calcutta 700001.
Indo European Agency P. Ltd., 67, Ezra St., Calcutta 700001.
Pioneer Indl. Syndicate, 67, Ezra St., Calcutta 700001.

CINEMA EQUIPMENT

Cine Enterprise, 11, Kiln Lane, Bombay 400007.
Cinefones, 3, M. Parmanand Marg, Bombay 400004.
Cinesales Corpn., 11, Court Rd., Civil Lines, Delhi 110006.
Continental Photo Stores, 243-45, Dr. D. Naoroji Rd., Bombay 400001.
Shah & Co. and Associates, 66, Shanti Sadan Estate, Opp. Dinbai Tower, Lal Darwaja, Ahmedabad 380001.
Xeca (India) Pvt. Ltd., Radio Market, Ch. Chowk, Delhi 110006.

Coir Products

CABLE : "EAROPES" ESTD. 1905 TELEPHONE : 320494

EBRAHIM ADAMJI & CO.

Adamji Bldg., 407, Narsi Natha Street, Katha Bazar,
Bombay 400 009.

* * *

Registered with **COIR BOARD OF INDIA for Exports of COIR YARN, ROPES, FIBRE & All Coir Products.**

DEALERS OF: **FIBRE, YARN, TWINE & ROPES OF COIR, MANILA, SISAL, JUTE, HEMP, ASBESTOS, STEEL WIRE, MONOFILAMENT, POLYPROPYLENE, NYLONS ETC.**

MAKERS OF: **SLING, NET SLINGS, ROPE LADDERS**

AND

ALL SHIPPING AND FISHING INDUSTRIES REQUIREMENTS

CROCKERIES & POTTERIES

Bharat Glass & Crockeries, G-2, Chickpet, Bangalore 560053.
United Potteries and Glassware Mart, 22, Noble Chambers. S. A. Brelvi Rd., Bombay 400001.

CRUCIBLES

Bombay Tools & Hardware Mart, 123, Narayan Dhuru St., Bombay 400003.
Gemini Corpn., 99, Surat St., Bombay 400009.
Govardhan Das P.A., 144, Nagdevi St., Bombay 400003.
J.D. Corporation, 64, Shahid Bhagatsingh Rd., Bombay 400023.
K. B. Gandhi & Co., Vimal Jyoti, Dr. Wilson St., Bombay 400004.
Laxmi Trading Co., 111, Khetwadi Back Rd., Bombay 400004.
Nagdevi Tool-Steel Mart, 186-88, Nagdevi St., Bombay 400003.
P. Ratilal & Co., 43, Dhanji St., Bombay 400003.
Pravinkumar & Co., 277, Sardar V. P. Rd., Bombay 400004.
V. Pech & Co. Aidum Bldg., Dhobi Talao, Bombay 400002.
William Jacks & Co India Pvt. Ltd., Hamilton House, Graham Rd., Ballard Est., Bombay 400038.

DIESEL ENGINES, GENERATORS & SPARES

Ambitious Traders, Surekha Bldg., G.B.Rd., Delhi 110006.
Chhaya Trading Co., Opp. Share Bazar, A. Doshi Mrg., Bombay 400023.
Continental Machines, 46, Shradhanand Mrg., G.B. Rd., Delhi 110006.
Diesel & Auto Spares (India), 10, Canning St., Calcutta 700001.
Eastern Industrial Syndicate, Seksaria Chambers, 135/137, Medows St., Bombay 400023.
Garlick Engg., Garlick House, 414, S. Bapat Mrg., Bombay 400013.
Honesty Trading Corpn., Beaumon Chambers, 27/33, N. Master Rd., Bombay 400023.
Industrial Equipment Corpn., Bharat House, 3rd Flr., Apollo St., Bombay 400023
International Commercial Corpn., 17, G.C. Avenue, Calcutta 700013.
Jeevan Diesels, 17, G.C.Ave., Calcutta 700013.
Kanubhai Engrs. Pvt. Ltd., 3, Mangoe Lane, Calcutta 700001.
Kapany Engg. Works, C-410, Defence Colony, New Delhi 110024.
Khemka Spares & Accessories Pvt. Ltd., Indian Chamber Bldg., Esplanade, Madras 600001.
Liberal Trading Co., 54, Bunder St., Madras 600001.
Meera & Co., 16-A, Asaf Ali Rd., New Delhi 110002.
N. Ramu Bros. (Electricals), 10/224, Avanashi Rd., Coimbatore 641018.
Naren Kumar Machinery Co., 9, Oak Lane, Medows St., Bombay 400023.
National Engg. Co. (Madras) Pvt. Ltd., P. B. No. 1616, Madras 600001.
Parry & Co. Ltd., Post Box No. 12, Madras 600001.
Power Centre Pvt. Ltd., 755, Mount Rd., Madras 600002.
Powerica Sales & Services Pvt. Ltd., 210, Commerce House, Medows St., Bombay 400023.
Rathi Indl. Equipment Co. Ltd., 162, Ambedkar Rd., Pune 411001
Rajkissen Radhakissen Mitter & Co., 15, G.C. Avenue, Calcutta 700013.
Reliance Electric Co., 41, Nelson Manicka Rd., Madras 600029.
S.M. Ghose & Sons, 14, N. Subhas Rd., Calcutta 700001.
Sah & Sangni, 11C, N. S. Patkar Mrg., Bombay 400007.
Shantilal C. Mehta, 45, K. Munshi Mrg., Bombay 400007.
Simpson & Co. Ltd., 202, Mount Rd., Madras 600002.
South Star Engg. Co., 180, Thambu Chetty St., Madras 600001.
Sree Power Agencies, 4F/705, Mount Rd., Madras 600006.
Suprex Industrial Annie Mansion, 1st, Flr., Main Rd., Ranchi 834001. (Bihar.)
Trading Engineers (International) Pvt. Ltd., C-42, Wazirpur Indl. Area, Delhi 110052.
Vineet Electrical Inds. Pvt. Ltd., 19, G.C. Avenue, Calcutta 700013.
Vinod Sharma, 113-B, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.
W. R. Talwalkar Bros., Lentin Chambers, Dalal St., Bombay 400023.
Western India Machinery Co., 24, G. C. Ave., Calcutta 700013.

DRILLING EQUIPMENT

Gautam Tools Corpn., 155, N. Dhuru St., Bombay 400003.
Greaves Cotton & Co. Ltd., Dr. V. B. Gandhi Mrg., Bombay 400023.
India Drilling Equipment Corpn., 5-4-98/99, M.G. Rd., Secunderabad 500003.
Kanubhai Engineers Pvt. Ltd., 117, Bajaj Bhavan, Nariman Point, Bombay 400021.
Vikrant Industrial Mart, 14, Irla Shopping Centre, Bombay 400056.

DRUMS, BARRELS & CONTAINERS

A. Gaffoor & Co., 1, Dockyard Rd., Mazgaon, Bombay 400010.
Ebrahim Noormohamed, 27A, Dr. Maheshwari Rd., Bombay 400009.
International Barrel Co., Plot No. 1, Navrang Compound, Dharavi Rd., Bombay 400017.
M. L. Day & Co., 36, Ganesh Ch. Ave., Calcutta 700013.

EARTHMOVING MACHINERY AND SPARES

Aarkey Engg. Corpn., 68, Saklat Place, Calcutta 700072.
Amiya Corpn., 19, Abdul Hamid St., Calcutta 700001.
Arora Tradg. Corpn., P49, Princep St. Calcutta 700013.
Bahri & Co. Pvt. Ltd., P/39, Mission Row Extn., Calcutta 700013.
D. M. Shah & Co., 7, Sooterkin St., Calcutta 700013.
D. P. Verma & Co., 10/1, Princep St., Calcutta 700013.
Excavators (India) Pvt. Ltd., C-17, N. D. S. E. II, New Delhi 110049.
General Marketing & Mfg. Co. Ltd., 103, Park St., Calcutta 700016.
George Oakes Ltd., 44, Krishnarao Tank St., Madurai 625001.
Indersons Corpn., P10/1, Princep St., Calcutta 700013.
K. Tractor Spares Co., Post Box 2125, Delhi 110007.
Marshall Sons & Co. (India) Ltd., 75C, Park St., Calcutta 700016.
Parker Ind. Corpn., 7/B, Leonard Rd., Hastings, Calcutta 700022.
Shah Auto Engg. Co. Pvt. Ltd., 3-5-333, Rashtrapati Rd., Secunderabad 500003.
Shah (India) Pvt. Ltd., Shah House, Temple St., Calcutta 700013.
Shantilal C. Mehta, 45, K. Munshi Mrg., Bombay 400007.
Track Parts Distributors, 29, R. N. Mukherjee Rd., Calcutta 700013.
Tractor Spares Pvt. Ltd., 8B, Lall Bazar St., Calcutta 700001.
Venkateshwara Auto Tractor Agencies, Siddiamber Bazar, Hyderabad 500012.

ELECTRIC CABLES & WIRES

Bombay Insulated Cables & Wires Co., 74, Podar Chambers, Syed Brelvi Rd., Bombay 400001.
Chakraborty Cables Pvt. Ltd., P-36, India Exchange Place, Calcutta 700001.
Engineering Monitors, 104, Mani Mahal, Mathew Rd., Bombay 400004.
Rawal & Co., Shreeji Bhuvan, Lohar Chawl, Bombay 400002.
Ravin Trading Co., 5, Mohatta Mkt., Palton Road, Bombay 400001.
Roopmeck Enterprises, 29, Ashish Estate, Gokhale Rd., (South), Dadar, Bombay 400025.
Shashi Electricals, Ahmed Bldg., 1st Flr., 49/51, Lohar Chawl, Bombay 400002.

ELECTRICAL GOODS

Ahmed & Co., 69-71, Kantilal Sharma Mrg., Lohar Chawl, Bombay 400002.
Allied Electrical Engg. Co., Madanzampa Rd., Vadodara 390001.
Asiatic Electric Corpn., Beaumon Chambers, Medows St., Bombay 400023.
Associated Marketing Agencies, 93, Mount Rd., Madras 600002.
Atlas Electricals, 25, Mangaldas Rd., Lohar Chawl, Bombay 400002.
Bipinkumar Electric Corpn., 14, Tawala Bldg., Lohar Chawl, Bombay 400002.
Britania Electricals (India), R. No. 17, Inside Crawford Mkt., Bombay 400001.
Chandrodaya Electric Co., Bhangwadi, Kalbadevi Road, Bombay 400002
Choksi Electric Co., 148-A, Princess St., Bombay 400002.
D. M. Electricals, Devismit House, 63, Lohar Chawl, Bombay 400002.
East Asiatic Electric Corp., Manhar Bldg., 187, Lohar Chawl, Bombay 400002.
Electrical Elements Co., 2, G. C. Ave., Calcutta 700013.
Escee Service, 'Shreenivas House', 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.
Essen Electrical Enterprise, 40, Babu Genu Rd., Nr. Lohar Chawl, Bombay 400002.
Express Trading Co., Sai Bhuvan, 141, Princess St., Bombay 400002.
Forma Electricals, 229/230, Govindappa Naicken St., Madras 600001.
G. K. Trading Co., 46, Mohatta Market, Bombay 400001.
Grand Electricals, 25, Nawab Bldg., 327, Dr. D. N. Rd., Bombay 400001.
Indian Engineering Co., 132A, Dr. A. Besant Rd., Bombay 400018.
Industrial Electric Corpn., B., Mohatta Mkt., Palton Rd., Bombay 400001.
Jain Electricals, 21, Veerappan St., Madras 600001.
Jostle Trading Corpn. Pvt. Ltd., Maskati Mahal, Lohar Chawl, Bombay 400002.
Kosmos Electric Corpn., Bagkar Bldg., 33/35, Picket Rd., Nr. Lohar Chawl, Bombay 400002.
Kunjal Electricals Pvt. Ltd., 1805, Electl. Mkt., Bhagirath Palace, Delhi 110006.
Lalson Trading Corpn., G.H.Rd., Kottaparamba, Calicut 673001. (Kerala State).
Laxmi Trading Co., 21-23, Lohar Chawl, Bombay 400002.
Lloyds Mercantile Corporation, 51, Ezra St., Calcutta 700001.
M. A. Shah & Co., P-15, New C. I. T. Rd., Calcutta 700073.
Mahaveer Electric Agencies, 4, Erulappan St., Madras 600001.
Metrogold Electric Stores, 60, Lohar Chawl, Bombay 400002.
Modi & Modi Co., 16, Hamam St., Bombay 400001.
Nand Kishore & Co., 48, Shradhanand Mrg., G. B. Rd., Delhi 110006.
Nursing Sahay Mudungopal Electric Co. Pvt. Ltd., 108, Mint St., Madras 600001.
P. Chatarji & Co. Pvt. Ltd., 53, Ezra St., Calcutta 700001.
Pan Electricals, 50, Veer Nariman Rd., Bombay 400023.
Premier Lighting Inds. Pvt. Ltd., 348-52, A. Rehman St., Bombay 400003.
R. G. Trading Co., 1/8, Govindappa Naicken St., Madras 600001.
R.K. Electricals, 147, K.M. Sharma Mrg., Bombay 400002.
Radha Enterprises, 56, Royapettah High Rd., Madras 500004.
Rajen Electric Co., 95/207, Dadasaheb Phalke Rd., Bombay 400014.
Rajni Electric Corpn.. 272, Y. Meharalli Rd., Bombay 400003.
Rathna Fan House, 1, Rajabadar St., T. Nagar, Madras 600017.
Raval & Co., Shreeji Bhuvan, Lohar Chawl, Bombay 400002.
Ravin Trading Co., 5, Mohatta Mkt., Palton Rd., Bombay 400001.
S. K. & Co., Gopal Niwas, 133, Princess St., Bombay 400002.
Sarita Electrical Accessories, 39, Ismail Bldg., 16, Pathak Wadi, Lohar Chawl, Bombay 400002.
Shah Commercial Corpn., 58, Mangal Das Rd., Lohar Chawl, Bombay 400002.
Shah Electric Co., Shah Bhuvan, 71-73, Dhirubhai Parekh Mrg., Bombay 400002.
Sopher & Co., 11, Bank St., Bombay 400023.
Super Electrical Insulating Co., 289-91, Nagdevi St., Bombay 400003.
Suresh Industries (Pvt.) Ltd., Atlas Mills Compound, Reay Rd., Bombay 400010.
Toshniwal Bros. Pvt. Ltd., 198, Jamshedji Tata Rd., Bombay 400020.
Trinity Electric Syndicate, 154, S. Gandhi Mrg., Bombay 400002.
Universal Electric Co., 73/75, Lohar Chawl, Bombay 400002.
Venus Electrical Trading Co., 30, Jay Mahal Estate, 20/48, Lohar Chawl, Bombay 400002.
Zenith Electric Stores, 51, Lohar Chawl, Bombay 400002.

ELECTRONIC COMPONENTS

Bihar

R. K. Trading Co., S. P. Verma Rd., Patna 800001.

Delhi

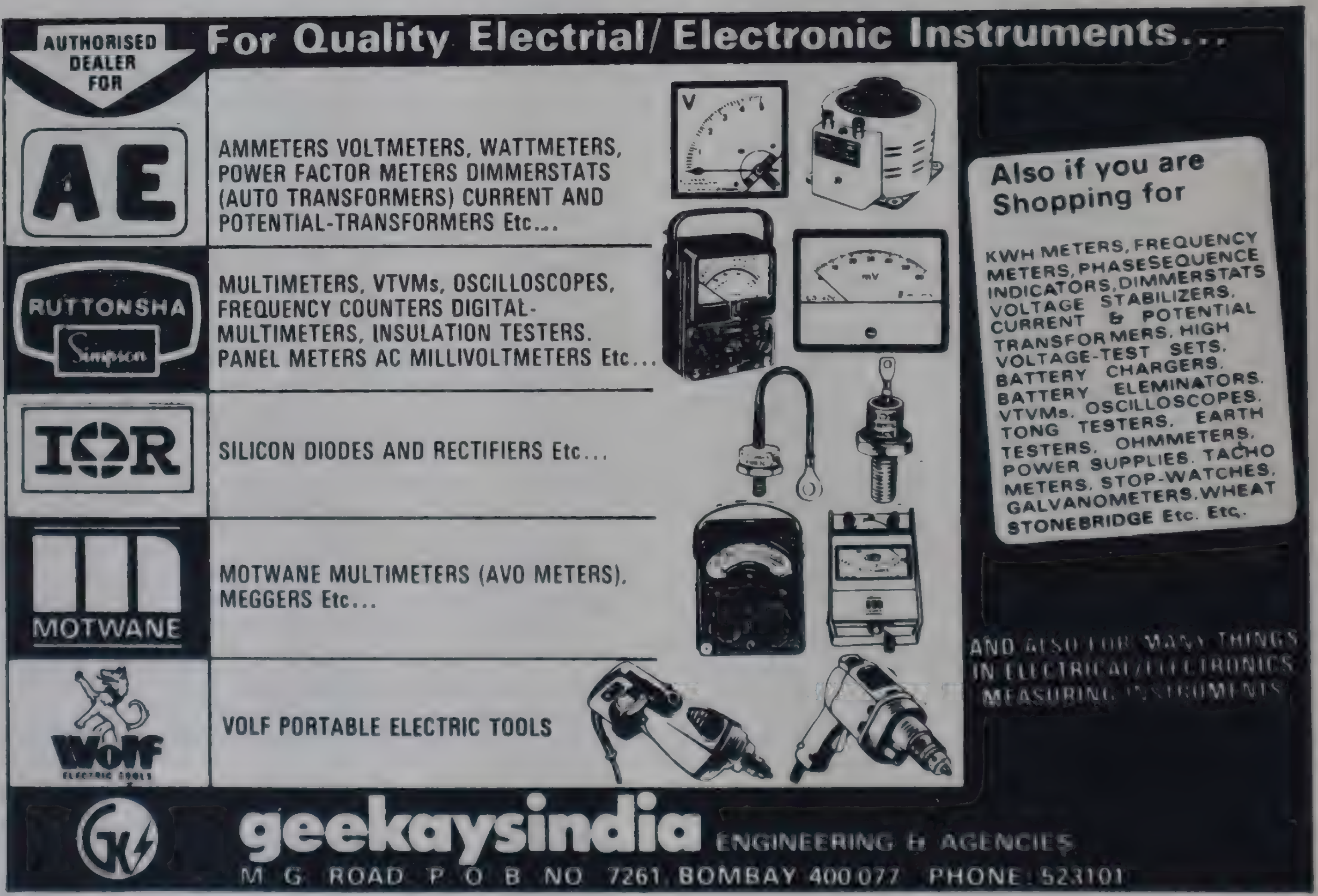
Advance Electronics, Jogdhian Colony, Chandni Chowk, Delhi 110006.
Comel, 4850, Ansari Rd., 24, Daryaganj, New Delhi 110002.
Envoys (India) Pvt. Ltd., B-24, Defence Colony, New Delhi 110024.
M. C. Engineering Co., 37, Okhla Ind. Estate, New Delhi 110020.
Parco, 16/B, Connaught Place, New Delhi 110001.

Karnataka

Associated Electronic & Electrical Ind., 1, Church St., Bangalore 560001.

Maharashtra

Aarjay & Co., 381, Dr. Bhadkamkar Marg, Bombay 400007.
Asian Electric Services, 84, Imamwada Rd., Bombay 400009.
Associated Trdg. Corpn., Western India House, Sir P. Mehta Rd., Bombay 400001.
Bombay Electronics Co. Pvt. Ltd., 381, Dr. D. Naoroji Rd., Bombay 400001.
Brisk Sales Corpn., 5, Homi Mody St., Bombay 400023.
Cycl-O-Incorporated, 54, Annapurna Ind. Estate, 46, Tilak Rd., Ghatkopar (East), Bombay 400077.
Dominion Radios, 15, New Queen's Rd., Opera House, Bombay 400004.
Echbee Corpn., Kamer Bldg., 38, Cawasji Patel St., Bombay 400001.
Electronic Radio & Sound Corpn., 394-B, Lamington Rd., Bombay 400004.
Electronica Devices & Components, R. No. 17, Tardeo Airconditioned Mkt., Bombay 400034.
Falcon Enterprises, Menon Indl. Estates, Near Oshiwara Bridge, S.V. Rd., Goregaon, Bombay 400104.
Hindustan Instruments, 7/9, Bell Lane, Bombay 400001.
Industrial Electronic Equipment Corpn., 19, Hamam St., Bombay 400001.
KDK Electronics, Peerbhoy Bldg. No. 2, Pathak Wadi, Bombay 400002.



AUTHORISED
DEALER
FOR

For Quality Electrial/ Electronic Instruments...

AE

AMMETERS VOLTMETERS, WATTMETERS, POWER FACTOR METERS DIMMERSTATS (AUTO TRANSFORMERS) CURRENT AND POTENTIAL-TRANSFORMERS Etc...

RUTTONSHA
Simpson

MULTIMETERS, VTVMs, OSCILLOSCOPES, FREQUENCY COUNTERS DIGITAL-MULTIMETERS, INSULATION TESTERS. PANEL METERS AC MILLIVOLTMETERS Etc...

IOR

SILICON DIODES AND RECTIFIERS Etc...

MOTWANE

MOTWANE MULTIMETERS (AVO METERS). MEGGERS Etc...

Wolf
ELECTRIC TOOLS

VOLF PORTABLE ELECTRIC TOOLS

Also if you are Shopping for

KWH METERS, FREQUENCY METERS, PHASESEQUENCE INDICATORS, DIMMERSTATS VOLTAGE STABILIZERS. CURRENT & POTENTIAL TRANSFORMERS. HIGH VOLTAGE-TEST SETS. BATTERY CHARGERS. BATTERY ELEMINATORS. VTVMs. OSCILLOSCOPES. TONG TESTERS. EARTH TESTERS. OHMMETERS. POWER SUPPLIES. TACHO METERS. STOP-WATCHES. GALVANOMETERS. WHEAT STONEBRIDGE Etc. Etc.

AND ALSO FOR MANY THINGS IN ELECTRICAL/ELECTRONICS MEASURING INSTRUMENTS

GK
geekaysindia ENGINEERING & AGENCIES
M. G. ROAD P. O. B. NO. 7261 BOMBAY 400 077 PHONE: 523101

Lalwani Electronics, 357, Lamington Rd., Bombay 400007.
MCE Products Sales Service Pvt. Ltd., 12, Sukh Sagar. Hughes Rd., Bombay 400007.
Navbharat Radio Agencies, 350, Lamington Rd., Bombay 400007.
Ruttonshah Services Ltd., Post Box No. 661, G.P.O., Bombay 400001.
Sales Industrials, Marketing & Industrial Services, Wadaia Bldg., 1st Flr., 22-D, S.A. Brelvi Rd., Bombay 400001.
Toshniwal Bros. Pvt. Ltd., 198, Jamshedji Tata Rd., Bombay 400020.
V. Pech & Co., Aiduri Bldg., Dhobi Talao, Bombay 400002.

Tamil Nadu

Electronic Agencies, 2/7, Wallers Rd., Mount Rd., Madras 600002.
Piezo Electronics, 2/7, Wallers Rd., Mount Rd., Madras 600002.
Sakhi Electronics, 4, Ritchie St., Mount Rd., Madras 600002.
Singh Trading Co., 9, Blacker's St., Mount Rd., Madras 600002.
Textonic Instruments, 393, Mint St., Madras 600001.
Umatson, 14, Angappa Naicken St., Madras 600001.

Uttar Pradesh

Electronics & Computers (I) Ltd., P.B. 56, Ghaziabad 201001.

West Bengal

Parikh Electric Corpn., 36, Ezra St., Calcutta 700001.
Zenith Ind. Equipments, 14/1/1A, Jackson Lane, Calcutta 700001.

ELECTROPLATING MATERIALS

Delhi

Nath Trading Co., 5234, H. Singh Chowk, Delhi 110006.

Maharashtra

Ara Pvt. Ltd., 41, Haman St., Bombay 400001.
Bharat Trading Co., 30, Sardar Patel Rd., Bombay 400004.
M. Bhatt & Co., 65A, Ardeshir Dady St., Bombay 400004.
Master & Co., 278, S. V. Patel Rd., Bombay 400004.
Mathuradas Bros. & Co., 76, Thakurdwar Rd., Bombay 400002.
S. Mitra & Co., Convent St., Bombay 400001.

Tamil Nadu

S. Mitra & Co., 26, Venkatachala Mudali St., Madras 600003.

West Bengal

B. C. Maity & Co., 94, Prem Chand Boral St., Calcutta 700012.
Hanuman Trading Co., 70, Cotton St., Calcutta 700007.
Reliable Trading Agency, 67-B, N. Subhas Rd., Calcutta 700001.
S. Mitra & Co., 30, Bentinck St., Calcutta 700001.

ENAMELS & LACQUERS

(See Synthetic Enamels and Lacquers)

ENGINEERING TOOLS

A.H. Bros. & Co., 26, Sarang St., Bombay 400003.
Bharat Engg. Stores, 44, Nagdevi Cross Lane, Bombay 400003.
Bombay Hardware Traders, 79, N. Dhuru St., Bombay 400003.
Bombay Tools Centre, 97, Broadway, Madras 600001.
Bombay Tools & Hardware Mart, 123, Narayan Dhuru St., Bombay 400003.
Bombay Tools Supplying Agency, 50, Nagdevi Cross Lane, Bombay 400003.
Central Tool & Equipment Co., 32, Sarang St., Bombay 400003.
Diwan Traders, 167, S.G. Barve Marg, Kalina, Bombay 400029.
Engineering Tools & Hardware Mart, 31, Lohar Chawl, Bombay 400002.
Gulamally & Bros., 90, Lohar Chawl, Bombay 400002.
Hemant Tools Trading Co., 33, Bibijan St., Bombay 400003.
Hindustan Tools & Hardware Mart, 126, Lohar Chawl, Bombay 400002.
Hiralal Gokuldas Dalal & Co., 45, Nagdevi St., Bombay 400003.
Jayantilal Bhagwandas & Co., 96, Nagdevi X Lane, Bombay 400003.
Kaiser Corpn., 135, Rashbehari Basu Rd., Calcutta 700001.
Nagdevi Tool-Steel Mart, 186, Nagdevi St., Bombay 400003.
Raj Tools Corpn., 50, Bibijan St., Bombay 400003.
Satellite Commercial Co., 153, Janjikar St., Bombay 400003.
Super Tools & Bearing Stores, 126/128, Nagdevi St., Bombay 400003.
Tools Supplying Agency, 12, Mahalaxmi Nivas, S.V. Rd., Bombay 400067.
Tyebally Dawoodjee, 87, Sarang St., Bombay 400003.
Venus Tools Agencies, 126, Nagdevi St., Bombay 400003.

ENGRAVERS & DIE SINKERS

Advance Electronics, 10, Pawar Ind. Estate, Edalji Rd., Charai, Thane 400601.
Calcutta Engraving Co., 6A, Malanga Lane, Calcutta 700012.
Kshirod Mohan Mullick & Sons, 48, M. Gandhi Rd., Calcutta 700009.
Mankame Bros., 465, Kalbadevi Rd., Bombay 400002.
Masani & Co., Ararat, 89C, Medows St., Bombay 400023.
Model Engravers, 207, Bajson Ind. Estate, Chakala Rd., Andheri, Bombay 400093.
Technical Instruments Mfrs. Pvt. Ltd., Shanti Nagar, Vakola Bridge, Santa Cruz (E), Bombay 400055.

ESSENTIAL OILS

Calcutta Essence Supply Co., Mulchand Mansion, Shamaldas Gandhi Marg, Bombay 400002.
Goldensun Mfg. Co., Mulchand Mansion, Shamaldas Gandhi Marg, Bombay 400002.
International Export Import Co., 65, Mody St., Bombay 400001.
M.C. Davar & Co., Sai Bhuvan, Princess St., Bombay 400002.
N.R. Shah & Co., Mulchand Mansion, Shamaldas Gandhi Marg, Bombay 400002.

EXPORT FIRMS

Andhra Pradesh

Andhra Pradesh State Export-Import Corpn. Ltd., Sahakar Bhawan, B-I/174, Fateh Maidan Rd., Hyderabad 500004.

Delhi

Bharat Vanidhya Pvt. Ltd., 101, Surya Kiran, 19, K. Gandhi Marg, New Delhi 110001.
CNA Exports Pvt. Ltd., A-16, Naraina Indl. Area, Phase I, New Delhi 110028.
Dayal Export House, 16/1022, Arya Samaj Rd., New Delhi 110005.
Exports (India), Paras Cinema Bldg., Nehru Place, New Delhi 110024.
Handloom Export Products of India, S-21, Green Park Extn., New Delhi 110016.
Hansa (Export) Pvt. Ltd., 4B/3, Ganga Ram Hospital Marg, New Delhi 110060.
Indo Java & Co., 811, Ansal Bhawan, 16, K. Gandhi Marg, New Delhi 110001.
J.B. Exports Pvt. Ltd., 7/26, Kirtinagar, Indl. Area, New Delhi 110015.
Kiran International, M-97, Conn. Place, New Delhi 110001.
P.C.I. Products of India, 198, Kirti Nagar, New Delhi 110015.
Pratibha Exports, 7/6, Daryaganj, Ansari Rd., New Delhi 110002.
R.D. Ramnath Co., Jama Masjid, Delhi 110006.
Reliance International Corpn. Pvt. Ltd., 4/2B, A. Ali Rd., New Delhi 110002.
Stalwarts Exports Pvt. Ltd., 12-E, Vandhana, 11, Tolstoy Marg, New Delhi 110001.

SAUDI ARABIA

IS GOOD BUSINESS

WE WOULD MAKE IT YOUR BUSINESS

Contact us at:

Post Box No. 324, Jeddah (Saudi Arabia).
Cable : "PERDESI" Telex : 401798 ILYAS S.
Phone : 6424964.

MESSRS. MASOOD CONTRACTING ESTABLISHMENT

(Civil, Roads, Electrical, Airconditioning, Landscaping Contractors.) We are interested in receiving enquiries from well established firms to collaborate with us.

MESSRS. GHULAM MASOOD

(Importers, Wholesalers, Agents of canned foods, juice, foodstuff, electrical goods, construction material, engineering goods, tea, rice, barley, cardamoms, dry ginger, cashew nuts, general merchandise.)

MESSRS. MASOOD SAREE CENTRE

In the whole of Saudi Arabia the only exclusive shop of Indian Sarees of all varieties and qualities. (Interested in receiving enquiries from manufacturers of ready made blouses for sarees, Saree Falls, Peti-Coats, Kurta and Pyjama for ladies, Borders, Organza Dupatta with Banarsiwork, Shawls, Printed Banarsi Silk, Chiffon-Satin Sarees with Zari Thread, Cotton Sarees Silver Jewelljery etc.).

- **Mrs. TAHIRA MASOOD**

  4, Coin House, 29th Road, Bandra, Bombay 400 050.
  Phone : **535730.**

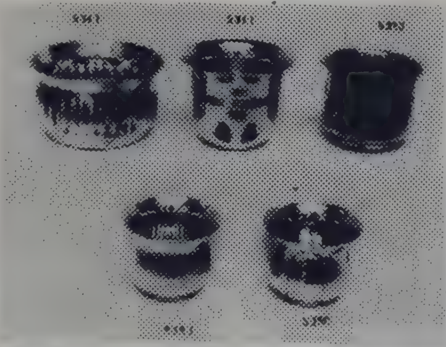
SUNBEAM EXPORTS

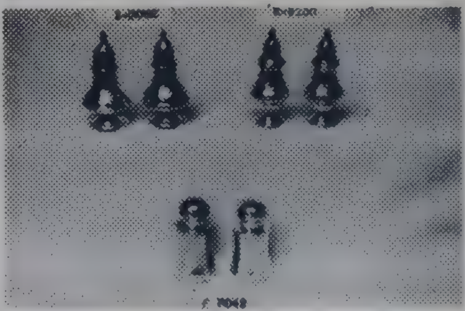
BRASSWARE HANDICRAFTS

Flower Vases, Fruit Dishes, Decanters, Aftabas, Ash Trays, Table Tops, Trays, Bells on String, School Bells, Lamps, Lanterns, Silent Butlers, Planters, Water Cans, Hubble Bubble, Dinner Gongs, Candle Stands, Candle Snuffers, Frypans, Water Jugs, Cricket Boxes, Incense Burners, Mortar & Pestle Goblets, Nut Dishes and many Special Miniature Sets and Toys.

The items are plain, engraved or enamelled in many colours.

Also available Gurkha Knives, Swords and Iron Bells.





SILVERPLATEDWARE (E.P.N.S. WARE)

Tea Sets, Coffee Sets, Wine Coolers, Ice Buckets, Candle Holders, Cordials, Brandy Snifters, Wine Goblets, Champagne Goblets, Beer Mugs (1pt. & half pt.), Fruit Baskets, Trays, Salvers, Gravy Boats, Water Jugs, Syrup Jugs, Sugar & Cream Sets, Flower Vases, Candle Stands & Candle Snuffers, Baby accessories like Baby Mugs, Porringer Baby Sets and Cutlery.

Since the above items are mainly for gift purposes, we have very attractive Gift Boxes covered with velvet for rich look and have stem ware and many items packed in the same for gifts.

Also many new designs of Miniature Sets, Animals, etc.

All items in very heavy silver plating and bright finish.

Postal Address :
POST BOX 7117
INDRAPRASTHA POST OFFICE
NEW DELHI-110002 (INDIA)

Regd. Office :
POST BOX 120
RAILWAY ROAD
MORADABAD-244001 (INDIA)

Telephones : 3311, 3397, 3535
Telex: 575-203 SUNE IN
Moradabad
Cable: SUNBEAM Moradabad.

Texcraft Exports, B-65, Narain Ind. Area, Phase 2, New Delhi 110028.

Trade India, F/I, Jangpura Ext., New Delhi 110014.

Maharashtra

Airauto Engg. Co., 38-Gala Ind. Estate, Mulund, Bombay 400080.

Ashoka International Factors, 408, Loha Bhawan, P. D'Mello Rd., Bombay 400009.

Atlas Exports, 212/216, Sheriff Devji St., Bombay 400003.

Chemet, Taj Bldg., 210, Dr. D. Naoroji Rd., Bombay 400001.

D.K. Exports, 61, Mohamedali Rd., Bombay 400003.

Ellora Art Ind., 51, Mangaldas Rd., Bombay 400002.

G.K. Export Corpn., 5/7, Syed Mukri St., Katha Bazar, Bombay 400009.

Ganon Exports Pvt. Ltd., Post Box No. 160, Bombay 400001.

Hiralal Maganlal & Co. (Exports), Mahavir Darshan, Bhandari St., Bombay 400003.

Indmag Pvt. Ltd., Udyog Bhavan, Walchand Hirachand Marg, Bombay 400038.

Industrial & Structurals Pvt. Ltd., Maker Bhuvan No.2, 5th Flr., New Marine Lines, Bombay 400020.

International Export Import Co., 65, Mody St., Bombay 400001.

JK Overseas, 77/83, Nagdevi St., Bombay 400003.

J. Khushaldas & Co., 77/78, Nagdevi St., Bombay 400003.

Jayant Inds., 33, Naik Niwas, 30, Benham Hall Lane, Bombay 400004.

Jayem Exports Pvt. Ltd., G.P.O. Box 420, Bombay 400001.

Jolly Exports Pvt. Ltd., 501, Rewa Chambers, 31, New Marine Lines, Bombay 400020.

Jyoti-Impex Pvt. Ltd., 107, Embassy Centre, Nariman Point, Bombay 400021.

Khemka Exports Pvt. Ltd., Vulcan Insce. Bldg., Churchgate Road, Bombay 400020.

Kotak & Co., Navsari Bldg., 240, Dr. D. Naoroji Rd., Bombay 400001.

Liberty Exports Pvt. Ltd., 94, Nagdevi St., Bombay 400003.

MD Enterprises (Bombay), P.B. No. 8026, 29, Brindavan Bldg., 1st Flr., Vallabhbhai Rd., Vile Parle (W), Bombay 400056.

Malhotra International Ltd., India House, 5th Flr., Opp. G.P.O., Bombay 400001.

Masood Contracting Establishment, 4, Coin House, 29th Rd., Bandra, Bombay 400050.

Metro Exporters Pvt. Ltd., Shah House, Shiv Sagar Estate, Dr. A. Basant Rd., Bombay 400018.

Miriam International Sales Corpn., P.O. Box 8317, Deonar, Bombay 400088.

Natraj Exporto (India), Venkatesh Chambers, Prescott Rd. 1, Bombay 400001.

Neela Exports Pvt. Ltd., Devchhaya Bldg., Near Haji Ali Corner, Tardeo, Bombay 400034.

New India Exports Pvt. Ltd., New India Centre, 17, Cooperage Rd., Bombay 400039.

Numex Engrs., 306, Commerce House, N. Master Rd., Bombay 400001.

Parry (Eastern) Pvt. Ltd., Dhiraj Chambers, Waudby Rd., Bombay 400001.

Patel Exports, Fernley House, 60, Perry Rd., Bandra, Bombay 400050.

Rajmal Paharchand, Jolly Bhavan No.2, 7, New Marine Lines, Bombay 400020.

Ram Exports, 403, Neelakanth, 98, Marine Drive, Bombay 400002.

Raunaq International Ltd., Hoechst House, 15th Flr., Nariman Point, Bombay 400021.

Safari Exports, 114/116, Bhajipala Lane, Bombay 400003.

Sajdeh Sales Corpn., National House, 6, Tulloch Rd., Bombay 400039.

Sepulchre Bros. (India) Ltd., Taj Bldg., 210, Dr. D. Naoroji Rd., Bombay 400001.

Shyams International, 23, Arun Chambers, Tardeo, Bombay 400034.

Sorabji Nowroji & Co., 16, Horniman Circle, Bombay 400023.

Sterling Exports Pvt. Ltd., 311, Venkatesh Chambers, Prescott Rd., Bombay 400001.

Taj Marble Exports, 117, Samuel St., Khadak, Bombay 400009.

Tarsema Textile Traders, 11, Noble Chambers, S.A. Brelvi Rd., Bombay 400001.

Tata Exports Ltd., Block 'E', Shivsagar Estate, Dr. A. Besant Rd., Worli, Bombay 400018.

Tejumal Export Corpn., P.O. Box 2074, Bombay 400002.

Orissa

Kalinga Exporters Ltd., 38-Udyog Bhawan, Bhubaneswar 751009.

Orissa Ind. Ltd., Katcheri Rd., Rourkela 769001.

Punjab

Intelimpex, 2674, Katra Hari Singh, Amritsar, 143001.

Tamil Nadu

Art Work Exports Ltd., 54-C, Sydenhams Rd., Madras 600003.

Chillies Export House Ltd., 35, M.C. Chidambara Nadar St., Virudhunagar 626001.

Eimco K.C.P. Ltd., 38, Mount Rd., Madras 600006.

Indian Ind. Export House Ltd., 31, Mount Rd., Madras 600002.

Intercraft South (Exports) Pvt. Ltd., 39, Thambu Chetty St., Madras 600001.

Prashanth Overseas Supplies House Pvt. Ltd., 1/6, Harrington Ave., Madras 600031.

Telephones :
324312
321954

Grams :
" JEKHUSHAL "

JK OVERSEAS

" JK " Chambers,
77/83, Nagdevi Street,
Bombay 400 003.

" CHAMPION " brand Asbestos products

" GARWARE " Nylon products

" CHARMINAR " Asbestos Insulation materials

ALL ENGINEERING PRODUCTS, Foodstuff & Spices.

(Ass. Concern, J. KHUSHALDAS & CO.)

SORABJI NOWROJI & CO.

16, Horniman Circle, Bombay 400 023.

Oldest & Largest Stockists & Exporters of :

SANDALWOOD,
SANDALWOOD OIL & PALMAROSA OIL

Manufacturers of :

'CROWN' BRAND SANDALWOOD OIL AGMARKED

★

TELEPHONES :

Office : 292937, 292943, 296346 *Factory* : 378316
Wholesale Depots : 349293, 331275, 323262 Retail Shops : 351637-261573

Cable Address : "WELFARE" Bombay.

Rajan Universal Exports (Mfrs.) Pvt. Ltd., 35, Sembudoss St., Madras 600001.

S.R.C. Inds., 3, Goomes St., Madras 600001.

Uttar Pradesh

Harnarain Purshottamdas Trdg. Co., 226, N-Block, Kidwai Nagar, Kanpur 208011.

West Bengal

Bunge & Co. Ltd., 6, Church Lane, Calcutta 700001.

J. Stone & Co. (I) Pvt. Ltd., 16, Taratolla Rd., Calcutta 700027.

Kajaria Exports Pvt. Ltd., 48, B.R.B.B. Rd., Calcutta 700001.

Nipha Exports Pvt. Ltd., 25, N. Subhas Rd., Calcutta 700001.

R.B. Agarwalla & Co., 4A, Jackson Lane, Calcutta 700001.

R S I India Pvt. Ltd., 56-D, Mirza Ghalib St., Calcutta 700016.

FARM EQUIPMENT

Asian Steel Co., Durgadas Bldg., Ardeshir Dady X Lane, Bombay 400004.

Cirugia De Lux Ltd., 24, J. Nehru Rd., Calcutta 700013.

FILTERS & FILTER PAPERS

Blackstone Supply Agency, 23-A, Netaji Subhas Rd., Calcutta 700001.

Durga Traders, Durga Estate, N.H. No. 8, Chhani Rd., Vadodara 390002.

Durga Traders, 11, Embassy Mkt., Ashram Rd., Ahmedabad 380009.

G. B. Dey & Co., 36, Strand Rd., Calcutta 700001.

S.M. Dey & Co., 51/3D, Strand Rd., Calcutta 700001.

FIRE FIGHTING EQUIPMENT

(See under Manufacturers list).

FOUNDRY MATERIALS

Blackstone Supply Agency, 23-A, N. Subhas Rd., Calcutta 700001.

Coimbatore Steels, 49, Avanashi Rd., Coimbatore 641037

Hatim & Co., 90, Ripon St., Calcutta 700016.

Indian Vegetable Products Ltd., (*Foundry Products Divn.*), 6A, Middleton St., Calcutta 700016.

J. D. Jones & Co., C5, Gillander House, Calcutta 700001.

K. K. Bose & Co., 27/1 B, Simla Rd., Calcutta 700006.

Monilal & Co., 34, Strand Rd., Calcutta 700001.

Precision Metalwork Co., 6/1, Clive Row, Calcutta 700001

GARAGE EQUIPMENT & TOOLS

All Indequips & Labequips (India), 49, Nagdevi Crosslane, Bombay 400003.

Garage Equipment & Tools Co., Kala Bhavan, Mathew Rd., Bombay 400004.

H. D. Traders, 22-A, Perianna Maistry St., Madras 600001.

Hemant Tools Trading Co., 33, Bibijan St., Bombay 400003.

M. K. Enterprises, 8571, Rashtrapati Rd., Secunderabad 500003

Raj Tools Corpn., 50, Bibijan St., Bombay 400003.

Sawant Engg. Tools Co., 49, Nagdevi X Lane, Bombay 400003

Southern Mercantile Corpn., 7/3, Patullos Rd., Madras 600002

GARDEN REQUISITES

Dattatraya Industries Pvt. Ltd., 691/A, Pune-Satara Rd., Pune 411009.

Palekar & Co., Sitaram Bldg., Nr. Crawford Mkt., Bombay 400001

GLASS & MIRRORS

Abdulhusein Karimji Arsiwala, 136, A. Rehman St., Bombay 400003.

General Glass Co. Pvt. Ltd., Gandhi Mansion, S. K. Barodawala Mrg., Bombay 400026.
Hakimi Sales Corpn., 37, Bapu Khote St., Bombay 400003.
Kaiser Corpn., 135, B.R.B.B. Rd., Calcutta 700001.
M. A. Kachwalla & Sons, 97-99, Dhanji St., Bombay 400003.
National Glass Bottle Co., Ararat, Medows St., Bombay 400023.
Orient Sales Corpn., 142, Barkatali Virani Mrg., Near J. J. Hospital Naka, Bombay 400008.
Popular Glass Traders, 116, A.Rehman St., Bombay 400003.
Premier Glass Traders, 76/78, Dhanji St., Bombay 400003.

HANDICRAFTS EXPORTERS

Delhi

Asian Antiques Arts & Handicrafts, N-258, Greater Kailash-1, New Delhi 110048.
Beharilal Benipershad Exports & Imports Pvt. Ltd., Mahalaxmi Market, Chandni Chowk, Delhi 110006.
Continental Exports, 18/4, A. Ali Rd., New Delhi 110002.
Dhananjai Pvt. Ltd., 16/12, Faiz Rd., New Delhi 110005.
Eastern Arts Corpn., 11/B-4, A. Ali Rd., New Delhi 110002.
Eastern Linkers Pvt. Ltd., Block A, Connaught Place, New Delhi 110001.
Hansa Agencies Pvt. Ltd., 4B/3, Ganga Ram Hospital Marg, New Delhi 110060.
Hira Lal & Son, 20, East Park Area, Karol Bagh, New Delhi 110005.
Indo Craft Exports, 23, Darya Ganj, New Delhi 110002.
Ivory Mart, 22-F, Connaught Place, New Delhi 110001.
J. R. Sharma & Co. Pvt. Ltd., 3622, N. Subhas Mrg., Delhi 110006.
Nava Bharat Enterprises Pvt. Ltd., Surya Kiran Bldg., K. Gandhi Mrg., New Delhi 110001.
Oriental Trading Society, F7, Jangpura Extn., New Delhi 110014.
Paramount Traders, 4/47, W.E.A., Karol Bagh, New Delhi 110005.
Pratibha Exports, 7/6, Daryaganj, Ansari Rd., New Delhi 110002.
R. D. Ramnath Co., Jama Masjid, Delhi 110006.
R. L. Khanna & Co. (Delhi), Khanna House, 15, Jangpura Ext., New Delhi 110014.
Reliance International Corpn. Pvt. Ltd., 4/2-B, Jawala Mansion, A Ali Rd., New Delhi 110002.
S. Nath Kakar & Son, 41, Hanuman Rd., New Delhi 110001.
Seven Seas Exporters, 131, Sadar Bazar, Delhi 110006.
Wellworth Trading Corpn., 82, Joshi Rd., Karol Bagh, New Delhi 110005.

Maharashtra

Bharat Industries Corpn., Janmabhoomi Chambers, Fort St., Bombay 400001.
Kairali, Nirmal, Nariman Point, Bombay 400021.
Murlidhar Sons, 7, Smeeta Nivas, Chira Bazar, Bombay 400002.
Narang Overseas Pvt. Ltd., Beach View Bldg., 93, B. Desai Rd., Bombay 400026.

Uttar Pradesh

H. Abdul Qayyum & Bros., Bara Shah Safa, P.B. 49, Moradabad 244001.
Indiacraft Emporium, P.B. 128, Dehra Dun 248001.
Jandaood & Co., Bhatti St., Moradabad 244001
National Import & Export Co., Bombay Bazar, P.B. 28, Meerut 250001
Nayar & Sons, P.B. 103, Deputy Ganj, Moradabad 244001.
Saxan Traders, Narendra Bldg., Sagar Sarai, P.B. 64, Moradabad 244001
Wajidson Pvt. Ltd., Qasre-Wajid, P.B. 79, Moradabad 244001

HARDWARE TOOLS & MACHINERY

Andhra Pradesh

D. Guruswami Chetty & Co., Santhapet, Nellore 524001.
Donty Govindiah Suryanaraniah & Bros., Hindupur 515201.
Vibgyor (I) Co., 8571, R. P. Rd., Secunderabad 500003.

Delhi

Delhi Hardware & Metal Stores, 822, Nai Sarak, Delhi 110006.
Delhi Hardware Store, 1917, Sirkiwalan, Delhi 110006.
Hardware Co. Ltd., 3620, Chawri Bazar, Delhi 110006.
Hardware Traders, 62, Shradhanand Mrg., Delhi 110006.
Milhard & Co., Hauz Qazi, Delhi 110006.
Vinod Metal Industries, 29, Chawri Bazar, Delhi 110006.

Karnataka

Mahboobali Md. Yakub & Sons, Gulbarga 585101.
Mangilal & Co., United Bldg., J.C. Rd., Bangalore 560002.
Town Hardware Stores, 5, Godown St., Bangalore 560002.

Kerala

C. A. Galiakotwala & Co. Pvt. Ltd., Bazar Rd., Cochin 682002.
Chakiat Bros., Ernakulam 682011.
General Hardware Stores, Mullakkal, Alleppey 688001.
Kerala Trading Corpn., Bazar Rd., Cochin 682002.
South India Corpn. Pvt. Ltd., Bazar Rd., Cochin 682002.

Maharashtra

Abdullabhai Faizullabhai Pvt. Ltd., 60-62, Sarang St., Bombay 400003.
Ashok Industrial Traders, 50, Bibijan St., Bombay 400003.
B. M. Abdeally & Co., 127, Sarang St., Bombay 400003.
Bharat Engg. Stores, 31, Nagdevi Cross Lane, Bombay 400003.
Bombay Hardware Co., 91, Kika St., Bombay 400004.
Bombay Hardware Traders, 79, N. Dhuru St., Bombay 400003.
Commercial Supplying Agency, 211, Nagdevi St., Bombay 400003.
Conet Corporation, 73, Nagdevi Lane, Bombay 400003.
Dawoodi Hardware Mart, 84, Bhajipala St., Bombay 400003.
Hardware & Mill Stores, 172, Nagdevi St., Bombay 400003.
Hardware Trading Syndicate, 51, Bibijan St., Bombay 400003.
Mutual Traders, 155, N. Dhuru St., Bombay 400003.
Raj Tools Corpn., 50, Bibijan St., Bombay 400003.
Reuben Enterprises, 82, Narayan Dhuru St., Bombay 400003.
Shah Trading Co., 163, Narayan Dhuru St., Bombay 400003.

Tamil Nadu

A. M. Hassanally Co., 34, Linghi Chetty St., Madras 600001.
Asia Corporation, Mill Rd., Coimbatore 641001.
Bhagat & Co., S. A., 26, P. Maistry St., Madras 600001.
Bombay Trading Agency, 22, E. Chetty St., Madras 600001.
India Co. Private Ltd., 161, Union High School Rd., Coimbatore 641012.
Indian Commercial Corpn., 6, Shanmugam Chettiar Rd., Coimbatore 641002.
Indian Hardware Stores, 73, Sembudoss St., Madras 600001.
Indian Overseas Trdg. Corpn., 295, Power House Rd., Coimbatore 641012.
Lehri Bros., 17, Sembudoss St., Madras 600001
Madras General Supply Corpn., 11, Singanna Naick St., Madras 600001.
Mehta Doshi & Co., 334, T. Chetty St., Madras 600001
S. K. Electricals, 7, Govindappa Naick St., Madras 600001.
South India Corpn. Pvt. Ltd., 50, Race Course Rd., Coimbatore 641018.

West Bengal

Atlas Industrial Stores, 89, Netaji Subhas Rd., Calcutta 700001.
Calcutta Hardware Store, 110/1, Amherst St., Calcutta 700009.
Dominion Hardware Stores, 40, Strand Rd., Calcutta 700001.
Hardware Mart, 159, N. Subhas Rd., Calcutta 700001.
Hardware Syndicate Pvt. Ltd., 113B, Manohardas Chowk, Calcutta 700007.
Jainsons & Co., 56/1, BRBB Rd., Calcutta 700001.
S. Natraj & Co., 67-B, Netaji Subhas Rd., Calcutta 700001.
Varieties Hardware Stores, 71/A, N. Subhas Rd., Calcutta 700001.

HIDES & SKINS

Abdus Samad & Co., 7/2, Gas St., Calcutta 700009.
Hooghly Hide & Skin Co., 9, M. S. Rd., Calcutta 700009.

HYDRAULIC EQUIPMENT

Aeicorp Pvt. Ltd., 10, Lall Bazar St., Calcutta 700001.
C. Bole & Co., 61, N. Dhuru St., Bombay 400003.
Diaphragms Ind., 46/C, Chowringhee, Calcutta 700016.
Drewet Chowna & Co., 123, N. Master Rd., Bombay 400023.
F. Pestonji & Co., 98, Nagdevi St., Bombay 400003.
Giriraj Agarwala Agencies, 1/1, Meredith St., Calcutta 700013.
Hydraulics & Pneumatics, 310/311, Linghi Chetty St., Madras 600001.
J. Rosales Pvt. Ltd., Venkatesh Chambers, Prescot Rd., Bombay 400001.
Jainsons Overseas, 26, World Trade Centre, Cuffe Parade, Bombay 400005.
Kafaz Engg. Co., 191, Nagdevi St., Bombay 400003.
Maneklal & Sons, 115, N. Dhuru St., Bombay 400003.
Mehta Doshi & Co., 334, Thambu Chetty St., Madras 600001.
R. B. Engg. Pvt. Ltd., Army & Navy Bldg., 3rd Flr., M. Gandhi Rd., Bombay 400023.
Rising Sun Trading Co., 20/1, S. J. Park Rd., Bangalore 560002.
Shantilal C. Mehta, 45, K. Munshi Marg, Sagar Vihar, Chowpatty, Bombay 400007.
Toshniwal Bros. Pvt. Ltd., 198, J. Tata Rd., Bombay 400020.

INSULATION MATERIALS

A. M. Electricals, 1869, Electrical Mkt., Chandni Chowk, Delhi 110006.
Asia Marine Insulation, 44, Anant Deep Chambers, 273/77, Bhat Bazar, Bombay 400009.
Bombay Insulated Cables & Wires Co., 74, Podar Chambers, S. A. Brelvi Rd., Bombay 400001.
British Electric Insulating Co. Ltd., 33, Dr. V. B Gandhi Mrg., Bombay 400001.
Chimanlal Shah & Co., 3-D, Mangaldas Rd., Bombay 400002.
Earthfield Products (Bombay), New Excelsior Bldg., 6th Flr., A. K. Naik Mrg., Bombay 400001.
Fibre Group Corpn., 377/B, J. Shanker Sheth Rd., Girgaum, Bombay 400004.
G. K. Electricals, 48, Krishnappa Naicken Agraharam St., Madras 600001.
G. R. Traders, 63, Kitchen Garden Lane, Mangaldas Rd., Bombay 400002.
Hari Om Vidyut Udyog, Sardargriha, Lohar Chawl, Bombay 400002.
Heatex Products Pvt. Ltd., 11, Bank St., Bombay 400001
Hemant Electricals, 34, Nagdevi St. Bombay 400003
Hills Engg. & Commercial Pvt. Ltd., 4-3-13, Rashtrapati Rd., Secunderabad 500003.

On Approved List of
D.G.S. & D. & VARIOUS RAILWAYS

Tangee-Dcc

HYDRAULIC ALL-PURPOSE JACKS

5 to 1000 M TONNES WITH HYDRAULIC LIFT UPTO 1000 M M

Also Available :

HYDRALITE TYPE JACKS, DETACHED (REMOTE CONTROL) JACKS, HYDRAULIC-CUM-SCREW JACKS, TRAVERSE BASE HYDRAULIC JACKS, PEDAL TYPE JACKS, COMPOUND JACKS, HIGH PRESSURE HAND MOTORIZED PUMP UNITS

Now Being Exported

For Particulars contact
DREWET CHOWNA & COMPANY
Estd. 1895.
123, Nagindas Master Road; Fort, Bombay 400 023
Phones : 274112 274124

Also Available " DCC ". Hydraulic Test Pressure Pumps for Testing Pipe—Valves, Boilers etc. Capacity 35kg cm² to 350 kg cm².

HOUSE FOR HOSES

Delivery & Suction Hoses for Air, Water, Oil, Fuel & Chemicals

Hot & Cold Water Hoses for Furnaces

Sand Blasting Hoses, Air Ducting Etc.

G. I. Brass-Copper & Stainless Steel Flexible Hoses

TEFLON & ASBESTOS HOSES for high temperature, Wire & Rayon Braided Hydraulic & Steam Hoses

Accessories like clamps, snap on couplings, shanks etc.

KAZAF ENGINEERING CO.
191, Nagdevi Street, Bombay 400 003.
Phones : 326007, 320810.
Grams : " FITHOSE ".

Industrial Electrical Engg. Co., 10, Hamam St., Bombay 400001.

Industrial Engg. & Insulations Co., 26, Davidson St., Madras 600001.

Insulation House, 123, B. V. K. Iyengar Rd., Bangalore 560053.

Insulation House, Kitab Mahal, Dr. D. Naoroji Rd., Bombay 400001.

Jain Sales Corpn., 3980A, Chawri Bazar, Delhi 110006.

Jhaveri Thanawala Pvt. Ltd., 47, Tamarind Lane, Bombay 400023.

Newkem Products Corpn., Harganga Mahal, Khodadad Circle, Bombay 400014.

Parekh Bros. (Madras), 22, Errabalu Chetty St., Madras 600001.

Pravin Dhudalal & Co., 166-72, Lohar Chawl, Bombay 400002.

Southern Insulations, 169/14, Broadway, Madras 600001.

Suresh Electric Corpn., 80-90, Umrigar Bldg., Lohar Chawl, Bombay 400002.

IRON & STEEL

Agarwal Engg. Corpn., 402/A, Steel Chambers, 58/B, Broach St., Carnac Bunder, Bombay 400009.

Bharat Tube Corpn., 90, Bhajipala Lane, Tavawala Bldg., Bombay 400003.

C. B. Steel Industries, 84A, Broach St., Bombay 400009.

C. Prabhudas & Co., 251, Sant Tukaram Rd., Bombay 400009.

Chandrakant & Co., 52, Baroda St., Iron Mkt., Carnac Bunder, Bombay 400009.

Commercial Steel Corpn., 8, Baroda St., Bombay 400009.

Desai Industrial Corpn., 176, A.B.R. St., Bombay 400003.

Doshi Bros., 306, Yogeshwar, 135/137, Kazi Syed St., Bombay 400003.

Fairdeal Enterprise Corpn., Mohatta Mkt., Ist Floor, Room No.9, Palton Rd., Bombay 400001.

Jivani Steels, Nr. Devi Dayal, 4th Lane, Darukhana, Bombay 400010.

MS CRCA SHEETS, MS BLACK SHEETS
and
BOILER QUALITY PLATES

Established in 1943

THE UNITED MILL STORE (INDIA)
(On Govt. Approved List)
404, Steel Centre, S. T. Road,
Iron-Market, Bombay 400 009.
Telephones : 326804, 342513 & 455043.
Grams : " SUREWIN "

Stockists of:

CARBON STEEL SEAMLESS PIPES AND TUBES, MS CRCA SHEETS, B. P. SHEETS, G. P. SHEETS, MS PLATES, BQ. PLATES and all other structurals Items of IRON and STEEL.

WE DEAL IN :

- **IRON AND STEEL**
- **C.R.C.A. SHEETS/STRIPS**
- **BOILERS QUALITY PLATES**

in any specification

COMMERCIAL STEEL CORPORATION

Iron & Steel Merchants & Manufacturers' Representatives.

8, Baroda Street, Iron Market, Bombay 400 009.

Telephones : Office: 336742, 341893, 348037 ; Res. 671607.

K. Rajesh & Co., 249, Sant Tukaram Rd., Bombay 400009.
Liberty Iron & Steel Traders, 206, Steel Centre, Iron Mkt., Bombay 400009.
Metropolitan Traders, 210, Loha Bhavan, P. D'Mello Rd., Bombay 400009.
Mona Steels, 26, Magazine St., Darukhana, Bombay 400010.
Nandlal Bhuta & Sons, 88, Yusuf Meheralli Rd., Bombay 400009.
R. V. Traders, 86, Sutar Chawl, Bombay 400002.
Shah Sales Corpn., 45, Janjikar St., Bombay 400003.
Soorajmull Baijnath, 21-22, Loha Bhavan, P. D'Mello Rd., Bombay 400009.
Steel Sales Corpn., 60, Sembudoss St., Madras 600001.
Steel Udyog, 1/39, Sembudoss St., Madras 600001.
Triveni Iron & Steel Industries, 18, Steel Yard, Iron Mkt., Bombay 400009.
Unique Steel Sales, 32, Steelyard House, Sant Tukaram Rd., Iron Market, Bombay 400009.
United Mill Store (India), 404, Steel Centre, Iron Mkt., Bombay 400009.

JEWELLERY, GOLD & DIAMOND

A. K. S. Jewellers, 215, N.S.C. Bose Rd., Madras 600001.
Amratlal Vishram Minawala, 161, Zaveri Bazar, Bombay 400002.
Bala Appaji & Sons, 9A, Homi Mody St., Bombay 400023.
Bapalal & Co., Rattan Bazar, Madras 600003.
Bhansali & Co., 205, Mumbadevi Rd., Bombay 400002.
Chunilal & Co., 17, Dhanji St., Bombay 400003.
Devraj Nensee & Co., 14, Peria Naiyakaran St., Madras 600001.
Gazdar Pvt. Ltd., Taj Mahal Hotel, Bombay 400039.
Ghanasingh Jewellers, 422/433, 'Panchratna', Opera House, Bombay 400004.
Girdharilal & Sons, Con. Circus, New Delhi 110001.
Hajare & Bros., Y.A. Ist Pinjarapole Lane, Bombay 400004.
Jhaveri Bros. & Co. Pvt. Ltd., 345, A. Rehman St., Bombay 400003.
K. Wadia & Co., 324, Grant Rd., Bombay 400007.
Kerala Jewellers, Ranganathan St., T. Nagar, Madras 600017.
L.K.S. Jewellers, 138, N.S.C. Bose Rd., Madras 600001.
London Star Diamond Co. India Pvt. Ltd., Prasad Chambers, 16th Flr., Near Roxy Cinema, Bombay 400004.
M.P.Jewellers, 1, Vivekananda Rd., Calcutta 700007.
Mangaldas Tribhovandas Bhimji & Sons, 3, Dharam Palace, Huges Rd., Bombay 400007.
Mohan Jewellery, 142, Royapettah High Rd., Mylapore, Madras 600004.
Nathella Sampathu Chetty & Son, 177, N.S.C. Bose Rd., Madras 600001.
National Jewellers, 7/9, 3rd Agiary Lane, Dhanji St., Bombay 400003.
P.C. Chandra & Sons, 127/1A, B.B. Ganguly St., Calcutta 700012.
Parson & Co., 16/C, Ashutosh Makherji Rd., Calcutta 700001.
Popley & Sons, 56/57, Panchratna, Opera House, Bombay 400004.
R.M. Gokul Associates, 134, Sheikh Memon St., Bombay 400002.
Raghubar Dayal & Sons, 1670, Dariba Kalan, Delhi 110006.
Rajnikant Bros., 58-A, Walkeshwar Rd., Bombay 400006.
Raju Jewellers, Abdulla Bldg. No. 2, Dr. Ambedkar Rd., Parel T.T., Bombay 400012.
Roopchand Jewellers, Sandhurst Bridge, Bombay 400004.
Ruby Jewellers, Tardeo Air-Conditioned Mkt., Bombay 400034.
Samir Diamonds, 9/910, Prasad Chambers, Near Roxy Cinema, Bombay 400004.
Surajmal Diamonds Pvt. Ltd., 65, Blumoon Complex, M.G. Rd., Bangalore 560001.
Tribhovandas Bhimji Zaveri & Sons, Hermes House, Next to Roxy Cinema, New Queen's Rd., Bombay 400004.
Vajubhai Jewellers, 252/58, Zaveri Bazar, Bombay 400002.
Vummidi Bangaru Chetty Trust, 11, Nageswara Rao Park, Panagal Park, Madras 600017.

LABORATORY CHEMICALS

Amrutlal Bhurabhai & Co., Anand Bhuvan, S. Gandhi Mrg., Bombay 400002.
B. Babulal & Co., 71, S. Gandhi Mrg., Bombay 400002.
Chandranil Dyechem Corpn., 98, Princess St., Bombay 400002.
Chemical Centre, Chhani Rd., N. H. No. 8, Near Octroi Naka, Vadodara 390002.
Chemical International, 3, Princess St., Bombay 400002.
Chemical Solvent Centre, 43, Princess St., Bombay 400002.
D. K. Lab Chemicals, 98, Princess St., Bombay 400002.
Hazari Trading Co., 296, S. Bhagatsingh Rd., Bombay 400001.
Hindustan Chemical Co., Mahavir Darshan, Bhandari St., Bombay 400003.
Impex Chemical Corpn., 7, Devkaran Mansion, 24, Vithaldas Rd., Princess St., Bombay 400002.
K. Varajdas & Co., 64/66, Princess St., Bombay 400002.
Laboratory Chemicals Co., 79, Princess St., Bombay 400002.
Micrographics Agencies, 31, Dadi Santook Bldg., Dadi Santook Lane, Dholi Talao, Bombay 400002.
N. Uttamlal & Co., 8, Bode Chawl, Babu Genu Rd., Princess St., Bombay 400002.
Narendra & Co., Bode Chawl, Babu Genu Rd., Princess St., Bombay 400002.
National Commercial Corpn., 9, Devkaran Mansion, Princess St., Bombay 400002.
Perfect Chemicals, 32, Shroff Mansion, Princess St., Bombay 400002,
Polypharm Pvt. Ltd., 8, Tamarind St., Bombay 400023.
Precision Scientific Co., 4, Baker St., Madras 600001.
S. D. F. Lab Chemical, Mehta Chambers, Mathew Rd., Bombay 400004.
S. Mathuradas & Co., Bode Chawl, S. Gandhi Mrg., Bombay 400002.
Shah Scientific (India), 114, Princess St., Bombay 400002.
Vora Brothers, 214-B, S. Gandhi Marg, Bombay 400002.

LABORATORY EQUIPMENT

Gujarat

Durga Traders, Durga Estate, N. H. No. 8, Chhani Rd., Vadodara 390002.
Shah & Co., 66, Shantisadan Estate, Opp. Dinbhai Tower, Lal Darwaja, Ahmedabad 380001.

Maharashtra

A. Sevantilal & Bros., 294, P. Nariman St., Bombay 400001.
Aristo Enterprise, 814, Parekh Mkt., Bombay 400004.
Armstrong Smith Ltd., Brady House, 12-14 V Nariman Rd., Bombay 400023.
Chemi Equip, 413-G, Kalbadevi Rd., Vasant Wadi, Bombay 400002.
Hindustan Trading Co., 91, Princess St., Bombay 400002.
Indsales Corpn., 11, Horniman Circle, Bombay 400023.
J.P. Vyas & Co., Mangaldas Bldg., 20, Kitchen Garden Lane, Bombay 400002.
Jashvant C. Shah & Co., Bharati Nivas, Block 6, 1st Flr., Besant Rd., Santacruz West, Bombay 400054
Labequip Corpn., Post Box 696, Bombay 400001
Lab-Hosp Corpn., B/26, Bhangwadi, 2nd Flr., Kalbadevi Rd., Bombay 400002
Lab. Instruments, Panchratna, Near Roxy Cinema, Bombay 400004.
Manilal Maganlal & Co., 382/7, Girgaum Rd., Bombay 400002.
Neolab Sales Corpn., 19A, 1st Flr., Stock Exchange Bldg., Bombay Samachar Mrg., Bombay 400023

MACHINERY IMPORTERS & MANUFACTURERS' AGENTS

MARBLE, TILES & GRANITE

DIAMOND TOOLS — for marble & granite. All types of blades & discs, segments. Automatic & semi-automatic brazing & sintering machines for diamond segments. Made in Italy by **DIAMOND SERVICE s.r.l., CAORSO (Piacenza), Italy.**

Single-blade frame machine for marble block dressing. **" ZONATO " — made in Italy.**

Engraving & writing machine for names & figures in Marble, Granite & Stone. **" INCIMAR " — made in Italy.**

ARTIFICIAL MARBLE & ONYX.

Complete plant of machinery & equipments for production of artificial marble & Onyx. — slabs as well as articles like bath-tubs, sinks, covers for w.c., wash-basins, etc. **" VISCOTON " — made in Austria.**

" A-T-S " — made in Italy. Steam-curing plants for cement products — Tiles, pipes etc. & kilns for pallets wrapping by means of thermo-shrinking plastic films suitable for tiles.

Automatic MACHINERY FOR TILES. **LONGINOTTI, S.p.A. Firenze, Italy.** Manufacturers of Automatic Machinery for Flooring Tiles.

" B.R.A." — Verona, Italy. Manufacturers of Automatic Machinery for Marble & Granite Cutting-Sawing, Polishing, etc.

LABORATORY & SCIENTIFIC INSTRUMENTS

Filter-papers & aids. **INDUSTRIAL — FILTRO made in Italy.** Various types of filter-papers, pads and other articles for filtering.

GIBERTINI — made in Italy. World-famous first class Laboratory & Analytical balances, Titration equipments, Hydrostatic balances, Electronic & digital with guaranteed accuracy.

PULVERIZING MACHINERY

" NUOVA GUSEO " — made in Italy. Pulverizers, micronizers and mixers for pharmaceuticals, fertilizers, Dyestuffs, chemicals, sulphur, carbon, limestones, talc, resins, pesticides, etc. Also complete plants on turn-key basis.

ICE CREAM CONE MAKING MACHINERY. " GABBRIELLI " — made in Italy. Complete plant for ice-cream cones production.

CRANES & MATERIAL HANDLING MACHINERY

Mobile cranes, self-propelled yard cranes, hydraulic telescopic cranes, truck cranes, all terrain & rough terrain cranes having different capacities. **RIGO — made in Italy.**

" CACCIA " world-famous **ROTATIONAL** moulding machines. Also turbo-mixers, dozers, vacuum feeding plants for plastic & chemical compounds (PVC resins etc.).

" L-M-P " — Lavorazione Materie Plastiche, S.p.A. — TORINO, Italy. Manufacturers of complete plant for production of EXPANDED POLYSTERENE & POLYETHELENE SHEETS, RIGID P.V.C. PIPES, SECTIONS, SHEETS, FILMS etc.

S. R. M. P. — THERMOFORMING — MILANO, Italy. Manufacturers of thermoforming, vacuum-forming and form-fill — & — seal auto matic machinery for packagings.

" EUROMATIC " — European Plastic Machinery Mfg. A/s. — COPENHAGEN, Denmark. Manufacturers of automatic machinery for plastic collapsible tubes.

Sole Agents :

JASHVANT C. SHAH & CO.

Bharati Nivas, Block No. 6, 1st Floor, Besant Road, Santa Cruz (West),
Bombay 400 054.

Phones : 561563 & C/o 317587.

Grams : " OTCASNART "

Sintrex Corpn., 909, Raheja Centre, N. Point, Bombay 400021.
Union Scientific Syndicate, 71, Princess St., Bombay 400002.
Unique Scientific Syndicate 17, New Market, 351, Sheikh Memon St., Bombay 400003.
Vibsons Scientific (India), 9, Khandke Bldg., R.K. Vaidya Rd., Dadar, Bombay 400028.

Tamil Nadu

Laboratory Equipment Supplies Co., 26, K.B. Dasan Rd., Madras 600018.

Uttar Pradesh

Superior Scientific Stores, 109/211, Jawaharnagar, Kanpur 208012.

West Bengal

Laboratory Equipments, 294/2/1, U. C. Rd., Calcutta 700009.
Laboratory Stores, Taher Mansions, 8, Bentinck St., Calcutta 700001.
Scientific Industries, 51/A, Raja Dinendra St., Calcutta 700009.
Western Laboratory Suppliers, 43/1B, Chakraberia Rd. (N), Calcutta 700020.

MACHINE POLISHING CLOTH

Lotus Industries Ltd., Burmah House, 16, Coral Merchant St., Madras 600001.

MACHINE TOOLS & MACHINERY

Delhi

Forbes, Forbes, Campbell & Co. Ltd., Engg. Division, 9/3A, Asaf Ali Rd., New Delhi 110002.
Hindustan Electric and Mill Stores Co., 58, Shradhanand Mrg., Delhi 110006.
M.P. Mudgal & Co., 234A, J. Darwaza, Delhi 110006.
Machine Tools (India) Ltd., D-24, South Ext.—Part II, New Delhi 110049.
Mathur Imports & Exports Pvt. Ltd., Hotel Metro Bldg., N-1, Connaught Circus, New Delhi 110001.

Karnataka

Alfred Herrbert (I) Pvt. Ltd., 13/23, Grant Rd., Bangalore 560001.
Bangalore Machine Tools (India), 89/1, Narasamma Comml. Complex, J.C. Rd., Bangalore 560002.
Machine Tools Traders (Bangalore), 41, Narasimharaja Rd., Bangalore 560002.

Maharashtra

Abhay Kumar & Co., 127, Princess St., Bombay 400002.
Amit Engg. Co., P. Box No. 16790, Bombay 400022.
Bharat Industrial Corpn., Petit Compound, Nana Chowk, Grant Rd., Bombay 400007.
C. Bole & Co., 61, Narayan Dhuru St., Bombay 400003.
Chemi Equip, 413-G, Kalbadevi Rd., Bombay 400002.
Chetna Trading Corpn., 105, Apollo St., Bombay 400023.
Coronet Engrs. (I), 38, Dalal St., Bombay 400023.
Duncan Stone Co., 500, Maulana Azad Rd., Bombay 400004.
Flex-Tool Equipment Co., 71/73, Nagdevi St., Bombay 400003.
Hemco Corporation, 308, P.Nariman St., Bombay 400001.
Hindustan Engg. Co., Aban House, 25-31, Ropewalk St., Rampart Row, Bombay 400023.
Hindustan Export & Import Corpn. Pvt. Ltd., Anand Bhavan, Dr. D.N. Rd., Bombay 400001.
India Machine Tools Corpn., 62, N. Master Rd., Bombay 400023.
Industrial & Agricultural Engg. Co. (Bombay) Ltd., 43, Dr. V.B. Gandhi Mrg., Bombay 400023.
Industrial Machines & Tools, 158, Narayan Dhuru St., Bombay 400003.
International Machine Tools Corpn., 5, Bank St., Bombay 400023.
Jam Machine Tools, 145, Narayan Dhuru St., Bombay 400003.
Jashwant C. Shah & Co., Bharati Nivas, Block No.6, Besant Rd., Santa Cruz (West), Bombay 400054.
Jayems Engineering Co., Great Western Bldg., 130, Apollo Street, Bombay 400023.
Katti Sales Corpn., 1238, Matruchhaya, J. M. Rd., Pune 411004.
Kumar Commercial Co., 12-A, Nadirshaw Sukhia St., Bombay 400001.
Machine Tool Accessories, A-19, MIDC., Andheri East, Bombay 400093.
Machine Tools (India) Ltd., Imperial Chambers, Wilson Rd., Ballard Estate, Bombay 400038.
Machine Tools Syndicate, 13, Lentin Chambers, Dalal St., Bombay 400023.
Machine Tools Traders, 45, Dhanji St., Bombay 400003.
Machinery & Equipments, 271A, Nagdevi St., Bombay 400003.
Machinery & Spares, 30, Apollo St., Bombay 400023.
Machinery Impex Corpn., 271A, Nagdevi St., Bombay 400003.
Machinery Marketing Corpn., 261 Dr. D. Naoroji Rd., Bombay 400001.
Machinery Sales Corpn., Afzal Mansion, 11, Burjorji Barucha Marg, Bombay 400001.
Modern Machines (India), 129, N. Master Rd., Bombay 400023.
N.M. Mehta & Co., 4/10, Old Custom House Rd., Bombay 400001.
P. Dalal & Co., Mehta Indl. Estate, 86, C.C.A., Andheri-Kurla Rd., Bombay 400093.
Parag Machine Tools Co., 54, Bibijan St., Bombay 400003.
Pattani Industrial Corpn., 19/21, Ambalal Doshi Marg, Bombay 400001.
Perfect Machine Tools Co. Pvt. Ltd., Bell Bldg., Sir P. Mehta Rd., Bombay 400001.

- HYDROBEND HYDRAULIC PIPE BENDERS
- HYDRAULIC PRESSES
- RAJI SPRAY GUNS
- ABRASIVE CUTOFF MACHINES
- BAKELITE PRESSES
- PLASTIC MOULDING MACHINES
- FILING & SAWING MACHINES

HEMCO CORPORATION
308, P. Nariman Street,
Bombay 400 001.

Phone : 295828 Grams : HEMCORP

Popular Machinery Corpn., Agra Bldg., Oak Lane, Bombay 400023.

Quality Machine Tools, 25, Hamam St., Bombay 400023.

R. Mansukhlal & Co., 145, Narayan Dhuru St., Bombay 400003.

Samuel Osborn (India) Ltd., D-16, Commerce Centre, Tardeo Rd., Bombay 400034.

Shalimar Machine Tools, Esplanade Mansion, Above Air India Cargo Office, Bombay 400023.

Shubh Machinery (Sales) Corpn., 15, Bank St., Bombay 400023.

Standard Machinery Corpn., 8, Maruti Lane, Nr. Handloom House, Bombay 400001.

Surekha Machine Tools Co., 24, Onlooker Bldg., Sir P.M. Rd., Bombay 400001.

Tamil Nadu

A. H. Taher & Company, 15, Broadway, Madras 600001.

Anuradha Engineering Enterprises, 888, Thambu Chetty St., Madras 600001.

Easun Engg. Co. Ltd., 5-7, Second Line Beach, Madras 600001.

Exports & Trading Co, Pvt. Ltd., 15, Marshalls Rd., Madras 600008.

Jayems Engineering Co., 317, Thambu Chetty St., Madras 600001.

Machine Tools (India) Pvt. Ltd., 49, Wallajah Rd., Madras 600002.

Machine Tools Traders (Madras), 218, Linghi Chetty St., Madras 600001.

Modern Machine **Tools, 72, Iyappa Chetty St., Madras 600001.**

Shiv Machine Tools, 67, American St., Madras 600001.

Summit Tools Corpn., 24/27, Muker Nallamuthu St., Madras 600001.

Trade Links Corpn., 1/8, McLeans St., Madras 600001.

Whitestar Engineering Co., 271, Linghi Chetty St., Madras 600001.

West Bengal

Asia Engg. Supply Stores Pvt. Ltd., P-15, Bentinck St., Calcutta 700001

Balmer Lawrie & Co. Ltd., 21, N. Subhas Rd., Calcutta 700001.

Machine Tools (India) Ltd., 56A, Mirza Ghalib St., Calcutta 700016.

Metal Specialities Pvt. Ltd., 6/1, Saklat Place, Calcutta 700013.

Sujauddin & Co., 75, N. Subhas Rd., Calcutta 700007.

Union Tools & Agencies Pvt. Ltd., 1, Chandni Chowk St., Calcutta 700013.

MARBLE & TILES (FLOORING)

Builders Home, 12/14, Old Custom House Rd., Bombay 400023.

C. Bhogilal & Co., 310, Perin Nariman St., Bombay 400001.

Duncan Stone Co., 500, Maulana Azad Rd., Bombay 400004.

Maharashtra Marble, Wadavli, Near Golf Club, Chembur, Bombay 400074.

Mahavir Ceramics, 161, Panjrapole Rd., Bombay 400004.

N.M. Mehta & Co., 4/10, Old Custom House Rd., Bombay 400001.

Ronak Traders, 3/1, Avanti Apartments, 'A' Flank Rd., Sion East, Bombay 400022.

MARINE DIESEL ENGINES

Metal Distributors Ltd., Udyog Bhavan, Walchand Hirachand Marg, Bombay 400001.

Standard Equipment Corpn., 19, Bank St., Bombay 400023.

W. R. T. Sales and Service Pvt. Ltd., 74, Sheriff House, S. B. Singh Rd., Bombay 400001.

MINERALS

Associated Commercial Enterprises, 20, Govindappa Naick St., Madras 600001.

Associated Soapstone Distributing Co. Pvt. Ltd., Rustom Bldg., 29, Veer Nariman Rd., Bombay 400001.

Aurowil Trading Corpn., 98, Surat St., Bombay 400009.

Bhupendrakumar & Co., 196-198, Samuel St., Bombay 400009.

World's best TALC

FROM THE WORLD FAMOUS
MINES OF DAUSA AND BHILWARA

Our Grades :
- FINEX
- BESTA
- BOMBAY QUALITY
- ZECCO
- PARAMHANS
- RAJHANS Etc.

Used In :
- COSMETIC
- PHARMACEUTICAL
- PAINTS
- CERAMIC
- PAPER
- RUBBER
- SOAP
- TEXTILE Etc.

Maharashtra and Gujarat Distributors :

ASSOCIATED SOAPSTONE DISTRIBUTING CO. (P.) LTD.
Rustom Building, 3rd Floor, 29, Vir Nariman Road, Bombay 400 001.
Phones : 254932 & 257885.

Bombay Mineral Supply Co., 138, Nagdevi St., Bombay 400003.

Dhirajlal & Co., 45, Cavel X Lane No. 3, Kalbadevi Rd., Bombay 400002.

Gandhi Enterprises, Giriraj, Flat No. 1, 201, Walkeshwar Rd., Bombay 400006.

Ganesh Mercantiles, 110, Arcot Rd., Kodambakkam, Madras 600024.

Golcha Mineral & Chemical Ind., 10, Clive Row, Calcutta 700001.

Gujarat Industrial Products, P. O. Box No. 62, Virdi Plot, Porbandar 360575.

Industrial Mineral Chemical Co. Pvt. Ltd., 125, Narayan Dhuru St., Bombay 400003.

Jilindrakumar & Co., 179, Samuel St, Bombay 400009.

Madras Minerals, 470, T. H. Rd., Madras 600021.

Mag-Hard Minerals, Darya Bldg., 375, Dr. D.N. Rd., Bombay 400001.

Navjivan Corpn., Refractory House, LBS Mfg., Nr. Premier Bus Stand, Bombay 400070.

Nitin Industrial Corpn., East View, Ashoknagar, Kandivli (E), Bombay 400066.

Oriental Minerals, C-8, Brick Bunder, Bombay 400033.

R. Harilal & Co., 3rd Cavel Lane, Kalbadevi, Bombay 400002.

Serai & Co., 212/16, Sheriff Devji St., Bombay 400003.

Sterling Minerals, 6, Tardeo Airconditioned Mkt., Bombay 400034.

Tejal Chemicals, Opp. Vayda Pole, Chokhandi, Vadodara 390001.

Tiffin Barytes, Asbestos & Paints Ltd., 272/273, Angappa Naik St., Madras 600001.

Universal Minerals & Chemical Co., 1308, Prasad Chambers, Opera House, Bombay 400004.

West End Minerals & Exports Pvt. Ltd., 117, M. Karve Mrg., Bombay 400020.

OFFICE EQUIPMENT

Delhi

Forbes, Forbes Campbell & Co. Ltd., 9/3, Asaf Ali Rd., New Delhi 110002.

Universal Business Machines, 32, New Municipal Market, Lodi Colony, New Delhi 110003.

Karnataka

Forbes, Forbes Campbell & Co. Ltd., Badami House, N. R. Square, Bangalore 560012.

Maharashtra

Forbes, Forbes Campbell & Co. Ltd., Latham Divn., Forbes Bldg., Charanjit Rai Mrg., Bombay 400001.

Godrej & Boyce Mfg. Co. Pvt. Ltd., Lalbaugh, Bombay 400012.

Khisa Steel Works Pvt. Ltd., Khira Bhavan, Sandhurst Bridge, Bombay 400007.

Killick Nixon Ltd., Killick House, Home St., Bombay 400001.

Methodex Business Systems, 33A, New Marine Lines, Bombay 400020.

Modern Business Machines, P. Box 17202, Chembur, Bombay 400071.

Office Equipment Co. of India, Bombay Mutual Bldg., Sir P. Mehta Rd., Bombay 400001.

Remington Rand of India Ltd., Mehta Mahal, Mathew Rd., Bombay 400004.

Tamil Nadu

Forbes, Forbes Campbell & Co. Ltd., Latham Dn., 147, Mount Rd., Madras 600002.

Office Appliances Co., 151A, Purasawalkam H. Rd., Madras 600007.

West Bengal

Continental Commercial Ltd., 2/1, Old Court House Corner, Calcutta 700001.

For Industrial
Timber & Packing Wood

The Well Geared Machinery & Specialized Services

★ In manufacturing packing cases for exports & heavy machinery.

★ Awaiting your call to solve your packing problems at your site.

★ In the service of the prominent Industrial organisations.

Please Contact :

TOLIA BROTHERS

84, Bombay Timber Market,
Reay Road, Bombay 400 010.

Phones : *Office:* 375162/378345 **Grams :**
Resi. : 670481. " NEEDTOLIA ".

PACKING MATERIALS

Amirudin Shalebhoy Tyebjee & Sons, Shale Bldg., Bank St., Bombay 400023.

K. Shah & Co., 1956/3, Opp. English Cinema, Khadia Char Rasta, Ahmedabad 380001.

Kirti & Co., 2/79, Sembudoss St., Madras 600001.

Morarji Peraj & Co. Talpatriwala, 138, Masjid Bunder Rd., Bombay 400003.

Purchase & Sales Syndicate, 198, Kalbadevi Rd., Bombay 400002.

Sanghvi Trading Co., 129, Mody St., Bombay 400001.

Shree Upendra Paper Corpn., 42/44, Sutar Chawl, Bombay 400002.

T. Lakhamshi Ladha & Co., 298, Narshi Natha St., Bombay 400009.

Tolia Brothers, 84, Bombay Timber Market Ltd., Reay Rd., Bombay 400010.

Western Paper & Yarn Pvt. Ltd., Khetan Bhuvan, J. N. Tata Rd., Bombay 400020.

PAINTS,ENAMELS & VARNISHES

Baker Bros., 31, C. P. Tank Rd., Bombay 400004.

Cooper & Co., 53, A. Rehman St., Bombay 400003.

Kapadia Brothers, 81, Abdul Rehman St., Bombay 400003.

Narandas & Sons., 71, Bhajipala Lane, Bombay 400003.

Rajkamal Supplying Stores, 295, A. Rehman St., Bombay 400003.

Star Paint & Oil Industries, Crescent Chambers, 56, Tamarind St., Bombay 400023.

(See also under Synthetic Enamel & Cellulose Lacquers).

PAPER

Delhi

Behari Lal Madan Lal Jaipuria Ltd., A-94, South Ext., Part II, New Delhi 110048.

Dharamdas Tarachand Jain, Chawri Bazar, Delhi 110006.
Hari Ram Gupta & Co., 64, N. Qutab Rd., Delhi 110006.
Jai Dayal Kapur, Chawri Bazar, Delhi 110006.
Modern Paper Mart, Chawri Bazar, Delhi 110006.
Munshilal & Sons, Chawri Bazar, Delhi 110006.
Omprakash Jitendra Kumar & Co., 63, Daryaganj, New Delhi 110002.
Paper Syndicate, 119, Chawri Bazar, Delhi 110006.
Premier Traders & Agencies, Chawri Bazar, Delhi 110006.
Ram Nath & Sons, 2426, Chawri Bazar, Delhi 110006.
Swastik Trading Agency, 3184, Chawri Bazar, Delhi 110006.

Gujarat

Dwarkadas & Sons, 995, Khadia Char Rasta, Ahmedabad 380001.

Maharashtra

Abdullabhai Fidaali & Co., 18, Shamaldas Gandhi Marg, Bombay 400002.
Abhijit Agencies, 157, Budhwar Peth, Pune 411002.
Amol Paper Syndicate, Syndicate Bank Bldg., 26-A, Sir P. M. Rd., Bombay 400001.
Bhagavatlal & Co., 56, Sutar Chawl, Bombay 400002.
Chandulal & Co., 100, Dhanji St., Bombay 400003.
Chimanlal Paper Co., Macmillan Bldg., Dr. D. Naoroji Rd., Bombay 400001.
East India Paper Co., Near Tilak Statue, Mahal, Nagpur 440001.
Emkay Trading Co., Shale Bldg., Bank St., Bombay 400023.
J. B. Advani & Co. Pvt. Ltd., Advani Chambers, Sir P. M. Rd., Bombay 400001.
J. M. Patel & Co., Hassan Chambers, Parsi Bazar St., Bombay 400001.
Jai Dayal Kapur, 31, Sutar Chawl, Bombay 400002
Jyoti Trading Co., 49/61, Sutar Chawl, Bombay 400002.
Kohinoor Agencies, 715, Narayan Peth, Laxmi Rd., Pune 411030.
Maharashtra Paper Co., 394, Guruwar Peth, Pune 411002.
Mayur Paper Co., 768/785, Shukrawar Peth, Pune 411002.
Nooruddin Abdulhusein & Sons, 66, Sutar Chawl, Bombay 400002. 400002.
Paper Trade (India), 383, B. Shanwar Peth, Pune 411030.
Prabhat Paper Distributors, 105B, Churchgate Chambers, Sr. V Thackersey Mrg., Bombay 400020.
Prahladrai Dalmia & Sons, 51/52, Podar Chambers, P. Bazar St., Bombay 400001.
Prakash Paper Co., 289/91, Nagdevi St., Bombay 400003.
Premchand Lallubhai & Co., 50-54, Mirza St., Bombay 400003.
Premier Paper Agencies, 606, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.
Rajesh Paper Corpn., 64, Sutar Chawl, Bombay 400002.
Royal Paper Stores, 187-89, A. Rehman St., Bombay 400003.
Shrikrishna Paper Co., 457, Budhwar Peth, Pune 411002.

Tamil Nadu

East Coast Papers, 16/17, College Rd., Madras 600006.
General Papers Ltd., 16, Armenian St., Madras 600001.
Hariharan & Co., 144, Oppannakara St., Coimbatore 611001.
Jai Dayal Kapur, 2, Anderson St., Madras 600001.
Jeyam & Co., 43/44, Anderson St., Madras 600001.
Kaveri Agencies, 24, Anderson St., Madras 600001.
Mittal Trading Co., 187, Linghi Chetty St., Madras 600001.
Paper Supplies Agencies, 331/333, Thambu Chetty St., Madras 600001.
Papers & Co., 35, Anderson St., Madras 600001.
Subramanian Brothers, 54, Badrian St., Madras 600001.

West Bengal

Ashoka Marketing Ltd., 11, Clive Row, Calcutta 700001.
Bholanath Dutt (Paper Merchants) Pvt. Ltd., 34-A, Brabourne Rd., Calcutta 700001.
Bholanath Paper House Pvt. Ltd., 32-A, Brabourne Rd., Calcutta 700001.
Calcutta Paper Supply Co., 26, Amherst St., Calcutta 700009.
Hanuman Paper Co., 12, Jackson Lane, Calcutta 700001.
Hindustan Paper & Board Co., 21, Synagogue St., Calcutta 700001.
Mymensingh Paper Agency Pvt. Ltd., 19, Sukeas Lane, Calcutta 700001.
Paper & Board Supplying Agency, 25-A, Swallow Lane, Calcutta 700001.
Paper Trading & Distributing Co., 60, M. Gandhi Rd., Calcutta 700009.
Paper Trading Syndicate Pvt. Ltd., 44, Harish Neogy Rd., Calcutta 700004.
R. D. Traders, 14/2, Old China Bazar St., Calcutta 700001.

PETROLEUM JELLY I.P.

A. & P. Traders, 61, Bhandari St., Mandvi, Bombay 400003.

PETROLEUM PRODUCTS (Also see Chapter on Petroleum Industry).

A. & P. Traders, 61, Bhandari St., Mandvi, Bombay 400003.
Allied Oil Corpn., 2/A, Thatha Muthiappan St., Madras 600001.
Anand Lubricants, 334, Narsi Natha St., Bombay 400004.
Armstrong Oil Co., Kothari Mansion, 3rd Flr., Opp. G. P. O., Bombay 400001.
Bharat Petroleum Products, 273, Narsi Natha St., Bombay 400004.
Bombay Petroleum Dealers, 382/84, Katha Bazar, Bombay 400009.
Crown Lubricants, Sanaulla Compound, Plot No. 2, Mahim Dharavi Rd., Bombay 400017.
Eastern Petroleum Pvt. Ltd., No. 3, Bandra Sea-Shell, Perry Cross Rd., Bandra, Bombay 400050.
Gajanand Oil Industries, 380, Narsi Natha St., Katha Bazar, Bombay 400009.
Gayatri Lubricants, N. S. Rd., Kul Deep Niwas, R. No. 22, Mulund, Bombay 400080.
Golden Eagle Lubricants, Hill No. 5, Asalpa Village, Ghatkopar, Bombay 400084.
H. J. Leach & Co., P. Box 899, Bombay 400001.
Hotchand Chhataram, 38, Broadway, Madras 600001.
Industrial Chemical Corpn., 235, Panch Ratna, Near Roxy Cinema, Opera House, Bombay 400004.
International Agencies (I), 273/77, Narshi Natha St., Bombay 400009.
International Lubricants Co., Court House, Dhobi Talao, Bombay 400002.
Jay Bharat Lubricants (I) Pvt. Ltd., Nafees Chambers, Carnac Rd., Bombay 400001.
Lubrica Oil Co., 3/B, Shankar Vijay, Rajawadi, Ghatkopar, Bombay 400077.
Lubricating Oil Co. of India, Sindhu House, Nanabhai Lane, Flora Fountain, Bombay 400001.
Maharashtra Lubricants, 6/A, Ashok Ind. Estate, L. B. Shastri Mrg., Mulund (W), Bombay 400080.
Maritime Lubricants, 20, Hem Prakash, 90-92, Kazi Syed St., Bombay 400003.
Marvel Lubricants, 5/7, Syed Mukri St., Katha Bazar, Bombay 400009.
Modern Lubricants, 6, Ashok Ind. Estate, L. B. Shastri Mrg., Mulund, Bombay 400080.

Motor & General Stores Supplying Co., G.P.O. Box No. 492, Bombay 400001.
The Oil Distributors, 45, Fancy Chambers, Surat St., Bombay 400009.
Panama Industries, 416, Katha Bazar, Narsi Natha St., Bombay 400009.
Petro-Chem Ind., Lohana Mahaparishad Bhuvan, 10, Khetwadi 4th Lane, Bombay 400004.
Petro Products Ind., 16, Vithaldas Rd., Bombay 400002.
Petrosil Oil Co. Ltd., Steelcrete House, 3, D. Vachha Rd., Bombay 400020.
Pioneer Oil Co., 354, N. Natha St., Katha Bazar, Bombay 400009.
Premier Oil Co., 379/81, Narsi Natha St., Bombay 400009.
Raj Petroleum Products, 5/7, Syed Mukri St., Bombay 400009.
Ravi Petroleum Products, 44, Surya Narayan Chetty St., Madras 600013.
Rinki Petroleum Pvt. Ltd., 67, Race Course Circle, Vadodara 390607.
Royal Corpn. of India, 38, Broadway, Madras 600001.
Savita Chemicals Pvt. Ltd., Commissariat Bldg., 231, Dr. D. N. Rd., Bombay 400001.
Special Oils Refinery, Mahul Naka, Chembur, Bombay 400074.
Sterling Lubricants, 19, Hind Rajasthan Centre, Plot No. 272/273, Bhaudaji Rd. Extn., Sion, Bombay 400022.
Swastik Petroleum Products, Nari Seva Sadan, Kurla Indl. Estate, Ghatkopar, Bombay 400086.
Universal Oil Co., 378/80, Katha Bazar, Narsi Natha St., Bombay 400009.
Victory Oil Industries, 75, Commercial Chambers, Masjid Bunder Rd., Bombay 400003.
Vijaya Lubricants, 13, Ashok Ind. Estate, L. B. Shastri Mrg., Mulund (W), Bombay 400080.
Vinayak Oil Industries, C-53, Kismat Nagar, C.S.T. Rd., Kurla, Bombay 400070.

PHOTOGRAPHIC MATERIALS

Delhi

Dass Studios, 12-F, Connaught Place, New Delhi 110001.
Delhi Photo Co., 78, Janpath, New Delhi 110001.
Imperial Photo Stores, 10, Chandni Chowk, Opp. State Bank, Delhi 110006.
Rangoon Studios, 58, Janpath, New Delhi 110001.

Maharashtra

Agfa Gevaert India Ltd., 41, New Marine Lines, Bombay 400020.
Bharat Photo Stores, Jiwaji Lane, Dr. D. Naoroji Rd., Bombay 400001.
Continental Photo Stores, 243-45, Dr. D. Naoroji Rd., Bombay 400001.
Forward Stores, Mangalwadi, J. Shankarshet Rd., Bombay 400004.
Kodak Ltd., Kodak House, Dr. D. Naoroji Rd., Bombay 400001.
Patel India Pvt. Ltd., 190, Dr. D. Naoroji Rd., Bombay 400001.

Tamil Nadu

Photo Cine Stores, 97/98, Armenian St., Madras 600001.
Photo Emporium, 11, Mount Rd., Madras 600002.

West Bengal

Photo Cine Sound Supplies, 21, R.N. Mukherjee Rd., Calcutta 700001.
Photo Cine Stores, 38, J. L. Nehru Rd., Calcutta 700013.
Photocraft, 7, K. S. Roy Rd., Calcutta 700001.
Xaca India Pvt. Ltd., 71, G. C. Ave., Calcutta 700013.

PIPES & PIPE FITTINGS

Andhra Pradesh

Atmaram Harisingh & Co., 2206, Hill St., Raniganj, Secunderabad 500003.
Indian Hardware Mart, 5-1-510, Hill St., Raniganj, Secunderabad 500003.
Metro Hardware Mart, 782/3, Raniganj, Secunderabad 500003.
Taha Tools Enterprise, 4-3-161 C, Hill St., Raniganj, Secunderabad 500003.
Veeras Tube Traders, 7835, Raniganj, Secunderabad 500003.

Delhi

Amar Allied Agencies, 58, Manohar Market, Hauz Qazi, Delhi 110006.
Delhi Pipe Store, Sirkiwalan, Hauz Qazi, Delhi 110006.
Goojar Mall Ganpatrai, Hauz Qazi, Delhi 110006.
Machines & Tubes, 2865, Sirkiwalan, Delhi 110006.
Tube Distributors, 901, Ansal Bhawan, K. Gandhi Mrg., New Delhi 110001.
Vijay Sales Corpn., 3356, Hauz Qazi, Delhi 110006.
Vinod Metal Industries, 29, Chawri Bazar, Delhi 110006.

Gujarat

Bhagyodaya Traders, Khadia Char Rasta, Ahmedabad 380001.
Pipe Suppliers, Pankore Naka, Ahmedabad 380001.
Pipe Traders, 1716, Khadia, Sir Chinubhai Rd., Ahmedabad 380001.

Karnataka

A. Mohamed Ibrahim & Co., 101, Godown St., Bangalore 560002.
Karnataka Trading Co., 293, Old Tharagupet, Bangalore 560053.
Prinson & Co., 11, Cambridge Rd., Ulsoor, Bangalore 560008.

Maharashtra

A. B. Trading Co., 85/87, Nagdevi St., Bombay 400003.
A. H. Virjee & Co., Loha Bhavan, P. D'Mello Rd., Bombay 400009.
Advance Tube Co., 99, Nagdevi St., Bombay 400003.
Afkars Tube Corpn., Plot 152, Reay Rd., Bombay 400033.
Ahfy Trading Co., 50, Nagdevi St., Bombay 400003.
Apex Tubes Corpn., 254, Nagdevi St., Bombay 400003.
Asian Pipes & Hardware Co., 30, Nagdevi St., Bombay 400003.
Bakshi Ghura & Co. Pvt. Ltd., 285, Thakurdwar Rd., Bombay 400002.
Bombay Pipe Trading Co., 145, N. Dhuru St., Bombay 400003.
Bombay Regd. Pipe Dealers Syndicate Pvt. Ltd., 93A, Nagdevi St., Bombay 400003.
C.B. Trading Corpn., 198, Lokmanya Tilak Mrg., Lohar Chawl, Bombay 400002.
C. Champaklal & Co., 205, Nagdevi St., Bombay 400003.
Central Tube & Hardware Mart, 55/57, Nagdevi X Lane, Bombay 400003.
Commercial Supplying Agencies, 221, Nagdevi St., Bombay 400003.
Crescent Tools Corpn., 4, Raghunath Maharaj St., Mandvi, Bombay 400003.
Daulatram Ratanji & Co., 208, Nagdevi St., Bombay 400003.
Economic Tubes Agency, 15-27, Bibijan St., Bombay 400003.
Engineers Tube Traders, 6, Coal Bunder, Mazgaon, Bombay 400010.
Excel Tube Corpn., 404, Gupta Bhavan, Ahmedabad St., Bombay 400009.
Govardhandas, P. A., 144, Nagdevi St., Bombay 400003.
Greater India Tubes Co., 201, Nagdevi St., Bombay 400003.
Gujarat Tube & Hardware Mart, 24, Nagdevi Cross Lane, Bombay 400003.

Hemani Bros., Mulchand Mansion, Princess St., Bombay 400002.

Hindustan Materials Pvt. Ltd., Commissariat Bldg., 231, Dr. D. N. Rd., Bombay 400001.

Indian Tube Syndicate, 116, Narayan Dhuru St., Bombay 400003.

Indo Bombay Trading Co., 34, Nagdevi St., Bombay 400003.

Industrial Development Corpn., 68, Bank of Baroda Bldg., Palton Rd., Bombay 400001.

International Tools & Hardware Suppliers, 242, Nagdevi St., Bombay 400003.

International Tube Co., 138, Nagdevi St., Bombay 400003.

International Tube Trdg. Corpn., 98, Nagdevi St., Bombay 400003.

Ishardas Aggarwal & Sons, Latif House, Sant Tukaram Rd., Bombay 400009.

Kadakia Enterprise, 153, N. Dhuru St., Bombay 400003.

Kapadvanj Trading Corpn., 62, Nagdevi St., Bombay 400003.

Khandelwal Bros. Pvt. Ltd., Khandelwal Bhavan, Dr. D. Naoroji Rd., Bombay 400001.

M.H. Šubedar & Sons, 48-A, Magazine St., Darukhana, Mazagaon, Bombay 400010.

M.J. Patel & Co. Pvt. Ltd., 116, P.D'Mello Rd., Bombay 400009.

M. M. Ebrahimji & Co., 147, Nagdevi St., Bombay 400003.

Maganlal Pranlal & Sons, 105, Nagdevi St., Bombay 400003.

Mahavir Tube Corpn., 240, Nagdevi St., Bombay 400003.

Metro Tube Trading Co., 131/135, N. Dhuru St., Bombay 400003.

MRT Tubes Corpn., 8/14, Baroda St., Bombay 400009.

Muktanandan Corpn., Clerk House, N. Parikh Mrg., Bombay 400005.

Nagardas Kanji Shah, 176, Magazine St., Darukhana, Mazagaon, Bombay 400010.

Nanalal Ambalal & Co., 69, Nagdevi St., Bombay 400003

Nandkishore Stel & Pipe Distributors, 404, Ashirwad, Ahmedabad St., Bombay 400009.

National Tube and Hardware Mart, 203, Nitin Mansion Dr. D.N. Rd., Bombay 400001.

Necet Trading Corpn. Pvt. Ltd., 94, Nagdevi St., Bombay 400003.

Nikunj Enterprises, 20/26, Tava Lane, A. Rehman St., Bombay 400003.

Nirmal Trading Corpn., 289-91, Nagdevi St., Bombay 400003.

P. Jayantilal & Co., 76-B, Mohamedali Rd., Bombay 400003.

P. S. Parekh & Co., 108, Nagdevi St., Bombay 400003.

Pankaj Trading Corpn., 254, Nagdevi St., Bombay 400003.

Patel Bros., 41, Nagdevi X Lane, Bombay 400003.

Popular Enterprise, 127, Nagdevi St., Bombay 400003.

Pravinchandra & Co., 158/60, Kalbadevi Rd., Bombay 400002.

Premier Tube & Hardware Mart, 43, Nagdevi X Lane, Bombay 400003.

Pressure Tube Industries, BPT Plot No. 345, Copper Smith St., Dockyard Rd., Bombay 400010.

R. Ochhavlal & Co., 86, Nagdevi St., Bombay 400003.

R. Shantilal & Co., 8, Nagdevi St., Bombay 400003.

Radiant Engg. Co., 152, N. Dhuru St., Bombay 400003.

Rajnikant & Co., 53, Bhajipala Lane, Bombay 400003.

Rameshchandra Santram, 205, S. Tukaram Rd., Bombay 400009.

Rasiklal Kantilal & Co., 145, Kika St., Bombay 400004.

Regal Trading Co., 80, Mohamadali Rd., Bombay 400003.

Reliable Engg. Works, 215-A, M. Azad Rd., Bombay 400008.

Remi Tubes & Pipes, 325, Kalbadevi Rd., Bombay 400002.

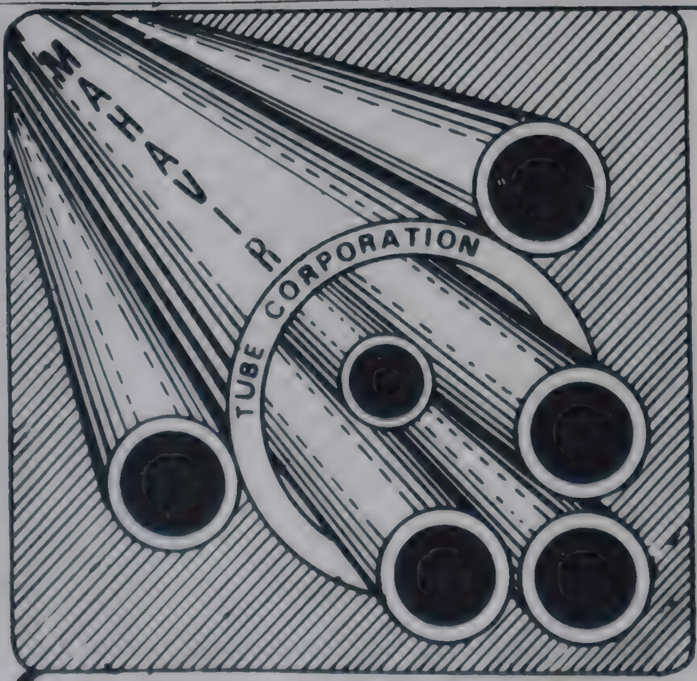
Rolex Trading Co., 10, Sarang St., Bombay 400003.

Royal Tube Co., 126, Mody St., Bombay 400001.

S. Sevantilal & Co., 246, Yusuf Meheralli Rd., Bombay 400003.

Shah Patel & Co., 111, Nagdevi St., Bombay 400003.

Shah Traders, 61, Nagdevi St., Bombay 400003.



STOCKISTS & DEALERS OF:

PIPES & TUBES

IN: M.S. SEAMLESS,
HYDRAULIC PIPES
BOILER & E.R.W. TUBES,
STEAM PIPES.
MECHANICAL & INDUSTRIAL
PIPES IN 12 mm. TO
50 mm WALL THICKNESS.

SPECIALISTS IN EXTRA HEAVY DUTY
PIPES, & TUBES.

MAHAVIR TUBE CORPORATION.

240. NAGDEVI STREET. SHOP NO 3. BOMBAY-400 003.

GRAM:
MAHVIRTUBE

PHONES: OFF.: 327680
349729
RESI: 596236

a wide range of shapes & sizes

Stockists & Dealers in

M. S. SEAMLESS PIPES, HYDRAULIC PIPES, BOILER TUBES & E.R.W. PIPES IN ALL SCHEDULES & SPECIFICATIONS

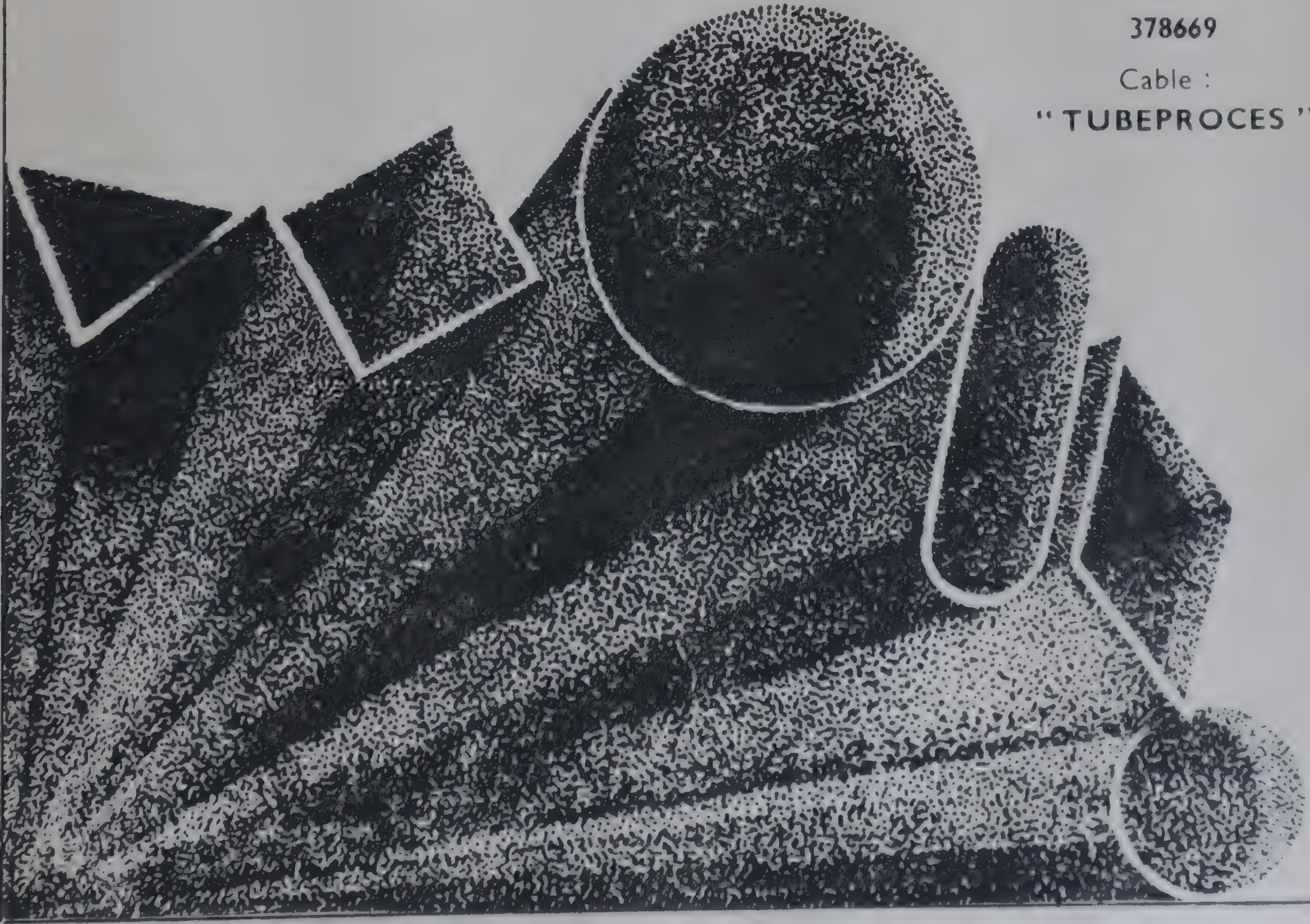
SQUARE, RECTANGULAR, OVAL, ELLIPTICAL AND *ANY SPECIAL SECTION* AS PER CUSTOMER'S REQUIREMENTS

PRESSURE TUBE INDUSTRIES

Office : B.P.T. PLOT NO. 345, COPPER SMITH STREET, DOCKYARD ROAD,
BOMBAY-400 010.

Works : 16, CHOWDHARY ESTATE, CEMETRY ROAD, KURESH NAGAR,
KURLA (EAST), BOMBAY 400 070.

Phone :
378669
Cable :
" TUBEPROCES "



PIPES, BOILER & HYDRAULIC
STAY TUBES

RAMESHCHANDRA SANTRAM

**205, Sant Tukaram Road, Carnac Bunder,
Bombay 400 009.**

Telephone : 322214.
Grams : " RAMESHLILA ".
Telex : 011-3564 RCS IN

★

Stockists of :

Carbon Steel Seamless Pipes and Tubes upto 500 mm dia. to ASTM, BSS, DIN, ISS standards

for

Pressure and Mechanical applications.

Solar Tubes Pvt. Ltd., 51, Tardeo Air-conditioned Mkt., Tardeo, Bombay 400034.

Standard Pipes & Fittings Co., 93-A, Nagdevi St., Bombay 400003.

Suhas Trading Corpn., 229, Masjid Bunder Rd., Bombay 400003.

Supreme Tubes Corpn., 4/29B, Piru Lane, Pathanwadi, Bombay 400009.

Swastik Trading Corpn., 152, N. Dhuru St., Bombay 400003.

Techno-Fab Industries, 82, Nagdevi Cross Lane, Bombay 400003.

Thakorelal & Co., 47, Nagdevi X Lane, Bombay 400003.

Tirathram Kewalkishan & Co., 29, Old Bardan Lane, Vadgadi, Shriram Mkt., Bombay 400009.

Trinity Tube Co., 94, Narayan Dhuru St., Bombay 400003.

Tubes India Corpn., 156/60, Narayan Dhuru St., Bombay 400003.

Union Tube & Hardware Mart, 84/86, Nagdevi Cross Lane, Bombay 400003.

Unique Enterprises, 633, J. Shankershet Rd., Bombay 400002.

United Trading Co., 76, Magazine St., Darukhana, Bombay 400010.

Venus Trading Corpn., 502, Loha Bhavan, P.D'Mello Rd., Bombay 400009.

Zedar Tubes, 25, Maruti Lane, Handloom House, 2nd Flr., Bombay 400001.

Tamil Nadu

Allied Import Co., 19, B. Mudali St., Madras 600003.

Chettinad Steel & Tubes Corpn., 41, Sembudoss St., Madras 600001.

Govardhandas, P. A., 13/81, Sembudoss St., Madras 600001.

Khandelwal Bros. Pvt. Ltd., 82, Sembudoss St., Madras 600001.

Preetam Pipes Syndicate, 2/83, Sembudoss St., Madras 600001.

Reliable Hardware Syndicate, 29, Perianna Maistry St., Madras 600001.

Shivmoni & Co., 2/79, Sembudoss St., Madras 600001.

Sreeram Pipe Traders, 316, Thambu Chetty St., Madras 600001.

Sreevatsa Engg. & Trading Co., 3/79, Sembudoss St., Madras 600001.

Universal Pipe Distributors, 15, Sembudoss St., Madras 600001.

West Bengal

A. N. Hussunally & Co., 28, Strand Rd., Calcutta 700001.

Aartus & Associates Pvt. Ltd., 7A, Elgin Rd., Calcutta 700001.

Advance Engg. Corpn., 12-B, Clive Row, Calcutta 700001.

Banka & Sons, 15, India Exchange Place, Calcutta 700001.

Bharat Pipe Fitting Co., 40, Strand Rd., Calcutta 700001.

Central Pipe Fitting Mart, 10, Canning St., Calcutta 700001.

Chunilal Prabhudas & Co. (Calcutta) Pvt. Ltd., 1, Bonfield Lane, Calcutta 700001.

D. Wren & Co., 25, Swallow Lane, Calcutta 700001.

Jaiswal Hardware Mart, 9, Bidhan Sarani, Calcutta 700006.

Jayant Tube Corpn., 4, Raja Woodmunt St., Calcutta 700001.

Nirmal Trading Corpn., 109, N. Subhas Rd., Calcutta 700001.

Roy & Son, 77, N. Subhas Rd., Calcutta 700001.

Sarcar Bros., 138, BRBB Rd., Calcutta 700001.

PLASTIC PRODUCTS

Dilip Plastics, 5, Shamshet St., Bombay 400003.

Expanded Metal Depot Pvt. Ltd., 91/93, Abdul Rehman St., Bombay 400003.

Ferroplast, 240, A to Z Ind. Estate, Fergusson Rd., Bombay 400013.

Gautam Trading Co., 184, Nagdevi St., Bombay 400003.

Ideal Traders, 11, Horniman Circle, Bombay 400023.

Modern Plastic Co., 36 Sutar Chawl, Bombay 400002.

Paras Trading Co., 49, Mirza St., Bombay 400003.

Plastika Enterprise, 120, Bapu Khote St., 1st Flr., Pydhonie, Bombay 400003.

Spark Traders, 235/37, Walkeshwar Rd., Bombay 400006.

PRESSURE GAUGES

Gemini Corpn., 99, Surat St., Bombay 400009.

H. T. Shah & Co., Ahmed Bldg., Golpitha, Bombay 4000004.

India Trading Corpn., 11, Narayan Dhuru Cross Lane, Bombay 400003.

Kaushik Engg. Co., 11, Nagindas Master Rd., Bombay 400001.

Kazaf Engg. Co., Palia Bldg., 191, Nagdevi St., Bombay 400003.

Narottamdas Kevalbhai Shah, 26, Abdul Rehman St., Bombay 400003.

Premier Tube & Hardware Mart, P. B. No. 3279, 43, Nagdevi Cross Lane, Bombay 400003.

Shah Desai & Co., 115, Nagdevi St., Bombay 400003.

Tubes (India) Corpn., 158-60, N. Dhuru St., Bombay 400003.

Venus Trading Co., 122, Barbhai Moholla, Bombay 400003.

Willgreen Commercial Corpn., 6, Khokha Bazar, Bombay 400003.

PUMPS & PUMPING SETS

Andhra Pradesh

Agricultural Engg. Co., 4 & 5, Durga Bhuvan, Rashtrapathi Rd., Secunderabad 500003.

Andhra Pradesh Co., 11, Durga Bhuvan, Rashtrapathi Rd., Secunderabad 500003.

Arjun Aancillads, 33-B, Vasavi Nagar Colony, Near Secunderabad Club, Picket, Secunderabad 500003.

Delhi

Agricultural Engg. Co., Naya Bazar, Delhi 110006.

Associated Engineers, 1860, Mahalaxmi Mkt., Delhi 110006.

Great India Engg. Co., 225, Cycle Mkt., Jhandewalan Extn., New Delhi 110055.

Pumps & Primemovers Pvt. Ltd., 4E/8, Jhandewalan Extn., New Delhi 110055.

Gujarat

Fourvents Engg. Co., 6, Shantisadan Socy., Lal Darwaja, Ahmedabad 380001.

Krantarth Traders, 582B, Sir Chinubhai Rd., Khadia, Opp. Golwad, Ahmedabad 380001.

Karnataka

M. Ramiah & Sons, Sri Krishna Bldgs., Avenue Rd., Bangalore 560002.

Mahakali Engg. Corpn., 133, Nagarthpet, Bangalore 560002.

Maharashtra

A. N. Seth & Co., 140, Meadows St., Bombay 400023.

Aarco, 3 Navjivan Colony, 14th Flr., Lamington Rd., Bombay 400008.

Agritex (India), 3/31-32, Tardeo Airconditioned Mkt., Bombay 400034.

Batliboi & Co., Apeejay House, V. B. Gandhi Mrg., Bombay 400023.

British Engg., 105, Apollo St., Bombay 400023.

C. Bole & Co., 61, Narayan Dhuru St., Bombay 400003.

Drewet Chowna & Co., 123, N. Master Rd., Bombay 400001.

Herberts Grovers Engg. Co., Hamam St., Bombay 400001.

Industrial Stores Co., 139, N. Master Rd., Bombay 400001.

Kaushik Engg. Co., 111, Nagindas Master Rd., Bombay 400001.

Lala Engg. Co., 82/1, Bombay Samachar Mrg., Bombay 400023.

Maharashtra Machinery Spares Corpn., 32, Bombay Samachar Mrg., Bombay 400001.

Manohar Bros., 4, Commerce House, Medows St., Bombay 400023.

Marketing Sales Supply Commercia, 65, M. Gandhi Rd., Bombay 400023.

New Era Engg. Co., 128, Medows St., Bombay 400023.

Nigos Corpn., 64, Forbes St., Bombay 400001.

Prinz Magnon (India), C-3, 3rd Flr., Commerce House, 140, Master Rd., Bombay 400023.

Semeicon Pvt. Ltd., 132, Dr. A. Besant Rd., Bombay 400018.

Thapar Bros., 302, Commerce House, N. Master Rd., Bombay 400023.

Toshniwal Bros. Pvt. Ltd., 198, J. Tata Rd., Bombay 400020.

United India Engg. Co., 6, Commerce House, 140, N. Master Rd., Bombay 400001.

Upadrasta & Sons, Bennett House, Forbes St., Bombay 400001.

Vijay Engg. & Machinery Co., Bombay Mutual Annexe, Sir P. M Rd., Bombay 400001.

Water Aids Sales & Service, 17, Bell Bldg., Sir P.M. Rd., Bombay 400001.

Tamil Nadu

Asha Engg. & Marketing, 7-A, Goods Shed St., Madurai 625001.

Diamond Engg. Co., 6, Errabalu Chetty St., Madras 600001.

Equipment Agencies, 97, Dr. Nanjappa Rd., Coimbatore 641018.

G. Janshi & Co. Pvt. Ltd., Opp. Alankar Theatre, 813, Mount Rd., Madras 600002.

Manohar Bros., 258, Angappa Naicken St., Madras 600001.

Vikrama Engg. Co. (Agencies), 1/11, Errabalu Chetty St., Madras 600001.

West Bengal

Asea United Traders & Industries Pvt. Ltd., 10-B, Kapalitolla Lane, Calcutta 700012.

Calcutta Engg. Co., 24, Amratalla Lane, Calcutta 700001.

Commercial & Engg. Corpn., 138, BRBB Rd., Calcutta 700001

Deepak Engg. Co., 37, BRBB Rd., Calcutta 700001.

Eastern Engg. Enterprises, 54, G. C. Avenue, Calcutta 700013.

General Machinery Corpn., 13, G. C. Ave., Calcutta 700013.

H. K. Enterprise, 54, G. C. Ave., Calcutta 700013.

Lloyds Engg. Co., 3, Amratolla St., Calcutta 700001.

P. Chakravarty & Sons, 3/1, Mangoe Lane, Calcutta 700001.

Plant and Machinery, 3, Mangoe Lane, 1st Flr., Calcutta 700001.

Sudeep Industrial Corpn., 13, Canning St., Calcutta 700001.

Techmech (India), 32, Ezra St., Calcutta 700001.

Wellwater Services Pvt. Ltd., 63, Radha Bazar St., Calcutta 700001.

West Bengal Engg. Co., 138, BRBB Rd., Calcutta 700001.

Western India Machinery Co., 24, G. C. Ave., Calcutta 700013.

SANITARY GOODS

Andhra Pradesh

National Sanitary Engg. Co., 149, Rashtrapathi Rd., Secunderabad 500003.

Uday Engg. Co., Tilak Rd., Hyderabad 500001.

Delhi

Arail Bros., Chawri Bazar, Delhi 110006.

Bharat Iron Works, Chawri Bazar, Delhi 110006.

D. Nath & Co., 3681, Chawri Bazar, Delhi 110006.

Goojar Mal Ganpat Rai, 33271, Hauz Qazi, Delhi 110006.

Intertools, Akashdeep, 26A, Barakhamba Rd., New Delhi 110001.

M. M. Arora & Co., 3639/10, Chawri Bazar, Delhi 110006.

Mahabir Pershad & Sons, 3702, Chawri Bazar, Delhi 110006.

Moti Lal Jain & Co., 3622, Chawri Bazar, Delhi 110006.

Prakash & Co., 3690, Chawri Bazar, Delhi 110006.

Prem Enamel & Metal Factory, Bara Hindu Road, Delhi 110006.

R. B. Rodda & Co. Ltd., 4K, Connaught Circus, New Delhi 110001.

Gujarat

Gujarat Tube & Sanitary Stores, Khadia Char Rasta, Ahmedabad 380001.

Maharashtra

A. G. Karimji Calcuttawala, 82, Kika St., Bombay 400004.

A. H. Shah & Co. Pvt. Ltd., Nanabhaai Mansion, Sir P.M. Rd., Bombay 400001.

All India Trading Centre, 100, Mint Rd., Bombay 400001.

Aranha Agencies, St. Michael Ch., L. J. Rd., Mahim, Bombay 400016.

Asgaralli Nuruddin & Co., 95, Nagdevi Street, Bombay 400003.

Bharat Pipe & Sanitary Corpn., 67-69, Mohamedali Rd., Dada Manzil, Bombay 400003.

Bharat Sanitary Stores, 73, Nagdevi St., Bombay 400003.

Bombay Building Materials Trading Co., 73, Medows St., Bombay 400023.

C. Bhogilal & Co., 310, P. Nariman St., Bombay 400001.

C. Tribhovandas & Co., 11, Green St., Bombay 400023.

Ceramica, 98, Medows St., Bombay 400023.

Crown Sanitary Suppliers, 9, 1st Cooper St., Bombay 400003.

Gopal Chand Puri & Brothers, 70, Mohamedali Rd., Bombay 400003.

Indian Ceramic Centre, 20/24, Old Custom House Rd., Bombay 400023.

Jivraj & Vrajlal, 122, Nagdevi St., Bombay 400003

K. Chimanlal & Co., 107A, Nagdevi St., Bombay 400003.
K. Gigabhai & Sons, 8-10, Green St., Bombay 400023.
Maganlal Pranlal & Sons, 105, Nagdevi St., Bombay 400003.
Modern Tube & Sanitary Stores, 48, Nagdevi St., Bombay 400003.
N. M. Mehta & Co., 4-10, Old Custom House Rd., Bombay 400023.
Nanalal Ambalal & Co., 69, Nagdevi St., Bombay 400003.
New India Sanitation Co., Central Bank Bldg., Homi Mody St., Bombay 400023.
P. S. Parekh & Co., 108, Nagdevi St., Bombay 400003.
Parikh Brothers, 12, Elphinstone Circle, Botawala Bldg., Bombay 400001.
R. C. Puri & Sons, 64-C, Sharu Castle, Mohamedali Rd., Bombay 400003.
R. Moolchand & Co., 44, Nagdevi Cross Lane, Bombay 400003.
Richardson & Cruddas Limited, Byculla Iron Works, Parel Rd., Bombay 400008.
United Potteries & Glassware Mart, 22, Noble Chambers, S. A. Brelvi Rd., Bombay 400001.
Vinubhai Chandulal & Co., 63, Nagdevi St., Bombay 400003.

Tamil Nadu

Bharat Sanitary Stores, 629, Perianna Maistry St., Madras 600001.
Calcutta Light Casting Supply Co., 19, E. Chetty St., Madras 600001.
Girnath Agencies, 133A, Crosscut Rd., Tatabad, Coimbatore 641012.
Haridas Bhagat & Co. Pvt. Ltd., 9/240, Crosscut Rd., Coimbatore 641012.
King & Co., 25, Thambu Chetty St., Madras 600001.
Madras Sanitary Mart, 418, Triplicane High Rd., Madras 600005.
Modern Sanitary Supplies, 24, T. Chetty St., Madras 600001.
New India Sanitary Stores, 65/7, Sembudoss St., Madras 600001.
United Mercantile Agencies, 1, Moores Rd., Madras 600006.

West Bengal

Allied Agencies (India), 10, N. Chander St., Calcutta 700012.
Emporia of Commercial Stores, 22, N. Subhas Rd., Calcutta 700001.
Hindusthan Distributors, 33, G. C. Ave., Calcutta 700012.
Laxmi Pottery Agencies, 7, R. Bazar St., Calcutta 700001.
R. B. Rodda & Co. Ltd., 2, Red Cross Place, Calcutta 700001.
Sanitary & Plumbing Stores Pvt. Ltd., 146, S. P. Mukherjee Rd., Calcutta 700026.

SCIENTIFIC INSTRUMENTS & LABORATORY EQUIPMENTS

Delhi

India Scientific Stores, 562, Esplanade Rd., Delhi 110006.

Gujarat

Scientific & Surgical Corpn., Khadia Kuin, Ahmedabad 380001.
Shah & Co., 66, Shantisadan Estate, Opp. Dinbai Tower, Lal Darwaja, Ahmedabad 380001.

Maharashtra

Adair, Dutt & Co. (India) Pvt. Ltd., Syndicate Bank Bldg., Sir P. Mehta Rd., Bombay 400001.
Allied Drawing Stores, Sitaram Bldg., 29, Dr. D.N. Rd., Bombay 400001.
Beekay International, 44/46, Popat Wadi, Mahabir Bldg., Bombay 400002.
C. Abhaykumar & Co., 127, Princess St., Bombay 400002.
Electronic Centre, 105/107, A. Rehman St., Asma Manzil, Bombay 400003.
India Scientific Emporium, Kamdar Chambers, Sion East, Bombay 400022.
Indo-Chem Corpn., 615, Cotton Exchange Bldg., Bombay 400002.
J. T. Jagtiani, National House, Tulloch Rd., Apollo Bunder, Bombay 400039.
Jashvant C. Shah & Co., Bharati Nivas, Block 6, 1st Flr., Besant Rd., Santacruz West, Bombay 400054.
Kalidas Madhavji & Co., 100, Princess St., Bombay 400002.
Lab-Hosp. Corpn., C/9, Laghu Udyog Kendra, I. B. Patel Rd., Goregaon East, Bombay 400063.
Pharma Trust, 114, S. Gandhi Mrg., Bombay 400002.
Scientific Sales Syndicate, Irani Bldg., 303, Cawasji Hormasji St., Bombay 400002.
Scientific & Technical Home, 443, D. Bhadkamkar Mrg., Bombay 400004.
Silica Ware Pvt. Ltd., Chotani Estate, Proctor Rd., Grant Rd., Bombay 400007.
Unique Scientific Syndicate, 351, S. Memon St., Bombay 400002.
Unique Trading Corpn., 221, Sheriff Devji St., Bombay 400003.
Vikas Glass Apparatus Co., 114, Satyam Industrial Estate, Bombay 400088.
Vora Bros., 214-B, S. Gandhi Mrg., Bombay 400002.
Zill & Co., 128, S. Gandhi Mrg., Bombay 400002.

Tamil Nadu

Industrial & Laboratory Equipment Co., 22, P.Maistry St., Madras 600001.
Instruments & Equipments, 16, Meeran Sahib St., Madras 600002.
Lab Ella Instrumentina, 5, Umpherson St., Madras 600001.
Mehta Scientific Corpn., 99, Perumal Mudali St., Madras 600001.
New Trade Links, 9 Kasichetty St., Madras 600001.
Precision Scientific Co., 4/14, Baker St., Madras 600001.
Sakthi Scientific Instruments Co., 41, Venkatesan St., T. Nagar, Madras 600016.
Sampat Ceramics Pvt. Ltd., 119, Nainiappa Naicken St., Madras 600003.

West Bengal

Automatic Scientific Supply, 149/1, Beliaghata Main Rd., Calcutta 700010.
Banner & Co., 265, B. B. Ganguly St., Calcutta 700012.
Ghose Bros., 14/2, Old China Bazar St., Calcutta 700001.
Industrial Enterprises, 71, BRBB Rd., Calcutta 700001.
International Commercial Traders, 18, Era St., Calcutta 700001.
Luxmi Scientific Glass Works, 4/8, Ultadanga Main Rd., Calcutta 700004.
New India Scientific Works, 63, Baithakhana Rd., Calcutta 700009.
Oriental Trading Corpn., 135, BRBB Rd., Calcutta 700001.
Scientific Supplies, 55, BRBB Rd., Calcutta 700001.
Wassan Bros., 26, J. Nehru Rd., Calcutta 700013.

SCRAP

Metal Scrap Trade Corpn. Ltd., 225-E, A. J. Bose Rd., Calcutta 700020.
Nathani Steel Pvt. Ltd., Vidya Vihar Railway Station, Bombay 400086.
Waste & Scrap Reclamation Centre, 1-1, Edward Elliots Rd., Madras 600004.

SEAFOOD EXPORTERS

Ahmed Oomerbhoy (Exports) Pvt. Ltd., Sitaram Bldg., "D" Block, Palton Rd., Bombay 400001.
Apollo Seafoods, Balmatta Rd., Mangalore 575001.
Associated International Corpn., 11, Pollock St., Calcutta 700001.

Blue Bay Fisheries Pvt. Ltd., 12/140 A, Kochangadi, Cochin 682005.

Bombay Fisheries Corpn., Hazarat Terrace, Sankli St., Byculla, Bombay 400008.

Chemmeens (Exports) Pvt. Ltd., Edacochin, Cochin 682006.

Cochin Seafoods, 1/64, Arcot Rd., Alwarthirunagar, Madras 600087.

Continental Seafoods India Pvt. Ltd., Arunachala Eswaran Koil St., Madras 600081.

Cordel Sea Foods Pvt. Ltd., Sepoy St., Cuddalore 607003.

Danda Fisheries Pvt. Ltd., 19, Mohatta Mkt., Palton Rd., Bombay 400001.

E.I.D. Parry Ltd., Marine Products Unit, P.B. No.380, Cochin 682002.

Eastern Seafood Exports Pvt. Ltd., 1/6, Harrington Avenue, Chetput, Madras 600031.

Eduthan Fishing Corpn., 1183, Opp. Hindi Prachar Sabha, Chittoor Rd., Ernakulam, Cochin 682016.

Fazalbhai Ibrahim & Co. Pvt. Ltd., Ismail Bldg., 381, Dr. Dadabhai Naoroji Rd., Bombay 400001.

Geo Seafoods, P.B.No. 906, Cochin 682006.

General Seafoods Pvt. Ltd., P.Box 31, Quilon 691001.

Gulf Sea Food Export House & Sea Food Export Corpn., 41, Korepope St., Tuticorin 628001. (Tamil Nadu).

Haly Fisheries, C. S. Maharaj Mkt., Room No.3, Palton Rd., Bombay 400001.

Hussain Exports Pvt. Ltd., 1/12, Jagannathan Rd., Nungambakkam, Madras 600034.

India Seafoods (Regd.), P.B. No. 813, Cochin 682005.

Indo-Marine Agencies (Kerala) Pvt. Ltd., Kochangadi, Cochin 682005.

Island Seafoods Pvt. Ltd., P.B. No. 580, Island Club House, Cochin 682003.

J.R.K. Seafoods Pvt. Ltd., 11, L.D. Ruparel Crosslane, Bombay 400006.

Karthika Marine Industries Pvt. Ltd., Chittoor Rd., Ernakulam, Cochin 682018.

Kerala Exports Pvt. Ltd., XII/1151 A, Panayappilly, Cochin 682002.

King Fisher Marine Products, 28-F, Wallers Rd., Madras 600002.

Konkan Fisheries Pvt. Ltd., India House, 3rd Flr., Opp. G.P.O., Bombay 400001.

Konkan Sea Foods Ltd., Warden House, 5th Flr., Sir P.M. Rd., Bombay 400001.

Kothari (Madras) International, 'Kothari Bldgs.', 20, Nungambakkam High Rd., Madras 600034.

Manerkar Fisheries Pvt. Ltd., Roshan Mahal, P.B. No. 42, Swatantraya Path, Vasco Da Gama 403802. (Goa).

Nava Bharath Enterprises Pvt. Ltd., Fisheries Divn., Door No. XVIII/1556(A), Near Laxmi Narayana Saw Mill, Cochin 682005.

New India Fisheries Ltd., Karuvelipadi, Cochin 682005.

Oceanic Products Exporting Co., Choolakkaparambil Rd., Ernakulam, Cochin 682018.

Oriental Marine Products Pvt. Ltd., Old Shaw Wallace Bldg., Madras 600001.

Prawns International Corpn., Karuvelipadi, Cochin 682005.

R.W. Sawant & Co., 7 & 8, Regent Chambers, 203, N. Point, Commercial Boulevard, Bombay 400021.

Rani Exporters Pvt. Ltd., C/o Santosh Aquatic Products, 11/4 Beebi Alabi Rd., Bunder, Mangalore 575001.

Ravi Fisheries Pvt. Ltd., Nilum Mansion, Lamington Rd., Bombay 400004.

Revathy Exports Pvt. Ltd., XXV/1947 "Archana", Vyttila, Cochin 682019.

SEWING MACHINES
E. H. TUREL & CO.
48, Clare Road, Byculla,
Bombay 400 008.
Phones : 374622, 397643. Telex : 3846, 3369.
Cable : "TWORAIL"

★

Sole Selling Agents :
" Brother " Industrial Sewing Machines
NAOMOTO; **Irons, Steam Pressing Equipments**
Indenting Agents :
Yamato : (Overlock, Flat Lock Machines)
RENOWN :
(Smoking, Fagotting, Ornamental Stitching, Elastic Shirring etc.)
KANSAI SPECIAL :
Elastic Inserting, Double Picotting, Tucking, Shirt Fronting, Tandem Sewing etc.
DEALERS
Sewing Machines, Parts, Needles, Attachments etc.
Service & Maintenance Contractors :
REPAIRERS OF REPUTE.
ATTACHMENTS OUR SPECIALITY.

Seafood (Exports) Pvt. Ltd., Cheriakadavu, Kannamali, Cochin 682007.

Southern Seafoods Ltd., "Montieth Court", 15, Montieth Rd., Madras 600008.

United Exporting Co., P.B. No. 833, Cochin 682005.

United Industries (Cochin) Ltd., Kochangadi, Cochin 682002.

Universal Marine Agencies, Bharath Bldg., KSR Cross Rd., Mangalore 575001.

Vijaya Industries, P.B. No.828, Cochin 682005.

SEWING MACHINES

Maharashtra

E.H. Turel & Co., 48, Clare Rd., Byculla, Bombay 400008.

Jayantilal Keshavlal & Bros., 282, S.V. Patel Rd., Bombay 400004.

Mehta Bros. & Co., 306, Sardar V.P. Rd., Bombay 400004.

National Sewing Machines Co., 10, Jerbai Baug, Byculla, Bombay 400027.

Senhig Machineries Syndicate, 653-A, J. Shanker Sheth Rd., Bombay 400002.

Sundersons, 647, J. Shanker Sheth Rd., Near Dhobi Talao, Bombay 400002.

Super Sewing Machine Co., Prajapati Bhuvan, Gokhale Rd. (N), Dadar, Bombay 400028

Tolaram Ramdas & Co., 629-B, J. Shanker Sheth Rd., Bombay 400002.

United Trading Agencies, 611, Girgaum Rd., Bombay 400002.

Vivek Enterprises, 114, Abdul Rehman St., Bombay 400003.

Punjab

Automite (India), 627, Naya Mohalla, Ludhiana 140101.

Columbia Sewing Machine Co., 13, Ganesh Mkt., Lakkar Bazar, Ludhiana 141001.

TEXTILE MACHINERY

ALTEX PRIVATE LIMITED

Textile Mills Stores & Machinery Importers and Manufacturers' Representatives.

P.O. Box No. 1096, Bombay 400 023.
Phone : 273122. Grams : " BETEX ".

Managing Director :
Minocher Ardeshir Bharucha.

Sole Agents for :

Gordon Woodroffe (Belting) Pvt. Ltd., Madras.
" RAMS HEAD " Brand Leather Belting, Endless Cone Drum Belts made from Ox Hides.
" INVICTA " Brand Single Leather Belting made from Buffalo Hides.
" INVICTA " Brand Spring Buffers Riveted and/or Lace Sewn also Pickers.

Knit Foulds Ltd., Kapurthala.
" GRIPIT " Nylon Leather Sandwich Belting & Endless Belts.
" ALTEX " Brand Nylon and/or Rayon Cord Endless Flat Belts. Also Vee-Belts, Variable Speed Vee-belts and Cone Drum Belts.

Rohtas Industries Ltd., Dalmianagar.
Red Vulcanised Fibre Card Cans.

H. D. Nariman & Son, Santa Cruz, Bombay.
" NORMAN " Brand Highly Concentrated Cloth Stamping Paste also " STAMTEX " Fast to Bleach Black Marking Ink, Writing Ink, Selvedge Ink etc.

Supreme Sales Agency, Delhi.
Hank Indicators, Pick Counters, Meter Counters.
" ALTEX " Brand Cotton Healds and Steel Reeds and
" ALTEX " Brand All Metal Reeds, Heald Piecing Yarn and Dobby Harness, Elastic Cord.

Indian Standard Metal Co. Ltd.
P.I.V. Gear Indigenous Make, Spares & Chains.

Platt International Ltd., Oldham (U.K.).
P.I.V. Gears and Metal Alloy Bobbins.

Pulrose Co. Ltd., Manchester, England.
"ADELPHI" Flat Cleaners, Lint Raising & Bandage cutting machines.
'All Wool Twill Sizing Flannel.' Roller Cloth, Clearer Cloth and Endless Clearer Cloth.
Pressed Steel Beam Flanges & Malleable Cast Iron Beam Flanges.

Branch Office :
Ramolia Building, 1st Floor, 2888/1, Relief Road, Ahmedabad 380 001. Phone : 380370.

Also at
C/o Machinetex (India), 6/234B, Trichy Road, Coimbatore 18.

Sub-Agents :
K. Podar, 15/56, Civil Lines, Kanpur.
Tilkam Agencies, 118, Yanam Venkatachalem Street, Pondicherry 1.

Hans Sewing Machine Co., Moongphali Mandi, Miller Ganj, Ludhiana 141003.

Manohar Sewing Machine Co., Lakkar Bazar, Ludhiana 141003.

Pilot Sewing Machine Co., Lakkar Bazar, Ludhiana 141003.

Popular Sewing Machine Co., Lakkar Bazar, Ludhiana 141003.

R.L. Sewing Machine Co., Pindi St., Ludhiana 141003.

Yash Mechanical Co., B-VIII, 613, Lakkar Bazar, Ludhiana 141003.

Tamil Nadu

Radha Enterprises, 56, Royapettah High Rd., Madras 600004.

West Bengal

Bose & Co., 149/1, Lenin Sarani, Calcutta 700013.

SPORTS GOODS

Andhra Pradesh

Oberon Sporting Service, 2-3-37, Amberpet, Hyderabad 500013.

Delhi

Sports Incorporated A-138, New Friends Colony, New Delhi 110014.

Goa

Goa Vidya Bhandar, P.O. Box No.248, Margao 403601.

Maharashtra

A.N. Kapoor & Co., 302, L. Tilak Marg, Bombay 400002.

D.D. Sharma & Co., Dhobi Talao, Bombay 400020.

Pioneer Sports Works Pvt. Ltd., 292, Tilak Marg., Bombay 400002.

Sportique, National House, Tulloch Rd., Apollo Bunder, Bombay 400039.

Tamil Nadu

Lightway Sports Co., 854, Mount Rd., Madras 600002.

Suray Sports, 16, First Main Rd., C.I.T. Colony, Madras 600004.

West Bengal

G.K. Sports, 30, J. Nehru Rd., Calcutta 700016.

Pioneer Sports (I) Pvt. Ltd., 25, J. Nehru Rd., Calcutta 700013.

SPRAY PAINTING GUNS

International Machine Tools Corpn., 5, Bank St., Bombay 400023.

M. Baker & Co., 35, Nagdevi St., Bombay 400003.

SURVEYING INSTRUMENTS

(See Under Scientific Instruments and Laboratory Equipment in this list.)

SYNTHETIC ENAMEL & CELLULOSE LACQUERS

Empire Paints & Hardware Centre, 56, Motiwala Bldg., 2nd Rd., Khar, Bombay 400052.

Harilal & Co., 18, Rohit Chambers, Parsee Bazar St., Bombay 400001.

M. Baker & Co., 35, Nagdevi St., Bombay 400003.

Marvin & Co. Pvt. Ltd., 3, Mody Chambers, Kennedy Bridge, Bombay 400004.

Mehta Hardware & Paints Mart, Lila Nivas, Napoo Rd., Matunga (C.Rly.), Bombay 400019.

Santaram Nikkamal Pvt. Ltd., 32, Bibijan St., Bombay 400003.

TEXTILE STORES & MACHINERY

Gujarat

Pargans (India) Pvt. Ltd., Industrial Mills' Estate, Gomtipur, Ahmedabad 380021.

Maharashtra

Acme Mfg. & Agencies (India), 4, Dean Lane, Alli Chambers, Bombay 400001.

Allied Machinery, 17, Nazir Bldg., Calicut St., B. Estate, Bombay 400038.

Altex Pvt. Ltd., P. Box 1096, Bombay 400023.

Arvinda Trading Co. Pvt. Ltd., 105, Apollo St., Bombay 400023.

B. Thanawala & Sons Pvt. Ltd., 47, Tamarind Lane, Bombay 400023.

Bombay Mill Stores Supply Co. Pvt. Ltd., W.I. House, Sir P.Mehta Rd., Fort, Bombay 400001.

C. Doctor & Co. Pvt. Ltd., 11, Homi Mody St., Bombay 400023.

Chunilal Mulchand & Co., Waterloo Mansion, Madame Cama Rd., Bombay 400039.

Consolidated Mill Supplies Pvt. Ltd., Co-op. Insurance Bldg., Sir P. Mehta Rd., Fort, Bombay 400001.

Engineering & Agencies Pvt. Ltd., French Bank Bldg., Homji St., Bombay 400001.

Excelsior Mill Supply Co., Ltd., 45-46, Alli Chambers, N. Master Rd., Bombay 400001.

Indian Textile Engineers Pvt. Ltd., 81-83, Veer Nariman Rd., Bombay 400020.

Indo-Foreign Textile Co., 43, Tamarind Lane, Bombay 400023.

J. Bracewell Pvt. Ltd., Nagree Bldg., 50/56, Custom House Rd., Bombay 400001.

Mehta Parikh & Co., Pvt. Ltd., 45-47, Apollo St., Bombay 400023.

Nagindas Kilbhai & Co., Crescent Chambers, Tamarind Lane, Bombay 400023.

Narotamdas Chunilal & Co., 51, Tamarind St., Bombay 4000023.

Ormerods (India) Pvt. Ltd., 12, Apollo Street, Bombay 400023.

Phiroz N. Motabhoy & Co. Pvt. Ltd., 146, Nagindas Master Road, Bombay 400001.

Prakash Trading Co., Mangrol Mansion, Bora Bazar St., Bombay 400001.

S.C. Sheth & Co. Pvt. Ltd., 8, Hamam St., Bombay 400001.

Star Trading Co. Pvt. Ltd., Dhanraj Mahal, C. Shivaji Maharaj Marg, Bombay 400039.

Surendrakumar & Co. Pvt. Ltd., C-3, Corinthian, Near Telephone Bhuvan, Colaba, Bombay 400005.

Technofield Sales Corpn., 19, Parsi Panchayat Rd., Andheri, Bombay 400069.

Textray Traders Pvt. Ltd., Laxmi Bldg., 6, Ballard Road, Bombay 400038.

Unitex Corpn., 712, Embassy Centre, Nariman Point, Bombay 400021.

Voltas Ltd., Elphinstone Bldg., Veer Nariman Rd., Bombay 400001.

W.H. Brady & Co., Ltd., Brady House, 12/14, Veer Nariman Road, Bombay 400023.

Tamil Nadu

Acme Textiles, 6/520, Trichy Rd., P.O. Box 145, Coimbatore 641018.

Uttar Pradesh

Thanawala Stores Trading Corpn., Vivek Bldg., Chuniganji, Kanpur 208001.

TIMBER

Anand Timber Traders, 170, Reay Rd., Bombay 400010.

Arvind Timber Products Pvt. Ltd., 501, Rewa Chambers, 31, New Marine Lines, Bombay 400020.

Baroda Timber Trading Co., Bombay Timber Market Ltd., Reay Rd., Bombay 400010.

Dandeli Timber Trading Co., Mustafa Bazar, Zavla Mrg., Bombay 400010.

Famous Timber Trading Co., 74, Ismail Curtey Rd., Bombay 400010.

Farouk Sodagar Darvesh & Co., 85-A, Sant Savta Mrg., Mazgaon, Bombay 400010.

Fopco Traders, 100, Victoria Rd., Mustafa Bazar, Bombay 400010.

Jawahar Saw Mills, 47, Victoria Rd., Mustafa Bazar, Bombay 400010.

Makanji & Co., 81, S.Savata Mrg., Mustafa Bazar, Bombay 400010.

Maklai Timber Mart, 79, Ghoghari Mohalla, Bombay 400003.

Mysore Timber Mart, 67/69, Ismail Curtey Rd., Bombay 400003.

Parekh & Co., 77, Victoria Rd., Mustafa Bazar, Bombay 400010.

Processed Timber Products, 106, S.V. Rd., Santacruz West, Bombay 400054.

Rameshchandra & Co., 158, Reay Rd., Bombay 400010.

Shree Shankar Vijay Saw Mill, Ghorapdeo, 108, Reay Rd., Bombay 400033.

Timber Supplying Corpn., 134, Reay Rd., Bombay 400010.

United Timber Inds., 59, S. Savata Mrg., Mustafa Bazar, Bombay 400010.

Wood Sellers Syndicate, Gala No.99, Victoria Rd., Mustafa Bazar, Bombay 400010.

Yamuna Timber Industries Pvt. Ltd., 8 & 9, Bentick St., Calcutta 700001.

Yusuf Maklai Co., 41/45, Mustafa Bazar, Bombay 400010.

TOOL, ALLOY & SPECIAL STEEL

Agarwal Machine & Engineering Stores, 63/69, Nagdevi Cross Lane, Bombay 400003.

Ajay Engg. Inds., Churchgate Chambers, New Marine Lines, Bombay 400020.

Baijnath & Sons, 22, Strand Rd., Calcutta 700001.

Bathija Corporation, No. 2, Jelly, Strand Rd., Calcutta 700001.

Cali Mic Impex, 110, N. Dhuru St., Bombay 400003.

Cambay Tool Steel Co., 924, Memonwada Rd., Dada Manzil, Bombay 400003.

Carex Trading Co., 35, 1st Pathan St., Bombay 400004.

Coment Steel Co., 119, Bazargate St., Bombay 400001.

Comet Steels, 3/11/29, Navjivan Socy., Lamington Rd., Bombay 400008.

Consolidated Steel Corporation, 30, Narayan Dhuru St., Bombay 400003.

Continental Steel Corpn., 12/14, Ardeshir Dady St., Bombay 400004.

Dharamdas M. Jhaveri & Co., 284, Nagdevi St., Bombay 400003.

Dhiraj Steel Co., 93, Mohamedali Rd., Bombay 400003.

India Tool Steel Mart, 200, T. Parsuram St., 6th Kumbharwada, Bombay 400004.

Indian Metal Inds., 6/11, Jagdish Kunj, R.A. Kidwai Rd., Wadala, Bombay 400031.

Industrial Commercial Corpn., 572/3, Reid Rd., Ahmedabad 380002.

Industrial & Mining Tools Co., 30, Chittaranjan Ave., Calcutta 700012.

Khandelwal Agencies, 23, Mooker Nallamuthu St., Madras 600001.

Maharashtra Steel Corpn., 52, Baroda St., Bombay 400009.

Mehta Steel Co., 36, Bora Bazar St., Bombay 400001.

N. Ratilal & Co., Darukhana, Oza Mkt., Mazgaon, Bombay 400010.

Perfect Alloy Steel Agency, 101, Nagdevi St., Bombay 400003.

Premier Tools Traders, 67/69, Dada Manzil, Mohamedali Rd., Bombay 400003.

S.J. Trading Co., 91, Khetwadi Back Rd., Khemraj Bhuvan, Bombay 400004.

Shah Engg. Equipment Co., 145, Kassara St., Bombay 400010.

Steel Centre, 29, Strand Rd., Calcutta 700001.

Summit Tools Corpn., 13, Mooker Nallamuthu St., Madras 600001.

Teedee Steel Corpn., 84, Memonwada Rd., Bombay 400003.

United Steel & Bearing Co., 5B, Clive Ghat St., Calcutta 700001.

Union Commercial Corpn., 608, Churchgate Chambers, New Marine Lines, Bombay 400020.

Venus Tools Agencies, 126/128, Nagdevi St., Bombay 400003

AUTHORISED STOCKIST

Fenner V Belt

CHETAK V & Fan Belt

Bearing Pullers Gear Pullers
Perforated Sheets & Elevator Buckets,
Tyre Type & Pin Bush Flexible Coupling,
Automatic Sight Feed Lubricators,
Muff Coupling Hammer

GEDORE

'ALBERT' Conveyer belt fastners,
Spring Lid Elbow Oil Cups
Grease Cups Trolly Tyres.

Araldite Adhesive : M Seal
Compound Mechanical Jack

Wooden Handle Screw Drivers,
Silicon Carbide Emery,
Rotary Barrel Oil Pumps

Folding Tool Box

IT Drills

JK Files

RABRO Figures & Letter Stamps

INDUSTRIAL COMMERCIAL CORP.
572/3 Reid Road, P.B. No. 1054 Opp. State Bank of India,
Ahmedabad-380002 Estd-1961 Resi-443396 Office-380457

Vikas Steel Co., 81, N. Dhuru St., Bombay 400003.

Workshop Engg. & Equipments Co., 30-32, Bhajipala St., Bombay 400003.

TOOLS

(See Hardware Tools and Machinery in this list).

TRACTORS & SPARES

(See Earthmoving Machinery & Spares in this list).

TYPEWRITERS

Ashok Typewriters, 40, C. Patel St., Bombay 400001.

Kores (India) Ltd., Business Machines & Systems Dn., Plot No. 10, Off Dr. E. Moses Rd., Worli, Bombay 400018.

VALVES & COCKS

Apex Equipments & Instruments, 9, Clive Row, Calcutta 700001.

Bakubhai Ambalal, Kaiser-I-Hind Bldg., Currimbhoy Rd., B. Estate, Bombay 400038.

Bengal Pipe Fittings Mart, 77, Netaji Subhas Rd., Calcutta 700001

Blue Star Ltd., 414/2, V. Savarkar Marg, Bombay 400025.

C. Bole & Co., 61, Narayan Dhuru St., Bombay 400003.

C. Vadilal & Co., 40, Nagdevi X Lane, Bombay 400003.

Chhotalal & Sons, 141, Narayan Dhuru St., Bombay 400004.

Commercial Trade Corpn., 81, C.P. Tank Rd., Bombay 400004.

Crescent Trading Co., 48-50, Bhajipala St., Bombay 400003.

D.L. Vaid. 181, Janjikar St., Bombay 400003.

Dipnal Valve & Tubestos Co., 84/86, Nagdevi St., Bombay 400003.

Equipment Fabricators & Traders, 753, Mount Rd., Madras 600002.

G.K. Kansara, 118, Kansara Chawl, Kalbadevi Rd., Bombay 400002.

Govardhandas P.A., 144, Nagdevi St., Bombay 400003.

Greenway Traders, 68/70, Nagdevi St., Bombay 400003

Gujarat Tube & Hardware Mart, 24, Nagdevi X Lane, Bombay 400003

Indian Engineers, 1/37, Roopnagar, Delhi 110007

Indl. Marketing Services, Jiji House, Ravelin St., Bombay 400001

Industrial Valves, H.10/9th Flr., Everest, Tardeo, Bombay 400034.

International Sales (India), 27, Unique Ind. Estate, V. Savarkar Marg, Prabhadevi, Bombay 400025.

K.B. Corpn., Jaldarshan, Ashram Rd., Ahmedabad 380009.

K.D. Naina & Co., 7/8, Tardeo Air-Conditioned Mkt., Bombay 400003.

Kadakia Enterprise, 153, N. Dhuru St., Bombay 400003.

Lehry Bros., 17, Sembudoss St., Madras 600001.

Mehta Bros. & Co., 54, Nagdevi X Lane, Bombay 400003.

Mehta Mill Gin Stores, 28, Nagdevi St., Bombay 400003.

Mehta Nanavati & Co., 96, Narayan Dhuru St., Bombay 400003.

Metro Tube Trading Co., 131/35, N. Dhuru St., Bombay 400003.

Mody Bros. & Co., 52, Nagdevi X Lane, Bombay 400003.

Muljibhai & Co., 76/78, Nagdevi St., Bombay 400003.

New India Refrigeration Stores (Regd.), 308/5, Shahzada Bagh, Opp. Daya Basti Rly. Stn., Old Rohtak Rd., Delhi 110036.

Nowgarh Trading Co., 8, Morland Rd., Bombay 400011.

Pankaj Trading Corpn., 25, Bibijan St., Bombay 400003.

Paras Hardwares, 263, Nagdevi St., Bombay 400003.

Patel Bros. & Co., 41, Nagdevi X Lane, Bombay 400003.

Rajiv Corpn., 61-73, Narayan Dhuru St., Bombay 400003.

Rajnikant & Co., 53, Bhajipala Lane, Bombay 400003.

S. Sevantilal & Co., 246, Y. Meherally Rd., Bombay 400003.

Shakti Sales Corpn., 70, Chakla St., Bombay 400003.

Shankar Trading Co., 38, Linghi Chetty St., Madras 600001.

Standard Tube Co. Pvt. Ltd., 123, Nagdevi St., Bombay 400003.

Super India Sales Corpn., 2853, Peepal Mahadev, Hauz Khas, Delhi 110006.

Swanlee Agencies, 3-A, Vasu St., Kilpauk, Madras 600010.

Swastik Trading Co., 152, N. Dhuru St., Bombay 400003.

ALL TYPES OF WEIGHING MACHINES
- COUNTER SCALES
- BEAM SCALES
- DIAL SCALES
- SPRING BALANCES
- PLATFORM MACHINES
- LABORATORY BALANCES
- WEIGHTS AND MEASURES

Sole Agents for Maharashtra :
"SOEHNLE" Weighing Machines.

Authorised Stockists of :
"SALTER" Spring Balances
"AVERY" Weighing Machines.

HINDUSTAN SCALE CO.
186-188, Janjikar Street, Bombay 400 003.
Tel. 323183.

Tru-A Line, 24, Kariappa Mudali St., Madras 600007.
United Trading Agency, 116, N. Dhuru St., Bombay 400003.
Universal Mercantile Corpn., 109-111, Nagdevi St., Bombay 400003.
Venus Trading Corpn., 502, Loha Bhavan, P. D.'Mello Rd., Bombay 400009.
Vijay Trading Corpn.. 152, N. Dhuru St., Bombay 400003.

WEIGHING MACHINES

A. A. Katawalla, 194, Janjikar St., Bombay 400003.
Associated Services, 1170/1, Junglee Maharaj Rd., Pune 411005.
B. Ganapathi Bhandarkar, 176, Golikatta Bazar, Mangalore 575001.
Bhuvaneswari & Co., 100, Armenian St., Madras 600001.
Blue Star Ltd., Band Box House, Dr. A. Besant Rd., Bombay 400025.
Giri Bros., 28, Broadway, Madras 600001.
Hindustan Scale Co., 186-188, Janjikar St., Bombay 400003.
M. Framroze & Co., 210, Dr. D. Naoroji Rd., Bombay 400001.
Misrilal Motilal, 71, Sarang St., Bombay 400003.
Sri Venkateswara Scales Co., 79, Acharappan St., Madras 600001.
Sujaddin & Co., 75, Netaji Subhas Rd., Calcutta 700001.

WELDING EQUIPMENT

Alps Trading Co., 49/57, Bibijan St., Bombay 400003.
Amar Mercantile Agency, 77/79, N. Subhas Rd., Calcutta 700001.
Arc Brazer Pvt. Ltd., 84, Foras Rd., Bombay 400008.
Blue Diamond Engg. Corpn., Stock Exchange New Bldg., Dalal St., Bombay 400023.
Bomcal Syndicate, 526A, N. Subhas Road, Mulund West, Bombay 400080.
EPS Craft Pvt. Ltd., 106, V. Dalvai Indl. Estate, Oshiwara, S. V. Rd., Jogeshwari West, Bombay 400102.
Hasmukh & Hasmukh, 5, Sobha Sadan, 8, Jawahar Nagar, S. V. Rd., Goregaon, Bombay 400062.
Impex Engg. & Equipment Co., 138/140, N. Dhuru St., Bombay 400003.
Industrial Distributors, 135-A, Moulana Azad Rd., Bombay 400008.
Industrial Equipment Suppliers, 58, N. Subhas Rd., Calcutta 700001.
Industrial Products, F/15, Nandjyot Ind. Estate, Kurla Andheri Rd., Bombay 400072.
Industrial Steel & Hardware Stores, 85, Netaji Subhas Rd., Calcutta 700001.
Jayprakash & Sons, 57, Sutar Chawl, Bombay 400002.
J. B. Advani & Co. (Mysore) Pvt. Ltd., Unity Bldgs., J. C. Wadiyar Rd., Bangalore 560002.
Jyoti Welding Corpn., Post Box No. 2169, Bombay 400002.
Kirtikumar Electric Corpn., 12, Tavawala Bldg., Lohar Chawl, Bombay 400002.
M. N. Hussein & Co., 90, Armenian St., Madras 600001.
Machinery Marketing Corpn., 261, Dr. D. N. Rd., Bombay 400001.
Mahendra Bros., 163-B, Sheth Motishah Le., Byculla, Bombay 400027.
Malhotra Gas House, 6070/8, Barri Mkt., Sadar Bazar, Delhi 110006.
Manish Agency, 357, Sardar V. P. Rd., Bombay 400004.
Mehta Doshi & Co., 334, Thambu Chetty St., Madras 600001.
Mehta Trading Co., 60, Sarang St., Bombay 400003.
Metasafe Trdg. Corpn., 65, Apollo St., Bombay 400023.
Navin Trading Co., 40, Strand Rd., Calcutta 700001.
Prakash Traders, 8, Parsee Church St., Calcutta 700001.
Premier Engg. Co., 20, Broadway, Madras 600001.
Reliable Trading Agency, 23, B.R.B.B. Rd., Calcutta 700001.
Roopmeck Enterprises, 29, Ashish Ind. Estate, Gokhale Rd. South, Bombay 400025.
Sisko Supply & Engg. Corpn., 42/1, Strand Rd., Calcutta 700007.
Unique Trading Co., 182, Kalbadevi Rd., Bombay 400002.
Vharawdekar Bros., 257, P. D'Mello Rd., Bombay 400001.
Weld-Tech Corpn., 28, Ashokraj, S.V. Rd., Goregaon West, Bombay 400062.
Welding Equipment Traders, 29/21, Gate No. 6, New Rohtak Rd., Ind. Area, New Delhi 110005.

WIRE ROPES

Abdulhusein Peerbhai & Sons, 66-68-A, N. Kohli Mrg., Bombay 400003.
Amratlal Chhaganlal & Co., 143, Nagdevi St., Bombay 400003.
Eastern Stores & Trading Co. Ltd., 115-A, Nagdevi St., Bombay 400003.
Esoofali Esmailji Karachiwalla & Co., 43-45, Narayanrao Koli Marg, Bombay 400003.
Gautam Trading Co., 184, Nagdevi St., Bombay 400003.
Heptoola Nooruddin & Co., 152, Nagdevi St., Bombay 400003.
Jivraj & Vrajlal, 122, Nagdevi St., Bombay 400003.
Modi & Modi Co., 16, A. Doshi Mrg., Bombay 400023.
Vasi Shums & Co. Pvt. Ltd., Vasi Bldg., Nagdevi St., Bombay 400003.
Western India Marine Mills & Engrs., 185, Janjikar St., Bombay 400003.

X RAY MACHINERY

Espi Trading Co., Vandhana Bldg., 11, Tolstoy Mrg., New Delhi 110001.

SERVICES

ADVERTISING AGENCIES

Andhra Pradesh

Associated Advtrs. & Printers, 5-9-1105, King Kothi Rd., Hyderguda, Hyderabad 500001.

Kiron Ads., 5-4-187/2/6, M.G. Rd., Secunderabad 500003.

Margadarsi Group of Companies, Margadarsi House, Abid Centre, Hyderabad 500001.

Delhi

Advertising & Sales Promotion Co., 26, Barakhamba Rd., New Delhi 110001.

Asian Advtg., H-35, Connaught Circus, New Delhi 110001.

D.S. Mittle & Sons, Post Box 5737, New Delhi 110055.

Delux Publicity Service, A/13/5, Rana Pratap Bagh, Delhi 110007.

Gayways Publicity Pvt. Ltd., 45, Panchkuin Marg, New Delhi 110001.

Hindustan Publicity Corpn., 21, Darya Ganj, New Delhi 110002.

Interads Advtg. Pvt. Ltd., 4/24, Asaf Ali Rd., New Delhi 110002.

National Publicity Service, A-6, Connaught Place, New Delhi 110001.

New Fields Advtg. Pvt. Ltd., Dharamsingh Ramsingh House, 3/4A, Asaf Ali Rd., New Delhi 110002.

Niros Advertising, G-67, Connaught Place, New Delhi 110001.

Pioneer Publicity Corpn., 20UB, Jawahar Nagar, Malkaganj Rd., Delhi 110007.

Prince Studio Advtg., Prince House, Sirkiwalan (Hauz Khas), Delhi 110006.

R.K. Swamy Advertising Associates Pvt. Ltd., 1301-1308, Vikrant Tower, 4, Rajendra Place, New Delhi 110008.

React Advertising Services Pvt. Ltd., 8, Jangpura Extn., New Delhi 110014.

Sterling Advtg. Pvt. Ltd., Jeevan Roop Mansion, L-Block, Connaught Circus, New Delhi 110001.

Universal Advertisers, A-14/3, Asaf Ali Rd., New Delhi 110002.

Gujarat

Apex Advertising, Commerce House, Debhar Rd., Rajkot 360001.

Bidhan Advtg. & Mktg., B-6, Divya Apartment, Navrangpura, Ahmedabad 380009.

Chitra Publicity Co., 1916, Gandhi Rd., Ahmedabad 380001.

Naren Advtg. & Mktg., P. Dhanjibhoy Bldg., Bhadra, Ahmedabad 380001.

Navnitlal & Co., 1161, Bhadra, Ahmedabad 380001.

Paramount Publicity Co., Jainwadi, Manekchowk, Ahmedabad 380001.

Publicity Parlour, Singaporewala Bldg., Khadia Char Rasta, Ahmedabad 380001.

Karnataka

Advtg. & Sales Promotion Co., 22, Brunton Rd., Bangalore 560025.

Allied Advt. & Printing Co., 46/15, Viswanatha Rao Rd., Bangalore 560001.

Madhya Pradesh

Collate Advtg., 1/2, Yeshwant Nivas Rd., Indore 452003.

Maharashtra

Aaren Advertising Pvt. Ltd., 54, Bajaj Bhawan, N. Point, Bombay 400021.

Ad-Fast Corpn., 187, Dr. D.N. Rd., Bombay 400001

Adroit Advtg., Ismail Bldg., Dr. D.N. Rd., Bombay 400001.

Advtg. & Sales Promotion Co., Vaswani Mansion, D. Wachha Rd., Bombay 400020.

Advtg. Research & Marketing Services, 28, Apollo St., Bombay 400023.

Adverts Pvt. Ltd., Mani Mahal, 11/21, Mathew Rd., Bombay 400004.

Adwell, Krishna Bhavan, 11, Bhuleshwar Rd., Near Cotton Exchange, Bombay 400002.

Alfred Allan Advtg., Queen's Mansion, 2nd Flr., A.K. Nayak Marg, Bombay 400001.

Amol Bose Advtg., Arsiwala Bldg., 61, Wodehouse Rd., Bombay 400005.

Apex Advtg., Cecil Court, 19, Lansdowne Rd., Bombay 400039.

Art Advtg. Agency, 52, Embassy Centre, Nariman Point, Bombay 400021.

Asian Advertisers, 27, Kala Bhavan, 3, Mathew Rd., Bombay 400004.

Associated Advertisers & Printers, Krishna Kunj, Chowpatty Road, Bombay 400007.

Bidhan Advtg., & Mktg. Bombay, Navjivan Society, Bldg. No.3, 7th Flr., Lamington Rd., Bombay 400008.

Chaitra Advertising Pvt. Ltd., Esperanca, 7th flr., S. B. Singh Rd., Colaba, Bombay 400039.

Classic Advtg., 42, Mittal Chambers, Nariman Point, Bombay 400021.

Concept Mktg. & Advtg. Pvt. Ltd., Eruchshaw Bldg., 249, Dr. D. Naoroji Rd., Bombay 400001.

Contour Advertising Pvt. Ltd., Elphin House, 88-C, Old Prabhadevi Rd., Bombay 400025.

BBC ADVERTISING
Announces
EXCLUSIVE
CLASSIFIED
ADVERTISEMENT
SECTION AT :
BANDRA BOOK CENTRE
OPP. NATIONAL COLLEGE, LINKING ROAD
BANDRA-50.
SAVE TIME & INCONVENIENCE
ADVERTISE THROUGH US AT NO EXTRA COST
WE BOOK ADVERTISEMENTS FOR
THE TIMES OF INDIA, MAHARASHTRA TIMES,
NAVBHARAT TIMES, EVENING NEWS, INDIAN EXPRESS
LOKSATTA, FREE PRESS AND BULLETIN
THE DAILY, MUMBAI SAKAL, BOMBAY SAMACHAR
JANMABHUMI, THE MID-DAY, ETC. ETC. ETC.
• PHONE : 542157 •

EVEREST
ADVERTISING PRIVATE LIMITED

Regd. Office :
Administration . Finance . Management
Dhiraj Chambers, 4th Floor
9/16, Hajarimal Somani Marg, Bombay 400 001.
Phones : 269118 and 269119.

★

Client Servicing . Marketing Information
Marketing Research
Creative Group . Art . Production . Media
Kitab Mahal, 192, D. Naoroji Road,
Bombay 400 001
Phones : 264771 (4 lines), 267779.

Branch :
3 90, Connaught Circus, New Delhi 110 001.
Phone : 311968.

ASSOCIATES THROUGHOUT THE WORLD

Creative Communication, 15, Walton Rd., Bombay 400001.

Creative Unit Pvt. Ltd., 143, M. Gandhi Rd., Bombay 400023.

Creative Workshop, Ionic, Near Strand Cinema, Colaba, Bombay 400005.

Crescent Advtg. & Mktg. Agency, 29, Kalabhavan, 3, Mathew Rd., Bombay 400004.

da Cunha Associates Pvt. Ltd., Elysium Mansion, Walton Rd., Bombay 400039.

Dattaram Advtg. Pvt. Ltd., Readymoney Mansion, V. Nariman Rd., Bombay 400023.

Devika Advertising Co., 318, Tulsiani Chambers, N. Point, Bombay 400021.

Everest Advtg. Pvt. Ltd., Dhiraj Chambers, 9/16, H. Somani Marg, Bombay 400001.

Fast Advertising, 20, 2nd Flr., Tardeo Airconditioned Mkt., Bombay 400034.

Frank Simoes Advtg. Pvt. Ltd., 107, Nathalal D. Parekh Marg, Colaba, Bombay 400005.

Garuda Advertisers, Tilak Path, Aurangabad 431001.

Grant Advtg. (I) Ltd., Brown Boveri House, Dr. A. Besant Road, Worli, Bombay 400025.

Graphic Advtg. Pvt. Ltd., 136, Cama Instt. Bldg., Apollo St., Bombay 400023.

Green's Advtg. Services, Rustom Bldg., 29, V. Nariman Road, Bombay 400023.

Gujarat Advtg. Agency Pvt. Ltd., 480, Kalbadevi Rd., Bombay 400002.

Heros' Publicity Service, 4-B, Vulcan Insurance Bldg., V. Nariman Rd., Bombay 400020.

Hindustan Advertising Agency, 7, Gitanjali, Opp. Nehru Memorial Hall, Pune 411001.

Hindustan Thompson Associates Ltd., Lakshmi Bldg., Sir P.M. Rd., Bombay 400001.

Imageads & Communications Pvt. Ltd., Post Box 1557, Bombay 400001.

Imex India Corpn., 1A, Dar-Ul-Muluk, Ramabai Rd., Gamdevi, Bombay 400007.

Impressions Advtg. & Marketing, 61, Anjali, Behind Radio Club, Colaba, Bombay 400005.

Incentive Mktg. & Advtg. Pvt. Ltd., 10, Indian Mercantile Insurance Bldg., 31, Forbes St., Bombay 400023.

Ind Advertising Agency, Commercial Chambers, Masjid Bunder Rd., Bombay 400003.

India Advertising Service, 9, Western India House, Sir P.M. Rd., Bombay 400001.

Inter Publicity Pvt. Ltd., Ballard House, Mangalore St., Bombay 400038.

Jaisons Advertising Pvt. Ltd., Kakad Chambers, Dr, A.Besant Road., Worli, Bombay 400018.

Jaya Advertising Agency, 129/131, Kazi Syed St., Bombay 400003.

Kant Advertising Service, 305, Rajgor Chambers, Masjid Siding Rd., Bombay 400009.

Lintas (I) Ltd., Express Towers, Nariman Point, Bombay 400021.

Madison Advtg., Khatau Mansions, B. Desai Rd., Bombay 400026.

Marketing Advtg. Associates Pvt. Ltd., Eucharistic Congress Bldg., No. 111, 5, Convent St., Bombay 400039.

Mirads Advertising, Diners House, 50, V. Nariman Rd., Bombay 400023.

Modern Publicity Service, 11, Ismail Bldg., Hutatma Chowk, Bombay 400023.

National Advtg. Service Pvt. Ltd., Khorshed Bldg., Sir P. Mehta Rd., Bombay 400001.

Ogilvy Benson & Mather Pvt. Ltd., Steelcrete House, D. Wachha Rd., Bombay 400020.

Pearl Publicity, 44, C. Patel St., Bombay 400001.

Prachar Agency, 382/83-9, Telang X Rd., No. 3, Matunga, Bombay 400019.

Pratibha Advertising, Cosmos, Prabhat Rd., Pune 411004.

Prem Associates Advtg. & Mktg., Sind Chambers, Colaba Causeway, Bombay 400005.

Press Syndicate Ltd., Readymoney Bldg., Shivaji Marg, Bombay 400039.

Pressman Advertising & Marketing Pvt. Ltd., 608, Dalamal House, Plot No. 206, N. Point, Bombay 400021.

R.C. Advertising Co., Mill Stores House, 73, Tamrind St., Bombay 400023.

Radeus Advtg. Pvt. Ltd., 19, Shah House, 55, Shahid Bhagat Singh Rd., Bombay 400039.

Radical Publicity, C/o Prabha Arts Studio, 140, Nagindas Master Rd., Bombay 400001.

Rajkishore Agency, 1, Sapna Bldg., Opp. Marathe Udyog Bhavan, New Prabhadevi Rd., Worli, Bombay 400025.

Ranjit Sales & Publicity Pvt. Ltd., Currimjee Jivanji Bldg., 111A, M. Gandhi Road, Bombay 400001.

Rasik Publicity Co., 906, Embassy Centre, 9th Flr., Nariman Point, Bombay 400021.

Ratan Batra Pvt. Ltd., Gool Manor, Opp. Telephone Bhavan, Colaba, Bombay 400005.

Rediffusion Advtg. Pvt. Ltd., 167, Annie Besant Road, Bombay 400018.

Sadhan Advertising, 32/8, Vijaranagar Colony, Pune 411030.

Shail-Art, Prithvi Apartments, A-19A, Altamount Rd., Bombay 400036.

Shilpi Advtg. Ltd., Shahibag House, 13, W. Hirachand Marg, Ballard Estate, Bombay 400038.

Sista's Pvt. Ltd., United Bank of India Bldg., Sir P. Mehta Road, Bombay 400001.

Skylark Advtg., 13/18, Prasad Chambers, M. Parmanand Marg, Bombay 400004.

Sobhagya Advtg. Service, Jeevan Sahkar Bldg., Sir P. Mehta Road, Bombay 400001.

Sterling Advertisers, 235, Dr. D.N. Rd., Bombay 400001.

Stusa Advtg. Pvt. Ltd., 113, Mittal Chambers, Nariman Point, Bombay 400021.

Swastika Advtg. & Mktg., 44, Caswaji Patel St., Bombay 400001.

Three Brothers & Fils, 5/2, Grants Bldg., Arthur Bunder Road, Colaba, Bombay 400005.

Tom & Bay (Advtg.) Pvt. Ltd., Ashok Chambers, 658, J.M. Road, Pune 411004.

Trikaya Advtg. Pvt. Ltd., 130/132, S. Bhagat Singh Road, Bombay 400023.

Ulka Advtg. Pvt. Ltd., Nirmal, Nariman Point, Bombay 400021.

Universal Marketing & Advertising, 765-E, Hudli Chambers, Shahupuri, Kolhapur 416001.

Punjab

Union Advertising Services, 23, Cecil Court, Ambala Cantt. 133001.

Tamil Nadu

Advertising Guild Pvt. Ltd., 6-B, Sterling Ave., Madras 600034.

Anand Advertisers, Dhun Bldg., 827, Anna Salai, Madras 600002.

Aries Advtg. Bureau, 271, Lloyds Rd., Royapettah, Madras 600014.

Criterion Publicity Pvt. Ltd., 19, Woods Road, Mount Road, Madras 600002.

Efficient Publicities Pvt. Ltd., 2, General Patters Road, Madras 600002.

F.D. Stewart Pvt. Ltd., 132, Lloyds Rd., Madras 600086.

Kanara Advertising Services, 15, Luz Church Rd., Mylapore, Madras 600004.

Madras Advertising Co. Ltd., 801, Anna Salai, Madras 600002.

Mouli's Advtg. Service, 42, Whites Rd., Madras 600014.

Paramount Publicities, 96-A, Mount Rd., Teynampet, Madras 600018.

R.K. Swamy Advertising Associates Pvt. Ltd., 122, Mount Rd., Madras 600006.

V.S.K. & Co., 106, Armenian St., Madras 600001.

West Bengal

Advtg. Consultants (India) Ltd., 55-B, Mirza Galib St., Calcutta 700016.

Alpha Advtg. Service, Marble House, 5/2, Garstin Place, Calcutta 700001.

Associated Advtrs. & Printers, 1/1, Meredith St., Calcutta 700013.

Clarion Advtg. Service Ltd., 55-B, Mirza Ghalib St., Calcutta 700016.

Ideal Advtg. Agency, 54, College St., Calcutta 700073.

India-International News Service, 12, India Exchange Place, Calcutta 700001.

Indian Publicity Bureau Pvt. Ltd., 6/2, Madan St., Calcutta 700013.

Interads Advtg. Pvt. Ltd., 72/73, Old China Bazar St., Calcutta 700001.

Phoenix Advtg. Pvt. Ltd., 18, Chowringhee Mansion, 30, Chowringhee Road, Calcutta 700016.

.... And now nearing in our 4th Decade of confidence winning
satisfaction through Creative thought and action

RPC

RASIK PUBLICITY CO.

Advertising Agents & Consultants,
Accredited by
I. E. N. S., New Delhi, A. I. R. & TV. Commercials,
Member of A. A. A. of India.

Contact us for all your advertising needs,
in Newspapers, Railways, Radio Broadcastings,
TV. Commercials, Cineslides & Short Films, Hoardings, Etc.

RASIK PUBLICITY CO.

(ESTD. 1943)
906, EMBASSY CENTRE, NARIMAN POINT, BOMBAY-400 021.
Phone: 232607-233095-Grams: RASIKPUBCO

Press & Publicity Syndicate Pvt. Ltd., 53, Radha Bazar Lane, Calcutta 700001.

Pressman Advtg. & Mktg. Pvt. Ltd., Bombay Mutual Bldg., 9, Brabourne Road, Calcutta 700001.

Progressive Publicity Service, 16-3, Gariahat Road, Calcutta 700019.

Publicity Forum, 16, R. N. Mukherjee Road, Calcutta 700001.

Radiant Display (India) Pvt. Ltd., 'Everest', 18th Floor, 46-C, J.L. Nehru Road, Calcutta 700071.

AGRICULTURAL AVIATION SERVICES

Agricultural Aviation Pvt. Ltd., Juhu Airport, Bombay 400054.

Avindia Pvt. Ltd., Liberty Bldg., New Marine Lines, Bombay 400020.

Cambata Aviation Pvt. Ltd., Old Aerodrome, Juhu, Bombay 400054.

H. Sobha Singh Pvt. Ltd., Nagin Mahal, 82, V. Nariman Road, Bombay 400020.

Khemka Aviation Pvt. Ltd., Safdarjung Airport, M. Block, New Delhi 110003.

AIRLINE COMPANIES

Bombay

Air France, Taj Mahal Hotel, Apollo Bdr., Bombay 400039.

Air India, Air India Bldg., Nariman Point, Bombay 400021.

Air Lanka Ltd., C/o Singapore Airlines Ltd., Air India Bldg., Nariman Pt., Bombay 400021.

Air Tanzania, 87-E, Stadium House, Ground Flr. V. Nariman Rd., Bombay 400020.

Alitalia Airlines, Ind. Assurance Bldg., Churchgate, Bombay 400020.

British Airways, Vulcan Ins. Bldg., Nariman Rd., Bombay 400020.

Cathay Pacific Airways Ltd., Mezzanine Flr., Taj Inter Continental, Apollo Bunder, Bombay 400039.

Czechoslovak Airlines, Stadium House, Nariman Rd., Bombay 400020.

Egypt Air, 7, J. Tata Rd., Bombay 400020.

Ethiopian Airlines, Taj Mahal Hotel, Bombay 400039.

Garuda Indonesian Airways, Tulsiani Chambers, Nariman Point, Bombay 400021.

Gulf Air, Air India Bldg., Nariman Point, Bombay 400021.

Huns Air Pvt. Ltd., 7, J. Tata Rd., 5th floor, Bombay 400020.

Indian Airlines, Air India Bldg., Nariman Point, Bombay 400021.

Iran Air Lines Corpn., Sunder Mahal, Marine Drive, Bombay 400020.

Iraqi Airways, Mayfair Bldg., 79, V. Nariman Rd., Bombay 400020.

Japan Airlines Co. Ltd., Air India Bldg., Nariman Point, Bombay 400021.

Kenya Airways, 199, Churchgate Reclamation, Bombay 400020.

KLM Royal Dutch Airlines, 198, J. Tata Rd., Bombay 400020.

Kuwait Airways Corpn., 82, V. Nariman Rd., Bombay 400020.

Lufthansa German Airlines, Express Towers, Nariman Point, Bombay 400020.

Malaysian Airline System, Air India Bldg., Nariman Point, Bombay 400021.

Middle East Airlines Co., 2B, J. Tata Rd., Bombay 400020.

Pakistan International Airlines Corpn., Hotel Oberoi Towers, Nariman Point, Bombay 400021.

Pan American World Airways, Taj Mahal Hotel, Bombay 400039.

Polish Airlines, G-2A, Jolly Maker Chamber 1, Nariman Point, Bombay 400021.

Pushpak Aviation Pvt. Ltd., 47, New Marine Lines, Bombay 400020.

Qantas Airways Ltd., Oberoi Sheraton Hotel, Nariman Point, Bombay 400021.

Sabena Belgian World Airlines, Nirmal, Nariman Point, Bombay 400021.

Safari Airways, J. K. Bldg., N. Morarjee Mrg., Bombay 400038.

Saudi Arabian Airlines, Express Towers, Nariman Point, Bombay 400020.

Scandinavian Airlines, Wavell House, Graham Rd., B. Estate, Bombay 400038.

Singapore Airlines, Air India Bldg., Nariman Point, Bombay 400021.

Swiss Air Transport Co. Ltd., Manek Mahal, Nariman Rd., Bombay 400020.

Syrian Arab Airlines, C/o Syrian Consulate General, Cambatta Bldg., J. Tata Rd., Bombay 400020.

Trans Mediterranean Airways, New Kamani Chambers, 32, Nicol Rd., Ballard Estate, Bombay 400038.

Trans World Airlines, 18, Raheja Centre, 214, Nariman Point, Bombay 400021.

Yemenia Airways, Room No. 113, Ambassador Hotel, Bombay 400020.

Delhi

Aeroflot (Soviet Airlines), 18, Barakhamba Rd., New Delhi 110001.

Air France, Scindia House, Janpath, New Delhi 110002.

Air Seychelles, Post Box No. 3575, New Delhi 110024.

Ariana Afghan Airlines Co. Ltd., 19, K. Gandhi Mrg., New Delhi 110001.

Ethiopian Airlines, Janapath Hotel, New Delhi 110002.

Gulf Air, Janapath Hotel, New Delhi 110002.

Qantas Airways Ltd., Janpath, New Delhi 110002.

Royal Nepal Airlines, 44, Janpath, New Delhi 110002.

Syrian Arab Airlines, 13/90, Con. Circus, New Delhi 110001.

Madras

Gulf Air, Kannammai Bldg., 122, Mount Rd., Madras 600006.

Qantas Airways Ltd., Connemara Hotel, Madras 600006.

Singapore Airlines, 36-D, Mount Rd., Madras 600002.

ANALYTICAL CHEMISTS

Analytical Testing Services Pvt. Ltd., Dr. Jha Mrg., New Delhi 110020.

Briggs R. V. & Co. Pvt. Ltd., 9, Bentinck St., Calcutta 700001.

Chem-Med Analytical Laboratories, 5-6-7, Kakad Estate, Seaface Rd., Worli, Bombay 400018.

Elca Laboratories, Gokuldas Wadi, 1st Pokhran Rd., Khopat, Thane 400601.

General Superintendence Co. (I) Pvt. Ltd., 35, Murzban Rd., Bombay 400001.

Geo Chem Laboratories Pvt. Ltd., 294, S. Bhagat Singh Rd., Bombay 400001.

Industrial Development & Research Laboratories, 33/2, Satish Mukherjee Rd., Calcutta 700026.

Italab (Goa) Ltd., Lotlikar Bldg., Margao 403601, Goa.

Italab Pvt. Ltd., 15, C. Patel St., Bombay 400001.

Madras Indl. Co-op. Analytical Laboratory Ltd., No. 5, Ninth Ave., Harrington Road, Madras 600031.

National Test House, 11/1, Judges Court Rd., Alipore, Calcutta 700027.

Regional Testing Laboratory, Ind. Estate, K. Pudur, Madurai 625007

Shriram Test House, 19, Univ. Rd., Delhi 110007.

Air-India now has no seats on 747 First Class

Only Slumberettes!

Stretch out luxuriously in your Slumberette
(it's yours at no extra cost). And while you're with us you'll get
to experience Air-India's legendary First Class service. Lavish
Whisper-soft. Anticipating the minutest detail.
And, perhaps, spoiling you forever.

AIR-INDIA
Get a good flight's sleep

Sri Ganeshram's Analytical Laboratories, 51, Thambu Chetty St., Madras 600001.

Therapeutics Chemical Research Corpn., 95, Ansari Mrg., Byculla, Bombay 400008.

Universal Research & Analytical Laboratories, Aman Chambers, 113, New Queen's Rd., Bombay 400004.

Uralab, Aman Chambers, 7th Flr., 113, New Queen's Rd., Bombay 400004.

ANODISERS

Bharat Eloxal Ind., Sudha Niwas, 134, S. Vivekanand Rd., Jogeshwari West, Bombay 400060.

Bieri Pvt. Ltd., Near Bus Terminus, Sion, Bombay 400022.

Evershine Inds., E-13, Naddham Indl. Estate, M. Maroshi Rd., Andheri East, Bombay 400059.

Excel Graphic Pvt. Ltd., Excel Estate, Valsad 396001. (Gujarat State).

Excel Process Pvt. Ltd., 117, M. Vasanji Rd., Chakala, Andheri, Bombay 400093.

J. Nagardas & Co., 55, Canning St., Calcutta 700001.

KIV Group Ind., Sun Mill Comp., Lower Parel, Bombay 400013.

Madhab & Co., 54/1, BRBB Rd., Calcutta 700001.

New India Name Platers & Anodisers, A-103, Phase II, Mayapuri, New Delhi 110064.

Pratima Anodiser, 73, Mun. Ind. Estate, Off Dr. E. Moses Rd., Gandhinagar, Worli, Bombay 400018.

Progressive Metal Inds., Agarwal Indl. Estate, 139, S.V. Rd., Jogeshwari West, Bombay 400069.

Raj Anodizing Works, Mun. Indl. Estate, Gala No. 47, 1st Flr., West Bapty Rd., Bombay 400008.

Rekha Engg. Works, 6-A, Favourite Indl. Estate, Masrani Lane, Kurla, Bombay 400070.

Renuka Industries Ltd., 11-A, Worli Sea Face, Bombay 400025.

Shums Anodizing Works, J.J. Compd., 83, L.B.S. Marg, Bhandup, Bombay 400078.

Sudaman Product, Plot 16, Progressive Model Colony, Hadapsar, Pune 411013.

AUCTIONEERS

Bennet & Co., 120, Apollo St., Bombay 400023.

Chowringhee Sales Bureau Pvt. Ltd., 24-B, Park St., Calcutta 700016.

Gilbert Lodge & Co., Elphinstone Bldg., V. Nariman St., Bombay 400001.

S. M. C. Beaty Pvt. Ltd., D-9, Connaught Place, New Delhi 110001.

BANKS

(Head Offices)-(Banks with asterisks are nationalised).

Algemene Bank Nederland (ABN), 14, V. Nariman Rd., Bombay 400023.

*Allahabad Bank, 2, Netaji Subhas Rd., Calcutta 700001.001.

American Express International Banking Corpn., Dalamal Towers, 221, N. Point, Bombay 400021.

*Andhra Bank, Sultan Bazar, Hyderabad 500001.

Bank of America National Trust & Savings Association. Air India Bldg., 16th Flr., N. Point, Bombay 400021.

*Bank of Baroda, Mandvi, Vadodara 390001.

Bank of Cochin Ltd., Post Box 1938, Ernakulam South, Cochin 682018.

*Bank of India, Express Towers, 14th Flr., N. Point, Bombay 400021.

Bank of Madura Ltd., Madurai 625001. (T. Nadu).

A MEMBER OF THE HONGKONG
BANK GROUP

**THE BRITISH BANK
OF THE
MIDDLE EAST**

(Incorporated in England by Royal Charter in 1889)

**16, Veer Nariman Road, Fort,
Bombay 400 023**

P. O. Box 876. • Phones : 258203-4.

COMPLETE LOCAL
AND
INTERNATIONAL BANKING
SERVICES

ALSO

Representative Office: 28, Kasturba Gandhi Marg, P. O. Box 126, New Delhi 110 001.

The Bank places at the disposal of clients its specialised knowledge of trading conditions throughout the MIDDLE EAST based upon long and close associations with countries in these areas through an extensive network of Branches, Subsidiaries and Associated Banks in the following territories :

Abu Dhabi **Oman**
Ajman **Qatar**
Bahrain **Ras al Khaimah**
Cyprus **Saudi Arabia**
Djibouti **Sharjah**
Dubai **Switzerland**
Fujairah **Tunisia**
Jordon **Umm Al Quwain**
Lebanon **Yemen Arab Republic**

Head Office :
I Queen's Road, Central, Hong Kong.

Overseas Offices of Bank of Baroda.

AMERICAS & PACIFIC

UNITED STATES OF AMERICA

New York

One Park Avenue, New York,
NY 10016, U.S.A.
Telephone: (212)
578-4550/(212) 578-4556
Grams: FORENBAR, New York
Telex: RCA 238957
Answerback BARODA UR
ITT 428901

BAHAMAS

Nassau, Bahamas (Off-shore Operation)

GUYANA

Georgetown

P.O. Box No. 10768
Regent St. No. 10
& Avenue of the Republic
Georgetown, Guyana
(S. America)
Telephone: 64005/64006/66423
Grams: Ransom,
Georgetown, Guyana.
Telex: 312-2243-Ransom

New Amsterdam

P.O. Box No. 21, 4, Strand
New Amsterdam, Berbice,
Guyana, (S. America)
Telephone: 2101/2102
Grams: Ransom,
New Amsterdam, Guyana

FIJI ISLANDS

Ba

P.O. Box No. 254
Varoka, Ba, Fiji
Telephone: 74555/74542/74138
Grams: Ransom

Labasa

P.O. Box No. 190
Nabeakulla Road, Labasa, Fiji
Telephone: 81620/81588
Grams: Ransom

Lautoka

P.O. Box No. 42
Corner of Vitogo Parade &
Vidilo St., 127, Vitogo Parade
Lautoka, Fiji
Telephone: 60811/60640/61321
Grams: Ransom

Nadi

P.O. Box No. 22
Opp. Nadi Post Office, Nadi, Fiji
Telephone: 70333/70523/70963
Grams: Ransom

Raki Raki

P.O. Box No. 88, Raki Raki, Fiji
Telephone: 94056
Grams: Ransom

Sigatoka

P.O. Box No. 3, Sigatoka, Fiji
Telephone: 50541
Grams: Ransom

Suva

P.O. Box No. 57
Bank of Baroda Building
Opp. Century Theatre
Marks Street, Suva,Fiji
Telephone: 311400/
311578/311929/311509
Grams: Ransom
Telex: FJ 2120

Mobile Branches at Ba, Sigatoka & Suva

AUSTRALIA

Sydney

Australian Representative Office
AMP Centre, 9th Floor
P.O. Box 297, 50 Bridge Street
Royal Exchange, NSW 2000
Sydney
Telephone: 2311544
Grams: ADORAB
Telex: 25950

EAST AFRICA

KENYA

Kisumu

P.O. Box No. 996
Central Square
Kisumu, Kenya (E.A.)
Telephone: 2159/2446
Grams: Ransom

Digo Road-Mombasa

P.O. Box No. 90260
Kenya House, Digo Road
Mombasa, Kenya (E.A.)
Telephone: 24507/24508/25140
Grams: ADORAB

Makadara Road-Mombasa

P.O. Box No. 90282
Corner of Nehru Road
& Makadara Road
Mombasa, Kenya (E.A.)
Telephone: 26211
Grams: Ransom

City Square-Nairobi

P.O. Box No. 43838, Solar House
Harambee Avenue, City Square
Nairobi, Kenya (E.A.)
Telephone: 28230/333521/25801
Grams: Adorab

Nairobi (Main)

P.O. Box No. 30033
Bank of Baroda Building
Corner of Mondlane Street
& Tom Mboya Street
Nairobi, Kenya (E.A.)
Telephone: 20575/29634
333089/337611—13
Grams: Ransom, Nairobi
Telex: 22250

Thika

P.B. No. 794, Kenyatta Avenue
Thika, Kenya (E.A.)
Telephone: 22379
Grams: Ransom

Mobile Branch at Kisumu

MAURITIUS

Curepipe

P.O. Box No. 28, Royal Road
Curepipe, Mauritius
Telephone: 6-2058
Grams: Adorab

Port Louis

P.O. Box No. 553
Sir William Newton Street
Port Louis, Mauritius
Telephone: 08-1504/08-
1505/08-3678
Grams: Ransom
Telex: 4237 IW

Quatre Bornes

St. Jean Road
Opp. Quatre Bornes Town Hall
Quatre Bornes, Mauritius
Telephone: 54-6188
Grams: Ransom

Rose Hill

Royal Road, Rose Hill, Mauritius
Telephone: 54-5908
Grams: Rodorab

Vacoas

St. Paul Road, Vacoas, Mauritius
Telephone: 6-4507
Grams: Vadorab

Mobile Branch at Port Louis

SEYCHELLES

Victoria, Mahe

Vallabhji Building
Revolution Avenue
P.O. Box No. 124
Victoria, Mahe, Seychelles
Telephone: 23038
Grams: Seydorab
Telex: 241

EUROPE

BELGIUM

Brussels

10, Rue Montoyer,

Round the clock around the Globe
Bank of Baroda
(A Government of India Undertaking)

(Off: Avenue DES ARTS)
B-1040, Brussels
Telephone: (02) 513-00-84/
512–98-21/23/24
Grams: Barodabank
Telex: 62294 BARODA

UNITED KINGDOM

Bolton

58, High Street
Bolton
Lancashire BL3 65Y
(United Kingdom)
Telephone: 0204-389-088
Grams: Ransom

Bradford

115/119, Great Horton Road
Bradford BD7 1PS
West Yorkshire (United Kingdom)
Telephone: 02-74-392-779
Grams: Ransom, Bradford

Brent

32, Ealing Road,
Wembley,
Brent, Middlesex HAO-4-TL
Telephone: 01-903-1576
(United Kingdom)
Grams: Ildorab, Wembley

Coventry

539, Foleshill Road,
Coventry CV6 5AU
(United Kingdom)
Telephone: 0203-664-947
Grams: Ransom, Conventry

Croydon

2 & 3, Essex House,
George Street,
Croydon,
Surrey—CRO-IPG
(United Kingdom)
Telephone: 01-680-4952
Grams: Camdorab, Croydon

Handsworth

175, Soho Road,
Handsworth
Birmingham B21-9SU,
Midlands
Telephone: 021-523-5973/
021-523-5991
Grams: Ransom, Birmingham 21

Ilford

122, Cranbrook Road,
Ilford,
Essex IG1 4LZ
Telephone: 01-518-0607
Grams: Ildorab

Kilburn

237, Kilburn High Road,
London NW 6 7 JN
Telephone: 01-328-4969
Grams: Kildorab, Kilburn

London

31/32, King Street,
London E.C. 2V 8EN
Telephone: 01-606-6903
Grams: Rodabank, London EC 2
Telex: 884609

Luton

72, Dunstable Road,
Luton Beds LU1-IEH (UK)
Telephone: 0582-20727
Grams: ELDORAB LUTON

Manchester

Holbeck House
63/65, Moseley Street,
Manchester M2 3LP
Telephone: 061-236-6622/
061-236-7542
Grams: Mandorab,
Telex: 666639 Mandat

Slough

118, High Street
Slough Berkshire SL1-1JQ
Telephone: 75-70048

Southall

86, The Broadway
Southall
Middlesex UBI IQD
Telephone: 01-574-1324
Grams: Sadorab, Southall

Streatham

10, Streatleigh Parade
Streatham High Road
London SW 16 IEQ
Telephone: 01-677-3676
Grams: Indorab, London SW 16

Whitechapel

30B, Commercial Road
Whitechapel, London E1
Telephone: 01-488-4345
Grams: Adorab

WEST ASIA

UNITED ARAB EMIRATES

Shaikh Khalifa Street Abu Dhabi (Main)

P.O. Box No. 2303
Shaikh Khalifa Street,
Abu Dhabi, U.A.E.
Telephone: 44220/44302
Grams: Bankbaroda, Abu Dhabi
Telex: 2391 Baroda AH

Shaikh Zayed Road Abu Dhabi

P.O. Box No. 3793
Khalifa Suwedi Building
Shaikh Zayed Road
Abu Dhabi, U.A.E.
Telephone: 22000/26669
Grams: Adorab, Abu Dhabi
Telex: 23803 ADORAB AH

Deira

P.O. Box No. 5107
Al-Battin Building
Murshid Bazar
Deira, Dubai, U.A.E.
Telephone: 284516/229949
Grams: Ransom, Dubai
Telex: 46979 BOBDE-EM

Dubai

P.O. Box No. 3162
Dubai, U.A.E.
Telephone: 434516/435647/431955
Grams: Bankbaroda, Dubai
Telex: 5707 Baroda
DB/6547 Adorab DB

Fujairah

P.O. Box No. 316
Yusuf Mohammed Al Bir Building
C/o Fujairah Post Office
Fujairah, U.A.E.
Telephone: 22730
Grams: Bankbaroda, Fujairah

Ras-Al-Khaimah

P.O. Box 5294
Shaikh Saqr Bin Rashid
Al Quassimi Building
Oman Street, Al Nakheel
Ras-Al-Khaimah, U.A.E.
Telephone: 29293
Grams: Bankbaroda
Ras-Al-Khaimah
Telex: 9159 Baroda RK

Sharjah

P.O. Box No. 1671
Zayani Building
Al Arooba Street
Sharjah, U.A.E.
Telephone: 358273/354231/
354232
Grams: Bankbaroda, Sharjah
Telex: 8133 Baroda SH

Umm-Al-Quwain

P.O. Box No. 519
Rashid Mazroei Building
Main Road
Umm-Al-Quwain, U.A.E.
Telephone: 66537/65237
Grams: Bankbaroda,
Umm-Al-Quwain

SULTANATE OF OMAN

Mutrah

P.O. Box No. 1231
Corniche Road
Mutrah, Sultanate of Oman
Telephone: 734549/703749/
734556
Grams: Bankbaroda, Mutrah
Telex: 3470 Baroda MT MB

Ruwi

P.O. Box No. 4610
Lt. Col. Said Salem Al
Wahaiby Building
Ruwi, Sultanate of Oman
Telephone: 702899
Grams: Adorab, Ruwi

Salalah

P.O. Box No. 8478
Salalah, Sultanate of Oman
Grams: Saldorab

BAHRAIN

Manama

Bahrain Off-Shore Banking Unit
P.O. Box 20014
C.R. No. 10426
Al Fateh Building
Al Khalifa Road
Manama, Bahrain
Telephone: 262538
Grams: BARODABANK
Telex: 9449

57 overseas offices in 13 countries, on 6 continents.

THE CATHOLIC SYRIAN BANK LTD.

(Registered Office : Trichur)

HIGHLIGHTS

Chairman	:	Shri K. P. Menon
Deputy General Manager	:	Shri P. D. Joseph
Year of Establishment	:	1920
Year in which the Bank celebrated its Diamond Jubilee	:	1980
Status	:	" A " Class Scheduled Commercial Bank authorised to deal in Foreign Exchange

Financial Position as on 30-6-1981

Capital & Reserves	:	Rs. 50 Lakhs
Total Deposits	:	Rs. 86 Crores
Total Advances	:	Rs. 56 Crores
Number of Branches as on 31st August, 1981	:	206

Composition of Branches

		Number	Percentage
Rural & Semi Urban	:	166	81%
Urban	:	31	15%
Metropolitan	:	9	4%

States in which the Bank has its Branches : Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, West Bengal & Union Territory of Delhi.

PLAY SAFE

Central Bank of India
Rs. 500

CARRY
CENTRAL BANK'S
SUPERMONEY
TRAVELLERS CHEQUES

Central Bank of India
(A Government of India Undertaking)
The Bank that moves out to people and places

Interpub/CBI/6/78

CITIBANK, N.A.

Worldwide banking service

Head Office : 399, Park Avenue, New York, N.Y. 10043, U.S.A.
Offices outside the U.S.A. in 94 countries, worldwide.

Supervision in India

Mr. V. J. Menezes, Vice President, Chief Executive Officer, Air India Building, Floor 9,
Nariman Point, Bombay 400 021. Phone : 231545.

Operations in India

At Bombay : 293, Dr. D. N. Road, Bombay 400 001. Phone : 258792.
Telex : 011-2288. P.O. Box 175.

Incharge : A. Chopra, Vice President (Marketing).
V. W. Khanna, Vice President (Operations).

Also at : Air India Bldg., Grd. Floor, Nariman Point, Bombay 400 021.
Phone : 232380.

At New Delhi : 3, Sansad Marg, New Delhi 110 001. Phone : 311116.
Telex : 031-2332. P.O. Box 520.

Incharge : J. Raj, Vice President (Marketing).
V. Krishnakumar, Asst. Vice President (Operations).

At Calcutta : 43, Chowringhee Road, Calcutta 700 071. Phone : 448321.
Telex : 021-7049/7346. P.O. Box 9213.

Incharge : A. Somasekhar, Asst. Vice President (Marketing).
B. B. Sarpeshkar, Asst. Vice President (Operations).

Also at : 9, Brabourne Road, Calcutta 700 001. Phone : 221675.

At Madras : 768, Anna Salai, Madras 600 002. Phone : 811449.
Telex : 041-326. P. O. Box 2235.

Incharge : V. Mathew, Asst. Vice President.

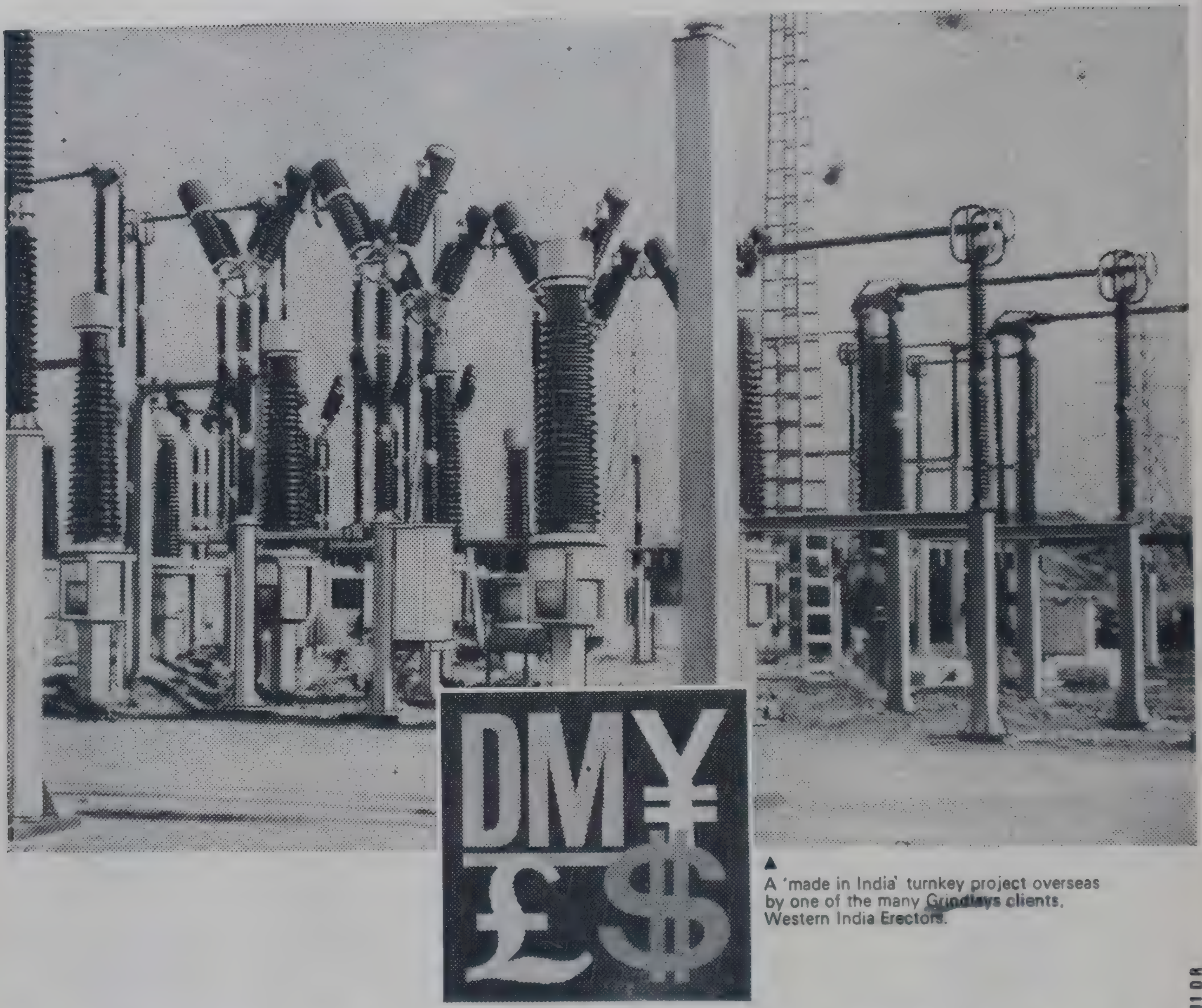
GROWTH OVER A DECADE

Our Position	31-12-'70	31-12-'80
	(Amount in Lakhs)	
Deposits	761·90	15720·92
Advances	454·47	8370·23
Capital	5·33	139·73
No.of Branches	58	302

THE FEDERAL BANK LIMITED

Regd. Office: ALWAYE.
KERALA

designers-8116



▲
A 'made in India' turnkey project overseas by one of the many Grindlays clients, Western India Erectors.

For projects and products 'made in India': Grindlays foreign currency loans.

For quite some time, the tide in international business has been in India's favour.

Opportunities to take it at the flood, crop up in many guises. Perhaps, a fertiliser plant in Ghana or a chemical complex in Indonesia needs Indian collaboration. Or, maybe, there's a big export order for Indian electronic components, even know-how.

Wherever there's need for foreign exchange financing, there's always Grindlays with its worldwide facilities at your service through branches/offices in 40 countries, including India. And, a Merchant Banking professional at your doorstep.

The other facets of Grindlays pioneering achievements are equally useful: pre-investment studies, in-depth project reports, global market probes, advice on acquisitions and mergers, project finance, management of public issues, indeed the whole gamut of Merchant Banking.

For businessmen, this means professional assistance that goes well beyond the bounds of conventional banking practice.

As for Grindlays, the spirit that inspires this approach springs straight from its heritage of professionalism and service.

Grindlays Bank Limited

Incorporated in the United Kingdom
The liability of members is limited

ASP/BM 360/111 DR

INDIAN OVERSEAS BANK

MERCHANT BANKING DIVISION

A financial brains trust you can call on.

IOB's Merchant Banking services include :

Project counselling including suggesting suitable locations, technical consultants collaborators, financing pattern, tax-benefits, etc.

Preparation of feasibility reports.

Preparation of term loan application forms for submission to term lending institutions.

Syndication of loans.

Obtaining the requisite permission from statutory bodies for starting industrial ventures.

Shares, bonds and debentures issue management including underwriting.

Appraisal and arrangement of working capital facilities.

Modification/restructuring of capital base.

Arranging foreign currency loans.

Overseas civil construction projects and joint ventures — package of Merchant Banking Services including advice on relevant Governmental regulations, scope, benefits, etc.

Indian Overseas Bank
Good people to grow with

To call in our specialist team contact :

The Manager, Merchant Banking Division
Central Office, Indian Overseas Bank
762, Anna Salai, Madras 600 002. Phone : 811993.

TIME AND TIDE WAIT FOR NONE . . .

It is true in respect of your plans for the future also.
You must save in time, choosing the right plan for you.

Save through our mighty savings schemes
which suit every pocket.

For details :—

THE KARUR VYSYA BANK LIMITED

Registered and Central Office :
Karur 639 001, Tamilnadu.

Authorised Dealers in
Foreign Exchange.

G. Venkatesam
Chairman.

*Bank of Maharashtra, 'Lokmangal', 1501, Shivajinagar, Pune 411005.

Bank of Oman Ltd., 4-6, Maker Arcade, Cuffe Parade, Colaba, Bombay 400005.

Bank of Tokyo Ltd., Jeevan Prakash, Sir P. Mehta Rd., Bombay 400001.

Banque National De Paris (French Bank), 62, Homji St., Bombay 400001.

Bombay Mercantile Co-operative Bank Ltd., 78, Mohamedali Rd., Bombay 400003.

British Bank of the Middle East, 16, Veer Nariman Rd., Bombay 400023.

*Canara Bank, Canara Bank Bldg., 112, Jayachamarajendra Rd., Bangalore 560002.

*Central Bank of India, Chander Mukhi Bldg., Nariman Point, Bombay 400021.

Chartered Bank, New Excelsior Bldg., A.K. Naik Mrg., Bombay 400001.

Citibank N. A., Air India Bldg., 9th Flr., Nariman Point, Bombay 400021.

*Corporation Bank, Mangalore 575001.

*Dena Bank, Devkaran Nanjee Bldg., Maket Towers, Near World Trade Centre, Cuffe Parade, Colaba, Bombay 400005.

Emirates Commercial Bank Ltd., Rehmat Manzil, 75B, Nariman Rd., Bombay 400020.

European Asian Bank, Tulsiani Chambers, N. Point, Bombay 400021.

Federal Bank Ltd., Alwaye 683101. (Kerala).

Grindlays Bank p.l.c., 90, M. Gandhi Rd., Bombay 400023.

*Indian Bank, 31, Rajaji Rd., Madras 600001.

*Indian Overseas Bank, 762, Anna Salai, Madras 600002.

Karur Vysya Bank Ltd., Karur 639001 (T. Nadu).

Maharashtra State Co-op. Bank Ltd., 9, Bakehouse Lane, Bombay 400001.

Mercantile Bank Ltd., 52/60, M. Gandhi Rd., Bombay 400023.

Mitsui Bank Ltd., 6, Wallace St., Bombay 400001.

*New Bank of India, 1, Tolstoy Mrg., New Delhi 110001.

*Oriental Bank of Commerce, E Block, Conn. Place, New Delhi 110001.

*Punjab National Bank, Parliament St., New Delhi 110001.

*Punjab & Sind Bank, B45/47, Connaught Place, New Delhi 110001.

Sonali Bank, 15, Park St., Calcutta 700016.

South Indian Bank Ltd., Trichur 680001. (Kerala).

State Bank of India, New Adm. Bldg., Madame Cama Rd., Bombay 400021.

*Syndicate Bank, Manipal 576119. (Karnataka).

*Union Bank of India, Union Bank Bldg., 239, Backbay Reclamation, Bombay 400021.

*United Bank of India, 16, Old Court House St., Calcutta 700001.

*United Commercial Bank, 10, Brabourne Rd., Calcutta 700001.

*Vijaya Bank, 2, Residency Road, Bangalore 560025.

Vysya Bank Ltd., Avenue Rd., Bangalore 560002.

BLOCK MAKERS

Adwell, Krishna Bhavan, 11, Bhuleshwar Rd., Near Cotton Exchange, Bombay 400002.

Bombay Art Printers, Near Safed Pul, Kurla-Andheri Rd., Bombay 400072.

Bombay Process Studio, Crescent Chambers, Tamarind Lane, Bombay 400023.

HELP THE DISABLED
WORK FOR A LIVING

1981 is the International Year for Disabled Persons. Let your sympathy for them take practical shape this year.

Help them secure jobs. If not, inform them about Syndicate Bank's Schemes to finance them at concessional rates of interest for productive endeavours. The Bank also has schemes to help them for their education in School College/Polytechnics.

Let us help them conquer their disability and enable them to lead as useful life as normal persons.

SYNDICATE BANK
Where Service is way of life
Head Office : MANIPAL — 576 119

Bharat Studio, 109, Mount Road, Madras 600018.

Commercial Art Engravers Pvt. Ltd., Sane Guruji Premises, 386, V. Savarkar Marg, Bombay 400025.

Express Block & Engraving Studios Pvt. Ltd., Mustafa Bldg., Sir P. Mehta Rd., Bombay 400001.

National Blocks, 356, Girgaum Rd., Bombay 400002.

Novelty Process Studio, 17, Khambata Lane, Khetwadi Back Rd., Bombay 400004.

Rapid Process Works, 306, Kalbadevi Rd., Kakad Market, Bombay 400002.

Rexen Free, Process Block Makers, 3, State Bank St., (Opp. Midland) Mount Rd., Madras 600002.

Salian Brothers, 161, Bora Bazar St., Bombay 400001.

Solar Process Studio, 22, Apollo St., Bombay 400023.

Sun Process Works, 8, Swadeshi Mills Comp., Tata Rd., Off New Queen's Rd., Bombay 400004.

The Times of India Press, Dr. D. N. Rd., Bombay 400001.

BUILDING SPECIALISTS

CONTRACTORS

Andhra Pradesh

Allied Construction Co., 6-3-898, Somajiguda, Hyderabad 500001.

Associated Engg. Enterprise, 10, Venkateswara Colony, Narayanaguda, Hyderabad 500001.

Premier Construction Co., 20, Lalbahadur Stadium, Hyderabad 500001.

Udani Engg. Co. Pvt. Ltd., 1-1-269, Chikadpally, Hyderabad 500001.

Assam

S. C. Das & Co., D. C. Barucha Rd., Tarajan, Jorhat 785001

Chandigarh

Chandigarh Construction Co., 204, Sector 9 C, Chandigarh 160017.

Uttam Singh Duggal & Co., 244, Sector 9 C, Chandigarh 160017.

Delhi

S. F. Engineer Group, 202, Nirmal Tower, 26, Barakhamba Rd., New Delhi 110001.

Gujarat

Jagdish Shah & Co., Ashok Niwas, Near Tower, Navsari 396445.

N. Kunwerji & Co., Kum Kum, Laxmiwadi, Main Rd., Rajkot 360001.

Paramount Constructions, Opp. Mandvi, Vadodara 390001.

Karnataka

Ferro Concrete Co. of India, Behind I.O.C. Petrol Pump, Saundatti, Belgaum 590001.

Structocrates, 4, 12th Cross, Malleswaram, Bangalore 560003.

Maharashtra

Arun Construction Co., Sunder Baug, Mathuradas Rd., Bombay 400067.

Associated Construction Co., 227-F, Kalbadevi Rd., Bombay 400002.

Bombay Builders Co. Pvt. Ltd., Mahendra Chambers (Empire Bldg.), 134, Dr. D. N. Rd., Bombay 400001.

Eapen Verghese & Co., 38, Super Shopping Centre, S. Vivekanand Rd., Andheri, Bombay 400058.

Indian Prestress Corpn., 101, M. Gandhi Rd., Bombay 400023.

Jai Hind Construction Corpn., 1117, Ali Lakaki Rd., Pune 411002.

Jolly & Maker Pvt. Ltd., 222, Nariman Point, Bombay 400020.

Jolly Bros. Pvt. Ltd., Lakshmi Insurance Bldg., Sir P. Mehta Rd., Bombay 400001.

Jyoti Construction Co., 32/34, Dhanji St., Bombay 400003.

Khandelwal Builders Pvt. Ltd., Khandelwal House, Linking Rd., Malad West, Bombay 400064.

Levka Pvt. Ltd., Sleater Rd., Bombay 400007.

National Asphalt Products & Construction Co., Hill View, Mahul Rd., Chembur, Bombay 400074.

Patel Construction Co., Laxmi Nivas, Hanuman Rd., Bombay 400057.

Popular Construction Co., 37, Tagore Rd., Bombay 400054.

Pressure Piling Co. India Pvt. Ltd., Savoy Chambers, Wallace St., Bombay 400001.

Project Engineers, Shree Ram Indl. Estate, Katrak Rd., Bombay 400031.

Shah Builders, 403, S.V. Patel Rd., Camp, Pune 411001.

Shah Construction Co. Ltd., Shah House, Shivsagar Estate, Dr. A. Besant Rd., Bombay 400018.

Shapoorji Pallonji & Co. Pvt. Ltd., New India Centre 11th Flr., Madame Cama Rd., Bombay 400039.

Space Builders Pvt. Ltd., Jyoti Chambers, N. Natha St., Bombay 400009.

Vazifdar Builders Pvt. Ltd., Corinthian, Arthur Bunder Rd., Bombay 400005.

Meghalaya

Stephens Belle & Co., Warjri Lodge, Malki, Shillong 793001.

Rajasthan

Gadhoke Construction Co., 4, Manu Marg, Alwar 301001.

Moti Construction Co., Moti Bhavan, Neeti Marg, Ajmer 305001.

Tamil Nadu

East Coast Constructions & Inds., 1, Moores Rd., Madras 600006.

Eimco-K.C.P. Ltd., Ramakrishna Bldg., 38, Mount Rd., Madras 600002.

Essar Construction & Carriers Ltd., 306, T. Chetty St., Madras 600001.

Gladston Lyall & Co. Ltd., 108, Mount Rd., Madras 600018.

Simplex Concrete Piles (I) Pvt. Ltd., 17, Casa Major Rd., Egmore, Madras 600008.

Southern Engg. & Construction Co., 39, Bhagirathi Ammal St., Madras 600017.

Tarapore & Co., 175/1, Mount Rd., Madras 600002.

Wilson & Co. Pvt. Ltd., Chordia Mansions, 105A/2, Mount Rd., Madras 600002.

Uttar Pradesh

All India Construction Co., 123, North Vijayanagar Colony, Agra 282001.

D.S. Enterprises, Yadav Bhavan, Arya Nagar, Lucknow 226001.

Inder Nath & Co., Hing Ki Mandi Crossing, Agra 282001.

Jain Bros., Mitra Bhavan, Prempuri, Meerut 250001.

Pahuja Builders, 112 A, Lukergunj, Allahabad 211001.

Vijay Construction Co., 127, Anandpuri, Meerut City 250001.

West Bengal

Ajit Kumar Nayak & Co., 14, Natabar Dutta Row, Calcutta 700012.

Daw Mitra & Co., 5 & 6, Hare St., Calcutta 700001.

Kumar Narayan Pvt. Ltd., 28, Southern Ave., Calcutta 700026

Prestressed Concrete & Shellroofs Pvt. Ltd., 10A, Harrington St., Calcutta 700016.

CONTRACTORS FOR GUNITE, GROUTING & COLLOIDAL CONCRETE

Bombay

Cementation Co. Ltd., Steelcrete House, D. Vachha Rd., Bombay 400020.

John Fleming & Co. Pvt. Ltd., 21, Bastion Rd., Bombay 400001

Shah Construction Co. Ltd., Shah House, Dr. A. Besant Rd., Bombay 400018.

Calcutta

Cementation Co. Ltd., 5, Chowringhee Approach, Calcutta 700013.
Consolidated Pneumatic Tools Co. Ltd., 30, J.L. Nehru Rd., Calcutta 700016.
Heatly & Gresham (India) Ltd., 31, Chittaranjan Ave., Calcutta 700012.
Hindustan Construction Co. Ltd., 9, Syed A. Ali Ave., Calcutta 700017.
Mukherjee Bros., 1B, N. Mitra Row, Calcutta 700002.
Patel Engg. Co. Ltd., 3, Esplanade East, Calcutta 700001.

Madras

Gannon Dunkerley & Co. (Madras) Ltd., 337, Thambu Chetty St., Madras 600001.

PILING CONTRACTORS

Maharashtra

Foundation Corpn. of India, Meher House, 15, C. Patel St., Bombay 400001.
Pressure Piling Co. (India) Pvt. Ltd., Savoy Chambers, Wallace St., Bombay 400001.
Sewri Engg. Construction Co. Pvt. Ltd., Savoy Chambers, Wallace St., Bombay 400001.

Tamil Nadu

Coromandel Engg. Co., 52/53, Jehangir St., Madras 600001.

West Bengal

Central Engg. Syndicate, 32, G. Chandra Ave., Calcutta 700013.
Gammon India Ltd., 19, P. Barua Sarani, Calcutta 700019.
Simplex Concrete Piles (India) Pvt. Ltd., Simplex House, P-1, Transport Depot Rd., Calcutta 700027.

PRESTRESSED CONCRETE SPECIALISTS

Assam

Bridge & Bldg. Corporation Pvt. Ltd., G.S. Rd., Ulubari, Gauhati 781001.

Bihar

Bhasin Construction Co. Pvt. Ltd., Blessington House, Kanke Rd., Ranchi 834001.
Bihar Prestressing Pvt. Ltd., 6, Beatson Rd., Bhagalpur 812001.
Hindustan Concrete & Allied Ind., Krishna Chowk, Station Rd., Patna 800001.

Delhi

Hindustan Housing Factory Ltd., Jangpura, New Delhi 110014.

Gujarat

Manibhai & Brothers, 28, N.B.K. Society, Anand 388001.

Karnataka

Indo-Swiss Corpn., 12, Palace Rd., Bangalore 560052.

Maharashtra

Gammon India Ltd., Gammon House, V. Savarkar Marg, Prabhadevi, Bombay 400025.
Hindustan Construction Co. Ltd., Construction House, Ballard Estate, Bombay 400038.
Indian Prestress Corpn., 101, M. Gandhi Rd., Bombay 400023.
Kayjay Engineers, 123, M. Gandhi Rd., Bombay 400023.
Killick Nixon & Co. Ltd., 31, Murzban Rd., Bombay 400001.
M.M. Bilaney & Co., 140, Medows St., Bombay 400023.
Patel Engg. Co. Ltd., Jogeshwari Estate, S. Vivekanand Rd., Jogeshwari, Bombay 400060
Prestressing Corpn. of India, Vishwa 52, Sion West, Bombay 400022

GAMMON INDIA LIMITED

Construction Engineers & Contractors

FIELDS OF ACTIVITY

Transportation Engineering : Bridges of all types, Ports, Harbours and Marine Structures, Airport Runways, Hangars and Terminal facilities.

Energy Projects : Civil Engineering Components of Thermal and Nuclear Power Projects, including Natural and Induced Draught Cooling Towers.

Industrial Structures : Civil Engineering works for Steel Plants, Fertilizer Plants, Paper Mills, etc., with complete structures in Steel and Concrete.

High Rise Structures : T. V. Transmission Towers, Chimneys and Stacks, Prilling Towers.

Bulk Storage Facilities : Warehouses, Godowns, Horizontal and Vertical Silos.

Hydraulic Works : Water Towers and Ground Reservoirs, Water Supply Treatment Schemes, R.C.C. and Prestressed Concrete Pipelines, Aqueducts, Intake Structures, Sewage Disposal Plants, etc.

Irrigation Schemes: Dams, Weirs and Allied Irrigation Works.

Bulk Storage Facilities : Silos, Warehouses and Godowns.

Public Storage Facilities : Water supply and treatment systems, Sewage disposal schemes and environmental pollution control.

Erection : Heavy Plant and Machinery for power plants and factories.

Manufacturing Activities : Fabrication of launching Trusses, Pontoons, Derrick Cranes, Trailers etc., Manufacture of Mixers, Pumps and complete range of prestressing equipment.

Registered Office : Gammon House,
Veer Savarkar Marg,
P.O. Box 9129, Prabhadevi,
Bombay 400 025.

Telephones : 422-6761 & 422 1084
Cable : " GAMMON ",
BOMBAY-DADAR 400 014.
Telex : 011-2552 & 011-5738

Board of Directors :

Chairman : James Bates .
Managing Director : T. N. Subba Rao
Director : L. R. Patel
Director : S. M. Patil
Director : Dharma Vira, I.C.S. (Retd.)
Secretary : P. L. N. Vijayanagar

Sewri Engg. Construction Co. Pvt. Ltd., Savoy Chambers, Wallace St., Bombay 400001.

Shah Construction Co. Ltd., Shah House, Dr. A. Besant Rd., Bombay 400018.

Stup (India) Ltd., Advent, J. Bhonsle Mrg., Bombay 400020.

Orissa

Orissa Concrete Products Ltd., Bhubaneswar Rd., Bhubaneswar 751001.

Orissa Construction Corpn. Ltd., Gopabandhu Nagar, Unit 8, Bhubaneswar 751003.

Tamil Nadu

Gannon Dunkerley & Co. (Madras) Pvt. Ltd., 337, Thambu Chetty St., Madras 600001.

Prestressed Concrete Co. (South India) Pvt. Ltd., 80, Lloyds Rd., Madras 600014.

West Bengal

B.K. Banerjee & Associates, 14-A, N. Banerjee Rd., Calcutta 700013.

Bridge & Bldg. Construction Co. Pvt. Ltd., 90-A, S.P. Mukherjee Rd., Calcutta 700026.

Chanda Engineers (India) Ltd., 21, Princep St., Calcutta 700013.

Ghosh, Bose & Associates, 8, Hochin Minh Sarani, Calcutta 700016.

Hind Construction & Engg. Co. Ltd., 9, Brabourne Rd., Calcutta 700001.

Kuljian Corpn. (India) Pvt. Ltd., 24-B, Park St., Calcutta 700016.

Simplex Concrete Piles (India) Pvt. Ltd., Simplex House, P-1, Transport Depot Rd., Calcutta 700027.

Stresscon Engg. Co. Pvt. Ltd., 13-C, Deodar St., Calcutta 700019.

Structures Pvt. Ltd., 58, Kedar Bose Lane, Calcutta 700025.

SHELL ROOF SPECIALISTS

Andhra Pradesh

Andhra Civil Construction Co., Uppal, Hyderabad 500009.

Udani Engg. Co., 1-8-27/19, Chikkadpally, Hyderabad 500020.

Bihar

Bhasin Construction Co. Ltd., Blessington House, Kanke Rd., Ranchi 834001.

Delhi

Teja Singh & Associates, 65/26, Guru Gobind Singh Mrg., New Delhi 110005.

Tirath Ram Ahuja Pvt. Ltd., 11, Friends Colony, New Delhi 110014.

Gujarat

Vakil Mehta Parikh Sheths, Khamasa Gate, Ahmedabad 380001. 380001.

Maharashtra

Designer's Pvt. Ltd., 91-A, Walkeshwar Rd., Bombay 400006.

Gammon India Ltd., Gammon House, V. Savarkar Marg, Prabhadevi, Bombay 400025.

Gannon Dunkerley & Co. Ltd., Chartered Bank Bldg., M. Gandhi Rd., Bombay 400023.

Jolly Brothers Pvt. Ltd., Laxmi Insurance Bldg., Sir P. Mehta Rd., Bombay 400001.

Shah Construction Co. Ltd., Shah House, Dr. A. Besant Rd., Bombay 400018.

Uttar Pradesh

N.K. Agarwal & Associates, 15/88, Civil Lines, Kanpur 208001.

West Bengal

B. K. Dhar Pvt. Ltd., 6, K. S. Roy Rd., Calcutta 700001.

Engineers Consortium, 56, Gariahat Rd., Calcutta 700019.

Hindustan Construction & Engg. Co. Ltd., 9, Brabourne Rd., Calcutta 700001.

Prestressed Concrete & Shell Roofs Pvt. Ltd., 10-A, Harrington St., Calcutta 700016.

CLEARING & FORWARDING AGENTS

Delhi

Chanson Shipping & Packing Co. Pvt. Ltd., Chanson House, E-56, Greater Kailash I, New Delhi 110048.

D.M. Holmes & Co., 3, Faiz Rd., New Delhi 110005.

Packways Pvt. Ltd., D 104, Panchsheel Enclave, N. Delhi 110017.

Goa

Agencia Geral Pvt. Ltd., P.O. Box 15, Vasco da Gama 403802.

Chowgule Bros., Marmugao Harbour 403803.

Hiralal & Co., 'Thakker House', Vasco Da Gama 403802.

Maharashtra

A.M. Sodder & Co., 11, Bank St., Bombay 400023.

A.V. John & Co., Yashodhan, Gokhale Rd., Thane 400601.

Artlee & Co., 130, Apollo St., Bombay 400023.

B.C. Buhariwala & Sons, 5, Graham Rd., Ballard Estate, Bombay 400038.

Chhotalal Keshavjee Shah & Son, 6/12, Calicut St., Bombay 400038.

Cox & Kings (Agents) Ltd., Grindlays Bank Bldg., Dr. D. Naoroji Rd., Bombay 400001.

D. Abraham & Sons Pvt. Ltd., Hague Bldg., Sprott Rd., Ballard Estate, Bombay 400038.

Express Transport Pvt. Ltd., Western India House, Sir P.Mehta Rd., Bombay 400001.

Freight Carriers Pvt. Ltd., 43, Tamarind St., Bombay 400023.

Freightwings & Travels Pvt. Ltd., 26, Adarsh Indl. Estate, G Block, Sahar Rd., Chakala, Andheri East, Bombay 400093.

Girdharlal & Co., 29, Imperial Chambers, Wilson Rd., Ballard Estate, Fort, Bombay 400038.

Gokaldas & Sons, 11/13, Mint Rd., Opp. G.P.O., Bombay 400001.

H. Mangaldas & Co., 12, Nazir Bldg., Calicut St., Ballard Estate, Bombay 400038.

Jeena & Co., 10, V. Nariman Rd., Bombay 400023.

Kimatram & Sons, 9, Hawa Mansion, Pinjari Lane, Bombay 400003.

Liladhar Pasoo & Co., Rai Chambers, Final Plot No. 87-A, Broach St., Bombay 400009.

Mackinnon Mackenzie & Co. Pvt. Ltd., 4, S. Vallabhdas Marg, Ballard Estate, Bombay 400038.

Manilal Mohanlal Karachiwalla, Laheri House, 81/N, Mohamedali Rd., Bombay 400003.

P. Cawasji & Co., 18, Karwar St., Bombay 400001.

Purshotamdas Madhavani & Co. Pvt. Ltd., P. B. 274, 8, Horniman Circle, Bombay 400023.

R. Sharp & Son Pvt. Ltd., Kaiser-i-Hind Bldg., Currimbhoy Rd., Ballard Estate, Bombay 400038.

Trade Wings Ltd., 30, K. Dubash Marg, Bombay 400023.

Travels & Shipping Pvt. Ltd., Darabshaw House, N. Morarjee Marg, Ballard Estate, Bombay 400038.

Tulsidas Khimji Pvt. Ltd., 46, Veer Nariman Rd., Bombay 400023.

Tamil Nadu

Cleford Shipping Co., 9, Singanna Naicken St., Madras 600001.

Continental Shipping and Clearing Agency, 32, 2nd Line Beach, Madras 600001.

Sugesan & Co. Pvt. Ltd., 22, First Line Beach, Madras 600001.

CLEARING – FORWARDING – SHIPPING – WAREHOUSING AND INSURANCE AGENTS:

H. MANGALDAS AND CO.

Customs licenced Clearing, Forwarding, Shipping, Warehousing Agents, Insurance Claim Recovery Agents. Cargo Booking Agents by Air and Sea. Transport facilities available. Unaccompanied Baggages—Cargoes by AIR & SEA.

Also enlisted as approved Clearing and Warehousing Agents on the list of the Punjab & Sind Bank Ltd.

Office : **12, Nazir Bldg., Calicut St., Ballard Estate, Bombay 400 038.**

Grams : " SHIPSCLEAR ". Phones : 261302, 264216, 265427.
Telex : 5813 449023 (Godown).

West Bengal

Armen George & Co. Pvt. Ltd., 35, Ezra St., Calcutta 700001.

Blacker & Co. Pvt. Ltd., 18, Strand Rd., Calcutta 700001.

D.D.G. 'Hansa', 113, Brabourne Rd., Calcutta 700001.

Pioneer Consolidated Co. of India Ltd., 2, Clive Row, Calcutta 700001.

Traders International Mercantile Agency Pvt. Ltd., 15, Shakespeare Sarani, Calcutta 700016.

COMPUTER PROGRAMMING CONSULTANTS

Delhi

International Data Processing Co. Ltd., 77, Nehru Place, New Delhi 110019.

Maharashtra

A. F. Ferguson & Co., Express Towers, Nariman Point, Bombay 400021.

Advance Computer Services Pvt. Ltd., Poonam Chambers, Shivsagar Estate, Dr. A. Besant Rd., Bombay 400018.

Computer Aids & Systems Help, Atlas Apartments, J. M. Mehta Rd., Bombay 400006.

Creative Computer Systems Pvt. Ltd., 310, Raheja Centre, 3rd Flr., 213, Nariman Point, Bombay 400021.

Datamatics Corpn., Computer Division, State Bank Bldg., Bank St., Bombay 400023.

International Computers (I) Pvt. Ltd., Magnet House, N. Morarjee Marg, Ballard Estate, Bombay 400038.

Sum Business Consultants Pvt. Ltd., 45, Atlanta, 209, N. Point, Bombay 400021

Tata Burroughs Ltd., Manish Commercial Centre, 216-A, Dr. A.B. Road., Worli, Bombay 400025

Tamil Nadu

Electronic Computers & Business Systems, 24, East Andar St., Tiruchirapalli 620002.

Indian Institute of Business Methods, Ahad Mansion, 150A/3, Mount Rd., Madras 600002.

M. A. Ryan, Systems Development Corpn., 11-A, Casa Major Rd., Madras 600002.

Shah Wallace & Co. Ltd., Computer Services Dn., 7, Linghi Chetty St., Madras 600001.

Software Services, 23, Airlines Hotel, 177-179, Anna Salai, Madras 600002.

CONTAINER (MARINE) REPAIRERS

Dolphin Marine Enterprises, 275, Reay Road, Bombay 400010.

DEBT COLLECTORS

Commercial Centre, G.P.O. Box No. 38, Calcutta 700001.

DIVING & UNDERWATER SERVICES

Dolphin Marine Enterprises Pvt. Ltd., 275, Reay Rd., Bombay 400010.

DOMESTIC ELECTRIC APPLIANCES REPAIRERS

Escee Service Centre, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

ELECTRIC APPLIANCES REPAIRERS

Allied Electrical Engg. Co., Madanzampa Rd., Vadodara 390001.

Escee Service Centre, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

ELECTROPLATERS & GALVANIZERS

Bihar

Kumar Electroplating Works, Begana Naveli, Patna 800008

Tata Iron & Steel Co. Ltd., Jamshedpur 831001.

Delhi

Capital Electroplating Works, 2631, Roshanpura, Delhi 110006.

Kastings Pvt. Ltd., 31, Karnal Rd., New Delhi 110033.

Kumar Electroplating and Engg. Works, 1172, B. Garh Rd., Delhi 110006.

Metalite Industries, 3, Daryaganj, New Delhi 110002.

Multicolour Anodisers, D-20, East Jyotinagar, Delhi 110032.

New Fancy Electroplating Works, 1980, Lal Kuan, Delhi 110006.

Public Electroplating Works, Main Bazar, Paharganj, New Delhi 110055.

S. N. Electroplating Works, 6958, Beriwalabagh, Delhi 110006.

Gujarat

Hindustan Brown Boveri Ltd., P.O. Box No. 124, Maneja, Vadodara 391710.

Kohinoor Electro-Chemicals Industries, Plot No. 199/1, G.I.D.C., Vapi 396195.

Peshavaria Brass Parts Ind., 57, Digvijay Plot, Jamnagar 361001.

Ranjan Electricals and Brass Ind., Dwarkapuri Rd., Jamnagar 361001.

Testeels Ltd., Navdeep, Opp. Akashvani, Ashram Rd., Ahmedabad 380014.

Haryana

Amarpali Structurals Pvt. Ltd., 14/7th Milestone, Mathura Rd., Faridabad 121001.

Jindal Industries Pvt. Ltd., Delhi Rd., Model Town, Hissar 125001.

Jotindra Steel & Tubes Ltd., 14/3, Mathura Rd., Faridabad 121001.

Raunaq Malleables, 12/6, Milestone, Mathura Rd., Faridabad 121001.

Karnataka

M. Vaman Nayak & Sons, Jeppoo, Mangalore 575002.

Mysore Porcelains Ltd., P.O. Science Institute, Bangalore 560012.

Kerala

Kerala Electrical & Allied Engg. Ltd., P.O. Mamala, Cochin 682305.

West Coast Electroplating Works, Chittoor Rd., Ernakulam 682011.

Maharashtra

Anupam Industries, Satguru Nanek Ind. Estate, Unit No. 116, W. Express Highway, Goregaon (E), Bombay 400063.

Asha Electroplaters, 13, Mungekar Ind. Estate, Bombay 400063.

B.M.K. Ind., 8, M. K. Bros. Ind. Estate, Andheri-Kurla Rd., Bombay 400072.

Best Mfg. & Electroplating Works, 25, Bhandari St., Bombay 400004.

Bharat Electro Guilders, Udava Ghantali, Thane 400601.

Bharat Electroplating Ind., Shree Lakshmi Woollen Mills Estate, Haines Rd., Bombay 400011.

Bharat Elexal Ind., 135, J. Shankar Sheth Mrg., Bombay 400004.

Bieri Pvt. Ltd., Near Bus Terminus, Sion, Bombay 400022.

Bright Electroplaters, Renuka Industrial Manor, Opp. Mittal Estate, Kurla-Andheri Rd., Bombay 400059.

Brightwell Ind., Bombay Talkies Comp., Malad, Bombay 400064.

Clad Materials System, 15, Cawasji Patel St., Bombay 400001.

Delta Chemicals, Delta House, J.I. Cama Zone, Goregaon East, Bombay 400063.

Diamond Electro Guilders & Galvanizers, 39, 2nd Carpenter St., Bombay 400004.

Electric Brass Works Factory, 91, Sarang St., Bombay 400003.

Electro Nickel Products, 139, S. Vivekanand Rd., Bombay 400060.

Emcolite Electroplaters, 4, Satguru Estate, Goregaon (East), Bombay 400063.

Excelsior Electroplaters, Sun Mill Comp., Lower Parel, Bombay 400013.

Excelsior Shinewell, Near Petrol Pump, C.S.T. Rd., Bombay 400029.

Golden Electroplaters, 37, Agarwal Ind. Estate, Dahisar, Bombay 400068.

Jay Industries, 18, Ardeshir Dady St., Golpitha, Bombay 400004.

Jayant Metal Mfg. Co., 924A, Sayani Rd., Bombay 400028.

Kamani Engg. Corpn. Ltd., Lal Bahadur Shastri Mrg., Kurla, Bombay 400070.

Kohinoor Electro Guilders, Khetwadi 10th Lane, Bombay 400004.

Kwality Platers, Rambaug, S. Vivekanand Rd., Bombay 400064.

Maharashtra Anodising Works, R. Prasad Rd., Bombay 400080.

Metalshine Ind., Masrani Estate, Kurla, Bombay 400070.

Myco Ind., 210, Bajsons Inds. Estate, 40, Chakala Rd., Bombay 400069.

National Engg. Electroplating Works, Asgaraly Compd., Vakola Pipelines, Bombay 400055.

New Sun Electro Guilders & Metal Mfg. Co., 250, Bellasis Rd., Bombay 400008.

Paramount Engrs., C-2, Nand Dham Ind. Estate, Marol Maroshi Rd., Bombay 400059.

Pragati Process, B-1, Nand Dham Ind. Estate, Marol, Bombay 400059.

Precious Platers, Simpson's Compd., I. B. Patel Rd., Bombay 400063.

Precision Electroplaters, Nand Bhuvan Indl. Estate, Mahakali Rd., Andheri East, Bombay 400093.

Radiant Electroplaters, 39, 2nd Carpenter St., Khetwadi Main Road., Bombay 400004.

Saif Electroplating & Brass Works, 87-A, Love Lane, Bombay 400010.

ELECTRICAL ENGINEERS

ASEA LIMITED

Electrical engineers, contractors for supply, erection, commissioning and service of equipment for power generation, transmission and distribution, protective relays and systems, transformers, H.V. & L.V. apparatus, industrial electronics, process industry, metallurgical industry, motors and marine equipment.

Indigenous manufacturers of protective relays control and relay panels together with accessories, HT switchgear cubicles and circuit breakers upto 24 kV, thyristor drives for speed control of motors, induction furnaces.

HQ. & Registered Office :

ASEA House, Goa Street, Ballard Estate, Bombay 400 038.
Phone : 264181. Grams : " ASEAFILIAL "
Telex : (011) 4131 ASBO IN.

Managing Director : Tommie Bergman
General Manager Finance & Secretary : K. J. Shah
General Manager Marketing & Sales : R. K. Kamat
General Manager Production : S. T. Patel
General Manager Relay Division : L. Matele

Branches :

- 52/4/1, Ballygunge Circular Road, Calcutta 700 019
  Phone : 482323. Grams : " ASEAFILIAL "
  Telex : (021) 7194 ASCL IN.
- 301, Bhandari House, 91, Nehru Place, New Delhi 110 019.
  Phone : 681466. Grams : " ASEAFILIAL "
  Telex : (031) 4787 ASND IN.

Saifee Electroplating Works, 139, I. Rahimtullah Rd., Bombay 400003.

Selfshine Ind., Saki Quarry Rd., Bombay 400072.

Sen Harvic, 37, Abdul Rehman St., Bombay 400003.

Skylite Ind., 5, Parmar Ind. Estate, Bail Bazar, Bombay 400070.

Sonak Ind., 37-A, Doctors Comp., Parel Cross Rd., Chinchpokli, Bombay 400012.

Star Delta Electroplaters, 135-A, M. Azad Rd., Bombay 400008.

Star Electroplating Works, 26, M. K. Ind. Estate, Bombay 400072.

Steelite Engg. Corpn., 8, Nanabhai Lane, Bombay 400001.

Sunrise Electroplaters, 96, Suryodaya Mill Compd., Tardeo Rd., Bombay 400034.

Sunshine Ind., Udyog Bhavan, 250-D, Worli, Bombay 400025.

Tri Brite Hard Chrome Platers Pvt. Ltd., A-23, Giriraj Ind. Estate, Mahakali Caves Rd., Chakala, Andheri East, Bombay 400093.

Vaid Engg. & Steel Works Pvt. Ltd., 259, Kalbadevi Rd., Bombay 400002.

Zaveri Bros., 8, Kitchen Garden Lane, Bombay 400002.

Punjab

Mohan Electroplating Works, Gile Rd., Ludhiana 141001.

Rajasthan

Man Structurals Ltd., P.O. Box 189, Jaipur 302001.

Shree Mundhra Metal Works, Industrial Area, Bikaner 334001.

Tamil Nadu

India Cements Ltd., Foundry Division, Nandambakkam, Madras 600089.

Modern Electroplaters, 28, Alandur Rd., Madras 600015.

Salem Automech, Salem-Omalur Trunk Rd., Jagir Ammapalayam, Salem 636005.

Seba Electrochem Pvt. Ltd., 33, Main Rd., Velacherry, Madras 600042.

Seshasayee Industries Ltd., P. O. Vadalur 607303. South Arcot Dist.

Tansi Structural & Galvanizing Works, Mettur Dam 636401. Salem Dist.

West Bengal

Ahuja & Co., 82, Chetla Rd., Calcutta 700027.

Allied Anodisers, 25, R. M. Dutt Garden Lane, Calcutta 700010.

Calcutta Anodising Works, 38, Strand Rd., Calcutta 700001.

City Engg. Co., 13, Raja Woodmunt St., Calcutta 700001.

EMC Steel Ltd., 3-A, Auckland Place, Calcutta 700017.

Gobindo Sheet Metal Works & Foundry, 74, Narkeldanga Main Rd., Calcutta 700011.

Gopal & Kumar Pvt. Ltd., 10A, Harrington St., Calcutta 700016.

Indian Iron & Steel Co. Ltd., Burnpur Works, P.O. Burnpur 713325.

Indo-Japan Steels Ltd., 11, Government Place (East), Calcutta 700001.

J. Roy Electroplating Works, 47, R. Bahadur Rd., Calcutta 700034.

Kolay Iron & Steel Co., 36, Strand Rd., Calcutta 700001.

Modern Malleable Casting Works, 207, Maharshi Debendra Rd., Calcutta 700007.

National Galvanizing Co. Pvt. Ltd., 66, Barrackpore Trunk Rd., Calcutta 700058.

New Economic Electroplating Co., 10, Mirza Ghalib St., Calcutta 700016.

Pioneer Electroplating Works, 114, Princep St., Calcutta 700013.

Sij Ind., 113-B, M. Katra Rd., Calcutta 700007.

Sinha Electroplaters, 77, Lenin Sarani, Calcutta 700013

Standard Electroplating Works, 11A & B, Lenin Sarani, Calcutta 700013

Swan Anodisers & Engrs. Pvt. Ltd., 56-1, B.R.B.B. Rd., Calcutta 700001.

Unique Electroplating Works, 75, Middle Rd., Calcutta 700014.

ENGINEERS—CONSULTING & CONTRACTORS

Bihar

Central Engg. & Design Bureau, Hindustan Steel Ltd., Ranchi 834002.

Holtec Engrs. Pvt. Ltd., Maurya Centre, Fraser Rd., Patna 800001.

McNally Bird Engg. Co. Ltd., Kumardhubi 828203, Dhanbad Dist.

Delhi

Bhargava Consulting & Design Engrs. Pvt. Ltd., 210, Ansal Bhavan, K. Gandhi Mrg., New Delhi 110001.

Chemical & Metallurgical Design Co. Pvt. Ltd., Vishal Bhawan, 95, Nehru Place, New Delhi 110024.

Consulting Engg. Services (India) Pvt. Ltd., M/124, Greater Kailash, New Delhi 110048.

Desein (New Delhi) Pvt. Ltd., Desein House, Greater Kailash II, New Delhi 110048.

Engineers (I) Ltd., PTI Bldg., 4, Parliament St., New Delhi 110001.

Indian Consortium for Power Projects Pvt. Ltd., E8/11, Vasant Vihar, New Delhi 110057.

Industrial Development Services Pvt. Ltd., Ml, Kanchan Junga Bldg., New Delhi 110001.

Lurgi India Co. Pvt. Ltd., Hindustan Times Bldg., K. Gandhi Mrg., New Delhi 110001.

SBP Consultants & Engrs., SBP Bldg., 4/45, Roopnagar, Delhi 110007.

Turcon India Pvt. Ltd., M-37, Greater Kailash-I, New Delhi 110048.

ENGINEERING CONSTRUCTION CORPORATION LIMITED
(A wholly owned subsidiary of Larsen & Toubro Limited)

CIVIL, MECHANICAL, ELECTRICAL ENGINEERS and CONSTRUCTORS

REGISTERED OFFICE :
L&T House, Narottam Morarjee Marg, Ballard Estate,
P.O. Box 278, Bombay 400 038.
Phone : 268181. Grams : " CIVICON ", " LARSENBRO "
Telex : 3694, 2246 and 3528.

MANAGING DIRECTOR'S OFFICE :

MADRAS
Mount-Poonamallee Road,
Nandambakkam P. O.,
P.O. Box No. 979, Madras 600 089.
Phone : 432741 (7 lines).
Grams : " CIVICON ".
Telex : 041-7157.

BOMBAY
Maker Towers (6th Floor),
" E " Block, Cuffe Parade,
Bombay 400 005.
Phone : 216711.
Grams : " CIVICON "
Telex : 011-3694.

REGIONAL OFFICES :

BOMBAY
Maker Towers (6th Floor),
" E " Block, Cuffe Parade,
BOMBAY 400 005.
Phone : 216711.
Grams : " CIVICON
Telex : 011-3694.

DELHI
P.O. Box No. 6223,
32, Shivaji Marg,
NEW DELHI 110 015.
Phone : 534945.
Grams : " LARSENBRO "
Telex : 031-2207 & 2327.

MADRAS
Mount Poonamallee Road,
Nandambakkam, P.O.,
P. O. Box No. 979,
MADRAS 600 089.
Phone : 432741.
Grams : " CIVICON ".
Telex : 041-7157.

CALCUTTA
3-B, Shakespeare Sarani,
P.O. Box No. 9010,
CALCUTTA 700 071.
Phone : 447561.
Grams : " LARSENBRO "
Telex : 021-2574.

Directors : Chairman : N. M. Desai, H. Holck-Larsen, S. K. Toubro, B. G. N. Patel, K. S. S. Mani, S. R. R. Subramaniam.

Managing Director : C. R. Ramakrishnan.

INDIAN STEELWORKS CONSTRUCTION

ELECTRICAL, MECHANICAL AND
STRUCTURAL ENGINEERS.

Office & Factory : **ISCON HOUSE**
BURDWAN ROAD
SILIGURI 734 405
WEST BENGAL

●

OUR SERVICES INCLUDE :

- **DESIGNING**
- **FABRICATION**
- **INSTALLATION**
- **ERECTION & COMMISSIONING**

CALL US FOR :

- **HYDEL PENSTOCK & WATER CONDUCTOR SYSTEM**
- **STEEL TUBULAR STRUCTURES**
- **LIGHT, MEDIUM & HEAVY STRUCTURAL STEEL WORKS**
- **FLEXIBLE COUPLINGS & EXPANSION JOINTS FOR PIPE LINES**
- **PIPE SPECIALS, STEEL DOORS AND WINDOWS etc.**
- **STEEL SHUTTERING FOR TUNNEL, CUT & COVER**

●

PHONE : 21534 — GRAM : " ISCON "

Water & Power Development Consultancy Service (I) Ltd., Kailash, K. Gandhi Mrg., New Delhi 110001.

Goa

Chowgule & Co. Pvt. Ltd., Mormugao Harbour 403803.

Gujarat

Argon Engineers, Mehta Estate, Khadia Cross Rd., Ahmedabad 380001.

Maxwell Services Corpn., 1, Rajendra Society, Vadodara 390011.

Karnataka

Ibcon Pvt. Ltd., 24, Lavelle Rd., Bangalore 560001.

Management & Industrial Consultants Pvt. Ltd., 57, 17th Cross, Malleswaram, Bangalore 560003.

Kerala

Eddy Current Controls (I) Ltd., Eddypuram, Chalakudy 680307.

Fertilisers & Chemicals Travancore Ltd., (FACT Engg. & Design Organisation), P.O. Udyogmandal 683501.

Maharashtra

Ador Consultants, 72, Mittal Chambers, N. Point, Bombay 400021.

Agrima Project Engg. & Consultancy Services Ltd., N.K.M. International House, 178, Backbay Reclamation, Bombay 400020.

Asian Constructions (India), New Excelsior Bldg., Flr. No. 6A, Bastion Wallace Rd. Jn., Bombay 400001.

Associated Ind. & Management Services, 42, V. Nariman Rd., Bombay 400001.

Beacons Pvt. Ltd., United Bank of India Bldg., Sir P. Mehta Rd., Bombay 400001.

Beam Services, Colaba Chambers, 117, Wodehouse Rd., Bombay 400005.

Behram Wadia& Associates, 77, Koregaon Park, Pune 411001.

Birla Consultants Pvt. Ltd., Century Bhavan, Dr. A. Besant Rd., Bombay 400025.

Cimechel Engg. Co., 11, Khorshed Bldg., Sir P. M. Rd., Bombay 400001.

Consulpharma, 6, Bhaweshwar Kutir, 4th Rd., Rajawadi, Bombay 400077.

Consultech Pvt. Ltd., 32, Nicol Rd., Ballard Estate, Bombay 400038.

Dr. Ganguly & Associates, 517, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Dalal Engrs. & Consultants Pvt. Ltd., 44, M. Abdul Gaffar Rd., Worli, Bombay 400018.

Engineering Construction Corpn. Ltd., L. & T. House, N. Morarjee Mrg., Bombay 400038.

Environmental Engg. Consultants, 24, Nariman Rd., Bombay 400001.

Ghezri Eastern Ltd., Neville House, Graham Rd., Ballard Estate, Bombay 400038.

Grup Consulting Engrs. Pvt. Ltd., G. R. House, 86, M. Vasanji Rd., Bombay 400069.

Hindustan Dorr-Oliver Ltd., Dorr-Oliver House, Chakala, Andheri East, Bombay 400093.

Hira & Co., 826, Parekh Mkt., 39-J, Shankar Sheth Rd., Bombay 400004.

Ibcon Pvt. Ltd., 41, New Marine Lines, Bombay 400020.

IBMEC International, 55, Prem Court, Peddar Rd., Bombay 400026.

Industrial Consulting Bureau Pvt. Ltd., Jiji House, Raveline St., Bombay 400001.

Infin Consultants Pvt. Ltd., Jolly Bhawan No. 2, New Marine Lines, Bombay 400020

Kamani Engg. Corpn. Ltd., 32, R. Kamani Mrg., Bombay 400038.

Kirloskar Consultants Ltd., 917/19A, Shivajinagar, Fergusson College Rd., Pune 411004.

Krips Consultants, Sahas Bldg., 414/2, V. Savarkar Marg, Prabhadevi, Bombay 400025.

Loop Engg. Consultants Pvt. Ltd., Sunder Mahal, 141, N. Subash Rd., Bombay 400020.

M.M. Bilaney & Co., Commerce House, N. Master Rd., Bombay 400023.

M.N. Dastur & Co. Pvt. Ltd., Engineering Centre, 9, Mathew Rd., Bombay 400004.

Mantech Consultants, 17, Golf Links, Bombay 400052.

Moti Lal Khanna & Associates, Kothari Mansion, 3rd Flr., Opp. G.P.O., Bombay 400001.

Nelcon Engrs., 310-A, Commerce House, N. Master Rd., Bombay 400023.

Patravali & Bhagwati, Fairy Manor, 13, Rustom Sidhwa Marg, Bombay 400001.

Personnel & Productivity Services, 148, M. Gandhi Road, Bombay 400023.

R.L. Dalal & Co., 86A, Dr. A. Besant Road, Worli Naka, Bombay 400018.

Raji Chopra & Sons, Deepak Mahal, 141, N. Subhas Rd., Bombay 400020.

Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.

Shroff Technical Services Pvt. Ltd., Excel Estate, S. Vivekanand Rd., Goregaon, Bombay 400062.

Steelfab Engg. Corpn., Arun, 34, N. Dabholkar Road, Bombay 400006.

Systems, 11-B, Yusuf Bldg., Flora Fountain, Bombay 400023.

Tata Consulting Engrs., 24, Sant Tukaram Road, Carnac Road, Bombay 400009.

Windsor Engg. & Welding Works, 75-B, Clare Road, Bombay 400008.

Tamil Nadu

East Coast Constructions & Ind., 1, Moores Road, Madras 600006.

West Bengal

A.S.C. Engrs. & Consultants, 2/2A, Ho-Chi-Minh Sarani, Calcutta 700071.

Amiya Corpn., 5A, Orient Row, Calcutta 700017.

Development Consultants Pvt. Ltd., 24-B, Park Street, Calcutta 700016.

Gammon Nirmal Ltd., 19, Ballygunge Circular Road, Calcutta 700019.

Hope Johnstone & Sons, 9, Hastings St., Calcutta 700001.

Indian Steelworks Construction, Iscon House, Burdwan Rd., Siliguri 734405.

Kalinga Otto Pvt. Ltd., 10, Middleton Row, Calcutta 700016.

Koppers India Pvt. Ltd., 36, G. Chandra Ave., Calcutta 700013.

Kuljian Corpn. (I) Pvt. Ltd., 24B, Park Street, Calcutta 700016.

M.N. Dastur & Co. Pvt. Ltd., P-17, Mission Row Extn., Calcutta 700013.

Mining & Allied Machinery Corpn. Ltd., P.O. Durgapur 713210.

Primacons, 20A, Camac St., Calcutta 700016.

ENGINEERS—STRUCTURAL

Coromandel Steels Ltd., 5, Santhome High Rd., Mylapore, Madras 600004.

Indian Commerce & Ind. Co. Pvt. Ltd., 95, Broadway, Madras 600001.

Industrial Agencies Corpn., Bhawana, 422, Cadell Road, Bombay 400025.

Reunion Engg. Co. Pvt. Ltd., Amar Bldg., Sir P.M. Road, Bombay 400001.

Rockfort Inds., Unit No. B-4, Industrial Estate, Ariyamangalam, Tiruchirapalli 620010.

ENGRAVERS & DIE STAMPERS

Mankame Bros. (Engravers) Pvt. Ltd., 405, Kalbadevi Rd., Bombay 400002.

Masani & Co., Ararat, 89-C, Medows St., Bombay 400023.

EXPORTS CONSULTANTS

Delhi

Chemical & Metallurgical Design Co. Pvt. Ltd., Vishal Bhawan, 95, Nehru Place, New Delhi 110024.

Export Mktg. & Management Services P. Ltd., 902, Akash Deep, Barakhamba Rd., New Delhi 110001.

Karnataka

Ibcon Pvt. Ltd., 24, Lavelle Rd., Bangalore 560001.

Maharashtra

A.F. Ferguson & Co., Express Towers, Nariman Point, Bombay 400021.

Birla Consultants Pvt. Ltd., Century Bhawan, Dr. A. Besant Rd., Bombay 400025.

Dalal Consultants & Engrs. Pvt. Ltd., 44, Maulana Abdul Gaffar Road, Worli, Bombay 400018.

Gherzi Eastern Ltd., Neville House, Graham Rd., Ballard Estate, Bombay 400038.

Kirloskar Consultants Ltd., 917/19-A, Shivaji Nagar, Fergusson College Rd., Pune 411004.

R.L. Dalal & Co., 86, Dr. A. Besant Rd., Worli Naka, Bombay 400018.

Tata Consultancy Services, Air India Bldg., Nariman Point, Bombay 400021.

Tamil Nadu

CIJE Sheth Agencies Pvt. Ltd., 22, N. Beach Rd., Madras 600001.

West Bengal

Development Consultants Pvt. Ltd., 24-B, Park St., Calcutta 700016.

M.N. Dastur & Co., Pvt. Ltd., P-17, Mission Row Extn., Calcutta 700013.

FINANCIERS

Commercial Credit Corpn. (1943) Pvt. Ltd., Finance House, 5-A, Patuloss Rd., Mount Rd., Madras 600002.

FUEL SAVING

South India Steam & Fuel Users' Assocn., Joint School Compound, Stephenson Rd., Perambur Barracks, Madras 600012. Free service to industries all over India in energy conservation and economic method of steam generation, utilisation & elimination of wasteful practices and in the combustion of all types of fuel. Technical advice & assistance in the selection and lay-out of suitable & efficient steam distribution, heat utilisation and condensate recovery systems and fuel utilisation, etc., etc.

GAS APPLIANCES REPAIRERS

Escee Service Centre, Shreenivas House, 98, Dattaram Lad Marg, Kalachowki, Bombay 400033.

GEOLOGICAL CONSULTANTS & PROSPECTORS

Apex Geological Services, Maker Bhavan No. III, 21, N. Marine Lines, Bombay 400020.

HARD CHROME PLATING

ChemEle Engineers, 290, Bentinck St., Calcutta 700001.

Regal Cobrites, Bombay Class Works Bldg., Balgovindas Road, Bombay 400016.

Sonak Inds., 6/22, Marol Co-op. Indl. Estate Ltd., M.V. Rd., Marol, Andheri East, Bombay 400059.

Technological Equipment Co. Pvt. Ltd., E-8-RIC, Indl. Estate No. 1, Calcutta 700035.

Tru-Brite Hard Chrome Platers Pvt. Ltd., A/23-24-25, Giriraj Indl. Estate, M. Caves Rd., Andheri East, Bombay 400093.

HEARING AIDS

Deaf Aid Centre (India), Prabhadevi Indl. Estate, Cadell Rd., Bombay 400025.

Elkon Hearing Aids, 1203, Prasad Chambers, Bombay 400004.

Hearing Aid Centre, Amzel Pvt. Ltd., Opp. Roxy Cinema, Nisser House, New Queen's Road, Bombay 400004.

Hearing Aid Centre, 164, Kodambakkam High Rd., Madras 600034.

Navjivan Hearing Centre, Navjivan Bldg. No.3, Lamington Rd. (N), Bombay 400008.

Raj Hearing Aid Centre, 19, Egmore High Rd., Madras 600008.

HEAT TREATMENT

Bagsvig, 38, Police Court Lane, Bombay 400001.

Champion Engg. Works Pvt. Ltd., S.V. Rd., Goregaon West, Bombay 400062.

Forging Products of India, Indian Metal Forging & Rolling Mills Compd., LBS Marg, Vikhroli, Bombay 400079.

G.R. Grindspares India Pvt. Ltd., A-18, Wagle Ind. Estate, Rd. No. 15, Thane 400604.

Gears & Pinions Pvt. Ltd., Whitefield Rd., Mahadevapuram, Bangalore 560048.

Heatchem Industries, B-73, Peenya Indl. Estate, Bangalore 560058.

Heatreaters and Engineers, Ashok Silk Mills Lane, Ghatkopar, Bombay 400086.

Hindustan Malleables & Forgings Ltd., Jalan Nagar, P.O. Bhuli 828104, Dhanbad Dist. (Bihar).

Indrajit Industries, 10, Kurla Industrial Estate, Ghatkopar, Bombay 400086.

Inductotherm Inds. Inc., Akhtar Manzil, 8, Umar Khadi Crosslane, Bombay 400009.

Isha Heat Treatment, Agra Rd., Vikhroli, Bombay 400083.

Jijo Inds., 29, Pratap Singh Ind. Estate, LBS Marg, Bombay 400078.

Micro Steel Treatments, B-79, Rd. No. 21, Wagle Ind. Estate, Thane 400604.

Murlimal Shrikishandas & Co., Pvt. Ltd., 37-A, LBS Mrg., Bhandup, Bombay 400078.

Nitriders, 529, Lavind Kapur, Old Bombay Agra Rd., Thane 400601.

Pioneer Inds., S.V. Road, Chitalsar, Manpada, Thane 400607.

Precision Moulds & Dies, E-24, Conn. Place, New Delhi 110001.

Precision Thermo Process Ind., B-12, Nanddham Ind. Estate, Marol Rd., Andheri East, Bombay 400059.

Pyro Metallurgical Services, Type 11-16, Instronics Campus, Thiruvanmiyur, Madras 600041.

Sahu Metal Engrs., Sadan, 40/C, Off Pedder Rd., Bombay 400026.

Sahyadri Udyog, Preet Chambers, 36, Poona Bombay Rd., Pune 411003.

Siyaram-Kumar Engg. Works Pvt. Ltd., 45, Shivaji Marg, New Delhi 110015.

Thermo Process Ind., B12, Nanddham Indl. Estate, Marol Rd., Andheri East, Bombay 400093.

Time Furnace Foundry Equipment Services, R-13, Jagdish Mkt., Hyderabad 500001.

Treatwel Inds., A-5, Giriraj Ind. Estate, Mahakali Rd., Chakala, Andheri East, Bombay 400093.

Trio International, 178, C.S.T. Rd., Kalina, Bombay 400098.

United Engg. Works, Ashok Silk Mill Lane, Off L.B.S. Marg, Ghatkopar, Bombay 400086.

Vel Electronics, 4A Majithia Indl. Estate, Waman T. Patel Marg, Deonar, Bombay 400088.

Yatin Industronics, 206, Gokul, 80-A, Baroda Street, Bombay 400009.

HOSPITALS—BOMBAY

Acworth Leprosy Hospital, Wadala, Bombay 400031.

B. Nanavati Hospital, S. Vivekanand Rd., Vile Parle, Bombay 400056.

B.C.J. Santa Cruz Gen. Hospital, S. Vivekanand Rd., Bombay 400054.

B.Y.L. Nair Hospital, Nr. Bombay Central Rly. Stn., Bombay 400008.

Bai Jerbai Wadia Hospital for Children, Acharya Donde Marg, Bombay 400012.

Bhatia General Hospital, Chikalwadi, J. Dadajee Rd., Bombay 400007.

Bombay Port Trust Hospital, Antop Hill Rd., Bombay 400031.

Breach Candy Hospital & Nursing Home, 60, B. Desai Road, Bombay 400026.

Cama & Albless Hospital, Mahapalika Marg, Bombay 400001.

Charak Clinic (Dr. Cooper's), 21, Karve Road, Bombay 400004.

Children's Orthopaedic Hospital, Haji Ali Park, K. Khade Marg, Bombay 400011.

Dharamdas Samaldas Kothari Public Health Centre, Kamala Kutir, C.P. Tank Rd., Bombay 400004.

Dr. Bacha's Memorial Belle-vue Nursing Home, La Citadelle, M. Karve Rd., Bombay 400020.

Dr. Bhajekar Municipal Gen. Hospital, Dr. Bhajekar St., Bombay 400004.

Dr. R.N. Cooper Mun. Gen. Hospital, Juhu, Vile Parle (W), Bombay 400056.

Eye Hospital, 375, Dr. D. Naoroji Rd., Bombay 400001.

G.T. Hospital, Tilak Road, Bombay 400001.

Group of T.B. Hospitals, Sewri, Bombay 400015.

Habib Hospital & Rehmethai Maternity Home, 125, Jail Rd. (E), Bombay 400009.

Haji Bachooali Free Ophthalmic Hospital, K. B. J. Merwanji St., Bombay 400012.

J.J. Group of Hospitals, J.J. Hosp. Comp., Bombay 400012.

Jaslok Hospital, 15G, Deshmukh Marg, Bombay 400026.

Jerbai Wadia Hospital for Children, King Edward Road, Bombay 400012.

K.B. Bhabha Hospital, Bandra, Bombay 400050.

K.B. Bhabha Hospital, Kurla, Bombay 400070.

K.E.M. Hospital, King Edward Road, Bombay 400012.

Kasturba Hospital, Sane Guruji Marg, Bombay 400011.

Lokmanya Tilak Mun. Gen. Hospital, Sion, Bombay 400022.

Mahatma Gandhi Memorial Hospital, S. S. Rau Road, Bombay 400012.

Mansadevi Tulsiram Mun. Gen. Hospital, Mulund, Bombay 400080.

Mental Hospital, Thane 400604.

Mother & Child Hospital, Gita Bldg., Ramabai Road, Bombay 400007.

Municipal Eye Hospital, Kamathipura, Bombay 400008.

Municipal General Hospital, Rajawadi, Ghatkopar, Bombay 400077.

N.S. General Hospital, Thane 400604.

Nowrojee Wadia Maternity Hospital, King Edward Road, Bombay 400012

New Hospital for Women, M. Parmanand Marg, Bombay 400004.

Osteopathic Clinic, Dunkeld, J.M. Mehta Road, Bombay 400006.

Petit Bomanjee Dinshaw Parsee Gen. Hospital, B. Desai Road, Bombay 400026.

Petit Sakarbai Dinsha Hospital for Animals, S.S. Rau Road, Bombay 400012.

Radhibai Watumull Sanatorium, 120, Savarkar Marg, Bombay 400016.

Ram Kunvar Charitable Xray Inst., Dnayaneshwar Mandir Road, Bombay 400002.

S.K. Patil Arogya Dham, Daftary Road, Bombay 400064.

Saifee Hospital, 15, Karve Road, Bombay 400004.

St. Georges Hospital, P. D'Mello Road, Bombay 400001.

Seth A.J. Bankerbihari Mun. E.N.T. Hospital, Napier Road, Bombay 400001.

Sir Hurkisondas Nurrotumdas Hospital, Prarthnasamaj, R.M. Roy Rd., Bombay 400004.

Suchak's Maternity & General Hospital, Dr. Mrs. Manchubhai Road, Bombay 400064.

Tata Memorial Hospital, Hospital Ave., Bombay 400012.

HOSPITALS—CALCUTTA

Balananda Brahmachari Sabayatan, 105/2, Raja Dinendra St., Calcutta 700006.

Behala Hospital, 455, Diamond Harbour Rd., Calcutta 700034.

Calcutta Chest Hospital, 84, Acharya J. C. Bose Road, Calcutta 700014.

Calcutta Gujarati Dawakhana, 8, Radha Bazar Lane, Calcutta 700001.

Calcutta Hospitals & Medical Research Institute, 7/2, D.H. Road, Calcutta 700027.

Calcutta Voluntary Hospital, 145A, S. Bose Rd., Calcutta 700026.

Dr. R. Ahmed Dental College & Hospital, 114, Lower Circular Road, Calcutta 700014.

Dum Dum Municipal Maternity Hospital, Dum Dum, Calcutta 700028.

Imambara Sadar Hospital, Chinsurah, Hooghly.

Kumup Sankar Ray T. B. Hospital, Jadavpur, Calcutta 700032.

M.N. Chatterjee Memorial Eye Hospital, 295/1, Acharya P. Chander Road, Calcutta 700009.

Marwari Relief Society Hospital, 392, U. Chitpur Road, Calcutta 700007.

Matri Mangal Pratisthan, 51, U. Chitpur Road, Calcutta 700007.

Mohananda Brahmachari Sebayatan, 22A, Shib Kristo Daw Lane, Calcutta 700011.

Nilratan Sirkar Medical College, 138, Lower Circular Road, Calcutta 700017.

North Howrah Hospital, 22, Guha Road, Ghusuri, Howrah.

Paschim Banga Samaj Seva Samity, Baranagar Hospital, 282, Madjid Bari Lane, Calcutta 700035.

Shri Lakshminarayan Trust Maternity Home & Hospital, 4, Justice C. Madhab Road, Calcutta 700020.

Sree Balaram Seva Mandir, Khardah, 24 Parganas.

Sri Balananda Brahmachari Matri Sevasadan, 455, Diamond Harbour Road, Calcutta 700034.

HOSPITALS—DELHI

Agarwal's Eye Institute, 15, Darya Ganj, New Delhi 110002.

All India Blind Relief Society, F2, Lajpat Nagar, New Delhi 110024.

Anhals General Nursing Home, E. Park Road, New Delhi 110005.

Aryavarta Polio Ashram, Aryavarta Bhavan, 79E, Kirti Nagar, New Delhi 110015.

Ayurvedic & Unani Tibbia Coll. Hospital, Karol Bagh, New Delhi 110005.
Balak Ram Hospital, 130, Timarpur, New Delhi 110007.
Banerji Nursing Home, Ansari Road, 23, Darya Ganj, New Delhi 110002.
Cantt. General Hospital, Delhi Cantt. 110010.
Charak Clinic, Ansari Road, Darya Ganj, New Delhi 110002.
Chawla Hospital, Bara Tooti, Sadar Bazar, New Delhi 110006.
Children's Clinic, B64, Defence Colony, New Delhi 110003.
Delhi Child Health Centre, Fountain View, B. Ram Road, 24, Darya Ganj, New Delhi 110002.
Delhi Clinic Maternity & Surgical Nursing Home, 119E, Kamla Nagar, New Delhi 110007.
Delhi Maternity Hospital, Sadhu V. Marg, New Delhi 110005.
Delhi Mental Health Clinic, F67, Bhagat Singh Mkt., New Delhi 110001.
Delhi Nursing & Maternity Home, 1, Ansari Rd., Darya Ganj, New Delhi 110002.
Deshraj Maternity Hospital, 77, Darya Ganj, New Delhi 110002.
Diwanchand Awal Nursing Home, 2, Jain Mandir Rd., New Delhi 110001.
Dr. Bhatia's Nursing Home, 19B, Ansari Rd., Delhi 110006.
Dr. Joshi's Pvt. Hospital, Krishna Lodge, New Delhi 110005.
Dr. Kedarnath Sharma's Nursing Home, 1, Doctor's Lane, New Delhi 110001.
Dr. Luthra's Hospital, 15A/14, Ajmal Khan Rd., Karol Bagh, New Delhi 110005.
Dr. Mallick's Maternity & Nursing Home, F4/2, M. Town, New Delhi 110009.
Dr. Oberai's Sanjiwan Hospital, 2290, A. Samaj Rd., New Delhi 110005.
Dr. Sen's Nursing Home, Tilak Bridge, New Delhi 110001.
Dr. Sharma's Nature Cure Hospital, Opp. Masjid Dispensary, Delhi 110006.
Dr. Sharma's Nursing Home, A19, G. Kailash, New Delhi 110048.
Dr. Soni's Clinic, B26, NDSE, Part II, New Delhi 110049.
Dr. Talwar's Nursing Home, 11/5B, Sadhu V. Marg, New Delhi 110005.
Dr. Vohra's Nursing Home, Rajouri Garden, New Delhi 110027.
Ear, Nose & Throat Clinic, C148, Defence Colony, New Delhi 110003.
Family Clinic & Maternity Home, 2286, Gurudwara Rd., Karol Bagh, New Delhi 110005.
Govind Ballabh Pant Hospital, J. L. Nehru Marg, New Delhi 110001.
Hamdard Research Clinic & Nursing Home, 2/3A, A. Ali Rd., New Delhi 110001.
Hemraj Jain Hospital, Bara Tooti, Delhi 110006.
Hemraj Jain Nursing Home, P. Dhiraj, Delhi 110006.
Hindu Rao Hospital, Subzi Mandi, New Delhi 110007.
Hospital for Mental Diseases, Shahdara, Delhi 110032.
Infectious Diseases Hospital, Kingsway, New Delhi 110009.
Irwin Hospital, New Delhi 110001.
Jeewan Hospital, Jeewan Nagar, New Delhi 110014.
Jeewan Hospital Nursing Home, 67/1, Rohtak Rd., New Delhi 110005.
Jeewan Nursing Home, 2, Sadhu V. Marg, New Delhi 110005.
Kalavati Saran Children Hospital, Bgla. Sabh Marg, New Delhi 110001.
Kingsway Maternity Hospital, Hudson Lines, Kingsway, New Delhi 110009.
Krishna Nursing Home, 23, Khan Market, New Delhi 110003.
Lady Hardinge Medical College & Hospital, P. Kuin Rd., New Delhi 110001.
Lajpat Nagar Hospital, Laj Nagar, New Delhi 110024.
Leprosy Home, Taharpur, New Delhi 110032.
Majumdar Ayurvedic Clinic, H. Qazi, New Delhi 110006.
Moolchand Kharaitiram Hospital, Laj Nagar, New Delhi 110024.
Moti Nagar Hospital, Moti Nagar, New Delhi 110015.
Mrs. Girdhari Lal Maternity Hospital, J. L. Nehru Marg, New Delhi 110001.
Nature Cure Hospital, Jawahar Nagar, New Delhi 110007.
Navjeewan Clinic, 5/15, Ajmal Khan Rd., New Delhi 110005.
New Delhi Clinical Laboratory, E28, NDSE, Part II, New Delhi 110049.
New Delhi Polyclinic, K35, Connaught Circus, New Delhi 110001.
New Delhi Tuberculosis Centre, J. L. Nehru Marg, New Delhi 110001.
Ortho Fracture Clinic, 13, N. Subash Marg, New Delhi 110006.
Orthopaedic & Trauma (Accident) Clinic, 71, Ring Rd., Laj Nagar III, New Delhi 110024.
Prem Hospital, Hari Masjid, Pahar Ganj, New Delhi 110055.
Puri Maternity & Nursing Home, 2/21, Roop Nagar, New Delhi 110007.
Rajasthan Surgical Nursing Home, Prabhat Market, New Delhi 110005.
Rajora Mission Hospital, 2906, S. R. Bazar, Delhi 110006.
Rana Nursing Home, JI/165, Rajouri Garden, New Delhi 110027.
Safdarjang Hospital, Safdarjang, New Delhi 110016.
Sahi Hospital, Mathura Rd., J. Pura, New Delhi 110014.
Sanghi's Nursing Home, C26, Green Park Extn., New Delhi 110016.
Sant Parmanand Blind Relief Mission, 18, Alipur Rd., Delhi 110006.
Sehgal's Nursing Home, B21, Kailash Colony, New Delhi 110048.
Sethi Maternity Nursing Home, 74F, Kamla Nagar, New Delhi 110007.
Shroff's Charity Eye Hospital, Darya Ganj, New Delhi 110002.
Shyam Lal Eye Hospital, Dina-ka-Talab, Malka Ganj, New Delhi 110007.
Silver Jubilee Tuberculosis Hospital, Kingsway Camp, New Delhi 110009.
Sir Gangaram Hospital, Raj Nagar, New Delhi 110060.
Sondhi Nursing Home, 82A, Kamla Nagar, New Delhi 110007.
Srivastava Nursing Home, 5/3, Roop Nagar, Delhi 110007.
St. Stephen's Hospital, Tis Hazari, Delhi 110006.
Sunder Lal Jain Charitable Eye Hospital, 26, Darya Ganj, Sadar Bazar, New Delhi 110002.
Swami Dayanand Hospital, Shahdara, New Delhi 110032.
Tilak Nagar Hospital, Tilak Nagar, New Delhi 110015.
Tirath Ram Shah Hospital & Nursing Home, Rajpur Rd., Delhi 110006.
Tuberculosis Hospital, Mehrauli, New Delhi 110030.
Verma Eye Clinic, 776C, Nr. Radhu Cinema, New Delhi 110032.
Veterinary Hospital, Qudsia Rd., Delhi 110006.
Veterinary Hospital, Tis Hazari, 110006.
Victoria Zanana Hospital, Darya Ganj, New Delhi 110002.
Willingdon Hospital, New Delhi 110001.
Worsley's Maternity Home & Clinic, 58, Darya Ganj, New Delhi 110002.

HOSPITALS—MADRAS

Arignar Anna Govt. Hosp. of Indigenous Medicine, Arumbakkam, Madras 600029.

E. S. I. Hospital, 37, Madhavakkam Tank Rd., Madras 600023.

Govt. Chest Inst. & T.B. Demo. & Trg. Centre, Spur Tank Rd., Madras 600031.

Govt. General Hospital, L. G. Nagar Rd., Madras 600002.

Govt. Hospital for Women & Children, Egmore, Madras 600008.

Govt. Kasturba Gandhi Hospital for Women & Children, Madras 600005.

Govt. Kilpauk Medical College & Hosp., P. H. Rd., Madras 600010.

Govt. Royapettah Hospital, Madras 600014.

Govt. T. B. Sanatorium, Tambaram, Madras 400047.

Govt. Thiruvoteswarar T. B. Hospital, Konnur High Rd., Otteri, Madras 600012.

Inst. of Child Health & Hosp. for Children, Halls Rd., Madras 600008.

Raja Sir Ramaswamy Mudaliar's Lying-In Hospital, Kamraj Rd., Madras 600013.

Silver Jubilee Children's Clinic, 1, Jeenis Rd., Madras 600015.

Stanley Hospital, Old Jail St., Madras 600001.

Tamil Nadu Govt. Ophthalmic Hospital, Egmore, Madras 600008.

Tuberculosis & Chemotherapy Centre, Spur Tank Rd., Madras 600031.

HOTELS

(See also chapter on "Tourists' Guide").

Agra (Uttar Pradesh)

Agra Hotel, 165, Cantt.

Holiday Inn.

Hotel Clarks Shiraz, 54, Taj Rd.

Lauries Hotel, M. Gandhi Rd.,

Ahmedabad (Gujarat)

Cama Hotels Ltd., Khanpur Rd.

Gokul Hotel Pvt. Ltd., Opp. Piranshah Roza, Pankore Naka.

Hotel Alankar, Opp. Rly. Station.

Hotel Capital, Mirzapur Rd.

Hotel Capri, Tilak Rd.

Hotel Karnavati Ashok, Ashram Rd.

Natraj Hotel, Ashram Rd.

Ritz Hotel, Lal Darwaja.

Ahmednagar (Maharashtra)

Ashoka Tourist Hotel, King's Rd.

Hotel Vrindavan.

Allahabad (Uttar Pradesh)

Barnetts Hotel, 14, M. Gandhi Rd.

Almora (Uttar Pradesh)

Govt. Circuit House.

Ambala Cantt. (Haryana)

Standard Hotel, Railway Rd.

Amritsar (Punjab)

Amritsar International Hotel, City Centre.

Hotel Airlines, Cooper Rd.

Hotel Broadway, M. Azad Rd.

Aurangabad (Maharashtra)

Ajanta Ambassador Hotel.

Aurangabad Hotel.

Hotel Aurangabad Ashok, Dr. R. Prasad Mrg.

Hotel Neelam.

Hotel Rama International.

Baroda (See Vadodara)

Bangalore (Karnataka)

Airlines Hotel, 4, Madras Bank Rd.

Barton Court, M. Gandhi Rd.

Berry's Hotel, 46-1, Church St., Off M. G. Rd.

Brindavan Hotel, 40, M. G. Road.

Chamundi Hotel Pvt. Ltd., The Palace.

Hotel Ashoka, Kumara Park High Grounds.

Hotel Bangalore International, 2-A, 2-B, Crescent Rd., High Grounds.

Hotel Broadway, 12, Kempe Gowda Rd.

Hotel Cauvery Continental, 11/37, Cunningham Rd.

Hotel Chalukya, 44, Race Course Rd.

Hotel Kamadhenu, Trinity Circle, M. Gandhi Rd.

Hotel Sudarshan East West, 66, Residency Rd.

Madras Woodlands Hotel, 5, Sampangi Tank Rd.

Palace Hotel, 3, Ali Askar Rd.

Shilton Hotel, St. Mark's Rd.

Victoria Hotel, 20/21, Residency Rd.

West End Hotel, Race Course Rd.

Belgaum (Karnataka)

Hotel Brindavan, Maruji Lane Corner.

Bhopal (Madhya Pradesh)

Hotel Ramsons International, Hamidia Rd.

Pagoda Hotel, Hamidia Rd.

Rajdoot Hotel, Hamidia Rd.

Bhubaneshwar (Orissa)

State Guest House.

Traveller's Lodge.

Bijapur (Karnataka)

Traveller's Lodge.

Bombay (Maharashtra)

Ambassador Hotel, Churchgate Extn.

Astoria Hotel, Churchgate Reclamation.

Centaur Hotel, Bombay Airport.

Fariyas Hotel Pvt. Ltd., Colaba.

Grand Hotel, Ballard Estate.

Holiday Inn, Turner Royal Lane, Juhu.

Hotel Airport Plaza, 70-C, Nehru Rd., V. Parle East.

Hotel Atlantic, Juhu Tara Rd.

Hotel Bombay International, Marine Drive.

Hotel Ceasars Palace, 313, Linking Rd., Khar.

Hotel Diplomat, Mereweather Rd., Colaba.

Hotel Ellora Palace, 10th Khetwadi Lane.

Hotel Heritage, Byculla.

Hotel In Phom, 148/8, Juhu Rd.

Hotel Hilltop International, Worli Sea Face.

Hotel Hiramani Dr. B. Ambedkar Rd., Lalbaug.

Hotel Horizon, Juhu Beach.

Hotel Kemp's Corner, Kemps Corner.

Hotel Lawrence, Rampart Row.

Hotel Linkway, Linking Rd., Khar.

Hotel Natraj, 135, N. Subash Rd.

Hotel Oberoi Towers, Nariman Point.

Hotel Poonam International, Shiv Sagar Estate, Worli.

Hotel President, 90, Cuffe Parade.

Hotel Rosewood, Tulsiwadi, Off Tardeo Rd.

Ritz Hotel, 199, Churchgate Reclamation.

Sea Palace Hotel, Apollo Bunder.

Shalimar Hotel, Cumballa Hill.

HOTEL
VRINDAVAN
RESTAURANT

HOTEL VRINDAVAN

PLOT NO. PI, MIDC, AHMEDNAGAR.
DIAL 13.

- ★ **Delicious Dishes**
- ★ **Hot and Cold-drinks**
- ★ **Tasty Lunch (Rice plate)**
- ★ **Prompt service**
- ★ **Reasonable Rates**

We also arrange Vegetarian Parties

BRANCH

— Welcome —

PEMRAJ SARDA COLLEGE CANTEEN

AHMEDNAGAR — Pin 414 001.
DIAL 4820.

Prop. : **V. R. Kamath.**

Planning a
business trip or Holiday to
BOMBAY . . . . .

and are you running around
in circles . . . . .

. . . . in search of a
hotel of your choice ?

FOR A 3 STAR LUXURY COMFORT

HOTEL
HIRAMANI

Dr. Babasaheb Ambedkar Rd., Lalbaug, Bombay-400 012.
Tel. 441126/7/8. Grams : Hotelmani

ARIES

In the land of the peaceful dragon . . .

We enjoy people

Welcomgroup Hotel Druk

Phuntsholing, Bhutan.

Phone : 308. Cable : "HOTELDRUK"

Offers a luxurious stay with A c rooms, telephone, channel music, departmental store, dry cleaning service, car rental service, diners club facility, video TV.

Restaurant with bar serving Bhutanese, Chinese, Indian and Continental cuisine. Banquet Hall with latest audio-visual equipment and Discotheque for recreation.

Sight seeing and cultural programmes arranged on request.

For Instant Reservations Contact

Domestic : RSM (South) Madras Tel. 89460
RSM (North) New Delhi Tel. : 674366 374127
RSM (East) Calcutta Tel. : 249566
RSM (West) Bombay Tel. : 310068

Overseas : Group Room Availability Bank, Maurya Sheraton
Diplomatic Enclave, New Delhi 110021.
Tel. : 370271. Telex 031-3247
Cable : "WELCOTED"

Sun-n-Sand, 39, Juhu Beach.
Taj Mahal Hotel, Apollo Bunder.
Taj Mahal Intercontinental, Apollo Bunder.
West End Hotel, 45. Marine Lines.

Calcutta (West Bengal)
Airport Hotel, Dum Dum.
Astoria Hotel, 6/2/3, Sudder St.
Carlton Hotel, 2, Chowringhee.
Fairlawn Hotel, 13-A, Sudder St.
Grand Hotel, 15, Chowringhee.
Great Eastern Hotel, 1, 2 & 3, Old Court House St.
Hotel Hindustan International, 235/1, Acharya J. C. Bose Rd.
Hotel Majestic, 4C, Madan St.
Hotel Minerva, 11, Ganesh Chandra Ave.
Hotel Oberoi Grand, 15, J.L. Nehru Rd.
Hotel Rutt-Deen Pvt. Ltd., 21B, London St.
Hotel West End, 25, Waterloo St.
Lytton Hotel, 14, Sudder St.
New Central Hotel, 90, Chittaranjan Ave.
New Kelinworth Hotel, 1 & 2, Little Russell St.
Oberoi Grand Hotel, 15, J. L. Nehru Rd.
Park Hotel, 17-B, Park St.
Ritz Continental Hotels Ltd., 12, J. L. Nehru Rd.
Sagar Hotel, 11, Waterloo St.
Spences Hotel, 4, Wellesley Place.
Stockman Hotel Pvt. Ltd., 12, Park St.

Cape Comorin or Kanya Kumari (Tamil Nadu)
Kerala House.

Chandigarh
Dak Bungalow.
Hotel Oberoi, Mount View, Sector 10

Cochin & Ernakulam (Kerala)
Casino Hotel, Willingdon Island.
Grand Hotel, M. Gandhi Rd., Ernakulam.
International Hotel, M. Gandhi Rd., Ernakulam.
Island Hotel Maharaj, Willingdon Island.
Malabar Hotel, Willingdon Island.
Sea Lord Hotel.

Coimbatore (Tamil Nadu)
Hotel Alankar, Sivaswamy Rd., Ramnagar.
Hotel Guru, 16/54, Raja St.
Hotel Sri Murugan.

Coonoor (Tamil Nadu)
Hampton Manor Hotel.
Ritz Hotel.

Cuttack (Orissa)
Circuit House.
Cuttack Hotel, Near Rly. Stn.
Eastern Hotel.

Dalhousie (Himachal Pradesh)
Aroma-in-Claire's Hotel.
Grand View Hotel.

Darjeeling (West Bengal)
Central Hotel, Robertson Rd.
Oberoi Mount Everest, 15, Gandhi Rd.
Windamere Hotel, Observatory Hill.

Dehra Dun (Uttar Pradesh)
Hotel Kwality, 19, Rajpur Rd.
Hotel Price, Hardware Rd.

Delhi & New Delhi
Akbar Hotel, Chanakyapuri.
Ashoka Hotel, 50-B, Chanakyapuri.
Claridges Hotel, 12, Aurangzeb Rd.
Hotel Diplomat, 9, Sardar Patel Rd.
Hotel Imperial, Janpath.
Hotel Janpath, Janpath.
Hotel Oberoi Intercontinental, Wellesley Rd.
Hotel Oberoi Maidens, 7, Alipur Rd.
Hotel President, Asaf Ali Rd.
Hotel Rajdoot, Mathura Rd.
Hotel Tourist, Near New Delhi Rly. Stn.
Lodi Hotel, Lala Lajpat Rai Marg.
Maurya Sheraton, Diplomatic Enclave
Nirula's Hotel, L Block, Connaught Circus.
Qutab Hotel, Off Sri Aurobindo Mrg.
Welcomehotel Maurya, Diplomatic Enclave.

Dhanbad (Bihar)
Hotel Skylark, Bank More.

Faridabad (Haryana)
Holiday Inn.

Gauhati (Assam)
Happy Lodge

Gaya (Bihar)
Traveller's Lodge, Bodh Gaya.

WELCOMGROUP

SeaRock

Address : Land's End, Bandra POSTAL CODE : 400 050.
Phone: 535421. Cable: "SeaRock". Telex: 011-5460.

Manager : Mr. C. S. Pantal.
Vice-President and General Manager :
Superior first class 17-storey resort hotel (1977).

Facing the sea at Bandra, 8 kms. from Airport, 3 kms. from Rly. Station, 20 kms. from downtown area.

Air-conditioned rooms with bath — 450 rooms with direct-dial phone, individual temperature controls and 4 channel music — 9 restaurants and bars including Revolving restaurant and a 24-hour coffee shop — bar — discotheque — conference and meeting rooms 20-1000 pax.

Beauty Parlour and Barber Shop, Health Club with gymnasium, sauna and facilities — billiards, tennis, squash — 1 swimming pool — 2 terrace gardens — tennis court – golf arranged — affiliated with ITC/Welcomgroup.

Rates : **Single Room — Rs. 500/- and Double Room — Rs. 600/- + SC + Tax — 17% and 15% Govt.surcharge. En pension & group rates on request.**

Credit cards : **American Express, Barclays, Carte Blanche, Diners Club, Master Charge and Visa.**

Goa
Goa Woodlands Hotel, M. L. Furtado Rd., Margao.
Hotel Fidalgo, 18, June Rd., Panaji.
Hotel Mandovi, Panaji.
Hotel Oberoi Bogmalo Beach, Panaji.
Hotel Solmar, Panaji.
Hotel Zuari, Vasco Da Gama.
Maberest Hotels Pvt. Ltd., Dr. W. Da Silva Rd., Panaji.
Tourist Hostel, Panaji.
Gopalpur on sea (Orissa)
Oberoi Palm Beach.
Gulmarg (Kashmir)
Hotel Highlands Park.
Nedous's Hotel.
Gwalior (Madhya Pradesh)
Hotel Gujri Mahal, High Court Lane, Lashkar.
Usha Kiron Palace Hotel, Jai Vilas Palace.
Hyderabad-Secunderabad (Andhra Pradesh)
Hotel Banjara Ltd., Rd. No. 13, Banjara Hills.
Hotel Dwarka, Raj Bhavan Rd.
Hotel Emerald Pvt. Ltd., Chirag Ali Lane.
Hotel Nagarjuna, Basheer Bagh.
Hotel Parklane Pvt. Ltd., Sarojini Devi Rd.
Percy's Hotel, Sardar Patel Rd.
Ritz Hotel, Hill Fort Palace.
Rock Castle Hotel, Jubilee Hills.
Sagar Mahal, Osmansagar.
Taj Mahal Hotel, King Kothi Rd.
Imphal (Manipal)
Hotel Manipur.
Indore (Madhya Pradesh)
Central Hotel, 27, M. Gandhi Rd.
Hotel Jahaz Mahal, 5, R. Tagore Marg.
Lantern Hotel, North Tukoganj.
Jabalpur (Madhya Pradesh)
Jackson's Hotel, Civil Lines.
Pagoda Hotel, 313, Napier Town.
Jaipur (Rajasthan)
Hotel Clarks Amer, J. L. Nehru Rd.
Hotel Jaipur Ashok, Jai Singh Circle, Bani Park.
Hotel Khasa, Kothi.
Hotel Khetri House.
Jai Mahal Palace Hotel, Civil Lines.
Kaiser-i-Hind Hotel, Tourist Palace.
LMB Hotel, Johari Bazar.
Rajasthan State Hotel, Mirza Ismail Rd., Khasa Kothi.
Rambagh Palace Hotel.
Jammu (Kashmir)
Hotel Asia, Nehru Mkt.
Jamshedpur (Bihar)
Tisco Hotel, 7B Rd.
Kalimpong (West Bengal)
Tourist Lodge.
Kangra Valley (Himachal Pradesh)
Civil Rest House.
Kanpur (Uttar Pradesh)
Berkeley Hotel, Civil Lines.
Sarvashri Meghdoot Hotels, Behari Lal Bldg., 37/3, The Mall.
Katrain (Himachal Pradesh)
Riverview Guest House.
Khajuraho (Madhya Pradesh)
Circuit House.
Hotel Chandela.
Khajuraho Hotel.
Tourist Bungalow.
Traveller's Lodge.
Kodaikanal (Tamil Nadu)
Carlton Hotel.
Highway Traveller's Bungalow.
Holiday Home.
Laughing Waters Guest House.
Konark (Orissa)
Traveller's Lodge.
Kulu Valley (Himachal Pradesh)
Calvert Lodge.
Civil Rest House.
Forest Rest House.
Hotel May Flower.
Traveller's Lodge.
Lonavala (Maharashtra)
Biji's Ingleside Inn.
Farivas Holiday Resort.
Lucknow Uttar Pradesh)
Carlton Hotel, Shahnajaf Rd.
Hotel Clarks Avadh, 8, M. G. Mrg.
Hotel Gulmarg, Amin-ud-daula Park.
Ludhiana (Punjab)
Gulmor Hotel, Ferozpur Rd.
Hotel Shiraz, Ferozpur Rd.
Madras (Tamil Nadu)
Adyar Gate Hotel, 65, Mowbrays Rd.
Connemara Hotel, Binny's Rd.
Geeta Hotels Pvt. Ltd., Egmore.
Hotel Blue Diamond, 598, Poonamallee High Rd.
Hotel Chola, 5, Cathedral Rd.
Hotel Claridges, 14, Thambuswamy Rd.
Hotel Dasaprakash, 50, Poonamallee High Rd.
Hotel Imperial, 1A, Gandhi Irwin Rd.
Hotel Kanchi, Commander-in-Chief Rd.
Hotel Madras International, 2/144, Mt. Rd.
Hotel Maris, 4A, Cathedral Rd.
Hotel New Victoria, No. 1, Kennet Le., Egmore.
Hotel Palm Grove, 112, Kodambakkam High Rd.
Hotel President, Edward Elliot Rd.
Hotel Safari, 222, Royapettah High Rd.
Hotel Shrilekha, 11A/5, Mount Rd.
Hotel Silver Stars Pvt. Ltd., 3, Purasawalkam High Rd.
Hotel Sornam International, 10, Stringers St., P.T.
Hotel Sudarshan International, 12-A, Montieth Rd.
Hotel Victoria, Egmore.
Madras Hotel Ashoka Pvt. Ltd., Egmore.
Savera Hotel, 69, Dr. Radhakrishna Rd.
Spencer International Hotels Ltd., 769, Anna Salai.

Taj Coromandel Hotel, 5, Nungambakkam High Rd.
Tourist Homes Pvt. Ltd., 5, G. Irwin Rd.
Woodlands Hotel, 1/23, E. Elliots Rd.

Madurai (Tamil Nadu)
Pandyan Hotel Ltd., Race Course.

Mahableshwar (Maharashtra)
Dina Hotel.
Fredrick Hotel.
Fountain Hotel.
Regal Hotel.

Manali (Himachal Pradesh)
Orchards Guest House.

Mangalore (Karnataka)
Hotel Annella, Hampankatta.
Hotel Srinivas, Ganapathy St., School Rd.
Moti Mahal, Falnir Rd.

Manipal (Karnataka)
Valley View International.

Matheran (Maharashtra)
Lords Central Hotel.
Royal Hotel.
Rugby Hotel.

Mount Abu (Rajasthan)
Bikaner Palace Hotel.

Mussoorie (Uttar Pradesh)
Connaught Castle Hotel, The Mall.
Hakman's Grand Hotel, The Mall.
Hotel Roan-Oke.
Savoy Hotel.
Sylverton Hotel, Kulri Bazar.

Mysore (Karnataka)
Hotel Highway Pvt. Ltd., New Bannimantap Extn.
Hotel Krishnaraj Sagar, Krishnaraj Sagar.
Hotel Metropole, J. Laxmibai Rd.
Hotel Mysore Dasaprakash, Gandhi Sqr. Rd.
Hotel Rajendravilas Imperial, Chamundi Hill.
Lalitha Mahal Palace Hotel.

Nagpur (Maharashtra)
Hotel Midland, Central Avenue.
Hotel Shyam, Malviya Rd., Sitabuldi.
Hotel Skylark, 119, Central Ave. Rd.
Mount Hotel, Commercial Rd.

Naini Tal (Uttar Pradesh)
Ardewell Camp.
Belvedere Hotel.
Brookhill Camp.
Grand Hotel.
Langham House.
Log Cabin, Cheena Peak.
Naini Tal Club.
Swiss Hotel.
Tourist Home.

Nasik (Maharashtra)
Green View Hotel, Trimbak Rd.
Hotel Mazda & Cafe, Agra Rd.
Hotel Rajdoot, Trimbak Rd.

Ootacamund (Tamil Nadu)
Hotel Dasaprakash.
Hotel Fernhill Imperial.
Savoy Hotel.
Tourist Bungalow.

Pahalgam (Kashmir)
Dak Bungalow.

Panchgani (Maharashtra)
Amir Hotel.
Il-Palazzo Hotel.
Prospect Hotel.

Patna (Bihar)
Hotel Maurya Clarks.
Hotel Natraj, Ashok Raj Path.
Hotel Pataliputra.
Hotel Republic, Exhibition Rd.
Hotel Satkar International, Fraser Rd.
Palace Hotel, Gandhi Maidan.

Pondicherry
Aurobindo Ghose Ashram.
Continental, Beach Rd.
Grand Hotel d' Europe, rue Suffren.

Pune (Maharashtra)
Dreamland Hotel, 14, Connaught Rd.
Hotel Ajit, 766/3, Deccan Gymkhana.
Hotel Amir, 15-A, Connaught Rd.
Hotel Blue Diamond, 11, Koregaon Rd.
Hotel Gulmohr, 15-A, Connaught Rd.
Hotel Pearl, Opp. Balgandharva Rangamandir, J. M. Rd.
Hotel Sapna, Jangli Maharaj Rd.
Hotel Shreyas, 124/B, Apte Rd.
Hotel Sutlej, 917/19-A, Shivaji Nagar.
Mobos Hotel, 20, Bund Garden Rd.
Ritz Hotel, 6, Connaught Rd.
Wellesley Hotel, 12-A, Connaught Rd.

Puri (Orissa)
Circuit House.
Forest Rest House.
P.W.D. Dak Bungalow.
South Eastern Railway Hotel.

Ranchi (Bihar)
Hotel Yuvraj.

Roorkee (Uttar Pradesh)
Polaris Hotel, Bar & Restaurant.

Sanchi (Madhya Pradesh)
Buddhist Guest House.
Circuit House.
P.W.D. Rest House.
Tourist Bungalow.

Shillong (Meghalaya)
Circuit House & Inspection Bungalow.
Pinewood Hotel.

Shivpuri (Madhya Pradesh)
Circuit House.
Dak Bungalow.
Shivpuri Hotel.

Simla (Himachal Pradesh)
Himland Hotel, Circular Rd.

Oberoi Cecil, The Mall.
Oberoi Clarkes, The Mall

Srinagar (Kashmir)
Hotel Broadway.
Hotel Oberoi Palace.
Nedous's Hotel.

Surat (Gujarat).
Apsara, Lal Darwaja.
Hotel Ashima, Opp. Rly. Stn.
Tex-Palazzo Hotel, Ring Rd.

Tirupati (Andhra Pradesh)
Hotel Urvashi, Renigunta Rd.
Hotel Vikram, 207, T. P. Area.

Trichur (Kerala)
Tourist Bungalow.

Trivandrum (Kerala)
Hotel Belair, Vellayani.
Hotel Tara.
Mascot Hotel.

Udaipur (Rajasthan)
Garden Hotel and Motel.
Lake Palace Hotel.
Laxmi Vilas Palace Hotel.
Shikarbadi Hotel.
State Hotel.

Vadodara (Gujarat)
Express Hotel, R. C. Dutt Rd.
Green Hotel, Race Course Rd.
Utsav Hotel Pvt. Ltd., Navrang Cinema Compound.

Varanasi (Uttar Pradesh)
Benaras Hotels Pvt. Ltd., Fort, Ramnagar.
Clarks Hotel.
Parade Kothi.
The Mall.
Tourist Bungalow.

Vijayawada (Andhra Pradesh)
Hotel Khandari International, Labbipet.
Hotel Manorama, Bunder Rd.
Hotel Nataraj, Congress Office Rd.
Sri Durga Bhavan, Near R.T.C. Bus Stand, Elluru Rd.
Welcome Hotel, Sumathi Bldgs., Besant Rd., Gandhi Nagar.

Visakhapatnam (Andhra Pradesh)
Dolphin Hotels Ltd.
Hotel Apsara, 6/134, Waltair Main Rd.
Hotel Ooty, Dabagardens.
Hotel Poorna, Poorna Bldgs., Main Rd.
Hotel Vikram, 75 Feet Rd.
Marina Hotel, Beach Rd.
Sun-n-Sea, Beach Rd.

(See chapter on State Association for a State-wise classification of Hotels and Restaurants Associations).

INDENTING AGENTS

G. Chemie Internationa, Vruj Bhavan, Sardar V.P. Rd., Bombay 400004.

Kaypee Sales Union, Nanabhoy Mansion (2nd Floor), Sir P.M. Rd., Bombay 400001.

INDUSTRIAL & MARKETING CONSULTANTS

Bee Gee Consultants Pvt. Ltd., 164, Atanta, 209, N. Point, Bombay 400021.

Boolani Engg. Corpn., 402, V. Savarkar Rd., Prabhadevi, Indl. Estate, Bombay 400025.

Chemiequip Process & Engg. Consultance Services Pvt. Ltd., 306, Green House, Green St., Bombay 400023.

Commander V.S.P. Mudaliar, 47, East Abiramapuram, Mylapore, Madras 600004.

Commercial & Industrial Services, E-7, Gokhale Marg, Jaipur 302001.

CPA Consultancy Services Pvt. Ltd., 11/1A, Sarojini Naidu Sarani, Calcutta 700018.

Creative Consultants, G.P.O. Box 484, Bombay 400001.

Creative Mktg. Consultants Services Pvt. Ltd., 21, Atlanta, N. Point, Bombay 400021.

Dalal Consultants & Engrs. Pvt. Ltd., 44, Maulana Abdul Gaffar Rd., Worli, Bombay 400018.

Decom Marketing Pvt. Ltd., Post Box 1340, Bombay 400038.

Delta Enterprises, 608, Churchgate Chambers, New Marine Lines, Bombay 400020.

Digitron Consultants, Post Box 6554, Bombay 400018.

Dr. R.M. Shah & Associates, 613, Churchgate Chambers, 5, New Marine Lines, Bombay 400020.

Field Force & Marketing Associates, 18, Fountain Plaza, Pantheon Rd., Madras 600008.

Holtec Engrs. Pvt. Ltd., B/62, Safdarjang Enclave, New Delhi 110016.

Ibcon Pvt. Ltd., Merchant Chambers, 41, New Marine Lines, Bombay 400020.

Industrial & Agricultural Consultants, 5, Sardambal St., Gokulam Colony, Madras 600017.

Industrial Consultants (India), 18/34, Shaktinagar, Delhi 110007.

Integrated Consultants Pvt. Ltd., No. 12, Davis Road, Bangalore 560005.

Industrial Consulting Bureau Ltd., Jiji House, Raveline St., Bombay 400001.

Industrial Consulting Bureau Ltd., 8A, Greames Rd., Madras 600006.

Iteng Engg. Pvt. Ltd., Aban House, 6th Flr., 25, Ropewalk St., Bombay 400023.

Kirloskar Consultants Ltd., 917/19A, Shivajinagar, Fergusson College Rd., Pune 411004.

Maini Industrial Consultants, 12, Rajmahal Vilas Extn., Bangalore 560006.

Margadarsi Marketing Pvt. Ltd., Eenadu Compd., Somajiguda, Hyderabad 500004.

Marketing, Consultants & Agencies Ltd., 36, Cunningham Rd., Bangalore 560052.

Marketing Group, C/o B. K. Parwani, 10, Jai Tirath Mansion, Barrack Rd., Bombay 400020.

Mercantile Information & Reference Agency, 103/104, B. Neelambuj, Kamal Apartments, Shankar Lane, Kandivli West, Bombay 400067.

Plywood & Industrial Consultants Pvt. Ltd., Makum Rd., Tinsukia 786125. (Assam).

Rosh-Nee Associates, Post Box 16681, Bombay 400050.

Shah Industrial Consultants, B-16/18, Noble Chambers, Ghogha St., Bombay 400001.

Swan Marketing Pvt. Ltd., 12-B, Lord Sinha Rd., Calcutta 700071.

Tata Consultancy Services, Air India Bldg., Nariman Point, Bombay 400021.

M/s. BEE GEE CONSULTANTS PRIVATE LIMITED

164, Atlanta, 16th Floor, 209, Nariman Point,
Bombay 400 021.

◆

We specialise in Industrial Consultancy and Industrial Finance.

However we offer complete range of services required for project management right from conception of project idea till commencement of commercial production. We also assist our industrial clients in entering into market and establish on sound footing.

Our major divisions are

Small Scale Industrial and Financial Service Cell

Projects Management and Finance Division
(for medium and large industries)

Turnkey Projects Division

Personnel Guide
(*for Guidance and Assistance in selecting appropriate personnel — Technical and Managerial — for our industrial clients*)

WHAT DO YOU NEED TO START YOUR OWN PLASTIC MANUFACTURING UNIT?

GUIDANCE FOR SECURING LOANS

TECHNICAL ADVICE

INSTALLATION OF UNIT

PROJECT REPORT

SKILLED PERSONNEL

BEC can help you in many ways

Write to **BEC** *today for assistance*

BOOLANI ENGINEERING CORPORATION
402, Veer Savarkar Rd., Prabhadevi
Industrial Estate, Bombay-400 025.
Phs: 4222826 & 4222790
Gram: BECOPLAST.
Branch: 288, Linghi Chetty St.,
Madras-600 001.
Ph: 24184 Gram: BOOLANIENG

MAKHIJA

- THERMOPLASTIC EXTRUDERS
- SEMI/AUTOMATIC INJECTION MOULDING MACHINE
- STRAND PELLETIZER
- STAMPING PRESS
- H/O INJECTION MOULDING MACHINE
- H/O BLOW MOULDING MACHINE
- SCRAP GRINDER

ITENG ENGINEERING PRIVATE LIMITED

Aban House, 6th Floor, 25, Ropewalk Street,
Bombay 400 023.

Cable : 'ITENG'. Telex : 011-5823 ITEN-IN. Phone : 243954.

Branches at : CALCUTTA, MADRAS, BANGALORE, DELHI, ALLAHABAD.

- Inspection of Raw Materials, Manufactured Goods and Equipments, Complete Industrial Plants, Power Generating and Transmission Equipment, Etc.
- Quality Assurance Auditors to Renowned Indian Export Houses.
- Destructive and Non-destructive Testing of Materials, Radiography, Metallurgical Investigations etc. Our Laboratories are recognised by I.S.I.
- Valuation of Moveable and Immoveable Properties, Estate Development Consultants, Recognised by Nationalized Banks and Important Industrial Houses as Valuers.
- Agents in India of several World Renowned Consultants — Robert W. Hunt Company, U.S.A.; International Inspection Company, Japan; Societe Generale Pour L'Industrie, Switzerland; Commonwealth Associates, Inc., U.S.A.; Electrobel, Belgium; Acres International, Canada; Kennedy & Donkin, U.K., SWECO, Sweden; Balfour Beatty; Harza Engineering, U.S.A.; ELC-Electro-consult, Italy; E.P.D.C., U.K.; E.P.D.C. International, Japan.

J. D. DAROGA,
C Eng., MSc (Eng.), FIE, FICE, FIMechE, FRSH,
FIPHE, DIC, FIProdE, FBIM, FIV, FIQA,
CHAIRMAN

Tiam House Services Pvt. Ltd., 11/12, N. Beach Rd., Madras 600001.

(Also see Management Consultants in this list.)

INSULATION CONTRACTORS

Exelite Insulations Pvt. Ltd., 108, Worli Sea Face Rd., Bombay 400018.

Hightone Insulation Engrs. Pvt. Ltd., 27-A, Assisted Private Ind. Estate, Balanagar, Hyderabad 500037.

Lloyd Insulations (India), 6, Middleton St., Calcutta 700016.

Mascot Insulations Pvt. Ltd., 99/5/8A, Ballygunge Place, Calcutta 700019.

KITCHEN APPLIANCES REPAIRERS

Escee Service Centre, Shreenivas House, 98, Dattaram Lad Mrg., Kalachowki, Bombay 400033.

MACHINING JOBS

Competition (Mfg.) Corpn., 337, V. Savarkar Mrg., Bombay 400028.

Hind Engg. Works, 372, Dharwar Rd., Belgaum 590002.

K. K. Shipping Consultants Pvt. Ltd., Rex Chambers, Walchand Hirachand Mrg., Bombay 400001.

Manoj Engg. & Mech. Works, 5, Jeevan Sukh, 14th Rd., Bandra, Bombay 400050.

Marintex Engrs., Block 1, J. Karia Indl. Estate, Mussa Killadar St., Clerk Rd., Bombay 400011.

Omega Engg. Corpn., Mehta Estate, Opp. Mohan Studios, Andheri East, Bombay 400093

Pursharath Engg. Co., Unit No. 15 & 18, Punjani Indl. Estate, 1st Pokhran Rd., Khopat, Thane 400601

Rajesh Engg. Works, Asian Chemical Compound., Subash Nagar, Jogeshwari East, Bombay 400060

Sea Horse Engg. & Inflatable Co., 9, Waterloo St., Calcutta 700069.

Sunil Enterprises, B. Kumar Compd., LBS Mrg., Vikhroli, Bombay 400083.

MANAGEMENT CONSULTANTS

(The bracketed alphabets next to the name indicate B — Business; E — Engineering; I — Industrial; L — Legal; M — Management; Ma — Marketing; T — Technical).

Andhra Pradesh

SYMCONS (Systems and Management Consultants) (I.M.), 187, Karbala Maidan, 2nd Flr., Secunderabad 500003.

Delhi

Automobile Corporate Services Pvt. Ltd., (M), 1, Sri Aurobindo Mrg., New Delhi 110016.

Exib Consultants Ltd., (I), A-2/147, Safdarjang Enclave, New Delhi 110016.

M. M. Suri & Associates Pvt. Ltd., (M), Bhandari House, 91, Nehru Place, New Delhi 110024.

Mahesh Chandra, (M), 50, Anandlok Colony, New Delhi 110049.

Mantec Consultants Pvt. Ltd., 805, Vishal Bhavan, 95, Nehru Place, New Delhi 110019.

Maxworth Consultants Pvt. Ltd., (M), A-2/147, Safdarjang Enclave, New Delhi 110016.

S.S. Kothary & Co., 9A, Atma Ram House, 1, Tolstoy Mrg., New Delhi 110001.

Karnataka

COBIM Pvt. Ltd., (B.I.), 71, Nagvarpalayam, Off Old Madras Rd., Bangalore 560016.

Interface, (M), 39/3, Residency Rd. Cross, Bangalore-560025.

Management & Industrial Consultants Pvt. Ltd., (M), 57, 17th Cross, Malleswaram, Bangalore 560003.

Kerala

MARG, 15/811, Thycaud, Trivandrum 695014.

Maharashtra

Ability Search Services (M), 42, V. Nariman Rd., Bombay 400023.

Ador Consultants, 72, Mittal Chambers, N. Point, Bombay 400021.

Advance Management Services, (M), 19, Jolly Maker Chambers No. 1, Nariman Point, Bombay 400021.

Almeco, (M.E.), Sambava Chambers, Sir P. Mehta Rd., Bombay 400001.

Anwar Divecha & Associates, (M. Ma.), 1113, Prasad Chambers, Charni Rd., Bombay 400004.

Associated Industrial & Management Services, (I), 42, Veer Nariman Rd., Bombay 400023.

Associated Personnel Services, 1-2, 10th Flr., Everest, Tardeo Rd., Bombay 400034.

B. K. S. Jain & Associates, (M. Ma.), 7, Neeltarang, 208, Savarkar Mrg., Bombay 400016.

B. K. Verma & Associates, 117, Arun Chambers, Bombay 400034.

Chemiequip Process & Engg. Consultancy Services Pvt. Ltd., (T). 306, Green House, Green St., Bombay 400023.

Chempro Expertise Pvt. Ltd. (E), J.P. House, Saki Naka, Bombay 400072.

Creative Management Consultants Services Pvt. Ltd., 21, Atlanta, Nariman Point, Bombay 400021.

Deccan Management Consultants, Adhar, 1098/8A, Model Colony, Pune 411016.

Executive Search, (M), P. Box 16565, Bombay 400018.

Gaube Consultants (Pvt.) Ltd., (T.E.I.M.), 507, Kakad Chambers, 132 Dr. A. Besant Rd., Bombay 400018.

Dr. Ghatge & Associates, (M), No. 2, Rehem Mansion, Colaba Causeway, Bombay 400005.

H. L. Financial Consultants & Management Services Pvt. Ltd., (M), Stock Exchange Bldg., Bombay Samachar Mrg., Bombay 400023.

Dr. K. K. Anand & Associates, (I), 71, Mittal Chambers, N. Point, Bombay 400021.

Kirloskar Consultants Ltd., (I.T.M.), 917/19A, Shivajinagar, Fergusson College Rd., Pune 411004.

Lateral Management Consultants Pvt. Ltd., 68-B, Nariman Point, Bombay 400021.

Managerial Services Pvt. Ltd., (M), Vidyabhavan, Near S. T. Office, Agra Rd., Thane 400602.

Mehan & Associates, (M), The "Garib", Fifth North South Rd., Juhu Vile Parle Scheme, Bombay 400058.

Modern Management Counsel, (M.T.), Court Chambers, New Marine Lines, Bombay 400020.

P. Sheth & Co. (M), 17/2, Parekh Vora Chambers, 66. N. Master Rd., Bombay 400023.

Personnel Adm. & Management Services, (M), 90-B, Gokhale Rd., Thane 400602.

Personnel and Productivity Services, (M), 148, M. Gandhi Rd., Bombay 400023.

Pranava Industrial Consultants Pvt. Ltd. (I), Warden Court, August Kranti Mrg., Bombay 400036.

R.G. Joshi & Associates, 198/22 (Old) Tilak Rd., Patil Bldg., Pune 411030.

Research Consultants and Marketing Services Pvt. Ltd., (Ma), Udyog Bhavan, B. Estate, Bombay 400038.

Sarin & Co., (M), Post Box 6544, Bombay 400026.

Shah Research Associates Pvt. Ltd., (I), 108, Bajaj Bhuvan, 10th Flr., Nariman Point, Bombay 400021.

Tata Consultancy Services (M), Air India Bldg., Nariman Point, Bombay 400021.

Unitech Indl. & Management Consultants Pvt. Ltd., Resham Bhavan, 7th Floor, 78, Veer Nariman Road, Bombay 400020.

Tamil Nadu

Management Services Group, Rosewood Offices, 126, Nungambakkam High Rd., Madras 600034.

Prosperity Management Consultants, 16, Jagambal St., T. Nagar, Madras 600017.

Uttar Pradesh

Vikalp Management Consultants, Anekant Palace, 25, Rajpur Rd., Dehra Dun 248001.

West Bengal

Belrex India Ltd., (M), 10, Princep St., Calcutta 700072.

Development Investors Ltd., 24-B, Park St., Calcutta 700016.

L. B. Jha & Co., 8 Camac St., Calcutta 700077.

P.K. Mitra & Co., P/7, Mission Row Extn., Calcutta 700001.

Price, Waterhouse Peat & Co. (M), B-4, Gillander House, N. Subhas Rd., Calcutta 700001.

MARINE ENGINEERS

(See Under 'Shipbuilders and Ship Repairers' in this list.)

MUSEUMS

Andhra Pradesh

Andhra Kesari Yuvajana Samiti Museum (Reg.), Rajamundry 533102, East Godavari Dist. (Paintings and Photographs).

Andhra Medical College Museum, Dept. of Anatomy, Andhra Medical College, Visakhapatnam 530001. (Anthropology & Anatomy).

Archaeological Museum, Amravati, Guntur 522001. (Stupa slabs, Coping pieces and cross-bars, Inscriptions etc.).

Archaeological Museum, Kondapur. (Architectural fragments of Stupa slabs, Sculptures etc.).

Archaeological Museum, Nagarjunakonda. (Satavahana period antiquities consisting of Stone Sculptures, Pottery Terracottas, Beads, Bangles, Coins, Iron objects etc.).

Salarjung Museum, Hyderabad 500002. (Paintings (Western, Indian), Textiles, Porcelain, Jade, Carpets, Manuscripts. Antique furniture, Ivory, Glass, Clocks, Bronze, Silver, Bidriware & Toys in the Children's Section).

State Archaeological Museum, Public Gardens, Hyderabad 500004. (Archaeology, Stone sculptures, Coins, Paintings & Costumes).

Arunachal Pradesh

Central Museum, Lachmiera, Shillong 793001. (Archaeology, Anthropology, Ethnology, Costumes).

Assam

Assam State Museum, Gauhati 781001. (Archaeology, Stone sculptures, Inscriptions, Paintings, Costumes, Ethnology).

Gauhati Medical College, Gauhati 781005. (Science, Medical, Anatomy).

Museum of Animal Husbandry and Veterinary Science, Assam Veterinary College, Gauhati 781022. (Veterinary Science).

Sibsagar College Museum, Sibsagar College, P.O. Joysagar Dist., Sibsagar 785640. (Archaeology, Costume, Ethnology, Science).

Bihar

Archaeological Museum, Bodhgaya, Gaya Dist. (Archaeology — Stone and bronze sculptures etc.).

Archaeological Museum, Nalanda, Patna Dist. (Archaeology — Stone and bronze sculptures.

Bihar Gandhi Smarak Sangrahalaya, North West Gandhi Ground, Patna 800001. (Personalia Museum of Gandhiji).

Bihar Tribal Welfare Research Institute, Morabadi Rd., Ranchi 834008. (Ethnology — the main purpose is to preserve material culture of the tribes of this State).

Gaya Musuem, Gaya 823001. (Archaeology, Patintings, Costumes, Ethnology).

Patna Museum, Patna-Gaya Rd., Buddha Marg, Patna 800001. (Archaelogy — Stone and bronze scluptures, Coins, Inscriptions, Art, Arms & Weapons, Ethnology, Tibetan & Nepalese).

State Chandradhari Museum, Darbhanga. (Multi-purpose).

Chandigarh

Government Museum & Art Gallery, Sector 10-C. Chandigarh 160017. (Miniature paintings. Sculptures including Gandhara sculptures and Moder art).

Delhi

Anthropology Department Museum, University of Delhi, Delhi 110007. (Anthropology — Cultural and Physical).

Archaeological Museum, Red Fort, Delhi 110006. (Historical Collections of Mughal period — Costumes, Arms, Coins, Jades, Astronomical objects and Miniature paintings).

Bhartiya Adim Jati Sevak Sangh Museum, Dr. Ambedkar Rd., New Delhi 110001. (Costumes and handicrafts of tribals).

Crafts Museum, Thapar House, 124, Janpath, New Delhi 110001. (Archaeology, Paintings, Costumes, Ethnology, Anthropology, and Crafts).

Gandhi Memorial Museum & Library, Rajghat, New Delhi 110001. (Photographs, Relics, Paintings, Sculptures of Gandhiji Library & Archives).

International Council of Museums (Regnl. Agency in Asia), 3/4. Sapru House Annexe, New Delhi 110001.

International Dolls Museum, Nehru House, Bahadurshah Zafar Marg, New Delhi 110002, (Dolls from all over the world).

National Children's Museum, Bal Bhavan, Kotla Rd., New Delhi 110001. (Dolls, Paintings, Photographs, etc.).

National Gallery of Modern Art, Jaipur House, New Delhi 110011. (Contemporary Paintings (from 1857 to date) Sculptures & Graphic Arts. Also paintings of Rabindranath Tagore and Amrita Shergil).

National Museum, Janpath, New Delhi 110001. (Prehistory, Proto-history, Sculptures, Bronzes, Copper plates, Coins, Miniature paintings, Arms, Arts, Pre-Columbian arts, Anthropology and Central Asian collections).

National Philatelic Museum, Dak Tar Bhavan, Sardar Square, Parliament St., New Delhi 110001. (Philately).

Nehru Memorial Museum, Teen Murti Marg, New Delhi 110001. (Personal belongings of Nehru & Library).

Tibet House Museum, 16, Jor Bagh, New Delhi 110003. (Tibetan sculptures, Paintings (Thankas), Ritual objects, Carpets etc.).

Gujarat

Calico Museum of Textiles, P.Box 21, Ahmedabad.

Darbar Hall Museum, Shilekhana Sakkar Bagh, Junagadh 362001. (Archaeology, Paintings, and Costumes).

Gandhi Smriti Museums, Gandhi Smriti, Bhavnagar 364001. (There are four museums under the care of Gandhi Smriti, all housed in one building. (i) Arts and Crafts Museum. Picturesque embroidery and Bead work of Saurashtra, Costumes, Ornaments, Wood Work. Clay objects, Antiquities from Valabin, Coins and Fossils from Piram island. (ii) Barton Museum. Fossils, Archaeology, Sculpture, Coins, Stones, Inscriptions, Copper plates, Manuscripts, Copies of Shilrot Wall paintings, Musical instruments, Brass utensils, Old locks, Arms, Artistic nutcrackers. (iii) Children's Museum. Relief map of Bhavnagar, Aquarium, Toys, Philatelic section, stuffed birds, reptiles and amphibians. (iv) Gandhi Museum. Photographs, collections of documents and personal relics, audio-visual material on Gandhiji).

Gujarat Museum Society, Culture Centre, Kocharab, Ahmedabad 380006. (Archaeology, Anthropology, Ethnology, Costumes, Paintings including N.C. Mehta Collection of miniatures, Science etc.).

Health Museum, Sayaji Bagh, Vadodara 390001. (Archaeology, Paintings, Costumes etc.).

Lady Wilson Museum, Dharampur, Valsad Dist. 396001. (Anthropology, Industrial Art and Natural History).

Museum & Picture Gallery, Sayaji Park, Vadodara 390005. (Indian Archaeology — Prehistoric, Proto-historic and Historic; Indian Art — Ancient, medieval, modern; Numismatics, Paintings, Asiatic and Egyptian collection, Greek, Roman, European Civilizations and Art, Ethnology, Geology, Zoology etc.).

Sardar V. Patel Museum, Sonifalia, Surat 395001. (Archaeology, Paintings & Costumes).

Shri Girdharbhai Children's Museum, Amreli Dist. 364601. (All round development of children).

Tribal Research & Training Institute, Gujarat Vidyapith, Ahmedabad 380014. (Anthropology).

Watson Museum, Jubilee Bagh, Rajkot 360001. (Archaeology, Anthropology, Costumes, Ethnology & Science).

Haryana

Haryana Prantiya Puratatva Sangrahalaya, P.O. Gurukul Jhajjar, Rohtak Dist. 124001. (Archaeology, Paintings, Costumes, Anthropology, Science, Geology, Numismatics, Sculpture, Craft and Manuscripts).

Himachal Pradesh

Bhuri Singh Museum, Chamba. (Archaeology, Anthropology, Costumes, Ethnology, Miniature Paintings).

Jammu & Kashmir

S.P.S. Museum, Lalmandi, Srinagar 190001. (Archaeology, Paintings, Costumes, Anthropology, Arts and Crafts, Minerals, Numismatics and Natural History).

Dogra Art Gallery, Jammu 180001. (Miniature paintings, specially Pahari).

Karnataka

Archaeological Museum, Bijapur 586101. (Stone sculptures, Inscriptions, Manuscripts, Arms and Weapons, Chinaware, Wood-carvings, Carpets etc.).

Archaeological Museum, Halebid. (Stone sculptures, Architectural pieces of Hoysala period).

Archaeological Museum, Hampi. (Sculptures and architectural pieces belonging to the Vijayanagar period).

Museum of Art & Archaeology, Kannada Research Institute, Karnatak University, Dharwar 580003. (Archaeology, Epigraphy, Manuscripts, Sculptures, Numismatics, Paintings).

Visvesvaraya Industrial & Technological Museum, Kasturba Rd., Bangalore 560001. (History of Science & Technology, the latest developments by working models and exhibits).

Mysore Government Museum, Kasturba Rd., Bangalore 560001. (Multi-purpose).

Kerala

Natural History Museum. Dept. of Museums and Zoos, Trivandrum 695001. (Geology, Ethnology and Science).

State Museum, Trivandrum 695001. (Sculptures — Metal, Wood, other Wood Carving, Ivory work, Collection of Lamps and Musical instruments, Numismatics, Handicrafts and Paintings).

State Museum, Trichur 680001. (Arts and Crafts, Wood Carvings, Natural History, Geology etc.).

V.K. Krishna Menon Museum, Calicut 673001.

Madhya Pradesh

Archaeological Museum, Khajuraho. (Archaeology — Stone sculptures from Khajuraho and vicinity).

Archaeological Museum, Sanchi, Raisen Dist. (Stone sculptures, Terracottas and other local finds).

Central Archaeological Museum, Gujari Mahal, Fort. Gwalior 474001. (Stone sculptures, Terracottas, Bronzes and Miniature paintings).

Central Museum, Bombay Agra Rd., Indore 452001. (Archaeology and Paintings).

Dhar District Museum, 12, Ootavad Darwaja, Dhar. (Mainly Archaeological).

District Archaeological Museum, Vidisha 464001. (Archaeology, Terracotta objects, Coins, Educationalset of Harappan Art, etc.).

District Museum Shivpuri, Ban Ganga Rd., Shivpuri. (30 stone images (Jain Tirthankars), 20 Harappan culture articles on exhibition. Rest in reserve collections).

Forest School Shivpuri, Shivpuri. (Forest products and Forestry, Ethnology).

Mahant Ghasi Dass Memorial Museum, Raipur 492001. (Archaeology, Paintings, Costumes, Anthropology and Natural History, Art and Crafts).

State Museum, Dhubela, Chhatarpur. (Archaeology, Paintings, Costumes).

Tulsi Sangrahalaya, Ramban, Satna 485001. (Local Archaeological finds and stone sculptures).

Maharashtra

Central Museum, Nagpur 440001. (Archaeology, Anthropology, Paintings, Geology, Natural History).

Deccan College Museum, Pune 411001. (Excavated materials from Nevasa, Jorwe, Nasik etc. and Maratha period objects).

Dr. Bhau Daji Lad Museum, Byculla, Bombay 400008.

Heras Institute of Indian History & Culture, St. Xavier's College, Bombay 400001. (Archaeology, Paintings, Sculpture, Iconography, Manuscripts & Rare books).

History Museum, Ahmednagar College, Ahmednagar 414001. (Archaeology, Paintings).

Magan Sangrahalaya, Maganwadi, P.O. Wardha 442001. (Only for Khadi & Village Industries).

Mahatma Phule Vastu Sangrahalaya, Ghole Rd., Pune 411001. (Archaeology, Agriculture, Anthropology, Costumes, Ethnology, Forestry, Industry, Paintings & Science).

Mani Bhavan Sangrahalaya, 19, Laburnum Rd., Gamdevi, Bombay 400007. (Personalia Museum of Gandhiji).

Prince of Wales Museum of Western India, Bombay 400023. (Archaeology, Art, Paintings, Costumes, Bronzes, Ivories, Porcelains, Jade, Natural History).

Raja Kelkar Museum, 1378, Shukrawarpeth, Natu Bagh, Pune 411001. (Archaeology, Anthropology, Ethnology, Costumes, Paintings).

Shri Bhavani Museum & Library, Aundh (Satara), Taluka Khatav, Satara Dist. 415001. (Archaeology, Paintings, Stone, Bronze statues, Sandalwood carvings and few textiles and a well-equipped Library).

Manipur

Manipur State Museum, Pologround, Imphal. (Anthropology, Archaeology, Ethnology, Costumes, Paintings, Zoology & Geology).

Orissa

Archaeological Museum, Konarak, Puri Dist. 752001. (Stone sculptures).

Orissa State Museum, Bhubaneshwar 751006. (Archaeology, Paintings, Costumes, Ethnology, Anthropology, Science, Manuscripts).

Punjab

State Museum, Patiala 147001. (Archaeology, Anthropology, Costumes, Paintings, Ethnology, Geology and Science).

Rajasthan

Archaeological Museum, Ahar. (Excavated material from the Chalcolithic site (1800 B.C. onwards) of Ahar, Sculptures and Bronzes).

Archaeological Museum, Amber. (Sculptures and excavated material from Bairat, Sambhar, Rairh, Nagar etc., in Jaipur region).

Archaeological Museum, Jhalawar 326001. (Sculptures, Inscriptions, Coins, Minature paintings and Manuscripts).

Central Museum, Institute of Technology & Science, Pilani (Paintings, Science & Technology).

Central Museum, Ramniwas Gardens, Jaipur 302004.

Ganga Golden Jubilee Museum, Bikaner 334001. (Sculptures, Terracottas, Miniature paintings, Textiles, Arms and Decorative arts).

Government Museum, Alwar 301001. (Sculptures, Inscriptions, Arms, Miniature paintings and Decorative arts).

Maharaja of Jaipur Museum, City Palace, Jaipur 302002. (Miniature Paintings, Costumes, Arms & Armours, Textiles, Mughal carpets etc.).

Multipurpose Cultural Museum. (Sculptures, Miniature paintings, Ethnology, Anthropology, Educational etc.)

Museum of Saraswati Bhandar, Garh, Kotah 324001. (Paintings, Costumes, Arms & Manuscripts).

Rajputana Museum, Ajmer 305001. (Sculptures, Inscriptions, Coins, Paintings).

Rana Pratap Museum, Near Pichhola lake, Udaipur 313001. (Sculptures, Inscriptions, Coins, Paintings and local crafts).

Sardar Museum, Jodhpur 342001. (Paintings, Handicrafts, Textiles, Natural History).

State Museum, Bharatpur 321001. (Excavated material from Noh (1000 B.C. and onward), Sculptures, Inscriptions, Coins and Arms).

State Museum, Mandore, Jodhpur 342001. (Science, Natural History, Paintings & Gallery).

State Museum, Mount Abu, Sirohi Dist. 307001. (Science, Paintings and Handicrafts).

Tamil Nadu

Fort St. George Museum, Madras 600001. (Paintings, Prints, Coins, Medals, Textiles, Porcelain Manuscripts etc. of early Indo-British history).

Gandhi Smarak Sangrahalaya, Tamukkam, Madurai 625013. (Personalia Musuem on Gandhiji *e.g.* Photographs, Relics, Manuscripts & Library).

Government Museum & National Art Gallery, Egmore, Madras 600008. (Archaeology, Stone and Bronze Sculptures, Art, Anthropology, Numismatics, Zoology, Botany, Geology, Children's section & Philately).

Government Museum, T.S. No. 6169, Big St., Tirugokarnam, Puddukkottai-2, Trichy District 620001. (Archaeology, Paintings, Costumes, Ethnology, Anthropology, Natural Sciences like Geology, Zoology and Botany).

Southern Forest Rangers College & Research Centre, P.O. R.S. Puram, Coimbatore 641002 (S. Rly.). Forest Museum.

Tipu Sultan Museum, Summer Palace, Dariya-Doulat-Bagh, Seringapatam. (Objects connected with the history of Haidar Ali and Tipu Sultan and their contemporary history).

Uttar Pradesh

Allahabad Museum, Alfred Park, Allahabad 211001. (Stone and Bronze sculptures, Terracottas, Miniature paintings, Modern Indian paintings and Gifts of Pandit Jawaharlal Nehru).

Archaeological Museum, Dampier Park, Mathura 281001. (Stone sculptures—particularly of Kushana and Gupta periods of Mathura school—Terracottas, Bronze etc.).

Archaeological Museum, Sarnath, Varanasi 221001. (Stone and Bronze sculptures, Seals, Beads, Toys, Terracottas and Pottery).

Bharat Kala Bhavan, Benaras Hindu University, Varanasi 221005. (Gandhi, Philatelic, Architecture, Bronze, Glassware, Arms, Roorich paintings, Jades, Jems, Ornaments, Modern art, Textiles, Coins, Miniature paintings, Terracottas, Sculptures, Nepal & Tibet Sections).

Maharaja Banaras Museum, Fort Ram Nagar, Varanasi 221001. (Stone sculptures, Textiles (Banaras brocades etc.), Arms, Manuscripts, Paintings, Decorative arts, Palanquins and Howdas etc.).

Motilal Nehru Bal Sangrahalaya, Motilal Nehru Marg, Charbagh, Lucknow 226001. (Exhibition and display according to the needs of the children).

Museum of Science & Culture, General Education Centre, Aligarh Muslim University, Aligarh 202001. (Science & Culture).

State Museum, Banarasibagh, Lucknow 226001. (Archaeology, Stone sculptures, Bronzes, Terracottas, Inscriptions, Anthropology, Paintings, Costumes, Ethnology & Natural History).

West Bengal

Asiatic Society of Bengal Museum, 1, Park St., Calcutta 700016. (Western paintings, Coins, Miniature paintings (Pala, Arabic, Persian etc.), Copper plates and Manuscripts).

Asutosh Museum of Indian Art, Centenary Bldg., Univ. of Calcutta, Calcutta 700012. (Archaeology, Art, Bengal Folk-Art, Paintings & Textiles).

Birla Academy of Art & Culture, 108-109, Southern Ave., Calcutta 700029. (Archaeology, Paintings, Costumes, Anthropology).

Birla Industrial & Technological Museum, 19A, Gurusaday Rd., Calcutta 700019. (Science).

Birla Planetarium & Astronomical Research Centre, 96, Chowringhee, Calcutta 700016. (Educational activities, Research problems and popularisation of Astronomy and allied fields).

Cultural Research Institute Museum, Scheduled Castes & Tribes Welfare Deptt., New Secretarial Bldgs., Block-B, 1, Hastings St., Calcutta 700001. (Ethnology & Anthropology).

Gandhi Smarak Sangrahalaya, 14, Riverside Rd., Barrackpore, 24 Parganas. (Relics, Replicas, Manuscripts, Photographs & Library).

Government Industrial and Commercial Museum, 45, Ganesh Chandra Ave., Calcutta 700013. (Industry and Commerce including folk art and handicrafts).

Indian Museum, 27, Jawaharlal Nehru Rd., Calcutta 700013. (Art, Bharhut, Gandhara and Pala Sculptures etc. Archaeology, Anthropology, Geology and Economic Botany).

Kala Bhavan, Visva Bharati University, Shantiniketan. (Fine Arts and Handicrafts).

Rabindra Sadan, Tagore Memorial Museum, Shantiniketan. (Personalia Museum: Materials connected with the life and works of Rabindranath Tagore mainly consisting of Manuscripts, Paintings, Photographs, Voice records, Costumes, Books, Journals etc.).

State Archaeological Gallery, 33, Chittaranjan Ave., Calcutta 700013. (Pre- and Proto-historic excavated material, Terracottas, Pala Stone Sculptures, Bronzes, Wood-carvings, Textiles, etc.).

Victoria Memorial, 1, Queensway, Calcutta 700016. (Museum of Modern Indian History; Historical paintings (Oil paintings, water colour, Late Mogul paintings etc.), Statues of Historical personages, Archival objects, Manuscripts, Arms & Armours).

NAVAL ARCHITECTS

(See under 'Shipbuilders, Ship Repairers' in this list).

PACKERS

Calcutta Packing Co., 5/2, Tiljala Rd., Calcutta 700046.

International Packers and Movers, 42, A to Z Ind. Estate, Bombay 400013.

Overseas Packers & Movers, 1, Edward Rd., Bangalore 560052.

Packers (India) Co., 34/38, Hamam St., Bombay 400001.

Sam Storage and Packing Corpn., 5, Graham Road, B. Estate, Bombay 400038.

PAINTING & DECORATING CONTRACTORS

A.A. Nayak & Co., Jobanputra Compound, Nana Chowk, Bombay 400007

Ceilings, 23/2, Seshadri Road, Bangalore 560009.

Color Coats and Contracts Pvt. Ltd., 232, Dr. D. Naoroji Rd., Bombay 400001.

Devi Designers & Decorators, 69-A, Lattice Bridge Rd., Madras 600041.

Kapadia Bros., 81, Abdul Rehman St., Bombay 400003.

M. Pallonji & Co. Pvt. Ltd., 87, A. Rehman St., Bombay 400003.

N. Davar & Co., Commerce Centre, Tardeo, Bombay 400034.

P. Manchershah & Co., 6-B, Forjett Crosslane, Opp. Saibaba Temple, Bombay 400026.

Osnar Paints & Contracts Pvt. Ltd., T.K. Ind. Estate, Bombay 400013.

Satin Paints & Decor, 128, Kasara Street, Darukhana, Bombay 400010.

Shree Raj Interior Decorators & Furnishers, 213, Moolee Tollaa Bldg., 504, Linking Rd., Khar, Bombay 400052.

Spartan Spraypainters, 128, Kasara St., Darukhana, Bombay 400010.

Swastik Decorators, 214-6, Tribhuvan, T.P.S. III, 60 Ft. Rd., Ghatkopar East, Bombay 400077.

Veldon Coats, 12/634, Rani Talao Main Rd., Surat 395003.

PATENTS & TRADE MARK ATTORNEYS

Bhate & Ponkshe, 1423, New Shukrawarpeth, Pune 411002.

Calcutta Trade Mark Co., 236, Chandni Chowk (Fatehpur), Delhi 110006.

DePenning & DePenning, 10, Govt. Place East, Calcutta 700001.

Kamath & Kamath, 45, Armenian St., Madras 600001.

L.R. Swami & Co., 21, Cenotaph Rd., Madras 600018.

L.S. Davar & Co., 17, Camac St., Calcutta 700017.

Mangla Registration Service, Katra Shahnashai, Chandni Chowk, Delhi 110006.

Oriental Trade Marks Bureau, 4/13, W. Patel Nagar, New Delhi 110008.

R.K. Dewan & Co., 78, Podar Chambers, Parsee Bazar St., Bombay 400001.

Remfry & Son, Gresham Assurance House, Sir P. Mehta Rd., Bombay 400001.

Vidhani Trade Marks Co., 1720/57, Naiwala, Karol Bagh, New Delhi 110005.

PEST CONTROL

Andhra Pradesh

Pest Control (Hyderabad) Corpn., 6-1-1070/2, Lakadikapool, Hyderabad 500004.

Pest Control (I) Pvt. Ltd., 5-9-101/4, Public Garden Road, Hyderabad 500001.

Dr. Sarup's Pest Control Pvt. Ltd., 5-9-88, Fateh Maidan, Hyderabad 500001.

Delhi

Anti Pest Operations (India), C/538, Defence Colony, New Delhi 110024.

Dr. Sarup's Pest Control Pvt. Ltd., AB8, Comm. Centre, Safdarjung Enclave, New Delhi 110016.

Hardy's Pest Control Svcg. (Regd.), 1620, Bahadurgarh Road, Delhi 110006.

Jardine Henderson Ltd., 49-50, Indra Palace, Connaught Place, New Delhi 110001.

Pest Control A. S. Goel, 8/12, Rajpur Rd., Delhi 110006.

Pest Control Advisers & Services, C-41, Greater Kailash I, New Delhi 110048.

Pest Control (India) Pvt. Ltd., 7, Jantar Mantar Road, New Delhi 110001.

WORLD WIDE MOVING

Call on **SAM STORAGE & PACKING CORP.**, for packing your valued possessions scientifically anywhere in India. For safe & dependable handling of prized household possessions call our skilled hands.

SAM STORAGE & PACKING CORP.

Agents :
ALL OVER THE WORLD

SAM STORAGE & PACKING CORP.

5, GRAHAM ROAD, BALLARD ESTATE, BOMBAY 400 038.
Telephones : 265451/3 & 263137 ★ Cables : " BECIBESONS ".

Pesticides India, 16, M. G. Marg, Lajpatnagar IV, New Delhi 110024.

Gujarat

Pest Control (India) Pvt. Ltd., 13, Mill Officers Colony, Ahmedabad 380009.

Karnataka

Mysodet Pvt. Ltd., 16/1, Residency Rd., Bangalore 560025.

Pest Control (I) Pvt. Ltd., 105/1, Infantry Rd., Bangalore 560001.

Maharashtra

All India Medical Corpn., 185, Princess St., Bombay 400002.

Anglo Orient Insecticide Services, Agakhan Bldg., Dalal St.. Bombay 400023.

B. Kaikhushroo & Co., 19, Bank St., Bombay 400023.

Beekay Pesticides Pvt. Ltd., 75, Mody St., Bombay 400001.

Bombay Fumigation Co. Pvt. Ltd., 93, Bazargate St., Bombay 400001.

Chemafumes Pvt. Ltd., 17, Horniman Circle, Bombay 400023.

City Pest Control Services, General Assurance Bldg., 232, Dr. D.N. Rd., Bombay 400001.

Dr. Sarup's Pest Control Pvt. Ltd., 203, Dr. D.N. Road, Bombay 400001.

Elite Corpn., Lentin Chambers, 36, Dalal St., Bombay 400023.

Eureka Mastic & Allied Products Pvt. Ltd., 461, D. S. Bhadkamkar Marg, Bombay 400004.

Filco Pvt. Ltd., BPT Plot No. 52, Sewree Fort Rd., Bombay 400015.

Fumigation Ind. & Laboratory Chemicals Co. Pvt. Ltd., BPT Plot No.52, Sewri Fort Rd., Bombay 400015.

Hindustan Pest Control, Ajanta, B/8, Juhu Lane, Bombay 400058.

Hindustan Pesticides, Sonawala Bldg., 25, Bank St., Bombay 400023.

Industrial Fumigation & Pest Control, 1/11-5, Khadak St., Bombay 400009.

International Insecticides, 168, Bank of Baroda Bldg., Palton Road, Bombay 400001.

Jagruti Pest Control, 139-C, Bhuleshwar Rd., 2nd Flr., Room No. 121, Bombay 400002.

Maharashtra Fumigation Co., 129, Modi Street, Bombay 400001.

Panasia Pest Control Services, 38, Cawasji Patel St., Bombay 400001.

Paragon Pesticides, 164/4, Modi St., Bombay 400001.

Pecopp Pest Control, Opp. Portuguese Church, Dadar, Bombay 400028.

Pest Chemco, 395E, D Bhadkamkar Marg, Bombay 400004.

Pest Control, Commercial House, 87, Dr. A. Besant Road, Bombay 400018.

Pest Control & Plant Protection, 'Shiv Sadan', Gokhale Rd., Near Portuguese Church, Dadar, Bombay 400028.

Pest Control Enterprises, Pushp-Vihar, 15th Rd., TPS III, Bandra, Bombay 400050.

Pest Control India Pvt. Ltd., Yusuf Bldg., M. Gandhi Rd., Bombay 400023.

Pest Control M. Walshe, New Great Insurance Bldg., J. Tata Rd., Bombay 400020.

Pestco Modern Service, Botawala Bldg., 11/13, Horniman Circle, Bombay 400023.

Pesticides Co. (Bombay) Pvt. Ltd., 19/21, Hamam St., Bombay 400001.

Pesticides Corpn., 19/20, Hamam St., Bombay 400001

Union Pesticides Corpn., 4A, Culliandas Bldg., 22, Gowalia Tank Rd., Bombay 400026.

Tamil Nadu

Indo-American Pest Control, Shanti Theatre Annexe, Madras 600002.

Mysodet Pvt. Ltd., Y.M.C.A. Divn., Madras 600014.

Pest Control & Advisory Service, 54, Bunder Rd., Madras 600001.

Pest Control (India) Pvt. Ltd., 38, Errabalu Chetty St., Madras 600001.

West Bengal

Dr. Sarup's Pest Control Pvt. Ltd., 216/2A, A.J. Bose Rd., Calcutta 700017.

National Pest Control Services, 117, Lenin Sarani, Calcutta 700013.

Pest Control & Co., 9A, R.M. Dutta Rd., Calcutta 700020.

Pest Control India Pvt. Ltd., 23, Mirza Ghalib St., Calcutta 700016.

Pest Killer Corpn., 6, G. Chandra Avenue, Calcutta 700013.

Universal Pest Control, 83, Chittaranjan Avenue, Calcutta 700012.

PRINTERS

Delhi

Batra Art Press, 120, R. M. Lohia Marg, Delhi 110006.

Bright Printing Press, 1214-Ch. N. Singh St., Sadar Bazar, Delhi 110006.

Central Electric Press, 80-D, Kamla Nagar, Delhi 110007.

Crescent Printing Works, 14/90, Connaught Circus, New Delhi 110001.

Delhi Press, E3, Jhandewallan Estate, New Delhi 110055.

India Offset Press, A-1, Maya Puri Indl. Area, New Delhi 110027.

Panchal Press, 66, Gokhale Market, Mori Gate, Delhi 110006.

R.K. Printers, 80-D, Kamla Nagar, Delhi 110007.

Rajhans Press, Rooi Mandi, Sadar Bazar, Delhi 110006.

Seth Art Printers, 10657, Jhandewalan Rd., New Delhi 110055.

Shuchi Pvt. Ltd., I-E, R. Jhansi Rd., Jhandewalan Estate, New Delhi 110055.

Statesman Ltd., Connaught Circus, New Delhi 110001.

PRINTING PRESSES

AHURA PRINTING PRESS

Specialised in printing of :

- ★ ANNUAL REPORTS
- ★ MULTI-COLOUR PUBLICITY MATERIAL
- ★ BOOKS, PAMPHLETS ETC.
- ★ HOUSE MAGAZINES
- ★ PHARMACEUTICAL VISUAL FOLDERS & LEAFLETS

Royal Industrial Estate,
5B, Naigaum Cross Road, Wadala,
Bombay 400 031.

Telephones : 443249 & 445490.

Swaran Printing Press, 4859, Bara Tooti, Sadar Bazar, Delhi 110006.

Tijarti Press, Pan Mandi, Sadar Bazar, Delhi 110006.

Maharashtra

Abhyudaya Printing Press, 219, J. Dadajee Rd., Bombay 400007.

Ahura Printing Press, 5B, Naigaum Cross Rd., Bombay 400031.

Albert Printing Works, S. Bapat Mrg., Lower Parel, Bombay 400013.

Amalgamated Press, 41, Ambalal Doshi Marg, Bombay 400023.

Bombay Press, 15, Stone Lane, Homji St., Bombay 400001.

Excelarts Pvt. Ltd., C-7, Minerva Indl. Estate, Bunder Rd., Sewri, Bombay 400015.

Fidvi Printing Press, 179, A. Rehman St., Bombay 400003.

G. Claridge & Co. Ltd., 289, Bhagatsingh Rd., Bombay 400023.

Grafika Printers Pvt. Ltd., 16/D, British Hotel Lane, Apollo St., Bombay 400023.

Ideal Printers Pvt. Ltd., Bell Bldg., Sir P.M. Rd., Bombay 400001.

Mahesh Art Ptg. Works, Irani Wadi, S. Mody Road, Kandivli West, Bombay 400067.

Saifee Printing Press, 205, A. Rehman St., Bombay 400003.

Tata Press Ltd., 414, V. Savarkar Marg, Prabhadevi, Bombay 400025.

The Times of India Press, Dr. D.N. Rd., Bombay 400001.

Vakil & Sons Pvt. Ltd., 18, Sprott Rd., Ballard Estate, Bombay 400038.

West Bengal

Anna Art Press Pvt. Ltd., 26, Dr. Suresh Sarkar Rd., Calcutta 700014.

Automatic Printers Pvt. Ltd., 49/1, S.N. Banerjee Rd., Calcutta 700014.

Baptist Mission Press, 41A, A.J. Bose Rd., Calcutta 700017.

Caxton & Co., 1B, A. Mukherjee Rd., Calcutta 700020.

Ciciki Ptg. & Binding Works Pvt. Ltd., 95/A, Garpar Road, Calcutta 700009.

Display Printers, 16/3, Gariahata Rd., Calcutta 700019.

Eastern Ptg. House, 9, Dharamtolla St., Calcutta 700013.

Headway Lithographic Co., P-253, C.I.T. Scheme No. 6, Calcutta 700054.

Hooghly Ptg. Co. Ltd., 41, Chowringhee Rd., Calcutta 700016.

Indian Press Pvt. Ltd., 93A, Lenin Sarani, Calcutta 700013.

Jnanoday Press, 17, H. Khan Lane, Calcutta 700009.

K.P. Basu Printing Works, 11, M. Gossain Lane, Calcutta 700006.

Kohinoor Art Press, 3, Abdul Ali Row, Calcutta 700016.

Limton Art Press, 148, Lower Chitpur Rd., Calcutta 700001.

Mary Art Press Pvt. Ltd., 90, S.R. Ghosh St., Calcutta 700009.

Metal Seamers & Printers Ltd., 81/3, H. Chatterjee St., Calcutta 700025.

National Printing Works Pvt. Ltd., 1, G. Babu Lane, Calcutta 700012.

Prabartak Printing & Halftone Ltd., 52/3, B.B. Ganguly St., Calcutta 700012.

Process & Print Pvt. Ltd., 5, Blockman St., Calcutta 700013.

Rolls Print Co. Pvt. Ltd., 6, Chowringhee Rd., Calcutta 700013.

Ruby Press, 35, Swallow Lane, Calcutta 700001.

Star Printing Works, 30, S. Das Lane, Calcutta 700006.

Statesman Ltd., 4, Chowringhee Square, Calcutta 700001.

Tarun Press, 11, Akur Dutta Lane, Calcutta 700012.

Technical & General Press, 17, Crooked Lane, Calcutta 700001.

Venus Printing Works, 52/7, B.B. Ganguly St., Calcutta 700012.

Vivekananda Press Pvt. Ltd., 9, S. Das Lane, Calcutta 700006.

Young Printers, 12/1/3, Goabagan St., Calcutta 700006.

PRINTERS—LETTERPRESS

Ashok Printing Works, 22A, Syed A. Brelvi Rd., Bombay 400001.

Bidyut Art Printers, Miniland, Tank Rd., Bombay 400078.

Hansa Printers, 13, Ambedkar Rd., Wadala, Bombay 400031.

Mebasser Printing Works, Lakshmi Bldg., 6, Shoorji Vallabhdas Marg, Bombay 400038.

Rishon Printing Works, Kumpta St., Ballard Estate, Bombay 400038.

Sarvodaya Printery, 24, Pinjari St., Bombay 400003.

Swastik Printing Press, 228, Wadala, Udyog Bhavan, 8, Naigaum Cross Rd., Bombay 400031.

The Times of India Press, Dr. D.N. Rd., Bombay 400001.

PRINTERS—LITHOGRAPHY

Bolton Fine Art Litho Works, 274, J. Dadajee Marg, Bombay 400007.

Bombay Fine Art Offset & Litho Works, 10, Sussex Rd., Veermata Jijabai Bhosale Udyan, Bombay 400027.

Eagle Lithographing Co. Pvt. Ltd., 26B, Christopher Rd., Entally, Calcutta 700046.

Headway Lithographic Co., P-253, C.I.T. Scheme No. 6, Calcutta 700054.

Modern Process Printers, 73, S.S.I. Area, V Block, Rajajinagar, Bangalore 560010.

Mohamadi Fine Art Litho Works, Mohamedi Bldg., Gun Powder Rd., Bombay 400010.

National Litho Works Pvt. Ltd., 608, B. Jagtap Rd., Bombay 400011.

National Lithographing & Printing Press, National Bldgs. 1 & 2, Old Court House, Calcutta 700001.

MOHAMADI

HALLMARK ON PACKAGING

MOHAMADI FINE ART LITHO WORKS

Established: 1878

Incorporated: 1938

Telephones: 863728 & 863735

Telegrams: "KORAN"

Lithographers - Offset and Letterpress Printers and Carton Manufacturers

MOHAMADI MAKES A GOOD IMPRESSION

SP

SAFERUN PRESS

Letterpress

and

Offset Printers

C-27, ROYAL INDUSTRIAL ESTATE,
NAIGAUM CROSS ROAD,
WADALA, BOMBAY-400 031.

Phones: 449391 Resi. 670622

Premier Offset Works, Swadeshi Mill Estate, Charni Rd., Bombay 400004.

Shivraj Firm Art Litho Works, Subash Rd., Nagpur 440002.

Sun Lithographing Co., P.20, C.I.T. Rd., Calcutta 700010.

PRINTERS—OFFSET

Bolton Fine Art Litho Works, 274, J. Dadajee Marg, Bombay 400007.

Bombay Art Printers, Near Safed Pul, Kurla-Andheri Road, Bombay 400072.

Commercial Printing & Publishing House Pvt. Ltd., 38-39, Mount Rd., Guindy Madras 600032.

Diamond Offset Works Pvt. Ltd., 8-E, R. Jhansi Road, Jhandewallan Estate, New Delhi 110055.

Friend's Printery, 191, Dimtimker Road, Bombay 400008.

Gemini Offset Press, 12-B, Prahlad Market, Karol Bagh, New Delhi 110005.

Gujarat Offset Works (Vatwa), Offset House, Vatwa 382440. (Ahmedabad Dist.).

IBH Printers, Andheri Kurla Road, Marol Naka, Bombay 400059.

Kumar Offset, 9, Hathori, Ajmer Rd., Jaipur 302001.

Letter Press & Offset Printers, 16-D, British Hotel Lane, Apollo St., Bombay 400023.

Lotus Offset Printers, 88, S.N. Chetty St., Royapuram, Madras 600013.

Mehta Offset Works, 16, Block A, Narain Indl. Area, Phase II, New Delhi 110028.

Murdan Kala Mandir, 3, Jeypore Nagar, Madras 600086.

Parksons Printers, Ind. Estate, Lalbaug, Bombay 400012.

Pradeep Art Printery, 34, C. Patel St., Bombay 400001.

Premier Offset Works, Swadeshi Mills Compound, Near Prasad Chambers, Girgaum, Bombay 400004.

Printwell, Laxmi Mills Estate, Off Dr. E. Moses Rd., Mahalaxmi, Bombay 400011.

Publicity Printers, 7, Homji Street, Bombay 400001.

Rite-Print-Pak, Off Phoenix Mills, S. Bapat Mrg., Bombay 400013.

Saferun Press, C-27, Royal Ind. Estate, Naigaum X Road, Wadala, Bombay 400031.

Tamil Nad Printers & Traders Pvt. Ltd., 328, G.S.T. Road, Madras 600044.

Thapar & Thapar, 262, Shaheed Bhagat Singh Road, Bombay 400039.

Usha Offset Printers Pvt. Ltd., 125, Govt. Ind. Estate, Kandivli, Bombay 400067.

PRINTERS—SILK/SCREEN

Ellora Silk Mills Pvt. Ltd., 47, Nakhoda St., Bombay 400003.

Everest Dyg. & Ptg. Works, I. Patel Road, Goregaon East, Bombay 400063.

Fashion Prints Ltd., Shastri Marg, Bhandup, Bombay 400078.

Girish Dyeing, Bleaching & Printing Works, Manilal Durlabha Compd., Lake Road, Bhandup, Bombay 400078.

Heena Dyg. & Ptg. Works, Tej Prakash, Dattapada Road, Borivli West, Bombay 400092.

Johnson Dye Works, Moti Udyog Nagar, Ramchandra Lane, Bombay 400064.

Jyoti Dyg. & Ptg. Works, Mody Estate, Shastri Marg, Bombay 400077.

Khanna Dyg. & Ptg. Works, Geeta Indl. Estate, I.B. Patel Road, Bombay 400063.

Mansukh Dyg. & Ptg. Mills, Kanjur Village Rd., Bhandup, Bombay 400078.

New Shakti Dye Works Pvt. Ltd., 127B, Jayker Marg, Bombay 400002

New Vinod Silk Mills Pvt. Ltd., Kasturchand Mills Estate, Dadar, Bombay 400028.

Pinko Dyg. & Printing Works, Pitamber Wadi, Mahim, Bombay 400016.

Radha Dyeing & Printing Mills, 149, Gamdevi Road, Bombay 400078.

Rhaenko, 38-B, Mount Road, Madras 600006.

Studio Bahar, 23-A, Central Chowpatty Bldg., Chowpatty, Bombay 400007.

Universal Dyg. & Ptg. Works, Narayan Nagar, Shastri Marg, Bombay 400077.

Usha Processors Pvt. Ltd., Mehra Estate, Vikhroli, Agra Road, Bombay 400079.

Veena Prints, Patel Indl. Estate, Vivekanand Rd., Bombay 400068.

Vishnu Dyg. & Ptg. Works, 444, Opp. Govt. Housing Colony, G.B. Road, Goregaon West, Bombay 400062.

Tamil Nadu

Madura Coats Ltd., Post Box 39, Madurai 625001.

Uttar Pradesh

Modi Rayon & Silk Mills, Modinagar 201201. Ghaziabad Dist.

West Bengal

Screen Process Printers, 6, J.-Nehru Road, Calcutta 700013.

REFRIGERATION ENGINEERS

Prakash Co., 1, Chandney Chowk Street, Calcutta 700013.

Richardson & Cruddas (1972) Ltd., Byculla Iron Works, Bombay 400008.

SECURITY SERVICES

Anapol (India) Pvt. Ltd., 17, Shakespeare Sarani, Calcutta 700071.

Expert Services Bureau Pvt. Ltd., Cecil Court, Lansdowne Road, Bombay 400039.

G.D.A. Security Pvt. Ltd., High Gates Arcade, 33, Church St., Bangalore 560001.

Globe Detective Agency Pvt. Ltd., 39, Jolly Maker Chamber 2, 225, Nariman Point, Bombay 400021.

Goliath Detectives Pvt. Ltd., 19E, Vasant Lok, Vasant Vihar, New Delhi 110057.

Guardwell Security Services Pvt. Ltd., 94, Meghdoot, Nehru Place, New Delhi 110024.

Gujarat Industrial Security Services, No. 3, 1st Flr., Ravi Chambers, Near Relief Cinema, Ahmedabad 380001.

Industrial Security Consultants & Services, 1, Netaji Subhas Rd., Calcutta 700001.

Industrial Security & Detective Agency, Afzal Mansion, 11-B, Bharucha Marg, Bombay 400001.

Industrial Security Organisation & Detective Agency Pvt. Ltd., Navjivan Society Bldg., Lamington Rd., Bombay 400008.

JM Watch & Ward Services Pvt. Ltd., C-41, East of Kailash, New Delhi 110024.

Linge Gowda Detective & Security Chambers Pvt. Ltd., J.C. Road, Bangalore 560002.

Littlemore Services Pvt. Ltd., 1-A-5, 'Sea Lord', Near President Hotel, Cuffe Parade Road, Bombay 400005.

Martial Security, 15, Guru Nanak Udyog Bhavan, LBS Marg, Bombay 400078.

Monitron Security Pvt. Ltd., Jolly Bhavan No.2, Marine Lines, Bombay 400020.

PAL Security Services, P.O. Box 1923, G.P.O., Bombay 400001.

P.R. Patel & Co. Pvt. Ltd., Union Co-op. Insurance Soc. Bldg., 23, Sir P. Mehta Road, Bombay 400001.

Security Consultants, Kamal Apartments, Near Bandra Masjid, S. V. Rd., Bandra, Bombay 400050.

With Best Compliments from:

MONITRON SECURITY PRIVATE LTD.

Jolly Bhavan No. 2, Marine Lines,
BOMBAY 400 020.
Telephone: 290379.
Gram : " MONCENTOR "

●

Investigation and Detection, Personnel Screening before recruitment, Industrial Security, Confidential Watch, Collection of Evidence, Security of Residential Places.

Escort of valuables and V.I.P.s, Insurance Enquiries, Industrial Intelligence, and any matter requiring intelligence work and inquiry.

Branch Offices at:

AHMEDABAD, SURAT, RAJKOT & AURANGABAD.

AHMEDABAD :

B-7, LEENA APARTMENTS, ELLIS BRIDGE, CROSS ROAD,
AHMEDABAD 380 006.

RAJKOT :

NIRMAL NIVAS, 2/5, JAGNATH PLOT.

" SECURITY IS OUR BUSINESS "

Security Services, Industrial, Investigation & Detection

P. R. PATELL & CO.
PRIVATE LIMITED
23, Phirozshah Mehta Road,
Bombay 400 001.

We specialise in providing full trained ex-army personnel for watch & ward duties, Investigation and Detection of frauds, shadowing of personnel and checking on the background of employees is our speciality. We train Security Officers & Watchmen in the latest methods and techniques of Industrial Security and carry out Security Surveys. Our Specialists on Labour & Industrial disputes are available when tensions prevail. We are personally looking after the Security of a large number of top international and Indian companies. Our business is based on sincerity, efficiency and integrity and we can always be relied upon to serve you.

Tel. Address : "PILOT"
Mg. Director:
Mr. FIRDAUS JEHANGIR.
Phones : **258193 & 253957**

Security & Detective Bureau Ltd., 17, Cathedral Garden Road, Madras 600034.

Security Organisation & Methods Consultants, Hind Rajasthan Bldg., D. Phalke Road, Bombay 400014.

Security & Personnel Services Pvt. Ltd., 'Satyam', 318, Linking Road, Khar, Bombay 400052.

Swastik Detective Agency Pvt. Ltd., Kirad Bhavan, 1, Hanuman Nagar, Nagpur 440009.

Tops Security Services, Sujata Bldg., Juhu Tara Rd., Bombay 400054.

Tradesvel Security Services Pvt. Ltd., 14, Abubaker Mansion, S. Bhagat Singh Road, Bombay 400039.

SHIPBUILDERS, SHIP REPAIRERS

Afco Ltd., 9, Wallace St., Bombay 400001.

Bharat Traders, 199, Perin Nariman St., Bombay 400001.

Bharat Shipyard, 205, Niranjan, 95, N. Subhas Rd., Bombay 400002.

Bombay Marine Engg. Works Pvt. Ltd., 5-B, Bakhtawar, Nariman Point, Bombay 400021.

Chowgule & Co. Pvt. Ltd., Shipbuilding Dn., Mormugao Harbour 403803. (Goa).

Dolphin Marine Enterprises Pvt. Ltd., 275, Reay Rd., Bombay 400010.

Hooghly Dock & Engg. Co. Ltd., 12, Mission Row, Calcutta 700001.

Mangala Engg. Works Pvt. Ltd., Plot No. 23, Mata Niwas, Dr. M.B. Raut Rd., Bombay 400028.

Modern Mechanical & Marine Works Pvt. Ltd., 93, Chinchbunder Rd., Bombay 400028.

Orient Engg. & Shiprepair Works, Orient Indl. Estate, 45, Jerbai Wadia Road, Bombay 400012.

PILCO
HOUSE OF SHIPPING & LIFTING TACKLES
Winches, Wire Ropes & Chains, Chain Pulley Blocks, Trolleys, Eyebolts, Screw & Hydraulic Jacks, Anchors & all sorts of Lifting Tackles.

abdulhusein peerbhoy & sons

TLX 11-6352 APSIN/Phone: 323956/Grams: "STUDCHAINS"
66-68, A. Peerbhoy Building, Bhandari Street, Bombay 400 003.

Patel Engg. Works, Mahavir Darshan, 99, Bhandari St., Bombay 400003.

Shaparia Dock & Steel Co. Pvt. Ltd., Sewree Fort Rd., Bombay 400015.

Singh Hindustan Marine Pvt. Ltd., 12, Rex Chambers, W. Hirachand Mrg., Bombay 400038.

West Coast Lighterage Co. Pvt. Ltd., Bajaj Bhavan, Nariman Point, Bombay 400021.

SHIPCHANDLERS

A. M. Motiwalla & Co., 213, Nagdevi St., Bombay 400003.

Abdeally & Co., B. M., 127, Sarang St., Bombay 400003.

Abdulhusein Peerbhoy & Sons, 66, N. Koli Mrg., Bombay 400003.

Adamji Kaderbhoy, 337, Katha Bazar, Bombay 400009.

Aemphico Engg. Works, Swadeshi Mills Estate, Opera House, Bombay 400004.

Amratlal Chaganlal & Co., 143, Nagdevi St., Bombay 400003.

Bright Engrs., 705, Commerce House, Kennedy Bridge, Bombay 400007.

Eastern Stores & Trading Co. Pvt. Ltd., 115-A, Nagdevi St., Bombay 400003.

Esoofali Esmailji Karachiwalla & Co., 43-45, N. R. Koli Mrg., Bombay 400003.

Heptoola Noorudin & Co., 152, Nagdevi St., Bombay 400003.

Hiralal Maganlal & Co., 263, Janjikar St., Bombay 400002.

Jawahar Enterprises, 40, N.R. Koli Mrg., Bhandari St., Bombay 400003.

Marine Supply Co., W. Hirachand Mrg., Opp. G.P.O., Nombay 400001.

Sea-Linkers, BPT Plot 107, Quay St., Darukhana, Bombay 400010.

Western India Marine Mills & Engineers, 185, Janjikar St., Bombay 400003.

SHIPPING AGENTS

Bombay

Abraham, D. & Sons Pvt. Ltd., Hauge Bldg., Sprott Rd., Ballard Este., Bombay 400038.

Chinubhai Kalidas & Bros., Bombay Mutual Chambers, A. Doshi Mrg., Bombay 400001.

Chowgule Bros., India House, Opp. G. P. O., Bombay 400001.

Cox & Kings (Agents) Ltd., Grindlays Bank Bldg., Dr. Dadabhoy Naoroji Rd., Bombay 400001.

Cruickshank & Co. Ltd., 3, W. Hirachand Mrg., B. Estate, Bombay 400038.

Dhunjibhoy Shipping Enterprises Pvt. Ltd., Zoroastrain Bldg., 16, Horniman Circle, Bombay 400023.

Eastern Bunkerers Ltd., Scindia House, Ballard Estate, Bombay 400038.

Express Transport Pvt. Ltd., Western India House, Sir Phirozshah Mehta Rd., Bombay 400001.

Forbes, Forbes Campbell & Co. Ltd., Forbes Bldg., Charanjit Rai Mrg., Bombay 400001.

Gokak Patel Volkart Ltd., 19, Graham Road, B. Estate, Bombay 400038.

Grand Ship Agency, 5-6, Rex Chambers, 1st Flr., W. Hirachand Mrg., Bombay 400038.

Hind Shipping Agencies, Janmabhoomi Chambers, 29, Walchand Hirachand Mrg., Bombay 400038.

Hindustan Shipping Agency, 29, Bank St., Bombay 400023.

International Liner Shipping Agency, Shreeniwas House, Waudby Rd., Bombay 400001.

International Transport & Trdg. Systems Pvt. Ltd., ITTS, 28, K. Dubash Mrg., Bombay 400023.

J. M. Baxi & Co., 16, Bank St., Bombay 400023.

James Finaly & Co. Ltd., Chartered Bank Bldg., Cannon Rd., Bombay 400023.

Kanji Jadhavji & Co., Masjid Bridge, Mandvi, Bombay 400009.

Kempco Shipping Corpn., 19, Khorshed Bldg., Sir P. M. Road, Bombay 400001.

Leslie, E. & Co., Botawalla Bldg., 7-10, Horniman Circle, Bombay 400023.

Lionel Edwards Ltd., 41, Nicol Rd., B. Estate, Bombay 400038.

Madhavlal & Co. Pvt. Ltd., 204, Raheja Centre, N. Point, Bombay 400021.

Maharashtra Shipping Agency India, 23, Gaikwad Bldg., Pawwala St., Near Charni Rd., Bombay 400003.

Manilal Mohanlal Karachiwala, Leheri House, Mohamedali Rd., Bombay 400003.

Manilal Patel & Co., 38, Cawasji Patel St., Bombay 400001.

Marine Transport Co. Pvt. Ltd., Wakefield House, Sprott Rd., Ballard Este., Bombay 400038.

Maritime Services Pvt. Ltd., Canara Bank Bldg., Mangalore St., Bombay 400038.

Merzario Shipping Agencies Pvt. Ltd., President Hotel, Cuffe Parade, Bombay 400005.

National Shipping Co., Cutch Castle, 4th Flr., Opera House, Bombay 400004.

Nav Bharat Corpn., Rex Chambers, W. Hirachand Mrg., B. Estate, Bombay 400038.

New India Maritime Agencies Pvt. Ltd., New Excelsior Bldg., 3rd Flr., Bastion Rd., Bombay 400001.

Oceanic Shipping Agency Pvt. Ltd., Darabshaw House, S. Vallabhdas Mrg., Bombay 400038.

Orient Ship Agency Pvt. Ltd., Orient House, Mangalore St., Bombay 400038.

SHIPPING AGENTS

NAV BHARAT CORPORATION

Agents :

LICENSED CUSTOM HOUSE.

Agents :

CLEARING, FORWARDING, SHIPPING & WAREHOUSING.

REX CHAMBERS (4th Floor),
WALCHAND HIRACHAND MARG,
BALLARD ESTATE, BOMBAY 400 038.

Phones : 264081 (3 Lines).

Telex : 011-3513.

Peninsular Maritime Services Pvt. Ltd., Udyog Bhavan, 29, Walchand Hirachand Mrg., Ballard Estate, Bombay 400038.

Ranadip Shipping & Transport Co. Pvt. Ltd., Maker Tower E, 4th Flr., Cuffe Parade, Colaba, Bombay 400005.

Sah & Sanghi, Shipping Divn., 11-C, N. S. Patkar Mrg., Bombay 400007.

Sealine Shipping Agency Pvt. Ltd., 207, Marine Chambers, 2nd Flr., 43, New Marine Lines, Bombay 400020.

Shaw Wallace & Co. Ltd., 3, Walchand Hirachand Mrg., Bombay 400038.

Transocean Shipping Agency Pvt. Ltd., 7, Kumpta St., 1st Flr., B. Estate, Bombay 400038.

Travels & Shipping Pvt. Ltd., Darabshaw House, Dougal Rd., B. Estate, Bombay 400038.

Tulso Shipping Pvt. Ltd., Janmbhoomi Chambers, 29, Walchand Hirachand Mrg., Bombay 400038.

Turner Morrison & Co. Ltd., 16, Bank St., Bombay 400023.

United Liner Agencies of India Pvt. Ltd., Wavell House, Ballard Estate, Bombay 400038.

World Wide Maritime Agencies Pvt. Ltd., New Excelsior Bldg., 3rd Flr., Bastron Rd., Bombay 400001.

Goa

Agencia Geral Pvt. Ltd., P. Box 15, Vasco-da-Gama 403802.

Chowgule Bros., Mormugao Harbour 403803. Goa.

Hiralal & Co., Thakker House, Vasco-da-Gamma 403802.

Madras

Ananthakrishna & Co., No. 16, First Line Beach, Madras 600001.

Binny Ltd., Rallis House, 320, Linghi Chetty St., Madras 600001.

Chowgule Bros., 15, Linghi Chetty St., Madras 600001.

C.I.A. & Liners Pvt. Ltd., 123, Angappa Naiken St., Madras 600001.

Cross Oceanic Navigational Services Pvt. Ltd., 115, Linghi Chetty St., Madras 600001.

Cruickshank & Co., Ltd., 7, Linghi Chetty St., Madras 600001.

D.B. Madan & Co., 16, Moore St., Madras 600001.

Express Carriers Ltd., 10/11, Kondi Chetty St., Madras 600001.

Gokak Patel Volkart Ltd., 5/6, Armenian St., Madras 600001.

Gordon Woodroffe & Co., (Madras) Ltd., 1/21, North Beach Rd., Madras 600001.

Indo Malaysia Shipping Agency Pvt. Ltd., 103, Armenian St., Madras 600001.

International Clearing & Shipping Agency, 312/313, Linghi Chetty St., Madras 600001.

J.M. Baxi & Co., 2/21, North Beach Rd., Madras 600001.

K.P.V. Shaik Mohamed Rowther & Co. (P) Ltd., 41, Lingh Chetty St., Madras 600001.

Madras Shipping Pvt. Ltd., 3, Perianna Maistry St., Madras 600001.

New India Maritime Agencies Pvt. Ltd., 119/120, Armenian St., Madras 600001

Overseas Shipping Agencies, 16, Moore St., Madras 600001.

Parry & Co. Ltd., Dare House, Madras 600001.

Shaikh Mohamed Rowther Shipping & Agencies Pvt. Ltd., 16, First Line Beach, Madras 600001.

Shaw Wallace & Co., Ltd., 7, Linghi Chetty St., Madras 600001.

South India Corporation (Agencies) Pvt. Ltd., 99, Armenian St., Madras 600001.

United Liner Agencies of India Pvt. Ltd., 7, Second Line Beach. Madras 600001

Wilson & Co., Pvt. Ltd., 150-A/2, Mount Rd., Madras 600002.

SHIPPING COMPANIES

Bombay

Allan Lines Ltd., Allana Bldg., 424, M. Azad Rd., Bombay 400004

Chowgule Steamships Ltd., Bakhtawar, 3rd Flr., Nariman Point, Bombay 400021.

Cochin Shipping Co., Patva Chambers, Clive Rd., Bombay 400009.

Collis Line Pvt. Ltd., 56, Broach St., Bombay 400009.

Damodar Bulk Carriers Ltd., Jolly Maker Chambers No.2, 14th Flr., Nariman Point, Bombay 400021.

Dempo Steamships Ltd., Regent Chambers, 10th Flr., N. Point, Bombay 400021.

Essar Bulk Carriers Ltd., 100-104, Medows St., Bombay 400023.

Everett Steamship Corpn., Fort House Annexe, Dr. D. Naoroji Rd., Bombay 400001.

Garware Shipping Corpn. Ltd., Express Towers 5th Flr., East Wing, Nariman Point, Bombay 400021.

Great Eastern Shipping Co. Ltd., Mercantile Bank Bldg., M. Gandhi Rd., Bombay 400023.

Indoceanic Shipping Co. Pvt. Ltd., 208, Regent Chambers, 6th Flr., Nariman Point, Bombay 400021.

Interseas Shipping (India) Pvt. Ltd., 61, Jolly Maker Chambers No.2, Nariman Point, Bombay 400021.

Jal Doot Shipping Pvt. Ltd., 508, Embassy Centre, Nariman Point, Bombay 400021.

Jay Shree Shipping Embassy Centre, 7th Flr., Nariman Point, Bombay 400021.

Lloyd Triestino, Neville House, Ballard Estate, Bombay 400038.

Mackinnon Mackenzie & Co. Ltd., 4, S. Vallabhdas Marg, Ballard Estate, Bombay 400038.

Maini Shipping Ltd., 77, Jolly Maker Chambers No.1, Nariman Point, Bombay 400021.

Malabar Steamship Co. Ltd., Express Towers, Nariman Point, Bombay 400021.

Mangla Bulk Carriers Ltd., Block No.23, Mata Niwas, Dr. M.B. Raut Rd., Bombay 400028.

Merchant Steam Navigation Co. Ltd., 289, N. Natha St., Bombay 400009.

Moghul Line Ltd., 16, Bank St., Bombay 400023.

New Dholera Shipping & Trading Co. Ltd., Express Towers, Nariman Point, Bombay 400021.

New Globe Shipping Service Pvt. Ltd., Khatau Bldg., 44, S. Bhagat Singh Rd., Bombay 400039.

Nilhat Shipping Co. Ltd., 36, Jolly Maker Chambers No.1, Nariman Point, Bombay 400021.

Pent Ocean Steamships Pvt. Ltd., Fort House, Dr. D. Naoroji Rd., Bombay 400001.

Polish Ocean Steamships Pvt. Ltd., Fort House, Dr. D. Naoroji Rd., Bombay 400023.

Pradhan Shipping Co. Pvt. Ltd., 74/75, Mahendra Chambers, 134-136, Dr. D. N. Rd., Bombay 400001.

Ranadip Shipping & Transport Co. Pvt. Ltd., Maker Tower E, 4th Flr., Cuffee Parade, Bombay 400005.

Sai Shipping Co. Pvt. Ltd., 12-A, 11th Flr., Embassy Centre, N. Point, Bombay 400021.

Samrat Shipping Co. Pvt. Ltd., 64, Jolly Maker Chambers No.2, Nariman Point, Bombay 400021.

Scindia Steam Navigation Co., Ltd., Scindia House, Ballard Estate, Bombay 400038.

Seabird Shipping & Services Ltd., 405, Maker Bhavan No.3, 4th Flr., 21, New Marine Lines, Bombay 400020.

Seven Seas Transportation Ltd., 15A, Chander Mukhi, Nariman Point, Bombay 400021.

Shipping Corpn. of India Ltd., Shipping House, Madame Cama Rd., Bombay 400021.

Shyama Coastal Shipping Co. Pvt. Ltd., Union Bank Bldg., 4th Flr., 13, Dalal St., Bombay 400023.

SCINDIA

THE SCINDIA STEAM NAVIGATION COMPANY LTD.

Scindia House, Narottam Morarjee Marg, Ballard Estate, Bombay 400 038.

Phone : 268161 (12 Lines).
Grams : "JALANATH" (for Coastal Services)
"SAMUDRAPAR" (for Overseas Services)
Telex : 011-2205/011-3519.

Business : Shipping.

Board of Directors :

Chairman : Smt. Sumati Morarjee.

Directors : Dharamsey M. Khatau; Shantikumar N. Morarjee ; Jehangir P. Patel ; Girdharilal Mehta ; Gopaldass Toolsidass ; Lalchand Hirachand ; A. K. Srivastava (S.D.F.C. Director) ; N. K. Suntook ; C. R. Mehta (S.D.F.C. Director) ; J. Matthan ; H. T. Parekh (I.C. & I.C.I. Director) ; H. M. Patel, I.C.S. (Retd.).

Branch Offices :

Calcutta, Mangalore, Bhavnagar, Porbandar, Jamnagar, Kandla and New Delhi.

Agents in all principal ports of the world.

South East Asia Shipping Co. Ltd., Himalaya House, Palton Rd., Bombay 400001.

Southern Shipping Corpn. Pvt. Ltd., 89, Gandhi Marg, Bombay 400002.

Swan Shipping Co. Pvt. Ltd., Gokul Niwas, Kandivli East, Bombay 400067.

Thakur Shipping Co. Ltd., Clark House, 8, Wodehouse Rd., Bombay 400039.

Tolani Shipping Co. Ltd., 10A, Bakhtawar, Nariman Point, Bombay 400021.

Transocean, 7, Kumpta St., B. Estate, Bombay 400038.

Transworld Shipping Services (India) Pvt. Ltd., Embassy Centre, Nariman Point, Bombay 400021.

Travels & Shipping Pvt. Ltd., Darabshaw House, N. Morarji Mrg., Ballard Estate, Bombay 400021.

Universal Shipping & Coastal Trdg. Pvt. Ltd., India House, Opp. G.P.O., Bombay 400001.

Varun Shipping Co. Ltd., Laxmi Bldg., S. Vallabhdas Mrg., Bombay 400038.

Calcutta

Himalaya Shipping Co. Ltd., 10, Middleton Row, Calcutta 700071.

India Steamship Co. Ltd., 21 Old Court House St., Calcutta 700001.

M. M. P. Lines Ltd., Great Eastern Hotel, Calcutta 700069.

Panchseel Shipping Ltd., 6, Layons Range, Calcutta 700001.

R.A.J. Lines Ltd., 14/1B, Ezra St., Calcutta 700001.

Ratnakar Shipping Co. Ltd., 16, Strand Rd., Calcutta 700001.

Surendra Overseas Ltd., 15, Park St., Calcutta 700016.

Cochin

Kerala Lines Ltd., 2/137, Calvetty, Cochin 682001.

Kerala Shipping Corpn. Ltd., Shipping House, Harbour Rd., Willingdon Island, Cochin 682003.

HIMALAYA SHIPPING CO., LTD.

18B, BRABOURNE ROAD, CALCUTTA 700 001.

Tel. : 261386 6878 4653. Telex : 021-3170 HSC IN.

Bombay Office

33-Jolly Maker Chambers No. 2,
225, Nariman Point,
Bombay 400 021.

Cable : "HIMALSHIP". Tel. : 230375, 231925, 231488.

Telex : 011-5764 HSCL IN.

REGULAR SAILINGS TO WEST ASIA GULF PORTS.

AGENTS FOR BANGLADESH SHIPPING CORPORATION AT CALCUTTA, BOMBAY, SAURASHTRA and VIZAG.

Madras

Essar Bulk Carriers Ltd., Essar House, 26, Haddows St., Madras 600006.

Parekh Ocean Carriers Pvt. Ltd., 11/12, Second Line Beach, Madras 600001.

Poompuhar Shipping Corpn. Ltrd., Kuralagam, 4th Flr., Madras 600001.

South India Shipping Corpn. Ltd., 6, Esplanade, Madras 600001.

Southern Shipping Corporation Pvt. Ltd., 8, Second Line Beach, Madras 600001.

Straights Gulf Shipping Pvt. Ltd., 43, Armenian St., Madras 600001.

STEVEDORES

Bombay

Ardeshir B. Cursetjee & Sons Pvt. Ltd., 6, Kaikushroo Dubash Marg, Bombay 400023.

Darabshaw B. Cursetjee Sons (Bombay) Pvt. Ltd., New Kamani Chambers, Nicol Rd., B. Estate, Bombay 400038.

Eastern Bunkerers Ltd., Scindia House, N. Morarji Marg, Ballard Estate, Bombay 400038.

Hill, Son & Dinshaw Pvt. Ltd., Marshall's Bldg., S. Vallabhdas Marg, Bombay 400038.

Kanji Jadhavji & Co., Masjid Bridge, Bombay 400009.

M. Dinshaw & Co. Pvt. Ltd., Marshall's Bldg., Shoorji Vallabhdas Mrg., Bombay 400038.

R. Sharp & Son Pvt. Ltd., Kaiser-i-Hind Bldg., Currimbhoy Rd., Ballard Estate, Bombay 400038.

Robinsons, Canara Bank Bldg., 15/17, Mangalore St., Bombay 400038.

Shiavax C. Cambata & Co. Pvt. Ltd., Sharda Chambers, New Marine Lines, Bombay 400020.

Vinsons, Imperial Chambers, Wilson Rd., Ballard Estate, Bombay 400038.

Calcutta

Alex Miller (Shipchandlers) Pvt. Ltd., 7, Old Court House Corner, Calcutta 700001.

B. Ghose & Co. Pvt. Ltd., 29, Mission Row Extn., Calcutta 700013.

Balailal Mookerjee & Co. Pvt. Ltd., Wardby House, 25, Swallow Lane, Calcutta 700001.

C. Laurie & Co., 3, Mangoe Lane, Calcutta 700001.

H. M. Coria & Son Pvt. Ltd., 6, Chowringhee Lane, Calcutta 700016.

J. M. Baxi & Co., 6, Lyons Range, Calcutta 700001.

Kamal Mookerjee & Co. (Shipping) Pvt. Ltd., 8/1, Loudon St., Calcutta 700017.

Praful Mukherjee (Stevedores) Pvt. Ltd., Mookerjee House, 17, Brabourne Rd., Calcutta 700001.

T. P. Roy Chowdhury & Co. Pvt. Ltd., 165, Sarat Bose Rd., Calcutta 700026.

Madras

A. Arumugam Chettiar, 67, East Mada Church St., Royapuram, Madras 600013.

Binny Ltd., 320, Linghi Chetty St., Madras 600001.

C. M. Natarajan & Bros., 1, Jaffar Sarang St., Madras 600001.

K. P. V. Shaik Mohamed Rowther & Co. Ltd., 41, Linghi Chetty St., Madras 600001.

Krishna & Co., 14, Jaffar Sarang St., Madras 600001.

N. Selvaradjalou Chetty & Co. (India), 6/20, North Beach Rd., Madras 600001.

South Indian Corpn. (Agencies) Pvt. Ltd., 99, American St., Madras 600001

United Stevedores, 22, Second Line Beach, Madras 600001.

TANNERS

A. Akhtar & Co., 27/28, Sydenhams Rd., Madras 600003.

Asia Tanning Co., 4, Rama Pilai St., Periamet, Madras 600003.

Bokiyu Tanneries Ltd., 52/18, Greenways Rd., Madras 600028.

Brilliant Tanners Pvt. Ltd., 5-9-321/4, Opp. State Bank of Hyderabad, Gunfoundary, Hyderabad 500001.

C. Abdul Rahman & Co., 29 & 30, V. V. Koil St., Periamet, Madras 600003.

C. Kalyanam & Co., 2, Muthugramany St., Madras 600003.

National Tannery Co. Ltd., 1, Middleton St., Calcutta 700016.

Madras Skins Agency, 2/38A, Vepery High Rd., Madras 600003.

R. S. & Sons, 2/38, Vepery High Rd., Madras 600003.

Rajiv Leather Inds., Poonawala Chawl, Dharavi, Bombay 400017.

Shafeeo Shamee & Co., 17, Sydenhams Road, Madras 600002.

South East Tanning Co., 1-C, Naval Hospital Rd., Periamet, Madras 600003.

Sreenivas & Co., 10, Sydenhams Rd., Madras 600003.

Tannery & Footwear Corpn. of India Ltd., 13/400, Civil Lines, Kanpur 208001.

Wagam & Co., P. B. 42, Agra 282001.

Western India Tanneries Ltd., 2-A, Dharavi Rd., Bombay 400017.

TRANSPORT— GOODS FROM BOMBAY

To Gujarat, Madhya Pradesh, Maharashtra and Rajasthan

Abdul Rehman & Sons, 105, Chakla St., Bombay 400003.

Bafna Transports India, 53, S. V. Patel Rd., Bombay 400009.

Bombay Burhanpur Rd. Transport Service, 165, K. Syed St., Bombay 400003.

Bombay Indore Transport Service, 4, Paltan Rd., Opp. Gulshan-e-Iran Restaurant, Bombay 400001.

Ghatge & Patil (Transports) Pvt. Ltd., Sitaram Bldg., Palton Rd., Bombay 400001.

Hajibhai & Co., Haji Ahmed Devji Bldg., M. Azad Rd., Bombay 400003.

Hindustan Motor Transport Co., 80B, Mohamedali Rd., Bombay 400003.

Hirji Virji & Sons, 135, Khand Bazar, Kazi Syed St., Bombay 400003.

Karad-Satara Motor Owners Transport Co., 51, Issaji St., Bombay 400003.

Kolaba Motor Transport Service, 120, Samuel St., Bombay 400009.

Liladhar Narshi Motorwala, Mirchi Gali, Below Masjid, Bombay 400003.

M.P. Transport Co., 135, K. Syed St., Bombay 400003.

Maharashtra Parivahan Pvt. Ltd., Tata Rd., Girgaum, Bombay 400004.

Nagpur Goods Transport Co., 35, Old Bardan Lane, Sri Ram Market, Bombay 400003.

Nav Samata Trasnport Agency, 398, Katha Bazar, Bombay 400009.

New India Transport Co., Eastern Chambers, Poona St., Bombay 400009.

Orient Mailspeed Transport Service, C82, Mohamedali Rd., Bombay 400003.

Parikh Transport Co., 414, N. Natha St., Bombay 400009.

Rapid Transport Co., 38, N. Dhuru St., Bombay 400003.

Reliable Roadways, 45A, Memonwada Rd., Bombay 400003.

Shakti Transport Co., 108, Kambekar St., Bombay 400003.

Shantilal & Co., 364/70, Samuel St., Vadgadi, Bombay 400003.

Shree Digvijay Motor Transport Service, 33, New Bardan Lane, Bombay 400003.

Shree Satyavijay Transport Co., 399, Katha Bazar, Bombay 400009.

Survey Reports & Research

INDIAN COUNCIL OF SOCIAL SCIENCE RESEARCH PUBLICATIONS

Survey of Research

(i) Political Science - Volume I & II ; (ii) Economics — Volume I to VII ; (iii) Geography — Volume I & II ; (iv) Management — Volume I & II ; (v) Public Administration — Volume I & II ; (vi) Psychology ; (vii) Demography ; (viii) Accounting Theory ; (ix) Sociology & Social Anthropology — Volume I to III ; (x) Second Survey of Research in Psychology — Pt. I & II.

Women's Studies

(i) Implications of Declining Sex Ratio in India's Population ; (ii) The Status of Women : Literacy and Employment ; (iii) The Status of Women : Household and Non-household Economic Activity ; (iv) Status of Women.

Gandhi Bibliographies (English, Hindi & Urdu)

Union Catalogue of Social Science Periodicals/Serials 32 — Volumes

Other Publications

(i) Banking Policy in India : An Evaluation ; (ii) Long Way to go ; (iii) Modernizing Effects of University Education on the Value Orientation of Students ; (iv) Input Output Analysis of Gujarat, Punjab and Haryana ; (v) A Geography of Hunger and Insecurity ; (vi) Population, Nutrition and Food Supply ; (vii) Alternatives in Agricultural Development ; (viii) Shifts in the functions of cities and towns of India 1961-71.

Journals

(1) ICSSR Journal of Abstracts and Reviews : Economics ; (2) ICSSR Journal of Abstracts and Reviews : Geography ; (3) ICSSR Journal of Abstracts and Reviews : Political Science ; (4) ICSSR Journal of Abstracts and Reviews : Sociology and Social Anthropology ; (5) ICSSR Newsletter ; (6) Indian Dissertations Abstracts ; (7) Indian Psychological Abstracts ; (8) Research Abstracts Quarterly.

For complete Catalogue and details, please contact:

Director
Indian Council of Social Science Research
Social Science Documentation Centre,
35, Ferozshah Road, New Delhi-110 001.

AHURA TRANSPORT SYNDICATE

Operation Address :
5, J. N. Heredia Marg (Graham Road), 1st Floor,
Ballard Estate,
BOMBAY 400 038.

★

LUXURY CAR AND COACH HIRE FOR LOCAL/ OUTSTATION PICNIC AND ORGANIZED TOURS ALL OVER INDIA

Contact : Office : Phones : 265451/52 53. 263137, 269715
Resi. : Phone : 241996

Shree Sidhnath Transport Co., International Rubber Bldg., N. Jani Rd., Bombay 400009.

Surat Goods Transport Service, 85-C, Mohamedali Rd., Bombay 400003.

Vijay Laxmi Transport Corpn., 3/5, Garibdas St., Vadgadi, Bombay 400003.

Vora Transport Co., 188, K. Syed St., Bombay 400003.

To Delhi, Haryana, Himachal Pradesh and Punjab

Amritsar Bombay Carriers, 201, S. Devji St., Bombay 400003.

Amritsar Transport Co. Pvt. Ltd., Nafees Chambers, Tilak Mrg., Bombay 400003.

Bombay General Freight Carriers Pvt. Ltd., Ashok Chambers, Broach St., Bombay 400009.

Caravan Tr. Organisation, Shanti Bldg, Nowroji Hill Rd. No.4, Dongri, Bombay 400009.

Delhi Kanpur Gondia Tr. Co., 56, Dontad St., Masjid Bunder Rd., Bombay 400009.

Delite Carriers (Regd.), 91, S. Devji St., Bombay 400003.

Globe Transport Corpn., Sitaram Bldg., Paltan Rd., Bombay 400001.

Great India Roadways, 17, Nowroji Hill Rd. No.5, Dongri, Bombay 400009.

Jaipur Golden Transport Co. Pvt. Ltd. 30, Carnac Rd., Bombay 400003

M. K. Mehendale Transport Pvt. Ltd., 20, Gordhandas Mansion, Supari Baug Rd., Parel, Bombay 400012.

Montgomery Co-op. Goods Transport Society Ltd., 209, S. Devji St., Bombay 400003.

New Safe Goods Transport Corpn., 178, S. Devji St., Bombay 400003.

Nitco Roadways Pvt. Ltd., 81, Chandan St., Bombay 400003.

Okara Trade Parcel Carriers, 141/47, Chakla St., Bombay 400003.

Orient Roadlines, 8/C, Mohamedali Rd., Bombay 400003.

Shaheen Roadlines Corpn., 811, Gamadia Rd., Carnac Bunder, Bombay 400001.

Sodhi Road Transport Co., 85, Issaji St., Bombay 400003.

Super Roadways, 26B/20, Dhobi St., Bombay 400003.

To Jammu & Kashmir and Uttar Pradesh

Bombay Okara Carriers (Regd.), Karimji Bldg., 19, Bhandari St., Bombay 400003.

Delhi U.P. M.P. Transport Co., 14A, K. Syed St., Bombay 400003.

Delux Roadlines, 70, Garibdas St., Bombay 400002.

Green Transport Co., 37, Old Bengali Pura St., Bombay 400003.

Hindustan Transport Corpn., 128-A, N. Jani Rd., Eastern Chambers, Poona St., Bombay 400009.

Jaihind Roadways, 3D, Mohamedali Rd., Bombay 400003.

Kanpur Bombay Transport Co. (Regd.), 36, Khadak St., Masjid Bunder Rd., Bombay 400009.

New Howrah Transport Co., A/3, Sugar Market Bldg., Ahmedabad St., Bombay 400009.

New Suraj Transport Co. Pvt. Ltd., 40, Tilak Marg., Bombay 400003.

Northern Carriers Pvt. Ltd., 114, S. Devji Mrg., Bombay 400003.

Shanti Roadways, 15, Dontad St., Bombay 400009.

To Andhra Pradesh, Goa, Karnataka, Kerala and Tamil Nadu

Andhra Goods Carriers, 175, S. Devji St., Bombay 400003.

Bombay Andhra Transport Carriers, 94, Nishan Pada Rd., Dongri, Bombay 400009.

Bombay Andhra Transport Co., 113, Bhandari St., Bombay 400003.

Deccan Queen Transport Co., Shri Samarth Siding, Bapat Mrg., Bombay 400016.

surat

GOODS TRANSPORT SERVICE

mobility of your goods is our concern

wide network covering kashmir to kanyakumari to facilitate prompt and effective service

admn. office

K. PARIKH HOUSE
47, P. D'MELLO ROAD BOMBAY 400 009
PHONES: 320555 • 335555 • 333555
GRAM: RAJENCAR, TELEX: 011-5875

MAIN BRANCHES:

AHMEDABAD
ANKLESHWAR
BANGALORE
BARODA
BILLIMORA
CALCUTTA
COCHIN
COIMBATORE
DELHI
HYDERABAD
INDORE
MADRAS
METTURDAM
NAVSARI
POONA
SALEM
SILVASSA
SURAT
VAPI

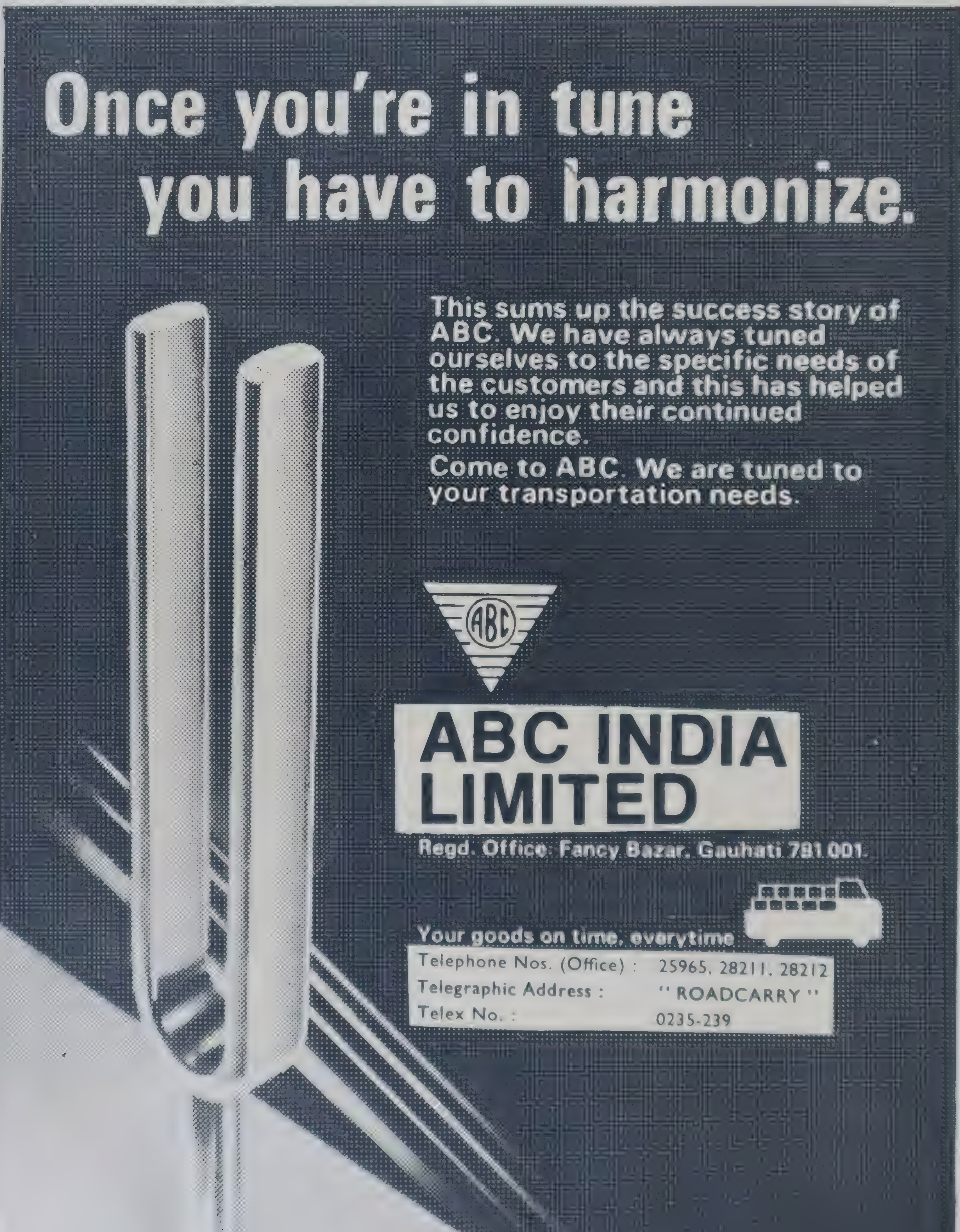
ALLIED CONCERN

R. P. gupta & sons

Tanker Owners & Luxury Bus Suppliers

CONTACT

KURLA : 671102
THANA : 594839



Once you're in tune you have to harmonize.

This sums up the success story of ABC. We have always tuned ourselves to the specific needs of the customers and this has helped us to enjoy their continued confidence.

Come to ABC. We are tuned to your transportation needs.

ABC INDIA LIMITED

Regd. Office: Fancy Bazar, Gauhati 781 001.

Your goods on time, everytime

Telephone Nos. (Office) :	25965, 28211, 28212
Telegraphic Address :	" ROADCARRY "
Telex No. :	0235-239

PRESSMAN

TRANSPORTATION SERVICES..

- ATTRACTIVE TERMS FOR REGULAR TRANSPORTATION AND LONG TERM CONTRACTS.
- Q.T.S. SERVICE AT ALL CAPITAL CITIES
- NO TRANSHIPMENT
- STORAGE FACILITIES
- TRUCKS & TRAILERS 10 TO 200 TONS
- TRANSPORTATION OF OVER DIMENSIONAL CONSIGNMENTS
- SPECIALIST IN CARRYING CONTAINERS OF ALL SIZES TO ALL OVER INDIA

BOMBAY **PHONES : 335953 320464**
RESI : 821803 812683

RANCHES AND AGENCIES ALL OVER INDIA

RASHTRIYA CARGO MOVERS

Head Office: STEEL CHAMBERS, BROACH STREET,
BOMBAY-400 009.

Deepak Transport Agency, 161, Shayda Mrg., Bombay 400009.

Delux Roadlines, 70/72, Garibdas St., Vadgadi, Bombay 400003.

Dinesh Transport Service, 1/2, Wadvakar Bldg., Gokhale Rd., Thane 400601.

Express Road Transport Pvt. Ltd., Mehta Chambers, Kalyan St., Bombay 400009.

Famous Transport Co., 15, Dontad St., Khadak, Bombay 400009.

Interestate Transports Pvt. Ltd., 12/14, Dontad St., Bombay 400009.

Interways Transport, 333, Samuel St., Bombay 400003.

Jai Mahavir Transport Agency, 104/108, Patva Chambers, Clive Rd., Bombay 400009.

Kale's Transport Service, Steel Chambers, Broach St., Bombay 400009.

Karnatak Maharashtra Transport Pvt. Ltd., 208, K. Syed St., Bombay 400003.

Kerala Roadways (Regd.), 25, Old Bengalipura St., Bombay 400009.

Kerala Transport Co., Loha Bhavan, P. D'Mello Rd., Bombay 400009.

Kirti Transport Pvt. Ltd., 91, Memonwada Rd., Bonbay 400003.

Laxmi Roadlines, 216, New Anant Bhuvan, 257, N. Natha St., Bombay 400009.

M. G. Bros. Lorry Service, Ashok Chambers, Broach St., Bombay 400009.

Maha Transport Co., Gowawala Bldg., 73, Janjikar St., Bombay 400003.

Mujawar & Co., Shroff Bhuvan, P. D'Mello Rd., Bombay 400009.

Nutan Gujarat Transport Co., Shakti Bhuvan, 1st Bhapurao Mrg., Bombay 400003.

Pai Transport Co., 7/9, Issaji St., Vadgadi, Bombay 400003.

Pragati Transport Co., K-4, Sitaram Bldg., Paltan Rd., Bombay 400001.

Prakash Roadlines, Pvt. Ltd., Eldee Chambers, 3, Broach St., Bombay 400009.

Radiant Kerala Roadways, Ebrahim Manor, 110, S. V. Patel Rd., Bombay 400009.

Rajesh Roadways, 10, Fancy Chambers, 94, Surat St., Dana Bunder, Bombay 400009.

Rajkamal Transport, 19, Dhobi St., Bombay 400003.

Road Carriers Corpn., Surat Siding, Surat St., Bombay 400009.

Sainath Transport Co., 22, Issaji St., Old Bardan Lane, Bombay 400008.

Senior Roadlines, Anand Bhavan, 102, New Chinchbunder Rd., Bombay 400009.

Sholapur Goods Transport, 138, K. Syed St., Bombay 400003.

Shree Mahadeswara Lorry Service, 197, S. Devji St., Bombay 400003.

Shree Sadguru Prasanna Transport Service, 102, Coronation Bldg., D. Phalke Rd., Dadar, Bombay 400014.

South Freight Carriers Pvt. Ltd., Ashok Chamber, Broach St., Bombay 400009.

Southern India Transport Service, 210, Himalaya House, Paltan Road, Bombay 400001.

Southern Road Carries Ltd., 98/100, Veer Vithaldas Chandan St., Bombay 400003.

Sri Palniappa Transport, Ashok Broach St., Dana Bunder, Bombay 400009.

United Transport Co., 80, Argyle Rd., Bombay 400009.

To Assam, Bihar, Orissa and West Bengal

Ashoke Transport Organisation, Mehta Chambers, Kalyan St., Bombay 400009.

ABC India Ltd., 92, S. Devji St., Bombay 400003.

Carryco, Municipal Bldg. No. 4, S. Siddique Rd., Carnac Bridge, Bombay 400001.

Dooars Transport Pvt. Ltd., 39, S. Devji St., Bombay 400003.

Indra Motors Pvt. Ltd., 99, Surat St., Bombay 400009.

Khanna Transport Corpn., Veena Chambers, Clive X Lane, Bombay 400009.

Maharashtra Roadlines Co. Pvt. Ltd., 8/10, Ahmedabad St., Bombay 400009.

National Roadways, Steel Chambers, Broach St., Bombay 400009.

Nepal Carriers, 58-B, Steel Chambers, Broach St., Bombay 400009.

New General Trading & Transport Corpn., 66, Chandan St., Bombay 400003.

New Hariyana Transport Co., 37, Issaji St., Bombay 400003.

Road Bird Pvt. Ltd., 76, Masjid Siding Rd., Bombay 400009.

Savani Transport Pvt. Ltd., Kasam Chambers, 163, P. D'Mello Rd., Bombay 400001.

All Over India

Associated Road Carries Pvt. Ltd., 30, Mehta Chambers, 127A, Kalyan St., Bombay 400009.

Associated Traders & Engrs. Pvt. Ltd., Eldee Chambers, P. D'Mello Rd., Bombay 400009.

Carriers Corpn. of India, Steel Chamber, Broach St., Bombay 400009.

Economic Transport Orgn., Economic House, 1st Flank Rd., Chinch Bunder Rd., Bombay 400009.

G. Shantilal Transport Co., 3, Cement Chawl, Katha Bazar, Bombay 400009.

Indian Roadways Corpn., Prestige Chambers, 127-B, Kalyan St., Bombay 400009.

International Express, 28, Eastern Chambers, 128A, Argyle Rd., Dana Bunder, Bombay 400009.

M. B. T. Co., Rajgor Chambers, Masjid Siding Rd., Bombay 400009.

Mehta Roadlines, 208, Sardar Patel Rd., Bombay 400009.

Munshi & Co., 84-C, Mohammedali Rd., Bombay 400003.

Pal Goods Transport Co., 15, Surat St., Bombay 400009.

Patel Roadways Pvt. Ltd., 100, Chakla St., Bombay 400003.

Rekhi Roadlines Pvt. Ltd., 40-42, Shroff Bhuvan, 159, P.D'Mello Rd., Bombay 400001.

Road Transport of India, 273/277, Narsi Natha St., Bombay 400009.

South Eastern Carriers, 199, S. Devji St., Bombay 400009.

South Eastern Roadways, Nooruddin Chambers, 87-B, Broach St., Bombay 400009.

Tatanagar Transport Corpn., Steel Chambers, Broach St., Bombay 400009.

Transport Corpn. of India Ltd., Transport House, 128-B, Poona St., Bombay 400009.

Vishal Roadways, 102, Steel Centre, Bombay 400009.

TRAVEL AGENCIES

List of some Travel Agencies in major cities approved by the Government of India with their telegraphic addresses within inverted commas:

Bombay

Ador Travels Pvt. Ltd., Ador House, 6, K. Dubash Mrg., Bombay 400023.

Aero Agencies Pvt. Ltd., 112, Medows St., Bombay 400023.

Air Trade & Tours Pvt. Ltd., Maker Bhavan No.2, 18, New Marine Lines, Bombay 400020.

Ambassador Travels Pvt. Ltd., 14, Embassy Centre, Nariman Point, Bombay 400021.

American Express International, Travel Division, Express Towers, N. Point, Bombay 400021. (Head Qrts.): "AMEXCO".

Arcadia Travels Pvt. Ltd., A-7/8, Sitaram Bldg., Near Crawford Mkt., Bombay 400001. "ARCTRA".

Asiatic Travel Service, 12, Murzban Rd., Bombay 400001. (Head Qrts.): "AIRASIA".

Balmer Lawrie & Co. Ltd., 5, Graham Rd., Ballard Estate, Bombay 400038. (Branch): "BALMER".

Bathija Travel Pvt. Ltd., New Silk Bazar, 491, Kalbadevi Rd., Bombay 400002. (Head Qrts.): "TRAVELRITA".

Blue Skies Pvt. Ltd., 28, K. Dubash Marg, Bombay 400023. (Head Qrts.): "BLUEHORIZON".

Chumble Travels Pvt. Ltd., 304, Niranjan Bldg., 99, Marine Drive, Bombay 400002.

Comforts Travel & Tours, Nagindas Chambers, 167, P. D'Mello Rd., Bombay 400038. "AIRTRAVEL".

Cosmos Travel Pvt. Ltd., 223, Dr. Cawasji Hormusji St., Dhobitalao, Bombay 400002. "EMITRAVEL".

Cox & Kings (Agents) Ltd., Grindlays Bank Bldg., Dr. D. Naoroji Rd., Bombay 400001. (Head Qrts.): "COXSHIP".

Everett Travel Service, Fort House Annexe, 221, Dr. D. Naoroji Rd., Bombay 400001. (Branch): "TRAVERETT".

Fourways Travels Pvt. Ltd., 8, Juhu Tara Rd., Santacruz West, Bombay 400049.

Freight Carriers Pvt. Ltd., 43, Tamarind Lane, Bombay 400001. (Head Qrts.): "QUICKFRETT".

Freight Wings & Travel Pvt. Ltd., Adarsh Indl. Estate, Sahar Rd., Andheri East, Bombay 400093.

Govan Travels, Poonam Apartments, 229, Dr. A. Besant Rd., Bombay 400018. "GOVANTOURS".

Hermes Travel & Garage Pvt. Ltd., 9, Waudby Rd., Bombay 400001. "SEMREH".

Hind Musafir Agency Pvt. Ltd., Khorshed Bldg., Sir P. Mehta Rd., Bombay 400001. (Head Qrts.):"PRAVASI".

Indtravels, Neville House, Nicol Rd., Ballard Estate, Bombay 400038. (Head Qrts.): "INDTRAVELS".

Kanji Jadhavji & Co., Masjid Bridge, Bombay 400009. "GITA".

Kundu Travel Agency, 604, Auto Commerce Centre, 8th Flr., Kennedy Bridge, Bombay 400007.

Mackinnous Travels Service, 4, S. Vallabhdas Marg, Bombay 400038. (Head Qrts.):"MACKINNONS".

Mercury Travels (India) Ltdd., 70, Dr. V. B. Gandhi Marg, Bombay 400023. (Branch): "MERCTRAVEL".

Onkar Travels P. Ltd., 2, Raheja Centre, Plot No. 214, Nariman Point, Bombay 400021.

Orient Express Co. Pvt., Ltd., UCO Bank Bldg., 359, Dr. D. Naoroji Rd., Bombay 400001. "OREXPRESCO".

Patvolk Travel Services, (Divn. of Gokak Patel Volkart Ltd.), 19, Graham Rd., Ballard Estate, Bombay 400038.

Raju Hires (International), 10, Madhu Ind. Estate, Pandurang Budhkar Marg, Bombay 400013.

Satya Travels, 1, Atlanta, 209, N. Point, Bombay 400021.

Sanghi International Travels, 39-A, N. S. Patkar Mrg., Bombay 400007. (Head Qrts.): "SANGHIWAR".

Sita World Travel (India) Pvt. Ltd., 'Atlanta", Nariman Point, Bombay 400021. "SITATRAVEL".

Skylark Travels Pvt. Ltd., 114, Shahid Bhagatsingh Rd., Colaba, Bombay 400005. "LARKTRAVEL".

SOTC Travels & Tours, 44, Mint Rd., Bombay 400001. (Head Qrts.): "SINDORTOUR".

Telstar Travels Pvt. Ltd., Mistry Court, 208, Dinshaw Vachha Rd., Bombay 400020. "JETHROUGH".

Thos. Cook India Ltd., Dr. D. Naoroji Rd., Bombay 400001. "THOMASCOOK".

Trade-Wings Ltd., 30, K. Dubash Mrg., Bombay 400023. (Head Qrts.): "TRAVEL"

Trans India Travels, Meher House, 15, Cawasji Patel St., Bombay 400001.

Trans Travel Pvt. Ltd., 4, Jain Chambers, 577, S. V. Rd., Bandra, Bombay 400050, "TRANSAIR"

Travel Corpn. (India) Pvt. Ltd., "Chandra Mukhi", Nariman Point Bombay 400021. (Head Qrts.): "TURING"

Travelera Ltd., Shahibag House, 13, Walchand Hirachand Marg, Ballard Estate, Bombay 400038.

Vensimal Bassarmal & Bros., 521, Kalbadevi Rd., Bombay 400002.

Calcutta

American Express International Banking Corpn., 21, Old Court House St., Calcutta 700001. "AMEXCO".

Balmer Lawrie & Co. Ltd., 21, N. Subhas Rd., Calcutta 700001, (Head Qrts.): "BALMER".

Everett Travel Service, 4, Govt. Place (N), Calcutta 700001, (Head Qrts.): "TRAVERTI".

Giananey Travels & Tours, Commerce House, 2, G. C. Avenue, Calcutta 700013. "WORRYFREE".

Gladstone Lyall & Co. Ltd., 25, Camac St., Calcutta 700016. (Head Qrts.): "GLADSWYLL".

Indian Air Travels Ltd., 28, Chittaranjan Avenue, Calcutta 700012. "SKYMASTER".

James Warren & Co. (I) Ltd., 31, Chowringhee Rd., Calcutta 700016, (Head Arts.): "PLANTERS".

Lionel Edwards Ltd., 21, Old Court House St., Calcutta 700001, "LIONWARDS".

Mackinnons Travel Service, 16, Strand Rd., Calcutta 700001. "MACKCAL".

Maharaja Travels, 9, K.S. Roy Rd., Calcutta 700001.

Mercury Travels (India) Ltd., 46-C, Chowringhee Rd., Calcutta 700071, (Head Qrts.): "MERCTRAVEL".

Orchid Travels Pvt. Ltd., 56, Chowringhee Rd., Calcutta 700016, (Head Qrts.): "TRAVORCHID".

Orient Express Co. Pvt. Ltd., 1 & 2, Old Court House Corner, Calcutta 700001, "OREXPRESCO".

Panurge Co., 30B, J. L. Nehru Rd., Calcutta 700016, (Head Qrts.): "EGRUNAP".

Sita World Travel (India) Pvt. Ltd., 27B, Camac St., Calcutta 70016, (Branch): "SITATRAVEL".

Speedways International,, 3, Chowringhee Square, Calcutta 700013, (Head Qrts.): "SPEEDWAYS".

Trade Wings (Calcutta) Ltd., 32, Chowringhee Rd., Calcutta 700016, (Head Qrts.): "TRAVELLING".

Travel Corpn., (India) Pvt. Ltd., 46-C, Chowringhee Rd., Calcutta 700071, "TRAVELAIDS".

Vensimal Bassarmal & Bros., 18, Rabindra Sarani, Calcutta 700001, "VENBASBRO".

Madras

Ashok Travels Pvt. Ltd., 23, Pantheon Rd., Egmore, Madras 600008, "JETRAVELS".

Asian Travels (India) Pvt. Ltd., 7/8, Anna Salai, Mount Rd., Madras 600002, "WORLTRAVEL".

Bharat Travel Services Pvt. Ltd., 159, Linghi Chetty St., Madras 600001, (Head Qrts.): "EXCURSION".

Binny Ltd., 7, Armenian St., Madras 600001, "BINNY".

Gay Travels Pvt. Ltd., 15/C, Nungambakkam High Rd., Madras 600034, "GAYTRAVEL".

Mercury Travels (India) Ltd., 40, Mount Rd., Madras 600006, "MERCTRAVEL".

Thomas Cook

The trusted name in travel. Everywhere.

Over 900 offices worldwide.

Thomas Cook (India) Limited

Thomas Cook Building
Dr. D. Naoroji Road
Bombay 400 001
Tel. No. 258556

55, Mahatma Gandhi Road
Bangalore 560 001
Tel. No. 571066/7

Taj Coromandel Hotel
5 Nungambakkam High Road
Madras 600 034
Tel. No. 83092/93/94

Hotel Imperial
Janpath
New Delhi 110 001
Tel. Nos. 312402, 312405

everest/79/TCO/133

Orient Express Co. Pvt. Ltd., 35, Mount Rd., Madras 600002, (Branch): "OREXPRESCO".

Ram Mohan & Co. Pvt. Ltd., 362, N. S. C. Bose Rd., Madras 600001

Revel Tours & Travels Pvt. Ltd., 34, Rajaji Salai, Madras 600001.

Sherif Travel & Cargo Services Pvt. Ltd., 22, Second Line Beach, Madras 600001, "SHERVELS".

Sita World Travel (I) Pvt. Ltd., 19, Commander-in-Chief Rd., Madras 600008, (Branch): "SITATRAVEL".

Thomas Cook Overseas Ltd., 4/5, North Beach Rd., Madras 600001, "THOMASCOOK".

Trade-Wings Ltd., 150-B, Anna Salai, Madras 600002, "TRAVELAGES".

Travel Corpn. (I) Pvt. Ltd., 150, Mount Rd., Madras 600006, (Branch: "TRAVELLING".

New Delhi

Air Travel Bureau Pvt. Ltd., 95-M, Connaught Circus, New Delhi 110011, "AIRBUREAU".

Ambassador Travels Pvt. Ltd., 60, Regal Bldg., Parliament St., New Delhi 110001, (Head Qrts.): "AMBTRAVEL".

American Express International Banking Corpn. (Travel Divn.), Wenger House, Connaught Place, New Delhi 110001, (Branch): "AMEXCO".

Asiatic Travels Service, 1/90, Connaught Place, New Delhi 110001, (Branch): "AIR-ASIA".

Careways (I) Pvt. Ltd., 15A/46, W.E.A., New Delhi 110005, (Head Qrts): "CAREWAYS".

Chaudri International Pvt. Ltd., 303, Ansal Bhawan, 16, Kasturba Gandhi Mrg., New Delhi 110001, "CHEPIL".

Cox & Kings (Agents) Ltd., Indra Palace, Connaught Circus, New Delhi 110001, (Branch): "COXSHIP".

Everett Travel Service, Prem House, 11C, Connaught Place, New Delhi 110001, (Branch): "TRAVERETT".

Govan Travels, 4, Scindia House, New Delhi 110001, (Head Qrts.): "GOVANTOURS".

Indian Air Travels Ltd., 10, Jain Mandir Rd., New Delhi 110001, (Branch): "CARAVELLE".

Indtravels, Hotel Imperial, Janpath, New Delhi 110002, (Branch): "INDTRAVELS".

Iyer & Son Pvt. Ltd., U.I. Life Bldg., F-Block, Connaught Place, New Delhi 110001, (Head Qrts.): "IYARNSON".

Kwick Travels P. Ltd., 6/85, Padam Singh Rd., W.E.A., Karol Bagh, New Delhi 110005.

Mackinnons Travel Service, 16, Parliament St., New Delhi 110001, (Branch): "MACKINNONS".

Mercury Travels (India) Pvt. Ltd., Jeevan Tara Bldg., Parliament St., New Delhi 110001, (Branch: "MERCTRAVEL".

Orient Express Co. Pvt. Ltd., 70, Janpath, New Delhi 110002, OREXPRESCO".

Oriental Travels Pvt. Ltd., Marina Hotel, Connaught Circus, New Delhi 110001, "SAFEST".

Saha & Rai Travels Pvt. Ltd., 9-A, Connaught Place, New Delhi 110001, (Head Office): "SAHRAITRAV".

Sanghi Travels, 7E, Jhandewalan Extn., New Delhi 110055, "AIRSPRAY".

Sita World Travel (I) Pvt. Ltd., F12, Connaught Place, New Delhi 110001, (Head Qrts.): "SITATRAVEL".

Skipper Travels Int. Pvt. Ltd., 8A, Kashi House, Connaught Place, New Delhi 110001, "SKIPTRAV".

SOTC Travels & Tours (India) Pvt. Ltd., No. 6, Himalaya House. 23, K. Gandhi Marg, New Delhi 110001.

Thomas Cook Overseas Ltd., Hotel Imperial, Janpath, New Delhi 110002, "THOMASCOOK".

TRAVEL CORPORATION (I) Pvt. Ltd.

Hotel Metro, N-49, Connaught Circus, New Delhi 110 001

		Phones
Regional Manager	Mr. B. P. Dumasia	45181-185
Branch Manager	Mr. Vishnu K. Bakhru	45834-838
Tours Dept.		
Manager — Tours	Mr. N. K. Malhotra	
Deputy Manager	Mr. C. P. Gupta	45181
Asst. Manager (Japan)	Mr. N. Masih	to
Asst. Manager (USA) — Tours	Mr. R. L. Shah	45185
Asst. Manager (S. Europe & U.K.)	Mr. D. Sugand	
Asst. Manager (Taiwan & Far East)	Mr. C. Bhatt	45181-185
Manager — Transport	Col. P. K. Banker	44819
Accountant — Tours	Mr. H. K. Chopra	43352
Travel Dept.		
Manager — Travel	Mr. B. D. Rao	45834
Asst. Manager	Mr. R. Mohan	to
Asst. Manager — Travel	Mr. Ram Nath Sharma	45838
Accountant — Travel	Mr. A. N. Sachdev	43352
Air Booking Counter		42077, 42150
Rail Booking Counter		44582
Project Dept., C-35, Connaught Place, New Delhi 110 001		350645
Asst. Manager — Projects	Mr. G. K. Sainanee	310383

Residential Lines :

	Phones		Phones
Mr. B. P. Dumasia	374099	Mr. C. P. Gupta	383568
Mr. Vishnu K. Bakhru	666733	Mr. N. Masih	626726
Mr. N. K. Malhotra	581742	Mr. R. Mohan	618550
Col. P. K. Banker	667312	Mr. G. K. Sainanee	668775

Trade Wings Ltd., 60, Janpath, New Delhi 110002 (Branch): "TRAVIT".

Travel Corpn. (I) Pvt. Ltd., Hotel Metro, N-49, Conn. Circus, New Delhi 110001, (Branch): "TRAVELJENA".

Travel World Inc., Room 3, Hotel Janpath, New Delhi 110002, (Head Qrts.): "WORLDTOUR".

TUBE-WELL DRILLERS

Alladin Virji Nathai, 1st Lane, Darukhana, Bombay 400010.

Bharat Water Works, Dr. R. Prasad Rd., Mulund, Bombay 400080.

Borewells, 25 B, Noble Chambers, Parsi Bazar St., Bombay 400001.

Drilling Corpn., C-3, Bhardran Nagar, Malad, Bombay 400064.

Hydro Carbide Drilling Co., 166, Salset Rd., Kalina, Santa Cruz East, Bombay 400029.

Imperial Tubewell Co., 161/1, M. Gandhi Rd., Calcutta, 700007.

Jai Malhar International, Municipal Bldg., Block D/30, Agarwada, Sion, Bombay 400022.

Moona Water & Mineral Exploration Bureau, 'Parikshit', 59, Jawahar Nagar, Goregaon, Bombay 400062.

UNDERWATER SERVICES

(See under Diving & Underwater Services.)

ZIP FASTENERS (NYLON) MFRS.

Your requirements of : NYLON Zip Fasteners can be satisfied both in quality and quantity with NYLOC, India's most modern Nylon Zip Fasteners.

Manufactured by

NYLO PLAST INDUSTRIES PVT. LTD.

Nyloc House, 254-D2, Dr. Annie Besant Road,
Prabhadevi, Bombay 400 025.

Telex : 011-3752.

Phones : 456231-32 Grams : " NYLONZIP ".

ZIRCONIUM SILICATE

FOUR FIELD

F-2 Block, Shed No. W-14
M.I.D.C. Industrial Area
Pimpri, Pune 411 018.

Grams : " WHITROX ".

Phones: 82431 & 84807.

Manufacturers of :

Zirconium Silicate Ceramic glaze opacifier, Vibro Energy Wet — Grinding Mills and Fluid Energy Pulveriser for submicrons grinding of materials.

It pays to advertise

in

THE TIMES OF INDIA

DIRECTORY & YEARBOOK

including

Who's Who in India

Try it and see the results.

GENERAL ELECTIONS

PARLIAMENT & ASSEMBLIES

As a Sovereign Democratic Republic, India has a bicameral Legislature — The Rajya Sabha (Council of States) and Lok Sabha (The House of the People). The President heads both.

Rajya Sabha : No. of seats: 244. Nominated by President : 12. Requirements for election : Citizenship of India and over 30 years of age. Not subject to dissolution. One third members retire every three years. Members indirectly elected through State legislatures.

Lok Sabha has 542 members, all elected through general election.

SEVENTH LOK SABHA POLL

The Sixth Lok Sabha was dissolved on August 22, 1979. The election to the Seventh Lok Sabha was the second mid-term poll. The first mid-term poll was the fifth general election in 1971.

The first day poll on January 3, 1980, in 18 States and 9 Union Territories, had 2,237 candidates in the field and 55 per cent of 148 million electorate in 244 Lok Sabha constituencies voted. January 3 was declared as a holiday in all constituencies going to the polls on that day. The second round of polling on January 6, covered 281 constituencies and parts of 17 others in 15 states.

Polling dates : Polling took place on January 3 and January 6, 1980 respectively in different States/Territories. Name of State/Territory, polling dates in brackets and number of constituencies to which elections were held respectively : Andhra Pradesh (6) 42 ; Assam (6) 3 ; Bihar (6) 54 ; Gujarat (3 & 6) 13 & 13 ; Haryana (3) 10 ; Himachal Pradesh (3) 4 ; Jammu & Kashmir (3 & 6) 3 & 3 ; Karnataka (3 & 6) 14 & 14 ; Kerala (3 & 6) 11 & 9 ; Madhya Pradesh (3 & 6) 24 & 16 ; Maharashtra (3 & 6) 26 & 22 ; Manipur (3 & 6) 1 & 1 ; Meghalaya (3) 2 ; Nagaland (3) 1 ; Orissa (3) 21 ; Punjab (3) 13 ; Rajasthan (3 & 6) 16 & 10 ; Sikkim (3) 1 ; Tamil Nadu (3 & 6) 19 & 20 ; Tripura (6) 2 ; Uttar Pradesh (3 & 6) 50 & 35 ; West Bengal (6) 42. The Union Territories went to the polls on 3rd January 1980.

Nominations : For the 529 Lok Sabha seats in 1980 7,151 candidates filed their nominations against 4,317 in 1977. Out of this 2,518 withdrew leaving 4,633 in the field. They were : Janata Party : 420 ; Lok Dal : 292 ; Congress (U) : 210 ; Congress (I) : 486 ; C.P.I. : 50 ; C.P.I.-M. : 60 ; State Parties : 106 ; and Independent : 2,736. 412 ex-M.P.s were also in the contest.

The largest number of candidates were from Uttar Pradesh — 1,004 for 85 seats, followed by Bihar — 594, Maharashtra — 415 and Madhya Pradesh — 359.

Election did not take place in 12 constituencies of Assam State and one in Meghalaya following an agitation for the postponement of the poll. Elections were countermanded in one Orissa and one West Bengal constituencies.

From Srinagar (Jammu & Kashmir) Farooq Abdullah of National Conference was declared elected unopposed.

Poll Clashes : Seven people lost their lives in poll clashes in various parts of the country. These clashes were reported from Andhra Pradesh, Madhya Pradesh, Uttar Pradesh and West Bengal.

Cost of Poll : The expenditure on the general election in 1952 was Rs. 104·5 million ; 1957 : Rs. 59·0 million ; 1962 : Rs. 73·1 million ; 1969 : Rs. 109·5 million : 1971 : Rs. 144·3 million and in 1977 it was Rs. 298·1 million.

Actual expenditure on the 1980 Lok Sabha poll was Rs. 559·7 million out of which Rs. 117·10 million was spent on the revision of electoral rolls.

Electorate : The number of people allowed to vote was 173 million in first elections of 1952 ; 193 million in the second in 1957 ; 216 million in the third in 1962 ; 251 million in the fourth in 1967 ; 271 million in the fifth in 1971 ; 318 million in the sixth in 1977 ; and 361 million in 1980.

The following statement shows the total number of constituencies and number of electorates during 1977 and January 1980 respectively.

Name of State/ Union Territory	Total number of constituencies	Total number of electorate in 1977	Total number of electorate in 1980
Andhra Pradesh	42	27,374,565	30,463,076
Assam	14	7,189,580	8,537,497
Bihar	54	34,233,510	39,536,456
Gujarat	26	14,099,926	15,520,678
Haryana	10	5,690,976	6,784,732
Himachal Pradesh	4	1,918,151	2,269,406
Jammu & Kashmir	6	2,544,624	2,813,164
Karnataka	28	16,700,261	19,599,314
Kerala	20	11,350,840	13,125,279
Madhya Pradesh	40	22,505,193	25,266,988
Maharashtra	48	28,490,646	33,707,463
Manipur	2	784,484	869,686
Meghalaya	2	527,238	635,767
Nagaland	1	467,162	464,484
Orissa	21	12,626,873	13,804,670
Punjab	13	8,040,582	9,692,962
Rajasthan	25	15,172,042	17,686,973
Sikkim	1	122,696	117,640
Tamil Nadu	39	26,861,460	27,929,535
Tripura	2	863,877	1,055,935
Uttar Pradesh	85	51,674,319	57,837,823
West Bengal	42	25,052,735	29,289.875
Union Territories			
Andaman & Nicobar Islands	1	79,125	94,704
Arunachal Pradesh	2	216,564	264,402
Chandigarh	1	153,423	195,353
Dadra & Nagar Haveli	1	37,495	45,760
Delhi	7	2,585,674	3.082,279
Goa, Daman & Diu	2	469,295	510,258
Lakshadweep	1	18,750	21,205
Mizoram	1	197,475	220,810
Pondicherry	1	293,061	317.779

VOTES POLLED

Year	No. of Seats	No. of Electorate	No. of votes polled	% of votes polled
1	2	3	4	5
1952	489	173,213,635	80,709,202	45·67
1957	494	193,652,069	91.329,866	47·84
1962	494	217,693,197	119,904.315	55·42
1967	520	250,086,202	152,724,611	61·33
1971	518	274,094,493	151,536,802	55·29
1977	542	321,174,327	194,263,913	60·53
1980	542	361,751,971	196,237,432	55·50

Poll Percentage : The poll percentage in the country as a whole was 55·5 in the 1980 Lok Sabha election, compared to 60·53 in 1977, 55·29 in 1971, 61·33 in 1967 and 55·42 in 1962.

Lok Sabha Strength : The delimitation of parliamentary constituencies throughout the country has been completed and the strength of the Lok Sabha has been increased to 542.

The latest distribution of the Lok Sabha seats in different States is: Andhra (42), Assam (14), Bihar (54), Gujarat (26), Haryana (10), Himachal Pradesh (4), Jammu and Kashmir (6), Karnataka (28), Kerala (20), Madhya Pradesh (40), Maharashtra (48), Manipur (2), Meghalaya (2), Nagaland (1), Orissa (21), Punjab (13), Rajasthan (25), Sikkim (1), Tamil Nadu (39), Tripura (2), Uttar Pradesh (85), and West Bengal (42).

Union territories : Andaman and Nicobar Islands (1), Arunachal Pradesh (2), Chandigarh (1), Dadra and Nagar Haveli (1), Delhi (7), Goa, Daman and Diu (2), Lakshadweep (1), Mizoram (1) and Pondicherry (1).

Women Candidates : There were 142 women who contested the 1980 Lok Sabha elections of whom 28 were elected.

Scheduled Castes/Tribes : Out of 542 seats in the Lok Sabha 119 are reserved seats — 79 for Scheduled Castes and 40 for Scheduled Tribes. State-wise the number of seats reserved for Scheduled Castes/Scheduled Tribes respectively are : Andhra Pradesh (6 : 2) ; Assam (1 : 2) ; Bihar (8 : 5) ; Gujarat (2 : 4) ; Haryana (2 : —) ; Himachal Pradesh (1 : —); Karnataka (4 : —); Kerala (2 : —); Madhya Pradesh (6 : 9) ; Maharashtra (3 : 4) ; Manipur (— : 1) ; Orissa (3 : 5) ; Punjab (3 : —) ; Rajasthan (4 : 3) ; Tamil Nadu (7 : —) ; Tripura (— : 1) ; Uttar Pradesh (18 : —) ; West Bengal (8 : 2) ; Dadra and Nagar Haveli (— : 1) ; Delhi (1 : —) ; Lakshadweep (— : 1).

The reserved seats in the assemblies of the States and Union Territories together are 539 for Scheduled Castes and 282 for Scheduled Tribes respectively.

LOK SABHA GENERAL ELECTIONS — PARTY POSITION

Party	First General Election 25–10–1951		Second General Election 24–2–1957 to 9–6–1957		Third General Election 16–2–1962 to 6–5–1962		Fourth General Election 15–2–1967 to 28–2–1967		Fifth General Election 1–3–1971 to 13–3–1971		Sixth General Election 16–3–1977 to 20–3–1977		Seventh General Election 3–1–1980 & 6–1–1980	
	Seats Contested	Seats Won	Seats Contested	Seats Won	Seats Contested	Seats Won	Seats Contested	Seats Won	Seats Contested	Seats Won	Seats Contested	Seats Won	Seats Contested	Seats Won
Congress (I)	469	354	483	366	485	358	452	280	410	355	493	153	486	351
PSP	400	20	175	18	168	12	110	13	60	—	N.A.	—	—	—
CPI	69	26	115	29	137	29	101	23	71	24	91	7	50	11
Jan Sangh	91	3	103	4	196	14	235	36	162	16	*	*	*	*
Others (Ind.)	946	83	580	71	716	44	670	44	726	44	1,222	27	2,736	6
Swatantra	—	—	—	—	173	18	177	42	60	8	—	—	—	—
Republican	—	—	—	—	68	3	66	1	46	—	2	2	—	—
CPI (M)	—	—	—	—	—	—	57	19	50	26	53	22	60	35
SSP	—	—	—	—	—	—	119	23	89	3	*	*	*	1
Akali Dal	—	—	—	—	—	—	—	—	13	1	—	8	—	—
V.H.P.	—	—	—	—	—	—	—	—	3	—	—	—	—	—
Congress (O)	—	—	—	—	—	—	—	—	205	11	*	*	*	*
Congress (U)	—	—	—	—	—	—	—	—	—	—	—	—	210	13
Muslim League	—	—	—	—	—	—	—	—	10	3	N.A.	2	—	2
Janata Party	—	—	—	—	—	—	—	—	—	—	423	299	420	31
AIADMK	—	—	—	—	—	—	—	—	—	—	N.A.	19	N.A.	N.A.
Lok Dal	—	—	—	—	—	—	—	—	—	—	—	—	292	41

* Constituent of Janata Party.

VOTES POLLED BY DIFFERENT PARTIES DURING 1977 & 1980 ELECTIONS

Parties	Votes won		Percentage	
	1977	1980	1977	1980
Congress (I)	62,789,348@	83,526,345	34·35	42·56
Janata Party	81,177,093	37,236,041	43·06	18·97
Lok Dal		18,546,358		9·45
Communist Party	5,201,832	5,122,172	2·76	2·61
Communist Party (Marxist)	8,113,659	11,867,796	4·30	6·05
Akali Dal	2,373,331	1,396,412	1·26	0·71
Dravida Munnetra Kazagham	3,224,654	4,236,537	1·71	2·16
All-India Anna Dravida Munnetra Kazhagam	5,579,043	4,674,064	2·96	2·83
Congress (U)		10,399,533		5·30
Independents	10,714,144	12,847,404	5·68	6·55
Others	7,380,584	6,384,770	3·92	3·25

@ United Congress.

General Elections to State Assemblies were held in Bihar. Haryana. Himachal Pradesh. Madhya Pradesh. Orissa. Punjab. Rajasthan. Tamil Nadu. Uttar Pradesh. West Bengal and Union Territories of Delhi. Goa. Daman & Diu and Pondicherry in June 1977.

General election was held in the States of Andhra Pradesh, Assam, Karnataka, Maharashtra, Meghalaya and Union Territory of Arunachal Pradesh on February 25, 1978 and to the States of Kerala and Manipur and to the Territories of Arunachal Pradesh, Goa and Pondicherry in January 1980.

On February 17. 1980, the assemblies of the States of Bihar, Gujarat. Madhya Pradesh. Maharashtra, Orissa, Punjab, Rajasthan. Tamil Nadu and Uttar Pradesh were dissolved. The election was to take place on May 27 and 30, 1980.

Highest Majority : The highest winning majority was 214,763 secured by Jatiram Barve (Cong.-I.), elected from Ramtek constituency in Maharashtra. He polled 273,957 votes against 59,194 polled by his nearest rival R. H. Deshmukh of Janata Party. Out of 650,457 eligible voters only 395,366 cast their votes.

Lok Sabha Speakers : 1. G. V. Mavlankar, 1952-56; 2. M. Ananthasayanam Ayyangar, 1956-62; 3. Hukam Singh, 1962-67; 4. N. Sanjiva Reddy, 1967-69; 5. G. S. Dhillon, 1969-75; Bali Ram Bhagat, 1975-77; N. Sanjiva Reddy, Mar.-July 1977; K. S. Hegde, July 1977-Aug.1979; Balram Thakar, since Jan. 1980.

States with Bi-cameral Legislatures : Following are the States which have an Assembly and a Legislative Council. All the other States have only a Legislative Assembly. Andhra Pradesh; Bihar; Maharashtra; Jammu and Kashmir; Karnataka; Tamil Nadu; and Uttar Pradesh.

Composition of Assembly : The number of elective seats in the State assemblies and the legislative bodies of Union territories has gone up. It is as follows (the figures in brackets show the seats they had on January 1, 1973):

Andhra Pradesh 294 (287), Assam 126 (114), Bihar 324 (318), Gujarat 182 (168), Haryana 90 (81), Himachal Pradesh 68 (68), Jammu and Kashmir 76 (75), Karnataka 224 (216), Kerala 140 (133), Madhya Pradesh 320 (296), Maharashtra 288 (270), Manipur 60 (60), Meghalaya 60 (60), Nagaland 60 (52), Orissa 147 (140), Punjab 117 (104), Rajasthan 200 (184), Sikkim 32 (—), Tamil Nadu 234 (234), Tripura 60 (60), Uttar Pradesh 425 (425), West Bengal 294 (280), Arunachal Pradesh 30, Goa 30 (30), Mizoram 30 (30), Pondicherry 30 (30), Delhi metropolitan council 56 (56).

The total seats in the assemblies are 3,997 as against 3,771 in 1973.

Legislative Council : The strength of the Council should be one third of the total membership of the Assembly but not less than 40.

Election to Councils : *One third* of its members are elected by the municipalities, district boards and other local authorities; *One twelfth* by the graduates of the universities of the territory; *One twelfth* by the teachers of institutions not lower than secondary school; *One third* by members of the Legislative Assembly and, the remaining few are nominated by the Governor of the State.

Assembly By-Election : Polling for by-elections in 7 constituencies in Uttar Pradesh (3), Sikkin (2), Karnataka (1) and Gujarat (1) was held on January 3, 1980. Also 19 assembly by-elections in eight States were held on January 6, 1980 with the final round of Lok Sabha voting.

There were 123 candidates in the fray for 5 seats in Andhra Pradesh, 3 in Bihar, 2 in Gujarat, 1 in Karnataka. 3 in Madhya Pradesh, 1 in Maharashtra, 3 in Tamil Nadu and one in West Bengal.

In the election which took place on May 27 and 30, 1980 for the 9 State Assemblies dissolved on Feb. 17, 1980 Congress (I) got majority in eight States. In Tamil Nadu AIADMK was successful. Name of State, total No. of Constituencies and seats won by majority party is given below. Punjab: 117; Cong. (I) 63; Rajasthan: 200; Cong. (I) 133; Gujarat: 182; Cong. (I) 140; Madhya Pradesh: 320; Cong. (I) 246; Maharashtra: 288; Cong. (I) 186; Uttar Pradesh: 425; Cong. (I) 306; Bihar: 324; Cong. (I) 155; Orissa: 147; Cong. (I) 117; Tamil Nadu: 234, AIADMK 128.

1981 By-Election : In the by-elections to six Lok Sabha seats, Congress (I) won in five of them — Amethi, Allahabad, Bareilly, Garhwal and Mirzapur in Uttar Pradesh and C.P.I. (M) won in Serampore in West Bengal. Simultaneous polling took place in 23 assembly constituencies in four States — eight each in Uttar Pradesh and West Bengal, six in Bihar and one in Karnataka. Of the assembly seats Congress (I) won 15 — seven in U.P., five in Bihar, two in W. Bengal and one in Karnataka — C.P.I. (M) won five of the eight seats, C.P.I. won in one and Independents were elected in two seats — one each in U.P. and Bihar respectively.

RAJYA SABHA*

Chairman : Mohammad Hidayatullah; *Dy. Chairman :* Shyam Lal Yadav; *Secretary-General :* S. S. Bhalerao; *Addl. Secretary :* Sudarshan Agarwal.

Total No. of Seats : 244.

An estimate of party position in the Rajya Sabha is : Congress (I) : 123; Congress (U) : 21; Janata : 16; B.J.P. : 14; Lok Dal : 13; C.P.I.(M) : 9; C.P.I. : 6; A.I.A.D.M.K. : 9; D.M.K. : 4; Akali Dal : 3; National Conference : 2; Muslim League : 1; Kerala Congress : 1; Forward Bloc : 1; U.D.F. (Nagaland) : 1; R.S.P. : 1; R.P.I. (Khobragade) : 1; Socialist : 1; Lok Tantrik Lok Dal : 1; Independents : 6; Nominated : 8; Vacant : 4; Number of Women Members : 29.

Andhra Pradesh — 18: Syed Rahmat Ali (Cong.-I); Krishna Mohan Bhamidipati (Cong.-I); A. S. Chowdhari (Cong.-I); M. R. Krishna (Cong.-I); Buddha Priya Maurya (Ind.); Shrimati Roda Mistry (Cong.-I); N. P. Chengalraya Naidu (Cong.-I); G. Swamy Naik (Cong.-I); K. L. N. Prasad (Cong.-I); Mohammad Rahamathulla (Cong.-I); Palavalasa Rajasekharam (Cong.-I); V. B. Raju (Cong.-U); V. C. Kesava Rao (Cong.-I); B. Satyanarayan Reddy (L.D.); Ghouse Mohiuddin Sheikh (Cong.-I); M. R. Apparow (Cong.-I); T. Chandrasekara Reddy (Cong.-I); K. V. R. S. Bala Subba Rao (Cong.-I).

Assam — 7 : Bipinpal Das (Cong.-I); Biswa Goswami (Janata); Dinesh Goswami (Ind.); Bijoy Krishna Handique (Cong.-I); Robin Kakati (Janata); Syed Abdul Malik (Cong.-I); Ajit Kumar Sharma (Soc.).

Bihar — 22 : Ashwani Kumar (B.J.P.); Ramachandra Bhardwaj (Cong.-I); Bhola Prasad (C.P.I.); Ram Lakhan Prasad Gupta (B.J.P.); Smt. Aziza Imam (Cong.-U); Dharamchand Jain (Cong.-I); Shiva Chandra Jha (Janata);

---

* 78 members are due to retire on April 2, 1982.

Sitaram Kesri (Cong.-I); Mahendra Mohan Mishra (Cong.-I); Smt. Manorama Pandey (Cong.-I); Ram Bhagat Paswan (Cong.-I); Dayanand Sahaya (Janata); Syed Shahabuddin (Janata); A. P. Sharma (Cong.-I); Yogendra Sharma (C.P.I.); Bhola Paswan Shastri (Cong.-U); Bhishma Narain Singh (Cong.-I); J. K. P. N. Singh (Cong.-I); Smt. Pratibha Singh (Cong.-I); Indradeep Sinha (C.P.I.); Hukmdeo Narayan Yadav (L.D.); Ramanand Yadav (Cong.-I).

Gujarat — 11 : Lal K. Advani (B.J.P.); Golandaz M. Husain (Cong.-I); Smt. Kumudben Manishankar Joshi (Cong.-I); Ibrahim Kalaniya (Cong.-I); Harisinh Bhagubava Mahida (Cong.-I); Yogendra Makwana (Cong.-I); Piloo Mody (Janata); Ghanshyambhai Oza (Janata); Prof. Ramlal Parikh (Janata); Manubhai Patel (Janata); Kishore Mehta (Cong.-I).

Haryana — 5 : Sushil Chand Mohunta (L.D.); Hari Singh Nalwa (Cong.-I); Dr. Sarup Singh (L.D.); Sujan Singh (Cong.-I); Sultan Singh (Cong.-I).

Himachal Pradesh — 3 : Smt. Usha Malhotra (Cong.-I); Smt. Mohinder Kaur (B.J.P.); Roshan Lal (Cong.-I).

Jammu and Kashmir — 4 : Tirath Ram Amla (Cong.-I); Om Mehta (Cong.-I); Sharief-ud-din Shariq (N.C.); Gulam Mohi-ud-Din Shawl (N.C.).

Karnataka — 12 : Smt. Margaret Alva (Cong.-U); M. Basavaraju (Cong.-I); Smt. Monika Das (Cong.-I); R. M. Desai (Cong.-U); K. S. Malle Gowda (Ind.); Ramakrishna Hegde (Janata); B. Ibrahim (Cong.-I); F. M. Khan (Cong.-I); Maqsood Ali Khan (Cong.-I); M. Maddanna (Cong.-I); Mulka Govinda Reddy (Cong.-I); Satchidananda (Cong.-U).

Kerala — 9 : T. Basheer (Cong.-U); C. Haridas (Cong.-U); O. J. Joseph (C.P.I.(M)); B. V. Abdulla Koya (M.L.); S. Kumaran (C.P.I.); K. K. Madhavan (Cong.-U); K. Chathunni Master (C.P.I.(M)); Pattiam Rajan (C.P.I.(M)); K. C. Sebastian (K.C.).

Madhya Pradesh — 16 : Baleshwar Dayal (L.D.); Balram Das (Cong.-I); N. K. Bhatt (Cong.-I); Gurudev Gupta (Cong.-I); J. K. Jain (Cong.-I); Pyarelal Khandelwal (B.J.P.); Dr. Bhai Mahavir (B.J.P.); Bhagatram Manhar (Cong.-I); Ladli Mohan Nigam (L.D.); Pravin Kumar Prajapati (Cong.-I); Rajendra Singh Ishwar Singh (Cong.-I); Smt. Ratan Kumari (Cong.-I); Smt. Vijaya Raje Scindia (B.J.P.); Sawaisingh Sisodia (Cong.-I); Smt. Maimoona Sultan (Cong.-I); Shrikant Verma (Cong.-I).

Maharashtra — 19 : Smt. Sushila Shankar Adivarekar (Cong.-I); Jagannath Sitaram Akarte (Cong.-I); Sadashiv Bagaitkar (L.D.); Ganapat Hiralal Bhagat (Cong.-U); Murlidhar Chandrakant Bhandare (Cong.-I); Smt. Premilabai Dajisaheb Chavan (Cong.-I); Bapuraoji Marotraoji Deshmukh (Cong.-I); S. W. Dhabe (Cong.-U); Dr. Joseph Leon D'Souza (Cong.-I); Dr. (Smt.) Najma Heptulla (Cong.-I); Prof. N. M. Kamble (Cong.-I); Smt. Saroj Khaparde (Cong.-I); B. D. Khobragade (R.P.I. Khobragade); A. G. Kulkarni (Cong.-U); Govindrao Ramachandra Mhaisekar (Cong.-I); Dr. Shanti G. Patel (Janata); N. K. P. Salve (Cong.-I); Dr. V. H. Salaskar (Cong.-I); Dr. Rafiq Zakaria (Cong.-I).

Manipur 1 : Ng. Tompok Singh (Cong.-I).

Meghalaya — 1 : Alexander Warjri (Ind.).

Nagaland — 1 : T. Aliba Imti (U.D.F.) (Nagaland).

Orissa — 10 : Jagadish Jani (Cong.-I); Dhaneshwar Majhi (L.D.); Harekrushna Mallick (Janata); Surendra Mohanty (Cong.-I); Shyam Sundar Mohapatra (Cong.-I); Narasingha Prasad Nanda (Cong.-U); Akshay Panda (Cong.-I); B. C. Pattanayak (Cong.-I); Patitpaban Pradhan (L.D.); Santosh Kumar Sahu (Cong.-I).

Punjab — 7 : Smt. Amarjit Kaur (Cong.-I); Harvendar Singh Hanspal (Cong.-I); Sat Paul Mittal (Cong.-I); Smt. Rajinder Kaur (A.D.); Harkishan Singh Surjeet (C.P.I.(M)); Sardar Jagdev Singh Talwandi (A.D.); Sardar Gurcharan Singh Tohra (A.D.).

Rajasthan — 10 : Mohammed Usman Arif (Cong.-I); Hari Shankar Bhabhra (B.J.P.); Bhim Raj (Cong.-I); Swami Dinesh Chandra (Cong.-I); (Molana) Asrarul Haq (Cong.-I); Jaswant Singh (B.J.P.); Smt. Ushi Khan (Cong.-U); Dhuleshwar Meena (Cong.-I); Ram Niwas Mirdha (Cong.-I); R. R. Morarka (Janata).

Sikkim — 1 : Leonard Soloman Saring (Cong.-I).*

Tamil Nadu — 18 : P. Anbalagan (A.I.A.D.M.K.); L. Ganesan (D.M.K.); V. Gopalsamy (D.M.K.); D. Heerachand (A.I.A.D.M.K.); A. P. Janardhanam (A.I.A.D.M.K.); M. Kalyanasundaram (C.P.I.); U. R. Krishnan (A.I.A.D.M.K.); Murasoli Maran (D.M.K.); R. Mohanarangam (A.I.A.D.M.K.); G. K. Moopanar (Cong.-I); M. Moses (Cong.-I); Dr. (Smt.) Sathiavani Muthu (A.I.A.D.M.K.); M. S. Ramachandran (Cong.-I); R. Ramakrishnan (A.I.A.D.M.K.); P. Ramamurti (C.P.I. (M)); Smt. Noorjehan Razack (A.I.A.D.M.K.); Era Sezhiyan (Janata); V. Venka (D.M.K.).

Tripura — 1 : Smt. Ila Bhattacharya (C.P.I. (M)).

Uttar Pradesh — 34 : Bhagwan Din (Cong.-I); Sundar Singh Bhandari (B.J.P.); Bhanu Pratap Singh (Ind.); G. C. Bhattacharya (Ind.); Dharmavir (Cong.-I); Dinesh Singh (Cong.-I); Smt. Hamida Habibullah (Cong.-I); Syed Ahmad Hashmi (L.D.); Krishna Nand Joshi (Cong.-I); Khurshed Alam Khan (Cong.-I); Piare Lall Talib Unnavi (Cong.-I); Lakhan Singh (B.J.P.); Asad Madni (Cong.-I); Satya Pal Malik (L.D.); Jagdish Prasad Mathur (B.J.P.); Prakash Mehrotra (Cong.-I); Kalraj Mishra (B.J.P.); Suresh Narain Mulla (Cong.-I); Narendra Singh (Cong.-I); K. C. Pant (Cong.-U); Narsingh Narain Pandey (Cong.-I); Sudhakar Pandey (Cong.-I); Kalp Nath Rai (Cong.-I); Rameshwar Singh (L.D.); Chaudhary Ram Sewak (Cong.-I); Syed Sibte Razi (Cong.-I); Nageshwar Prasad Shahi (L.D.); Abdul Rehman Sheikh (L.D.); M. R. Shervani (Cong.-U); Dr. M. M. S. Siddhu (Janata); Dr. Rudra Pratap Singh (Cong.-I); Surendra Mohan (Janata); Shyam Lal Yadav (Cong.-I).

West Bengal — 16 : Jaharlal Banerjee (Cong.-U); Prasenjit Barman (Cong.-I); Prof. Sourendra Bhattacharjee (R.S.P.); Smt. Pratima Bose (Cong.-U); Amarprosad Chakraborti (F.B.); Prof. D. P. Chattopadhyaya (Cong.-I); Sankar Ghose (Cong.-U); Phanindra Nath Hansda (Cong.-I); Sangdopal Lepcha (C.P.I. (M)); Ahmad Hossain Mondal (Cong.-I); Smt. Kanak Mukherjee (C.P.I. (M)); Pranab Mukherjee (Cong.-I); Smt. Purabi Mukhopadhyay (Cong.-U); Kalyan Roy (C.P.I.); Syed Shahedullah (C.P.I. (M)).

Arunachal Pradesh — 1 : Ratan Tama (Cong.-I).

Delhi — 3 : Charanjit Chanana (Cong.-I); Jagannathrao Joshi (B.J.P.); Vacant.

Mizoram — 1 : Lalsawia (Cong.-I).

Pondicherry — 1 : V. P. Munusamy (A.I.A.D.M.K.).

Nominated — 11 : Dr. Malcolm S. Adiseshiah; B. N. Banerjee; *Smt. Maragatham Chandrasekhar; Smt. Fathema Ismail; Pandurang Dharmaji Jadhav; Prof. Rasheeduddin Khan; Khushwant Singh; Sivaji Ganesan; *Lokesh Chandra; *Bishambhar Nath Pande; *Scato Swu; Bhagwati Charan Varma.

---

* Joined Congress (I) Party in the Rajya Sabha.

LOK SABHA

Speaker : Bal Ram Jakhar ; *Dy. Speaker* : G. Lakshmanan ; *Secretary* : Avtar Singh Rikhy.

Seats : 544 ; *Party Position* (as on 6–4–1981) : Congress (I) : 353 ; C.P.I.(M) : 36 : Lok Dal : 33 ; D.M.K. : 16 ; B.J.P. : 14 ; Congress (U) : 12 ; Janata : 12 ; C.P.I. : 12 ; D.S.F. : 8 ; R.S.P. : 4 ; S.P. : 3 ; Forward Bloc : 3 ; Muslim League : 3 ; J & K National Conference : 3 ; A.I.A.D.M.K. : 2 ; D.L.D. : 2 ; Unattached : 11 ; Vacant : 17. No. of Women : 28.

ANDHRA PRADESH — 42 : G. Narasimha Reddy (Cong.-I.), (*Adilabad*) ; Kusuma Krishna Murthy (Cong.-I.), (*Amalapuram—S.C.*) ; S. R. A. S. Appalanaidu (Cong.-I.), (*Anakapalli*) ; Darur Pullaiah (Cong.-I.), (*Anantapur*) ; P. Ankineedu Prasada Rao (Cong.-I.), (*Bapatla*) ; Smt. Radhabai Ananda Rao (Cong.-I.), (*Bhadrachalam—S.T.*) ; P. V. Gajapati Raju (Cong.-I.), (*Bobbili*) ; P. Rajagopal Naidu (Cong.-I.), (*Chittoor*) ; K. Obul Reddy (Cong.-I.), (*Cuddapah*) ; Chittoor Subbarao Chowdary (Cong.-I.), (*Eluru*) ; Prof. N. G. Ranga (Cong.-I.), (*Guntur*) ; P. V. Narasimha Rao (Cong.-I.), (*Hanamkonda*) ; P. Bayapu Reddy (Cong.-I.), (*Hindupur*) ; K. S. Narayan (Cong.-I.), (*Hyderabad*) ; M. S. Sanjeevi Rao (Cong.-I.), (*Kakinada*) ; M. Satyanarayana Rao (Cong.-I.), (*Karimnagar*) ; J. Kondala Rao (Cong.-I.), (*Khammam*) ; K. Vijaya Bhaskara Reddy (Cong.-I.), (*Kurnool*) ; Ankineedu Maganti (Cong.-I.), (*Machilipatnam*) ; Mallikarjun (Cong.-I.), (*Mahbubnagar*) ; Mrs. Indira Gandhi (Cong.-I.), (*Medak*) ; G. S. Reddy (Cong.-I.), (*Miryalguda*) ; Mallu Anantaramulu (Cong.-I.), (*Nagar Kurnool—S.C.*) ; T. Damodar Reddi (Cong.-I.), (*Nalgonda*) ; P. Venkata Subbiah (Cong.-I.), (*Nandyal*) ; A. Subbash Chandra Bose (Cong.-I.), (*Narasapur*) ; K. Brahmananda Reddy (Cong.-I.), (*Narasaraopet*) ; D. Kamakshaiah (Cong.-I.), (*Nellore—S.C.*) ; M. Rama Gopal Reddy (Cong.-I.), (*Nizamabad*) ; P. Venkata Reddy (Cong.-I.), (*Ongole*) ; V. Kishore Chandra Deo (Cong.-U.), (*Parvathipuram—S.T.*) ; K. Rajamallu (Cong.-I.), (*Peddapalli—S.C.*) ; S. B. Pattabhirama Rao (Cong.-I.), (*Rajahmundry*) ; P. Parthasarathi (J.P.), (*Rajampet*) ; P. Shivashankar (Cong.-I.), (*Secunderabad*) ; N. Yelliah (Cong.-I.), (*Siddipet—S.C.*) ; B. Rajagopala Rao (Cong.-I.), (*Srikakulam*) ; M. Nageswara Rao (Cong.-I.), (*Tenali*) ; Pasala Penchalaiah (Cong.-I.), (*Tirupathi—S.C.*) ; Mrs. Chennupati Vidya (Cong.-I.), (*Vijayawada*) ; Appalaswamy Kommuru (Cong.-I.), (*Visakhapatnam*) ; M. Kamaluddin Ahmed (Cong.-I.), (*Warangal*).

ASSAM† — 14 : Nihar Laskar (Cong.-I.), (*Karimganj*) ; Santhosh Mohan Dey (Cong.-I.), (*Silchar*).

BIHAR — 54 : D. L. Baitha (Cong.-I.), (*Araria—S.C.*) ; Chandra Prasad Verma (L.D.), (*Arrah*) ; S. N. Sinha (J.P.), (*Aurangabad*) ; Bhola Raut (Cong.-I.), (*Bagaha—S.C.*) ; Surya Narayan Singh (C.P.I.), (*Ballia*) ; Chandra Shekhar Singh (Cong.-I.), (*Banka*) ; Dharambir Singh (Cong.-U.), (*Barh*) ; Mrs. Krishna Sahai (Cong.-I.), (*Begusarai*) ; Kedar Pandey (Cong.-I.), (*Bettiah*) ; Bhagwat Jha Azad (Cong.-I.), (*Bhagalpur*) ; Tapeshwar Singh (Cong.-I.), (*Bikramganj*) ; K. K. Tiwari (Cong.-I.), (*Buxar*) ; Satyadeo Sinha (Cong.-I.), (*Chapra*) ; Ranjit Singh (Cong.-I.), (*Chatra*) ; Harinath Mishra (Cong.-I.), (*Darbhanga*) ; A. K. Roy (U.A.), (*Dhanbad*) ; Shibhu Soren (U.A.), (*Dumka—S.T.*) ; Ram Swaroop Ram (Cong.-I.), (*Gaya—S.C.*) ; Bindeshwari Dubey (Cong.-I.), (*Giridhi*) ; Samin Uddin (Cong.-I.), (*Godda*) ; Nagina Rai (Cong.-I.), (*Gopal Ganj*) ; Ram Vilas Paswan (L.D.), (*Hajipur—S.C.*) ; Dr. B. N. Singh (Cong.-I.), (*Hazaribagh*) ; R. P. Sarangi (B.J.P.), (*Jamshedpur*) ; Mahendra Prasad (Cong.-I.), (*Jehanabad*) ; Dhaniklal Mandal (L.D.), (*Jhanjharpur*) ; Tariq Anwar Shah (Cong.-I.), (*Kathihar*) ; Satish Prasad Singh (Cong.-I.), (*Khagaria*) ; Nirel Enem Horo (U.A.), (*Khunti—S.T.*) ; Jamilur Rahman (Cong.-I.), (*Kishanganj*) ; Ritlal Prasad Verma (B.J.P.), (*Koderma*) ; Kartik Oraon (Cong.-I.), (*Lohardaga—S.T.*) ; Rajindra Pd. Yadav (Cong.-U.), (*Madhepura*) ; Bhogendra Jha (C.P.I.), (*Madhubani*) ; Krishna Pratap Singh (Cong.-I.), (*Maharajganj*) ; Devendra Prasad Yadav (Cong.-U.), (*Monghyr*) ; Kamala Mishra Madhuka (C.P.I.), (*Motihari*) ; George Fernandes (L.D.), (*Muzaffarpur*) ; Vijay Kumar Yadav (C.P.I.), (*Nalanda*) ; Kunwar Ram (Cong.-I.), (*Nawadah—S.C.*) ; Km. Kamala Kumari (Cong.-I.), (*Pilamau—S.C.*) ; Ramavtar Shastri (C.P.I.), (*Patna*) ; Mrs. Madhuri Singh (Cong.-I.), (*Purnea*) ; Seth Hembram (Cong.-I.), (*Rajmahal—S.T.*) ; Shiv Prasad Sahu (Cong.-I.), (*Ranchi*) ; Baleshwar Ram (Cong.-I.), (*Rosera—S.C.*) ; Kamal Nath Jha (Cong.-I.), (*Saharsa*) ; Prof. Ajit Kumar Mehta (L.D.), (*Samastipur*) ; Jagjivan Ram (Cong.-U.), (*Sasaram—S.C.*) ; Mrs. Ram Dulari Sinha (Cong.-I.), (*Sheahar*) ; Bagun Sumbrui (Cong.-I.), (*Singhbhum—S.T.*) ; B. R. Bhagat (Cong.-U.), (*Sitamarhi*) ; Mohammed Yusuf (Cong.-I.), (*Siwan*) ; Mrs. Kishori Sinha (J.P.), (*Vaishali*).

GUJARAT — 26 : Maganbhai Barot (Cong.-I.), (*Ahmedabad*) ; Navinchand Ravani (Cong.-I.), (*Amreli*) ; Ishwar Chavda (Cong.-I.), (*Anand*) ; Bheravdan K. Gadhavi (Cong.-I.), (*Banaskantha*) ; Ranjit Gaekwad (Cong.-I.), (*Baroda*) ; G. B. Gohil (Cong.-I.), (*Bhavnagar*) ; Ahmed M. Patel (Cong.-I.), (*Broach*) ; Uttambhai Patel (Cong.-I.), (*Bulsar*) ; Vacant (*Chhota Udepur—S.T.*) ; Narsinh Makwana (Cong.-I.), (*Dhandhuka—S.C.*) ; Somjibhai Damor (Cong.-I.), (*Dohad—S.T.*) ; Amrit Patel (Cong.-I.), (*Gandhinagar*) ; Jaideep Singh (Cong.-I.), (*Godhra*) ; Daulatsinhji Jadeja (Cong.-I.), (*Jamnagar*) ; Mohanlal Patel (Cong.-I.), (*Junagadh*) ; Ajit Sinh Dabhi (Cong.-I.), (*Kaira*) ; Natvarsinh Solanki (Cong.-I.), (*Kapadvanj*) ; Mahipatray Mehta (Cong.-I.), (*Kutch*) ; Chhitubhai Gamit (Cong.-I.), (*Mandvi—S.T.*) ; Motibhai R. Chaudhary (J.P.), (*Mehsana*) ; Hiralal Parmar (Cong.-I.), (*Patan—S.C.*) ; Maldevji Odedra (Cong.-I.), (*Porbandar*) ; Ramji Mavani (Cong.-I.), (*Rajkot*) ; Shantibhai Patel (Cong.-I.), (*Sabarkantha*) ; C. D. Patel (Cong.-I.), (*Surat*) ; Digvijay Sinh (Cong.-I.), (*Surendranagar*).

HARYANA — 10: Suraj Bhan (B.J.P.), (*Ambala—S.C.*) ; Bansi Lal (Cong.-I.), (*Bhiwani*) ; Tayyab Hussain (Cong.-I.), (*Faridabad*) ; Mani Ram Bagri (S.P.), (*Hissar*) ; Chiranji Lal Sharma (Cong.-I.), (*Karnal*) ; Mohan Lal Saini (L.D.), (*Kurukshetra*) ; Rao Birender Singh (Cong.-I.), (*Mahendragarh*) ; Swami Indervesh (L.D.), (*Rohtak*) ; Dalbir Singh (Cong.-I.), (*Sirsa—S.C.*) ; Devi Lal (L.D.), (*Sonepat*).

HIMACHAL PRADESH — 4 : Narain Chand Parashar (Cong.-I.), (*Hamirpur*) ; Vikram Chand Mahajan (Cong.-I.), (*Kangra*) ; Virhhadra Singh (Cong.-I.), (*Mandi*) ; Kishan Dutt Sultanpuri (Cong.-I.), (*Simla—S.C.*).

JAMMU AND KASHMIR — 6 : Gulam Rasool Kochak (N.C.), (*Anantnag*) ; Mubarak Shah (N.C.), (*Baramulla*) ; G. L. Dogra (Cong.-I.), (*Jammu-Poonch*) ; P. Namgyal (Cong.-I.), (*Ladakh*) ; Dr. Farook Abdullah (N.C.), (*Srinagar*) ; Dr. Karan Singh (U.A.), (*Udhampur*).

KARNATAKA — 28: Veerendra Patil (Cong.-I.), (*Bagalkot*) ; C. K. Jaffar Sharief (Cong.-I.), (*Bangalore-North*) ; T. R. Shamanna (J.P.), (*Bangalore-South*) ; S. B. Sidnal (Cong.-I.); (*Belgaum*) ; R. Y. Ghorpade (Cong.-I.), (*Bellary*); Narasingh Suryawanshi (Cong.-I.), (*Bidar—S.C.*) ; K. B. Choudhari (Cong.-I.), (*Bijapur*) ; V. Sreenivasa Prasad

---

† 12 seats fell vacant following public pressure against holding elections with alleged foreigners in the voters list

(Cong.-I.), (*Chamarajnagar—S.C.*) ; S. N. Prasan Kumar (Cong.-I.), (*Chikballapur*) ; B. Shankaranand (Cong.-I.), (*Chikkodi—S.C.*) ; D. M. Putte Gowda (Cong.-I.), (*Chikmagalur*) ; K. Mallanna (Cong.-I.), (*Chitradurga*) ; T. V. Chandrasekharappa (Cong.-I.), (*Devangere*) ; D. K. Naikar (Cong.-I.), (*Dharwar-North*) ; Mohsin Fakruddin Hassain (Cong.-I.), (*Dharwar-South*) ; C. M. Stephen (Cong.-I.), (*Gulbarga*) ; H. N. Gowda (Cong.-I.), (*Hassan*) ; M. V. Chandrasekhar Murthy (Cong.-I.), (*Kanakpura*) ; G. Naik Devaraya (Cong.-I.), (*Kanara*) ; G. Y. Krishnan (Cong.-I.), (*Kolar—S.C.*) ; H. G. Ramulu (Cong.-I.), (*Koppal*) ; S. M. Krishna (Cong.-I.), (*Mandya*) ; Janardhana Poojary (Cong.-I.), (*Mangalore*) ; M. Rajasekara Murthy (Cong.-I.), (*Mysore*) ; B. V. Desai (Cong.-I.), (*Raichur*) ; S. T. Quadri (Cong.-I.), (*Shimoga*) ; K. Lakkappa (Cong.-I.), (*Tumkur*) ; Oscar Fernandes (Cong.-I.), (*Udipi*).

KERALA — 20 : P. K. Kodiyan (C.P.I.), (*Adoor—S.C.*) ; Susheela Gopalan (C.P.I.M.), (*Alleppey*) ; K. P. Unnikrishnan (Cong.-U.), (*Badagara*) ; K. Kunhambu (Cong.-U.), (*Cannanore*) ; A. A. Rahim (Cong.-I.), (*Chirayinkil*) ; Xavier Arackal (Cong.-I.), (*Ernakulam*) ; M. M. Lawrence (C.P.I.M.), (*Idukki*) ; M. Ramanna Rai (C.P.I.M.), (*Kasargod*) ; Skariah Thomas (U.A.), (*Kottayam*) ; E. K. Imbichi Bava (C.P.I.M.), (*Calicut*) ; Ibrahim Sulaiman Sait (M.L.), (*Manjeri*) ; P. J. Kurian (Cong.-U.), (*Mavelikkara*) ; E. Balanandan (C.P.I.M.), (*Mukundapuram*) ; George Joseph (U.A.), (*Muvattupuzha*) ; A. K. Balan (C.P.I.M.), (*Ottappalam—S.C.*) ; V. S. Vijayaraghavan (Cong.-I.), (*Palghat*) ; G. M. Banatwalla (M.L.), (*Ponnani*) ; B. K. Nair (Cong.-I.), (*Quilon*) ; K. A. Rajan (C.P.I.), (*Trichur*) ; A. Neelalohithadasan Nadar (D.S.F.), (Cong.-I.), (Trivandrum).

MADHYA PRADESH — 40 : Nand Kishore Sharma (Cong.-I.), (*Balaghat*) ; Laxman Karma (Cong.-I.), (*Bastar—S.T.*) ; Gufran-e-Azam (Cong.-I.), (*Betul*) ; Kalicharan Sharma (Cong.-I.), (*Bhind*) ; S. D. Sharma (Cong.-I.), (*Bhopal*) ; Godil Prasad Anuragi (Cong.-I.), (*Bilaspur—S.C.*) ; Kamal Nath (Cong.-I.), (*Chindwara*) ; P. N. Tandon (Cong.-I.), (*Damoh*) ; Fatehbhan Singh Chahan (Cong.-I.), (*Dhar—S.T.*) ; Chandulal Chandrakar (Cong.-I.), (*Durg*) ; Madhav Rao Scindia (Cong.-I.), (*Guna*) ; N. K. Shejwalkar (B.J.P.), (*Gwalior*) ; Rameshwar Nikhra (Cong.-I.), (*Hoshangabad*) ; P. C. Sethi (Cong.-I.), (*Indore*) ; Mandar Sharma (Cong.-I.), (*Jabalpur*) ; Ramgopal Tiwari (Cong.-I.), (*Janjgir*) ; Dilip Singh Bhuria (Cong.-I.), (*Jhabua—S.T.*). Arvind Netam (Cong.-I.), (*Kanker—S.T.*) ; Mrs. Vidyawati Chaturvedi (Cong.-I.), (*Khajuraho—S.C.*) ; Shivkumar Singh (Cong.-I.), (*Khandwa*) ; Subhash Yadav (Cong.-I.), (*Khargone*) ; Vidya Charan Shukla (Cong.-I.), (*Mahasamund*) ; Chhotelal Uike (Cong.-I.), (*Mandla—S.T.*) ; Bhanvarla Nahta (Cong.-I.), (*Mandsaur*) ; Babu Lal Solanki (Cong.-I.), (*Morena—S.C.*) ; Ku. Pushpa Devi Singh (Cong.-I.), (*Raigarh—S.T.*) ; Keyur Bhushan (Cong.-I.), (*Raipur*) ; Vasantkumar Pandit (B.J.P.), (*Rajgarh*) ; Sivendra Bhadur Singh (Cong.-I.), (*Rajaanandgaon*) ; Martand Singh (U.A.), (*Rewa*) ; Ram Prasad Ahirwar (B.J.P.). (*Sagar—S.C.*) ; Parasram Bhardawaj (Cong.-I.), (*Sarangarh—S.C.*) ; Chakra Dhari (Cong.-I.). (*Sarguja—S.T.*) ; Gulsher Ahmed (Cong.-I.), (*Satna*) ; Gargi Shankar Mishra (Cong.-I.), (*Seoni*) ; Dalbir Singh (Cong.-I.), (*Shahdrol—S.T.*) ; Phoolchand Verma (B.J.P.), (*Shajapur—S.C.*) ; Motilal Singh (Cong.-I.), (*Sidhi—S.T.*) . Vacant (*Surguja—S.T.*) , Satyanarayan Jatiya (B.J.P.), (*Ujjain—S.C.*); Pratap Bhanu Sharma (Cong.-I.), (*Vidisha*).

MAHARASHTRA — 48 : Chandrabhan Balaji Athare Patil (Cong.-I.), (*Ahmednagar*) ; Madhusudan Vairale (Cong.-I.), (*Akola*) ; Mrs. Usha Prakash Choudhari (Cong.-I.), (*Amravati*) ; Qasi Saleem (Cong.-I.), (*Aurangabad*) ; Shankarrao Patil (Cong.-I.), (*Baramati*) ; Keshorao Pardhi (Cong.-I.), (*Bhandara*) ; Mrs. Kesarbai Kshirsagar (Cong.-I.), (*Bhir*) ; Ravindra Verma (J.P.), (*Bombay-North*) ; Mrs. Pramila Dandavate (J.P.), (*Bombay-North Central*) ; Dr. Subramaniam Swamy (J.P.), (*Bombay-North East*) ; Ram Jethmalani (B.J.P.), (*Bombay-North West*) ; Ratansinh Rajda (J.P.), (*Bombay-South*) ; R. R. Bhole (Cong.-I.), (*Bombay-South Central*) ; Balkrishna Ramchandra Wasnik (Cong.-I.), (*Buldhana—S.C.*) ; Potdukhe Shantaram (Cong.-I.), (*Chandrapur*) ; Vilas Muthamwar (Cong.-I.), (*Chimur*) ; D. B. Shingada (Cong.-I.), (*Dahanu—S.T.*) ; R. M. Bhoye (Cong.-I.), (*Dhule*) ; V. N. Patil (Cong.-I.), (*Erandol*) ; Uttam Rathod (Cong.-I.), (*Hingoli*) ; Rajaram Shankarrao Mane (Cong.-I.), (*Ichalkaranji*) ; Y. S. Mahajan (Cong.-I.), (*Jalgaon*) ; Balasaheb Pawar (Cong.-I.), (*Jalna*) ; Jashwantrao Mohite (Cong.-I.), (*Karad*) ; Prof. Ramkrishna More (Cong.-I.), (*Khed*) ; A. T. Patil (Cong.-I.), (*Kolaba*) ; Udaysingrao Gaikwad (Cong.-I.), (*Kolhapur*) ; Balasaheb Vikhe Patil (Cong.-I.), (*Kopargaon*) ; Shivraj V. Patil (Cong.-I.), (*Latur*) ; Z. M. Kahandole (Cong.-I.), (*Malegaon—S.T.*) ; Jambuwant Dhote (Cong.-I.), (*Nagpur*) ; S. B. Chavan (Cong.-I.), (*Nanded*) ; Manikrao Gavit (Cong.-I.), (*Nandurbar — S.T.*) ; Dr. Pratap Wagh (Cong.-I.), (*Nasik*) ; T. M. Sawant (Cong.-I.), (*Osmanabad — S.C.*) ; Bhausaheb Thorat (Cong.-I.), (*Pandharpur—S.C.*) ; R. N. Yadav (Cong.-I.), (*Parbhani*) ; V. N. Gadgil (Cong.-I.), (*Pune*) ; Madhu Dandavate (J.P.), (*Rajapur*) ; J. C. Barve (Cong.-I.), (*Ramtek*) ; Bapusaheb Parulekar (J.P.), (*Ratnagiri*) ; Vasantrao Patil (Cong.-I.), (*Sangli*) ; Y. B. Chavan (Cong.-U.), (*Satara*) ; G. S. Kuchan (Cong.-I.), (*Sholapur*) ; Ramchandra K. Mhalgi (B.J.P.), (*Thane*) ; Vasant Sathe (Cong.-I.), (*Wardha*) ; Gulam Nabi Azad (Cong.-I.), (*Washim*) ; Uttamrao Patil (Cong.-I.), (*Yavatmal*).

MANIPUR — 2 : Mahendra Ngangom (C.P.I.), (*Inner Manipur*) ; N. Gouzagin (Cong.-I.), (*Outer Manipur—S.T.*).

MEGHALAYA — 2 : Vacant (*Shillong*) ; Purno A. Sangma (Cong.-I.), (*Ture*).

NAGALAND — 1 : Chingwang Konyak (U.A.).

ORISSA — 21 : Ramchandra Rath (Cong.-I.), (*Aska*) ; Chintamani Jena (Cong.-I.), (*Balasore*) ; R. Jagannath Rao (Cong.-I.), (*Berhampur*) ; Arjun Charan Sethi (Cong.-I.), (*Bhadrak—S.C.*) ; Chintamani Panigrahi (Cong.-I.), (*Bhubaneshwar*) ; Nityananda Mishra (Cong.-I.), (*Bolangir*) ; Mrs. Jayanti Patnaik (Cong.-I.), (*Cuttack*) ; Narayan Sahu (Cong.-I.), (*Deogarh*) ; Raja Kamakhya Mahindra Bahadur (Cong.-I.), (*Dhenkanal*) ; Lakshman Malik (Cong.-I.), (*Jagatsinghpur*) ; Anadi Charan Das (Cong.-I.). (*Jaipur—S.C.*) ; Rashbehari Behera (Cong.-I.), (*Kalahandi*) ; Biju Patnaik (L.D.), (*Kendrapara*) ; Harihar Soren (Cong.-I.), (*Keonjhar—S.T.*) ; Giridhar Gomango (Cong.-I.), (*Koraput—S.T.*) ; Manmohan Tudu (Cong.-I.). (*Mayurbhanj—S.T.*) ; Kagapati Pradhani (Cong.-I.). (*Nourangpur—S.T.*); Murtunjaya Nayak (Cong.-I.), (*Phulbani—S.C.*) ; Rajamohan Mohanty (Cong.-I.), (*Puri*) ; Krupasindhu Bhoi (Cong.-I.). (*Sambalpur*) . Christopher Ekka (Cong.-I.), (*Sundagarh—S.T.*).

PUNJAB — 13 : R. L. Bhatia (Cong.-I.), (*Amritsar*) ; Hakam Singh (Cong.-I.), (*Bhatinda—S.C.*) ; Mrs. Gurbrinder Kaur Bras (Cong.-I.), (*Faridkot*) ; Balram Jakhar (*Ferozepur*) ; Mrs. Sukhbans Kaur (Cong.-I.), (*Gurdaspur*) ; Zail Singh (Cong.-I.), (*Hoshiarpur*) ; Gen. Rajinder Singh Sparrow (Cong.-I.), (*Jullundur*) ; Devinder Singh Garcha (Cong.-I.), (*Ludhiana*) ; Amrender Singh (Cong.-I.). (*Patiala*) ; Sunder Singh (Cong.-I.), (*Phillaur—S.C.*) ; Buta Singh (Cong.-I.). (*Ropar—S.C.*) ; Gurcharan Singh Nihal Singhwala (Cong.-I.), (*Sangrur*) ; Lehna Singh Tur (U.A.), (*Tarn Taran*).

RAJASTHAN — 25 : Acharya Bhagwan Dev (Cong.-I.), (*Ajmer*) ; Ram Singh Yadav (Cong.-I.), (*Alwar*) ; Bhikha Bhai (Cong.-I.), (*Banswara—S.T.*) ; Virdhi Chand Jain (Cong.-I.), (*Barmer*) ; Vacant (*Bayana—S.C.*) ; Rajesh Pilot (Cong.-I.), (*Bharatpur*) ; Girdharilal Vyas (Cong.-I.), (*Bhilwara*) ; Manphoot Singh Chaudhary (Cong.-I.), (*Bikaner*) ; Mrs. Nirmala Kumari (Cong.-I.), (*Chhittorgarh*); Daulat Ram Saran (L.D.), (*Churu*) ; Nawal Kishore Sharma (Cong.-I.), (*Dausa*) ; Birbal (Cong.-I.), (*Ganganagar—S.C.*) ; Satish Chandra Agarwal (B.J.P.), (*Jaipur*) ; Virda Ram (Cong.-I.), (*Jalore—S.C.*) ; Chaturbhuj (B.J.P.), (*Jhalawar*) ; Bhim Singh (J.P.), (*Jhunjhunu*) ; Ashok Gehlot (Cong.-I.), (*Jodhpur*) ; Krishna Kumar Goyal (B.J.P.), (*Kota*) ; Nathu Ram Mirdha (Cong.-U.), (*Nagaur*); Mool Chand Daga (Cong.-I.), (*Pali*) ; Jai Narayan Roat (Cong.-I.), (*Salumber—S.T.*) ; Ram Kumari Meena (Cong.-I.), (*Sawai Madhopur*) ; Kumbha Ram Arya (L.D.), (*Sikar*) ; Banwarilal (Cong.-I.), (*Tonk—S.C.*) ; Mohanlal Sukhadia (Cong.-I.), (*Udaipur*).

SIKKIM — 1 : Pahal Man Subha (U.A.).

TAMIL NADU — 39 : A. M. Velu (Cong.-I.), (*Arkonam*) ; V. Kulandaivelu (D.M.K.), (*Chidambaram—S.C.*) ; Era Anbarasu (Cong.-I.), (*Chengelput*) ; Ram Mohan (D.M.K.), (*Coimbatore*) ; R. Muthu Kumaran (Cong.-I.), (*Cuddalore*) ; K. Arjun (D.M.K.), (*Dharmapuri*) ; Maya Thevar (D.M.K.), (*Dindigul*) ; C. Chinaswamy (A.I.A.D.M.K.), (*Gobichettipalayam*) ; S. A. Dorai Sebastian (Cong.-I.), (*Karur*) ; K. Ramamurthy (Cong.-I.), (*Krishnagiri*) ; Dr. A. Kalanidhi (D.M.K.), (*Madras Central*) ; G. Lakshmanan (D.M.K.), (*Madras North*) ; R. Venkataraman (Cong.-I.), (*Madras South*) ; A. G. Subburaman (Cong.-I.), (*Madurai*) ; N. Kudanthai Ramalingam (Cong.-I.), (*Mayuram*) ; Thazhai M. Karunanidhi (D.M.K.), (*Nagapattinam—S.C.*) ; N. Dennis (Cong.-I.), (*Nagercoil*) ; R. Prabhu (Cong.-I.), (*Nilgiris*) ; Senapati Gounder (Cong.-I.), (*Palani*) ; K. B. S. Mani (Cong.-I.), (*Perambalur—S.C.*) ; Cumbum Natarjan (D.M.K.), (*Periakulam*) ; C. T. Dhandapani (D.M.K.), (*Pollachi—S.C.*) ; V. N. Swaminathan (Cong.-I.), (*Pudukkottai*) ; M. S. K. Satyendran (D.M.K.), (*Ramanathapuram*) ; B. Devarajan (Cong.-I.), (*Rasipuram—S.C.*) ; C. Palaniappan (D.M.K.), (*Salem*) ; R. V. Swaminathan (Cong.-I.), (*Sivaganga*) ; N. Soundarajan (A.I.A.D.M.K.), (*Sivakasi*) ; T. Nagaratnam (D.M.K.), (*Sriperumbudur—S.C.*) ; M. Arunachalam (Cong.-I.), (*Tenkasi—S.C.*) ; S. Singara Vadivel (Cong.-I.), (*Thanjavur*) ; S. S. Ramaswamy Padayachi (Cong.-I.), (*Tindivanam*) ; K. T. Kosalram (Cong.-I.), (*Tiruchendur*) ; M. Kandaswamy (D.M.K.), (*Tiruchengode*) ; N. Selvaraju (D.M.K.), (*Tiruchirappalli*) ; D. S. A. Shivaprakasam (D.M.K.), (*Tirunelveli*) ; S. Murugan (D.M.K.), (*Tiruppattur*) ; Abdul Samad (M.L.), (*Vellore*) ; D. Puttuswamy (Cong.-I.), (*Vandivasi*).

TRIPURA — 2 : Bajuban Riyan (C.P.I.M.), (*Tripura East—S.T.*) ; Ajoy Biswas (C.P.I.M.), (*Tripura West*).

UTTAR PRADESH — 85 : Nihal Singh Jain (Cong.-I.), (*Agra*) ; Ram Awadh (L.D.), (*Akbarpur*) ; Mrs. Indira Kumari (L.D.), (*Aligarh*) ; K. P. Tiwari (Cong.-I.), (*Allahabad*) ; Harish Chandra Singh Rawat (Cong.-I.), (*Almora*) ; Rajiv Gandhi (Cong.-I.), (*Amethi*) ; Chandra Pal Singh (L.D.), (*Amroha*) ; Jaipal Singh Kashyap (S.P.), (*Aonla*) ; Chandrajit Yadav (D.L.D.), (*Azamgarh*) ; Mohammad Asrar Ahmad (Cong.-I.), (*Badaun*) ; Charan Singh (L.D.), (*Baghpat*) ; Muzaffar Hussain (Cong.-I.), (*Bahraich*) ; Chandra Bhal Mani Tewari (Cong.-I.), (*Balrampur*) ; Chandra Shekhar (J.P.), (*Ballia*) ; Ramnath Dubey (Cong.-I.), (*Banda*) ; Mahabir Prasad (Cong.-I.), (*Bansgaon—S.C.*) ; Ram Kinkar (L.D.), (*Bara Banki—S.C.*) ; Begum Abida Ahmed (Cong.-I.). (*Bareilly*) ; Kalpnath Sonkar (Cong.-I.). (*Basti—S.C.*) ; Mangal Ram Premi (L.D.), (*Bijnor—S.C.*) , R. N. Tripathi (Cong.-I.), (*Bilhaur*) ; Mahmood Hasan Khan (L.D.), (*Bulandsahr*) ; N. Rakesh (D.S.F.), (*Chail—S.C.*) ; Nihal Singh (L.D.), (*Chandauli*) ; Ramayan Rai (Cong.-I.), (*Deoria*) ; Kazi Jalil Ahhasi (Cong.-I.), (*Domariaganj*); Mohd. Mushir Ahmed Khan (Cong.-I.), (*Etah*); Ram Singh Shakya (L.D.), (*Etawah*) ; Jairam Verma (Cong.-I.), (*Faizabad*); Dayaram Shakya (B.J.P.), (*Farukhabad*); Hari Kishan Shastri (Cong.-I.), (*Fatehpur*); Rajesh Kumar Singh (L.D.), (*Firozabad—S.C.*) ; Vacant (*Garhwal*) ; Ashkaran Sankhwar (Cong.-I.), (*Ghatampur—S.C.*); Zainul Basher (Cong.-I.), (*Ghazipur*) ; Jharkande Rai (C.P.I.), (*Ghosi*); Anand Singh (Cong.-I.), (*Gonda*); Harikesh Bahadur (D.S.F.), (*Gorakhpur*); Doonger Singh (Cong.-I.), (*Hamirpur*); Anwar Ahmad (Cong.-I.), (*Hapur*) ; Mannilal (Cong.-I.), (*Hardoi—S.C.*) ; Jagpal Singh (L.D.), (*Hardwar—S.C.*) ; Chandrapal Shailani (Cong.-I.), (*Hathras—S.C.*) ; Nathuram Shakhyawar (Cong.-I.), (*Jalaun—S.C.*) ; Multan Singh (S.P.), (*Jalesar*) ; A. U. Azmi (L.D.), (*Jaunpur*) ; Viswanath Sharma (D.S.F.), (*Jhansi*) ; Mrs. Gayatri Devi (L.D.), (*Kairana*) ; Ranavir Singh (Cong.-I.), (*Kaiserganj*) ; Chhotey Singh Yadav (L.D.), (*Kannauj*) ; Arif Mohammed Khan (Cong.-I.), (*Kanpur*) ; Kishan Chand Pandey (Cong.-I.), (*Khalilabad*) ; Mrs. Usha Verma (Cong.-I.), (*Kheri*) ; Trilok Chand (L.D.), (*Khurja—S.C.*) ; Chhangui Ram (D.L.D.), (*Lalganj—S.C.*) ; Mrs. Sheila Kaul (Cong.-I.), (*Lucknow*) ; Sheo Sharan Verma (L.D.), (*Machhlishahr*) ; Ashfaq Husain (D.S.F.), (*Maharajganj*) ; Raghunath Singh Verma (L.D.), (*Mainpuri*) ; Digambar Singh (L.D.), (*Mathura*) ; Smt. Mohshina Kidwai (Cong.-I.), (*Meerut*) ; Umakant Mishra (Cong.-I.), (*Mirzapur*); Ram Lal Rahi (D.S.F.), (*Misrikh—S.C.*); Mrs. Kailashpati (Cong.-I.), (*Mohanlalganj—S.C.*); Ghulam Mohd. Khan (L.D.), (*Moradabad*) ; G. A. Khan (L.D.), (*Muzaffarnagar*) ; N. D. Tiwari (Cong.-I.), (*Naini Tal*); C. P. N. Singh (Cong.-I.), (*Padrauna*); B. D. Singh (L.D.). (*Phulpur*); Harish Kumar Gangwar (D.S.F.), (*Pilibhit*) ; Ajit Pratap Singh (Cong.-I.), (*Pratapgarh*); Arun Kumar Nehru (Cong.-I.), (*Rai Bareli*); Zulfiquar Ali Khan (Cong.-I.), (*Rampur*); Ram Pyare Panika (Cong.-I.), (*Robertsganj—S.C.*); Rashid Masood (L.D.), (*Saharanpur*); Rajnath Sonkar Shastri (L.D.), (*Saidpur—S.C.*); Ram Nagina Misra (Cong.-I.), (*Salimpur*); Brijendra Pal Singh Yadav (Cong.-I.), (*Sambhal*); D. G. Singh (Cong.-I.), (*Shahabad*); Jitendra Prasad (Cong.-I.), (*Shahjahanpur*) ; Rajindra Kumar Bajpai (Cong.-I.), (*Sitapur*) ; Gire Raj Singh (Cong.-I.), (*Sultanpur*) ; T. S. Negi (D.S.F.), (*Tehri-Garhwal*) ; Ziaur Rahman Ansari (Cong.-I.), (*Unnao*) ; Kamalapati Tripathi (Cong.-I.), (*Varanasi*).

WEST BENGAL — 42 : Pius Tikey (R.S.P.), (*Alipurduars—S.T.*) ; Bijoy Modak (C.P.I.-M.), (*Arambagh*) ; Ananda Gopal Mukhopadhyay (Cong.-I.), (*Asansol*) ; Palas Barman (R.S.P.), (*Balurghat—S.C.*) ; Basudeb Acharya (C.P.I.-M.), (*Bankura*) ; Chitta Basu (F.B.), (*Barasat*) ; M. Ismail (C.P.I.-M.), (*Barrackpore*) ; Indrajit Gupta (C.P.I.), (*Basirbat*) ; Tridib Chaudhuri (R.S.P.), (*Berhampore*) ; Gadadhar Saha (C.P.I.-M.), (*Birbhum—S.C.*); Dr. Sardish Roy (C.P.I.-M.), (*Bolpur*); Sushil Bhattacharya (C.P.I.-M.), (*Burdwan*) ; Sunil Maitra (C.P.I.-M.), (*Calcutta N.E.*) ; Ashok Kumar Sen (Cong.-I.), (*Calcutta N.W.*) ; Satyasadan Chakraborty (C.P.I.-M.), (*Calcutta-South*) ; Sidhir Kumar Giri (C.P.I.-M.), (*Contar*) ; Amar Roypradhan (F.B.), (*Cooch Behar—S.C.*) ; Ananda Pathak (C.P.I.-M.), (*Darjeeling*) ; Jyotirmoy Bosu (C.P.I.-M.), (*Diamond Harbour*); Niren Ghosh (C.P.I.-M.), (*Dum Dum*); Krishna Chandra Halder (C.P.I.-M.), (*Durgapur—S.C.*) ; Roop Chand Pal (C.P.I.-M.), (*Hooghly*) ; Samar Mukherjee (C.P.I.-M.), (*Howrah*) ; Somnath Chatterjee (C.P.I.-M.), (*Jadavpur*) ; Subodh Sen (C.P.I.-M.), (*Jalpaiguri*) ; Zainal Abedin (C.P.I.-M.), (*Jangipur*) ; Motilal Hasda (C.P.I.-M.), (*Jhargram—S.T.*) ; Sanat Kumar Mandal (R.S.P.), (*Joynagar—S.C.*) ; Saifuddin Chowdhury (C.P.I.-M.), (*Katwa*) ; R. P. Das (C.P.I.-M.), (*Krishnagar*) ; A. B. A. Ghani Khan Chaudhury (Cong.-I.), (*Malda*) ; Mukunda Mandal (C.P.I.-M.), (*Mathurapur—S.C.*) ; Narayan Choubey (C.P.I.), (*Midnapore*) ; Masudal Hossain Syed (C.P.I.-M.), (*Murshidabad*) ; Smt. Bibha Ghosh Goswami (C.P.I.-M.), (*Nabadwip—S.C.*) ; Smt. Geeta Mukherjee (C.P.I.), (*Panskura*) ; Chitta Mahata (F.B.), (*Purulia*) ; Golam Yazdani (Cong.-I.), (*Raiganj*); Ajit Bagh (C.P.I.-M.), (*Serampore*) ; Satya Gopal Misra (C.P.I.-M.), (*Tamluk*) ; Hannan Mollah (C.P.I.-M.), (*Uluberia*) ; A. K. Saha (C.P.I.-M.), (*Vishnupur—S.C.*).

ANDAMAN AND NICOBAR ISLANDS — 1 : Manoranjan Bhakta (Cong.-I.).

ARUNACHAL PRADESH — 2 : Sobeng Tayeng (Cong.-I.), (*Arunachal-E.*) ; Prem Khandu Thungon (Cong.-I.), (*Arunachal-W.*).

CHANDIGARH — 1: Jagan Nath Kaushal (Cong.-I.).

DADRA AND NAGAR HAVELI — 1 : Ramji Potia Mahala (Cong.-I.).

DELHI — 7 : Bhiku Ram Jain (Cong.-I.), (*Chandni Chowk*) ; Jagdish Tytler (Cong.-I.), (*Delhi Sadar*) ; H. K. L. Bhagat (Cong.-I.), (*East Delhi*) ; Dharam Dass Shastri (Cong.-I.), (*Karol Bagh—S.C.*) ; Atal Bihari Vajpayee (B.J.P.), (*New Delhi*) ; Sajjan Kumar (Cong.-I.), (*Outer Delhi*) ; Charanjit Singh (Cong.-I.), (*South Delhi*).

GOA, DAMAN & DIU — 2 : M. Eduardo Faleiro (Cong.-I.), (*Marmagao*) ; Mrs. Sanyogita Rane (Cong.-I.), (*Panaji*).

LAKSHADWEEP — 1: P. M. Sayeed (Cong.-I.).

MIZORAM — 1 : Dr. R. Rothuama (U.A.).

PONDICHERRY — 1 : P. Shanmugam (Cong.-I.).

NOMINATED ANGLO-INDIANS—2: Frank Anthony ; A. E. T. Barrow.

ESTIMATES COMMITTEE :

Chairman : S. B. P. Pattabhi Raman.

PUBLIC ACCOUNTS COMMITTEE :

Chairman : Chandrajit Yadav.

PUBLIC UNDERTAKINGS COMMITTEE :

Chairman : Bansilal.

LEGISLATIVE ASSEMBLIES AND LEGISLATIVE COUNCILS

ANDHRA PRADESH LEGISLATIVE ASSEMBLY

Speaker : K. Prabhakara Rao ; *Dy. Speaker :* A. Eswara Reddy.

Seats : 295 ; *Party Position :* Cong. (I) : 254 ; Janata Party (S) : 7 ; C.P.I. (M) : 8 ; Janata Party : 5 ; C.P.I. : 6 ; Bharateeya Janata Party : 3 ; Cong. (U) : 3 ; Majlis-Ittehad-ul-Muslimeen : 3 ; Independents : 4 ; Vacant : 2 ; Women members : 10.

R. M. Manohar (Cong.-I.), (*Achampet—S.C.*) ; K. Dhanaraju (Cong.-I.), (*Achanta—S.C.*) ; C. Ramachandra Reddy (Cong.-I.), (*Adilabad*) ; H. Satyanarayana (Cong.-I.), (*Adoni*) ; S. Pochaiah (Cong.-I.), (*Alair—S.C.*) ; Ram Bhupal Reddy (Cong.-I.), (*Alampur*) ; S. Venkata Reddy (Cong.-I.), (*Alamuru*) ; G. Prathapa Reddy (Cong.-I.), (*Allagadda*) ; P. Veeraraghavalu (Cong.-I), (*Allavaram—S.C.*) ; G. Sundara Ramaiah (Cong.-I), (*Allur*) ; Eranna (Cong.-I), (*Allur—S.C.*) ; P. Sreerama Murthy (Cong.-I), (*Amadalavalasa*) ; P. V. Sreerama Rao (Cong.-I), (*Amalapuram*) ; Veera Reddy (Cong.-I), (*Amarchinta*) ; K. Govind Rao (C.P.I.), (*Anakapalli*) ; B. T. L. N. Choudary (Cong.-I), (*Anantapur*) ; P. Ammi Reddy (Cong.-I.), (*Anaparthi*) ; C. Rajanarasimha (Cong.-I.), (*Andole—S.C.*) ; Santosh Reddy (Cong.-I.), (*Armoor*) ; B. Krishna (Cong.-I.), (*Asafnagar*) ; D. Narasaiah (Cong.-I.), (*Asifabad—S.C.*) ; B. Sundara Rami Reddy (Cong.-I.), (*Atmakur*) ; A. Vengala Reddy (Cong.-I.), (*Atmakur*) ; I. Rama Krishnan Raju (Cong.-I.), (*Attili*) ; M. V. Krishna Rao (Cong.-I.), (*Avanigadda*).

V. Siva Ramakrishna Rao (Cong.-I), (*Badvel*) ; Mrs. G. Susheela Rajaram (Cong.-I), (*Balkonda*) ; V. Ranga Rao (J.P.), (*Bandar*) ; M. Sreenivasa Rao (Cong.-I), (*Banswada*) ; K. Prabhakara Rao (Cong.-I), (*Bapatla*) ; M. Yerraiah Reddy (C.P.I.-M.), (*Bhadrachalam—S.T.*) ; D. Jagannadha Raju (Cong.-I.), (*Bheemunipatnam*) ; K. V. Narasimha Raju (Cong.-I.), (*Bhimavaram*) ; K. Appadu Dora (Cong.), (*Bhogapuram*) ; K. Narasimha Reddy (Cong.-I.), (*Bhongir*) ; T. Amar Singh (Cong.-I.), (*Boath—S.T.*) ; K. Venkata Kurmi Naidu (Cong.-I.), (*Bobbili*) ; Gulam Samdani (Cong.-I.), (*Bodhan*) ; A. Rajaram (Cong.-I.), (*Buggaram*) ; P. Ramachandraiah (Cong.) (*Burgampahad—S.T.*) ; V. Padma Raju (Cong.-I.), (*Burugupudi*) ; N. Ramulu (Cong.-I.), (*Chalakurthy*) ; N. Chandrababu Naidu (Cong.-I.), (*Chandragiri*) ; Mohd. Amanullah Khan (M.I.U.M.), (*Chandrayanagutta*) ; S. S. Owaisi (M.I.U.M.), (*Charminar*) ; N. Yetiraja Rao (Cong.-I.), (*Chennur*) ; G. Siddaiah (Cong.-I.), (*Cheriyal*) ; Ch. Pratapalingam (Cong.-I.), (*Chevella*) ; S. Sambaiah (Cong.-I.), (*Chilakalaripet*) ; C. Narayana (Cong.-I.), (*Chinnur—S.C.*) ; G. Venkateswara Rao (Cong.-I.), (*Chintalapudi*) ; D. Kondala Rao (Cong.-I.), (*Chinalapalli—S.T.*) ; Dr. S. Chandramouli (Janata), (*Chirala*) ; N. P. Venkateswara Choudury (Cong.-I.), (*Chittoor*) ; E. Seetharama Sastry (Cong.-I.), (*Chodavaram*) ; N. Sreepathi Rao (Cong.-I.), (*Choppadandi*) ; Ch. Syamala Rao (Cong.-I.), (*Chupurupalli*) ; G. Ranga Reddy (Cong.-I.), (*Cuddapah*) ; K. Obul Reddy (Cong.-I.), (*Chumbum*).

B. Gnanaprakasam (Cong.-I.), (*Darsi*) ; N. Charles (Cong.-I.), (*Dendulur*) ; D. Ravindra Naik (Cong.-I.), (*Deverkonda—S.T.*) ; G. Anantha Reddy (Cong.-I.), (*Dharmavaram*) ; K. E. Krishna Murthy (Cong.-I.), (*Dhone*) ; Balareddy Antha Reddy (Cong.-I.), (*Dichpalli*) ; A. Lingaiah (Cong.-I.), (*Dommat*) ; R. Surendar Reddy (Cong.-I.), (*Dornakal*) ; G. Vedantha Rao (Cong.-I.), (*Duggirala*) ; V. Sanyasi Naidu (Cong.-I.), (*Elamanchili*) ; N. Suryaprakasa Rao (Cong.-I.), (*Eluru*) ; K. Narasayya (Cong.-I.), (*Etcherla—S.C.*) ; D. K. Samara Simha Reddy (Cong.-I.), (*Gadwal*) ; V. Narayanappala Naidu (Cong.-I.), (*Gajapatinagaram*) ; P. Sundarayya (C.P.I.-M.), (*Gannavaram*) ; P. Ranga Reddy (Cong.-I.), (*Giddalur*) ; G. Rama Swamy (Cong.-I.), (*Ghanpur—S.C.*) ; K. Venkata Ramaiah (Cong.-I.), (*Gooty*) ; Smt. D. Sarojini Devi (Cong.-I.), (*Gopalapuram—S.C.*) ; N. Bayapa Reddy (Cong.-I.), (*Gorantla*) ; K. Satyanarayana Rao (Cong.-I.), (*Gudivada*) ; P. Prakasa Rao (Cong.-I.), (*Gudur—S.C.*) ; L. Eswara Rao (Cong.-I.), (*Guntur I*) ; Veeranjaneya Sarma (Cong.-I.), (*Guntur II*) ; G. Mallikarjuna Rao (Cong.-I.), (*Gurzala*) ; T. Hayagrivachari (Cong.-I.), (*Hanamkonda*) ; K. A. Narasimham Bhukta

(Cong.-I.), (*Harischandrapuram*); Smt. Lakshmikanthamma (Cong.-I.), (*Himayatnagar*); K. Thippa Swamy (Cong.-I.), (*Hindupur*); D. Venkata Rao (Cong.-I.), (*Huzurabad*).

A. G. Krishna (Cong.-I.), (*Ibrahimpatnam—S.C.*); B. Venkatesam Sarma (Cong.-I.), (*Ichapuram*); D. Chinna Mallaiah (C.P.I.), (*Indurthi*); N. Narasappa (Cong.-I.), (*Jadcherla*); D. Surendar Rao (Cong.-I.), (*Jagtial*); P. Padmanabhan (Cong.-I.), (*Jaggampeta*); B. Rama Rao (Cong.-I.), (*Jaggayyapet*); M. Ramanatha Reddy (Cong.-I.), (*Jammalamaddugu*); K. Vardha Reddy (Cong.-I.), (*Jangaon*); Gangaram (Cong.-I.), (*Jukkal—S.C.*); P. Ammi Raju (Cong.-I.), (*Kadiam*); Nizam Vali (Cong.-I.), (*Kadiri*); K. Bapi Raju (Cong.-I.), (*Kaikaluru*); Janardhan Reddy (Cong.-I.), (*Khairatabad*); M. Swamy (Cong.-I.), (*Kakinada*); S. Jaipal Reddy (J.P.), (*Kalwakurthi*); H. Narasappa (Cong.-I.), (*Kalyandurg—S.C.*); P. Janardhan Reddy (J.P.), (*Kamalapur*); P. Siva Reddy (Cong.-I.), (*Kamalapuram*); B. Balaiah (Cong.-I.), (*Kamareddy*); D. Kondaiah Chowdary (Cong.-I.), (*Kandukur*); B. Rama Subba Reddy (Cong.-I.), (*Kanigiri*); N. Kondaiah (Cong.-I.), (*Karimnagar*); Shiv Lal (Cong.-I.), (*Karwan*); K. Yanadi Reddy (Cong.-I.), (*Kavali*); K. Anantha Reddy, (Cong.-I.), (*Khamman*); Ambajee (Cong.-I.), (*Khanapur—S.T.*); A. Vasudeva Rao (Cong.-I.), (*Kodad*); Gurunatha Reddy (Cong.-I.), (*Kodangal*); D. Muniswamy (Cong.-I.), (*Kodumur—S.C.*); N. Venkata Subbaiah (Cong.-I.), (*Kodur—S.C.*); M. K. V. Reddy (Cong.-I.), (*Koikuntla*); K. Venkateswara Rao (Cong.-I.), (*Kollapur*); G. Pattabhi Ramaswamy (Cong.-I.), (*Kondapi*); M. V. S. Subba Raju (Cong.-I.), (*Kothapeta*); V. Narasimha Rao (Cong.-I.), (*Koturu—S.T.*); P. Ramchandra Reddy (Cong.-I.), (*Kovur*); Munshi Abdul Aziz (Cong.-I.), (*Kovvur*); E. Subba Rao (Janata-S.), (*Kuchinapudi*); R. R. Doraswamy Naidu (Cong.-I.), (*Kuppam*); Mohd. Ibrahim Khan (Cong.-I.), (*Kurnool*).

G. R. Subba Reddy (Cong.-I.), (*Lakkireddipalli*); Ch. Lakshmaiah (Cong.-I.), (*Luxettipet*); Ch. Narapa Reddy (Cong.-I.), (*Macherla*); Y. Thimma Reddy (Cong.-I.), (*Madakasira*); G. V. Narayana Reddy (Cong.-I.), (*Madanapalli*); B. Prasada Rao (Cong.-I.), (*Madhira*); K. Ramu Naidu (Cong.-I.), (*Madugula*); J. Janardhan Reddy (Cong.-I.), (*Mahabubabad*); Shiv Prasad (Cong.-I.), (*Maharajgunj*); L. Anjaneyulu (Cong.-I.), (*Mahbubnagar*); K. Prabhakara Reddy (Cong.-I.), (*Malakpet*); B. Niranjan Rao (Cong.-I.), (*Malleswaram*); G. V. Rathaiah (Cong.-I.), (*Mangalagiri*); C. Narayana Reddy (Cong.-I.), (*Manthani*); P. Subbaiah (C.P.I.), (*Markapur*); J. Chandramaoli (Janata-S.), (*Martur*); S. Lakshma Reddy (Cong.-I.), (*Medak*); Dr. M. Chenna Reddy (Cong.-I.), (*Medchal*); V. Venkateswara Rao (Cong.-I.), (*Metpalli*); A. Lakshminarayana (C.P.I.-M.), (*Miryalguda*); Gaddana (Cong.-I.), (*Mudhole*); P. Koteswara Rao (Cong.-I.), (*Mudenepalli*); P. Jagan Naik (Cong.-I.), (*Mulug—S.T.*); M. S. Vishnuprasad Rao (Cong.-I.), (*Mummidivaram—S.C.*); P. Govardhan Reddy (Cong.-I.), (*Mungode*); Narasimha Reddy (J.P.), (*Mushirabad*); G. Eshwar (Cong.-I.), (*Myadaram—S.C.*); D. L. Ravindra Reddy (Cong.-I.), (*Mydukur*); Ch. Venkata Rao (Cong.-I.), (*Mylavaram*).

N. Ganapathi Rao (Cong.-I.), (*Nagaram—S.C.*); R. Chenga Reddy (Cong.-I.), (*Naguri*); S. Vijayarama Raju (Cong.-I.), (*Naguru—S.T.*); Srinivasa Rao (Cong.-I.), (*Nagarkurnool*); N. Raghava Reddy (C.P.I.-M.), (*Nakrekal*); G. Mohan Reddy (Cong.-I.), (*Nalgonda*); A. Veerappa (Cong.-I.), (*Nallamada*); M. Venkateswara Rao (Cong.-I.), (*Nandigama*); B. Seshasayana Reddy (Cong.-I.), (*Nandikotkur*); Mrs. Kalikamba Parkala (Cong.-I.), (*Narasapur*); K. V. K. Reddy (Cong.-I), (*Narasaraopet*); S. Shiv Rao (Cong.-I), (*Narayankhed*); P. Rajam (Cong.-I), (*Narella—S.C.*); M. Omkar (C.P.I.-M.), (*Narsampet*); Ch. Vithal Reddy (C.P.I.), (*Narsapur*); B. Gopatrudu (Cong.-I.), (*Narsipatnam*); K. V. Sabba Reddy (Cong.-I.), (*Nellore*); Smt. G. Dhanasuryavati (C.P.I.-M.), (*Nidumolu—S.C.*); P. Ganga Reddy (Cong.-I.), (*Nirmal*); A. Kishandas (Cong.-I.), (*Nizamabad*); P. Venkata Rao (Cong.-I.), (*Nuzvid*); Dr. (Smt.) S. Jeevaratnam Naidu (Cong.-I.), (*Ongole*).

G. Appala Naidu (Cong.-I.), (*Paderu—S.T.*); V. Satyanarayana (Cong.-I.), (*Palacole*); G. Rajaram (Cong.-I.), (*Palakonda*); K. Rajaratnam (Cong.-I.), (*Palakonda—S.C.*); S. Chandrasekhar (Cong.-I.), (*Palair—S.C.*); A. Ratnam (Cong.-I.), (*Palamaner—S.C.*); Ayyapu Reddy (Cong.-I.), (*Panyam*); Bh. S. R. Murthy (Cong.-I.), (*Paravada*); M. Narayana Rao (Cong.-I.), (*Parcher*); Ahmed Shareef (Cong.-I.), (*Pargi*); B. Sammaiah (Cong.-I.), (*Parkal—S.C.*); Ch. Parsuram Naidu (Cong.-I.), (*Parvatipuram*); K. Mohan Rao (Cong.-I.), (*Patapatnam*); K. B. Narasappa (Cong.-I.), (*Pattikonda*); M. Adeyya (Cong.-I.), (*Payakaraopeta—S.C.*); G. Ramaswamy Reddy (Cong.-I.), (*Pedakurapadu*); G. Raji Reddy (Cong.-I.), (*Peddapalli*); V. Narayana Murthy (Cong.-I.), (*Peddapuram*); Oronan Raju Satyanarayana (Cong.-I.), (*Pendurthi*); J. Venkateswara Rao (Cong.-I.), (*Penugonda*); S. Narayana Reddy (Cong.-I.), (*Penukonda*); M. Saifulla Baig (Cong.-I.), (*Pileru*); K. V. Chandra Mohan Rao (Cong.-I.), (*Pithapuram*); R. Nagabhushanam (Cong.-I.), (*Polavaram—S.C.*); G. Nageswara Rao (Cong.-I.), (*Ponnur*); K. Lakshminarayana Reddy (Cong.-I.), (*Pratipad*); M. Padmanabhan (*Pratipadu*); R. G. Obul Reddy (J.P.), (*Proddatur*); Y. S. Rajasekharan Reddy (Cong.-I.), (*Pulivendla*); K. V. Pathi (Cong.-I.), (*Punganur*); K. B. Siddayya (Cong.-I.), (*Puttur*).

Smt. T. Satyavathi (Cong.-I.), (*Rajahmundry*); Smt. K. Prabhavathamma (Cong.-I.), (*Rajampet*); P. Apparao (Cong.-I.), (*Ramachandrapuram*); K. Papaiah (Cong.-I.), (*Ramannapet*); T. Anjaiah (Cong.-I.), (*Ramayampet*); N. V. R. Naidu (Cong.-I.), (*Rapur*); S. Palekondreyudu (Cong.-I.), (*Rayachoty*); K. B. Chennamallappa (Cong.-I.), (*Rayadrug*); K. Satyanarayana (C.P.I.-M.), (*Repalle*); R. Ramalinga Raju (Cong.-I.), (*Razole*); S. R. T. P. S. Veerappa Raju (C.P.I.), (*Salur—S.T.*); M. Venkata Ramana (Cong.-I.), (*Sampara*); Narasimha Reddy (Cong.-I.), (*Sangareddy*); S. Ram Das (Cong.-I.), (*Sanathnagar*); V. Yellaiah (Cong.-I.), (*Santhanuthalapadu—S.C.*); Ch. V. Sesha Reddy (Cong.-I.), (*Sarvepalli*); P. Sambasiva Raju (Cong.-I.), (*Sathivada*); J. Venkateswara Rao (Cong.-I.), (*Sattenapalli*); C. Dass (Cong.-I.), (*Satyavedu—S.C.*); L. Narayana (Ind.), (*Secunderabad*); B. Machinder Rao (Cong.-I.), (*Secunderabad Cantt.—S.C.*); B. L. Kistaiah (Cong.-I.), (*Shadnagar—S.C.*); B. Seetharamaiah (Cong.-I.), (*Shujatnagar*); Ch. Janga Reddy (J.P.), (*Shyampet*); A. Madan Mohan (Cong.-I.), (*Siddipet*); Smt. B. Rukmini Devi (Cong.-I.), (*Singanamala—S.C.*); Ch. Rajeshwara Rao (C.P.I.), (*Sircilla*); K. V. Keshavulu (Cong.-I.), (*Sirpur*); G. Latchanna (Janata-S.), (*Sompeta*); Ch. Lakshminarayana (Cong.-I.), (*Srikakulam*); V. Subramanyam Naidu (Cong.-I.), (*Srikalahasti*); D. Sanyasi Dora (Cong.-I.), (*Srungavarapukota—S.T.*); P.Venkata Subbiah (Cong.-I.), (*Sullurpet—S.C.*); A. Parandhamulu (Cong.-I.), (*Suryapet—S.C.*).

Ch. V. P. Murthy Raju (Cong.-I.), (*Tadepalligudem*); T. Amruta Rao (Cong.), (*Tadikonda—S.C.*); D. Venkata Reddy (Cong.-I.), (*Tadpatri*); B. Suryanarayana (Cong.-I.), (*Tallarevu*); M. Manik Rao (Cong.-I.), (*Tandur*); K. Apparao (Cong.-I.), (*Tanuku*); B. Narayana Swamy (Janata-S.), (*Tekkali*); Smt. D. Indira (Cong.-I.), (*Tenali*); A. Mohan Reddy (Cong.-I.), (*Thamballapalle*); V. Varada Rama Rao (Cong.-I.), (*Therlam*); Smt. M. Swarajyam (C.P.I.-M.), (*Thungathurthi*); A. Eswara Reddy (Cong.-I.), *(Tirupathi)* ; V. Adam (Cong.-I.), *(Tiruvuru—S.C.)* ; Smt. M. N. Vijayalakshmi Devi (Cong.-I.), *(Tuni)* ; M. Venkaiah Naidu (J.P.), *(Udayagiri)* ; G. Ramachandra Raju (Cong.-I.), *(Undi)* ; K. Satyanarayana (Cong.-I.), *(Ungutur)* ; R. Vemanna (Cong.-I.), *(Uravakonda)* ; K. V. R. S. Padmanabha Raju (Cong.-I.), *(Uttarapalli)* ; N. Amaranatha Reddy (Cong.-I.), *(Vayalpad)*; N. Sreenivasulu Reddy (Cong.-I.), *(Venkatagiri)* ; Y. Venkata Rao (Cong.-I.), *(Vemur)* ; B. Armugam (Cong.-I.), *(Vepanjeri—S.C.)* ; V. B. Thirumalayya (Cong.-I.), *(Vicarabad)* ; N. Bhaskar Rao (Cong.-I.), *(Vijayawada—E)* ; P. Chinna (Cong.-I.), *(Vijayawada—W)* ; A. Venkateswarlu (Cong.-I.), *(Vinukonda)* ; S. Alwar Dass (Cong.-I.), *(Visakhapatnam-I)* ; N. S. N. Reddy (J.P.), *(Visakhapatnam-II)* ; P. S. A. Ganapathi Raju (Janata-S.), *(Vizianagaram)* ; M. Babu Paramkusum (Ind.), *(Vunukuru)* ; V. Sobhanadreeswara Rao (Janata-S.), *(Vuyyuru)* ; Jaya Ramulu (Cong.-I.), *(Wanaparthy)* ; A. Buchhaiah (Cong.-I.), *(Warangal)* ; M. Jagannadham (Cong.-I.), *(Warthannapet)* ; Baquer Agha (M.I.U.M.), *(Yakutpura)* ; Ch. Yerriah (Cong.-I.), *(Yellandu—S.T.)* ; Bala Gound (Cong.-I.), *(Yellareddy)* ; G. Prakasa Rao (Cong.-I.), *(Yellavaram—S.T.)* ; Hanumantha Reddy (Cong.-I.), *(Yemmiganur)* ; M. Baga Reddy (Cong.-I.), *(Zahirabad)* ; O. H. Pedro *(Anglo-Indian Nominee)*.

ANDHRA PRADESH LEGISLATIVE COUNCIL

Chairman : Syed Mukassir Shah : *Dy. Chairman :* Vacant ; *Secretary :* M. Anguraj.

Strength : 90; An estimate of Party position in the Council is as follows : Congress-I.—38 ; Congress—12 ; Janata Party—9 ; Communist Party of India—2 ; Communist Party of India (Marxist)—1 ; Progressive Democratic Front — 5 ; Independent — 1 ; Vacant — 22 ; Women members — 8.

Legislative Assembly (31) : V. Venkatanarayana (Cong.-I.); Kammili Appa Rao (Cong.) ; V. Krishnamurthy Naidu (Cong.-I.) ; Mir Akbar Ali Nasiri (Cong.) ; Smt. T. N. Sadalakshmi (J.P.) ; B. Ram Dev (Cong.-I.) ; Y. Adinarayana Reddy (Cong.-I.) ; K. Rosaiah (Cong.) ; K. Subba Rao (C.P.I.) ; A. Bapineedu (Cong.-I.) ; Chebrolu Hanumaiah (Cong.-I.) ; K. L. Mahendra (C.P.I.) ; Y. Mahanandi Reddi (Cong.-I.); V. Nageswara Rao (Cong.-I.); G. Ramchandra Reddy (Cong.-I.) ; Smt. J. M. Rajamani Devi (Cong.-I.) ; R. Narapa Reddy (Cong.) ; T. Musalayya (Cong.) ; Smt. B. Sarojini Pulla Reddy (Cong.-I.) ; Mrs. Suguna Devi (Cong.-I.) ; Bhavanam Venkatram Reddy (Cong.-I.) ; M. M. Hashim (Cong.-I.) ; N. Janardhana Reddy (Cong.-I.) ; K. Satyanarayana Raju (Cong.-I.) ; G. V. Sudhakara Rao (Cong.-I.) ; P. V. Chowdary (Cong.-I.) ; Smt. Ch. Santhosham (Cong.-I.) ; G. Venkataswamy (Cong.-I.) ; M. Hanumantha Rao (C.P.I.-M.) ; Smt. Kumud B. Naik (J.P.) ; T. Panchajanyam (Cong.).

Local Authorities (31) : Syed Mukassir Shah (Cong.), *(Adilabad)* ; Vacant *(Anantapur)* ; Vacant *(Chittoor)* ; Vacant *(Chittoor)* ; Vacant *(Cuddapah)* ; Vacant *(Godavari-East)* ; Vacant *(Godavari-East)* ; Vacant *(Godavari-West)* ; Vacant *(Godavari-West)* ; Vacant *(Guntur)* ; Vacant *(Guntur)* ; Vacant *(Hyderabad)* ; Vacant *(Hyderabad)* ; Engati Gopal Rao (Cong.), *(Karimnagar)* ; Vacant *(Khammam)* ; Vacant *(Krishna)*; Vacant *(Krishna)* ; Vacant *(Kurnool)* ; Vacant *(Kurnool)*; Vacant *(Mahboobnagar)* ; Vacant *(Mahboobnagar)* ; Vacant *(Medak)* ; V. Purushotham Reddy (J.P.), *(Nalgonda)* ; Vacant *(Nellore)* ; A. V. Narayana Reddy (Cong.-I.), *(Nizamabad)* ; Vacant *(Prakasham)* ; G. Sreeramulu Naidu (Cong.-I.), *(Srikakulam)*; Rao Venkatagopalakrishna Rao (Cong.), *(Srikakulam)* ; Pusapati L. Narasimha Raju (Cong.-I.), *(Visakhapatnam)* ; Ruthala Latchapatrudu (Cong.-I.), *(Visakhapatnam)* ; Vedavalli Venkat Reddy (Cong.-I.), *(Warangal)*.

Graduates (8) : T. Bullaiah (Ind.), *(Circars Central)* ; P. V. Chalapathi (J.P.), *(Circars North)* ; J. Yegnanarayana (J.P.), *(Circars South)* ; V. Rama Rao (J.P.), *(Hyderabad)* ; K. Keshava Rao (Cong.-I.), *(Hyderabad)* ; A. Sanjeeva Reddy (Cong.), *(Rayalaseema-East)* ; D. Surya Prakash Reddy (J.P.), *(Rayalaseema-West)* ; V. Jagapati Rao (Ind.), *(Telangana)*.

Teachers (8) : D. Sivarama Raju (Cong.), *(Circars Central)* ; M. Bala Krishnamma (P.D.F.), *(Circars North)* ; M. J. Manikya Rao (P.D.F.), *(Guntur)* ; K. Koteswara Rao (P.D.F.), *(Krishna)* ; M. Madhava Rao (J.P.), *(Rayalaseema-East)* ; P. Bhujanga Rao (N.D.F.), *(Rayalaseema-West)* ; S. Himavantha Rao (P.D.F.), *(Telangana-East)* ; A. Syamasundera Rao (P.D.F.), *(Telangana-West)*.

Nominated (12) : Hafiz Abu Yusuf (Cong.-I.) ; A. Chakrapani (Cong.-I.) ; K. Venkateswara Rao (Cong.) ; Payam Neenaiah (Cong.) ; Smt. Roda Mistry (Cong.-I.) ; Abdul Rahman Khan (Cong.-I.) ; Pragada Kotaiah (Cong.); Amar Singh Rathod (Cong.-I.) ; Smt. Uma Devi Venkata Ram Reddy (Cong.-I.) ; Smt. Samyukta Bullayya (Cong.-I.) ; Boyi Bheemanna (Cong.-I.) ; N. Sreeram Murthy (Cong.-I.).

ARUNACHAL PRADESH LEGISLATIVE ASSEMBLY

Speaker : T. L. Rajkumar ; *Dy. Speaker :* Pasang Wangchuk Sona.

Electorate : 266,726 ; *Votes polled :* 179,984.

Party Position : No. of seats 33 ; Congress (I) : 25 ; Peoples Party of Arunachal : 6 ; Independent : 2 ; Woman Member : 1.

Talong Taggu (Cong.-I.), *(Along North)* ; Tumpak Ete (P.P.A.), *(Along South)* ; Tade Tacho (Ind.), *(Anini)* ; Tomo Riba (P.P.A.), *(Basar)*; Sinam Dususow (Cong.-I.), *(Bomdila)* ; Tengam Ngemu (Cong.-I.), *(Changlang)* ; Kameng Dolo (Cong.-I.), *(Chayangtajo)* ; Tadak Dulom (Cong.-I.), *(Daporijo)* ; Nima Tsering Khrime (Cong.-I.), *(Dirang-Kalaktang)* ; Techi Takar (Cong.-I.), *(Doimukh-Sagalee)* Wanglat (P.P.A.), *(Khonsa North)* ; T. L. Rajkumar (Cong.-I.), *(Khonsa South)* ; Lokam Tado (Cong.-I.), *(Koloriang)* ; Onyok Rome (P.P.A.), *(Mariyung-Mebo)* ; Pasang Wangchuk Sona (Cong.-I.), *(Mechukha)* ; Chau Khouk Manpoong (Cong.-I.), *(Namsai-Chowkham)* ; Wangnam Wangshu (Cong.-I.), *(Niausa-Kanubari)* ; Samchom Ngemu (Cong.-I.), *(Noadihing-Nampong)* ; Tadar Tang (Cong.-I.), *(Nyapin-Palin)* ; Talo Kadu (P.P.A.), *(Pasighat)* ; Haijen Ponglaham (Cong.-I.), *(Pongchou Wakka)* ; Boa Tamo (Cong.-I.), *(Raga-Tali)* ; Aken Lego (P.P.A.), *(Roing)* ; Mrs. Nyari Welli (Cong.-I.), *(Seppa)* ; Punji Mara (Cong.-I.), *(Taksing-Taliha)* ; Karma Wangchu (Cong.-I.), *(Tawang-I)* ; Tsering Tashi (Cong.-I.), *(Tawang-II)* ; Khapriso Krong (Cong.-I.), *(Tezu-Hayuliang)* ; Gegong Apang (Cong.-I.), *(Yingkiong-Pangin)* ; Padi Yubbe (Ind.), *(Ziro)* ; Japu (Cong.-I.), (nominated) ; Dambing (Cong.-I.), (nominated) ; Kumku Gam (Cong.-I.), (nominated).

ASSAM LEGISLATIVE ASSEMBLY

Speaker : Vacant. *Dy. Speaker* : Vacant.

Seats : 126. Party position : Janata Party : 25 ; Congress (U) : 3 ; Congress (I) : 51 ; C.P.I. : 6 ; C.P.I. (M) 11 : R.C.P.I. : 4 ; P.T.C.A. : 4 ; A.J.V.D. : 4 ; Lok Dal : 1 ; B.J.P. : 1 ; Independent : 10 ; Vacant 6.

Phani Medhi (Ind.), (*Abhayapuri North*) ; Rabindra Nath Choudhury (Cong.-I.), (*Abhayapuri South–S.C.*) ; Nepal Chandra Das (Cong.-I.), (*Algapur*) ; Khagen Barbarua (R.C.P.I.), (*Amguri*) ; Ramendra De (C.P.I.-M.), (*Badarpur*) ; Ibrahim Ali (Cong.-I.), (*Baghbar*) ; Dhani Ram Rangpi (Cong.-I.), (*Baithalangso–S.T.*) ; Baikuntha Nath Das (Cong.-I.), (*Baruma–S.T.*) ; Kamal Chandra Basumatary (P.T.C.A.), (*Barchalla*) ; Lakheswar Gohain (B.J.P.), (*Barhampur*) ; Sheikh Chand Mahammad (Ind.), (*Barkhetri*) ; A. F. Golam Osmani (Cong.-I.), (*Barkhola*) ; A. Latif (Cong.-I.), (*Barpeta*) ; Baneswar Saikia (R.C.P.I.), (*Batadrava*) ; Bishnulal Upadhyaya (Cong.-I.), (*Behali*) ; Dr. Tarini Charan Das (A.J.V.D.), (*Bhabanipur*) ; Premodhar Bora (Ind.), (*Bihpuria*) ; Padmalochan Boro (Ind.), (*Bijni*) ; Sarat Chandra Sinha (Cong.), (*Bilasipara–East*) ; Giasuddin Ahmed (C.P.I.), (*Bilasipara–West*) ; Dr. Kosheswar Bora (J.P.), (*Biswanath*) ; Bilton G. Momin (Cong.-I.), (*Bokajan–S.T.*) ; Vacant (*Bokakhat*) ; Umesh Chandra Das (J.P.), (*Boko–S.C.*) ; Jnan Gogo (J.P.), (*Chabua*) ; Vacant (*Chapaguri–S.T.*) ; A. N. Akran Hussain (Cong.-I.), (*Chaygaon*) ; Dames Ali Ahmed (Cong.-I.), (*Chenga*).

Smt. Syeda Anwara Taimur (Cong.–I.), (*Dalgaon*) ; Ramesh Das (J.P.), (*Dergoan–S.C.*) ; Vacant (*Dhakua Khana–S.T.*) ; Ramani Barman (J.P.), (*Dharampur*) ; Pratap Kalita (Cong.), (*Dhekiajuli*) ; Purna Chandra Bora (A.J.V.D.), (*Dhemaji–S.T.*) ; Md. Shamoul Huda (R.C.P.I.), (*Dhing*) ; Vacant (Cong.-I.), (*Dholai-S.C.*) ; Mohammad Umaruddin (Cong.-I.), (*Dhubri*) ; Keshab Chandra Gogoi (Cong.-I.), (*Dibrugarh*) ; Rameshwar Dhanowar (Cong.-I.), (*Digboi*) ; Gandhi Ram Timung (J.P.). (*Diphu–S.T.*) ; Dr. Tarini Mohan Barua (Ind.), (*Dispur*) ; Dileswar Tanti (Cong.-I.), (*Doom Dooma*) ; Jagat Chandra Patgiri (Cong.-I.), (*Dudhnai–S.T.*) ; Jogendra Nath Hazarika (A.J.V.D.), (*Duliajan*) ; Ajoy Kumar Dutta (J.P.), (*Gauhati East*) ; Kiran Chandra Bezbarua (J.P.), (*Gauhati West*) ; Mohd. Azad Ali (J.P.), (*Gaur-pur*) ; Birendra Nath Choudhury (C.P.I.–M.), (*Goalpara East*) ; Nazmul Haque (Ind.), (*Goalpara West*) ; Ramchandra Sarmah (J.P.), (*Gohpur*) ; Soneswar Bora (J.P.), (*Golaghat*) ; Alauddin Sarkar (C.P.I.). (*Golokganj*) ; Mathias Tudu (Cong.-I.),(*Gossaigaon*) ; Sona Ram Thaosen (Cong.-I.). (*Haflong-S.T.*) ; Dipak Bhattacharjee (C.P.I.–M.), (*Hailakandi*) ; Rabindranath Malakar (J.P.), (*Hajo*); S. R. D. Gupta (Cong.-I.), (*Hojoi*); Barelong Terang (J.P.), (*Howraghat-S.T.*) ; Prasad Chandra Dolai (Cong.-I.),(*Jagirod-S.C.*); Afzalur Rahman (Cong.-I.), (*Jaleswar*) ; Lakhyadar Choudhury (J.P.), (*Jalukbai*) ; Mujamil Ali Choudhry (Cong.-I.), (*Jamunamukh*) ; Abdus Sobhan (Cong.-I.), (*Jania*) ; Romesh Mohan Kouli (Lok Dal), (*Jonai–S.T.*) : Dulal Chandra Baruah (J.P.), (*Jorhat*).

Nagen Sarma (J.P.), (*Kalaigaon*) ; Atul Chandra Goswami (Ind.), (*Kaliabar*); Daibasakti Deka (Ind.), (*Kamalpur*) ; Nishith Ranjan Das (C.P.I.-M.), (*Karimganj North*) ; Abdul Muntadir Choudhury (Cong.-I.), (*Karimganj South*); Abdul Kiyum Choudhury (Cong.), (*Katigora*) ; Vacant (*Katlicherra*) ; Nagen Barua (J.P.), (*Khumtai*) ; Samar Brahma Choudhury (P.T.C.A.), (*Kokrajhar East–S.T.*) ; Ranendra N. Basumatari (Cong.-I.), (*Kokrajhar West–S.T.*) ; Abdul Kashem (Cong.-I.), (*Laharighat*) ; Dipak Moormoo (Cong.-I.), (*Lahowal*) ; Sulo Bora (C.P.I.), (*Lakhimpur*) ; K. Kutubuddin Ahmed (Ind.), (*Lakhipur*) ; Biresh Misra (C.P.I.-M.), (*Lumding*) ; Silvius Condpan (Cong.-I.), (*Majbat*) ; Chakbhal Kagyung (J.P.), (*Majuli–S.T.*) ; Anil Das (Cong.-I.), (*Mangaldoi–S.C.*) ; Zahirul Islam (Cong.-I.), (*Mankachar*); Kul Bahadur Chetri (Cong.-I.), (*Margherita*) ; Gajen Tanti (Cong.), (*Mariani*) ; Kalira Deka Raja (Cong.-I.), (*Marigaon*) ; Buddda Barua (R.C.P.I.), (*Mohmora*) ; Joy Chandra Nagbanshi (Cong.-I.), (*Moran*) ; Sasha Kamal Handique (C.P.I.–M.), (*Naharkatia*) ; Narendra Nath Dutta (C.P.I.–M.), (*Nalbari*) ; Afazuddin Ahmed (Cong.-I.), (*Naoboicha*) ; Hiteswar Saikia (Cong.-I.), (*Nazira*) ; Mukut Sarma (Cong.-I.), (*Nowgong*).

Harendra Goswami (J.P.), (*Palasbari*) ; Ramesh Chandra Saharia (Cong.-I.). (*Panery*) ; Bubaneswar Barman (J.P.), (*Patachar-Kuchi*) ; Fakrul Islam (Cong.-I.), (*Patharkandi*) ; Baliram Das (J.P.). (*Raha-S.C.*) ; Gokok Rajbanshi (Cong.-I.), (*Rangapara*); Purna Boro (C.P.I.-M.), (*Rangiya*); Lilamoy Das (Cong.-I.), (*Ratabari S.C.*); Mohammad Idris (Cong.-I.). (*Rupahihat*) ; Bipin Hazarika (C.P.I.–M.), (*Sadiya*) ; Dewan Joynal Abedin (Ind.), (*Salmara-South*) ; Bhabendra Kumar Saikia (J.P.). (*Samaguri*) ; Hemen Das (C.P.I.-M.), (*Sarbhog*) ; Sirajul Haque (Ind.). (*Sarukhetri*) ; Akliues Tirkey (Cong.-I.). (*Sarupathar*) ; Promode Gogoi (C.P.I.). (*Sibsagar*) ; Panchanam Brahma (P.T.C.A.). (*Sidli–S.T.*) ; Noorul Huda (C.P.I.-M.). (*Silchar*) ; Madhab Rajbanshi (J.P.), (*Sipajhar*) ; Altaf Hossain Mazumdar (Cong.-I.). (*Sonai*) ; Satya Tati (Cong.-I.), (*Sonari*) ; Golak Kakati (J.P.), (*Sootea*) ; Padam Bahadur Chouhan (Cong.-I.), (*Tamulpur*) ; Devendra Bora (J.P.). (*Teok*) ; Jiban Bora (J.P.). (*Tezpur*) ; Jogan Gogoi (C.P.I.), (*Thowra*) ; Vacant (*Tinkhong*) ; Golap Borborah (J.P.), (*Tinsukia*) ; Giridhar Thengal (C.P.I.). (*Titabar*) ; Binoy Kumar Basumatary (P.T.C.A.). (*Udalguri*) ; Jagannath Singh (Cong.-I.). (*Udharbond*).

BIHAR LEGISLATIVE ASSEMBLY

Speaker : Radhanandan Jha.

Seats : 325. *Party Position* : Congress (I) 176 ; Janata-S (Charan Singh Group)/Lok Dal : 42 ; Communist Party of India : 23 ; Bharatiya Janata Party : 21 ; Congress (U) : 11 ; Janata Party : 13 ; Jharkhand Mukti Morcha : 13 ; Janata-S (Raj Narain Group) : 1 ; Communist Party of India (Marxist) : 6 ; All India Forward Bloc : 1 ; Marxist Co-ordination : 1 ; Independents : 19 ; Nominated : 1 ; Women : 7.

Shamimuddin Hasmi (J.P.–S), (*Adapur*) ; Virendra Kumar Singh (J.P.–S), (*Alamnagar*) ; Misri Sada (Cong.-I.), (*Allauli*) ; Nil Mohan Singh (Cong.-I.), (*Amarpur*) ; Md. Moizuddin Munshi (Cong.-I.), (*Amour*) ; Mohammad Taslimuddin (J.P.–S). (*Araria*) ; S. M. Isha (Cong.-I.), (*Arrah*) ; Krishanandan Prasad Singh (Ind.). (*Arwal*) ; Ayodhya Prasad (Cong.-I.), (*Asthawan*) ; S. P. Tarun (Cong.-U.), (*Atri*) ; Ganesh Pd. Yadav (J.P.–S). (*Aurai*) , Ram Naresh Singh (Ind.), (*Aurangabad*) ; Mahendra Nath Jha (Cong.-I.), (*Babubari*) ; Ramdeo Rai (Cong.-I.). (*Bachhwara*) ; Kishore Nath Choudhary (Ind.), (*Badh*) ; Ranjit Prasad Singh (Cong.-I.), (*Badhara*) ; Triloki Harijan (Cong.-I.), (*Bagaha—S.C.*) ; Shankar Dayal Singh (Cong.-I.), (*Bagmara*) ; Kharagdhari Narain Singh (Ind.), (*Bagodar*) ; Najmuddin (Cong.-I.), (*Bahadurganj*) ; Devi Pada Upadhyaya (C.P.I.), (*Baharagora*) ; Parmanand Jha (Cong.-I.), (*Baheda*) ; Rama Kant Jha (Cong.-I.), (*Bahedi*) ; B. K. Narain Singh (J.P.), (*Baikuntpur*) ; Ramchandra Paswan (C.P.I.). (*Bakhri*) ; Ram Jaipal Singh (Cong.-I.), (*Bakhtiarpur*) ; Narayan Yadav (J.P.–S), (*Balia*); Smt. Uma Pandey (Cong.-I.), (*Baniapur*); Kamakhya Prasad Singh (Cong.-I.), (*Banka*); Jaikant Paswan (Cong.-I.), (*Banmankhi*); G. S. Ramcharan Das (Cong.-I.), (*Barachatti*); Karuneshwar Singh (Cong.-I.), (*Barari*); Md. Abdul Ghafoor (Cong.-U.), (*Barauli*); Rameshwar Singh (C.P.I.), (*Barauni*); Mahabir Chaudhary (Cong.-I.), (*Barbhiga*); Ramendra Kumar (C.P.I.), (*Barkagon*); Thomas Hansda (Cong.-I.), (*Barhait*); N. P. Singh (Cong.-I.), (*Barhi*); Bhuwaneshwar P. Gupta (C.P.I.), (*Barkhatta*); Smt. Beula Doza (Cong.-I.), (*Barsoi*); Jamuna Singh (Cong.-I.), (*Baruraj*); Manik Chand Rai (J.P.–S), (*Basantpur*); Suryadeo Rai (Cong.-U), (*Bathnaha*); Bhola Singh (Cong.-I.), (*Begusarai*); S. S. Singh (Cong.-U.), (*Belaganj*); Chandra Mauleshwar Singh (Ind.), (*Belaganj*); C. M. S. Jalan (Ind.), (*Belhar*); R. P. Singh (J.P.–S), (*Belsand*); Yogeshwar Jha (Cong.-I.), (*Benipatti*); Ram Das Singh (B.J.P.), (*Bermo*); Gaurishankar Pandey (Cong.-I.), (*Bettiah*); Shyam Narayan Pandey (Cong.-I.), (*Bhabhua*); Sheochandra Jha (Cong.-I.), (*Bhagalpur*); Shankar Pratap Deo (Cong.-I.), (*Bhavnathpur*); Algu Ram (Cong.-I.), (*Bhore—S.C.*); Deonath Prasad (C.P.I.), (*Bihar*); Rajendra Prasad Sharma (Cong.-I.), (*Bihpur*); Ram Nath Yadav (C.P.I.), (*Bikram*); Akhlakh Ahmad (J.P.–S), (*Bikramganj*); Rajkumar Purbe (C.P.I.), (*Bisfi*); Ramai Ram (J.P.), (*Bochaha—S.C.*); Balik Ram (C.P.I.), (*Bodhgaya*); Aklu Ram Mahto (J.P.–S), (*Bokaro*); John Hembrom (Cong.-I.), (*Boriyo*); Rishikesh Tiwari (Cong.-I.), (*Brahmapur*); Jagnarayan Trivedi (Cong.-I.), (*Buxar*).

Smt. Muktidani Simbrui (Ind.), (*Chaibasa*); Lalmuni Choube (B.J.P.), (*Chainpur*); Falguni Prasad Yadav (B.J.P.), (*Chakai*); Devendra Manjhi (J.M.M.), (*Chakradharpur*); Haru Rajwar (J.M.M.), (*Chandankiyari*); Ram Raj Prasad Singh (Cong.-I.), (*Chandi*); Virval Sharma (C.P.I.), (*Chanpatia*); Janak Yadav (J.P.–S), (*Chapra*); Kumbh Narain Sardar (Cong.-I.), (*Chatarpur*); Mahesh Ram (Cong.-I.), (*Chatra*); Ghanshyam Singh (Cong.-I.), (*Chautham*); Dudhnath Paswan (Cong.-I.), (*Chenari*); Sahdeo Mahto (C.P.I.), (*Chira Baryunpur*); R. K. Kishore (Cong.-I.), (*Chhatarpur*); Sadanand Singh (Cong.-I.), (*Colgong*); Jagdish Prasad Chaudhary (Cong.-I.), (*Dalsing Sarai*); I. S. Namdhari (B.J.P.), (*Daltonganj*); Chandrika Pandey (Cong.-I.), (*Darauli*); Abdul Sani Nadvi (Cong.-I.), (*Darbhanga*); Jagdish Chaudhary (J.P.–S), (*Darbhanga Rural*); Iliss Hussain (J.P.–S), (*Dehri*); Baidyanath Das (Cong.-I.), (*Deoghar*); Dilkeshwar Singh (Cong.-I.), (*Dev*), Mohiur Rahman (Cong.-I.), (*Dhaka*); Ramnagina Prasad (Cong.-I.), (*Dhanaha*); Tilakdhari Prasad Singh (Cong.-I.), (*Dhanavar*); Y. P. Yogesh (Cong.-I.), (*Dhanbad*); Naresh Das (C.P.I.), (*Dhoraiya*); Budhdeo Singh (Cong.-I.), (*Dinapur*); Lakshaman Rai (Cong.-I.), (*Dinara*); Stephen Marandi (J.M.M.), (*Dumka*); Vijay Kumar Bharati (Cong.-I), (*Dumraon*); Shiba Mahto, (J.M.M.), (*Dumri*); J. R. Majhi (Cong.-I.), (*Fatehpur*); Punit Rai (J.P.–S), (*Fatwa*); Surya Mishra (Cong.-I.), (*Forbesganj*); Sanjiv Prasad Tony (Cong.-I.), (*Fulwari*); Yugal Kishore Pandey (Cong.-I.), (*Gadhva*); Jitendra Pd. Singh (B.J.P.), (*Gaighati*); Sarfraj Ahmad (Cong.-I.), (*Gandhe*); Jai Kumar Palit (Cong.-I.), (*Gaya*); Awadesh Kumar Singh (Cong.-I.), (*Gaya Rural*); Mahendra Azad (Cong.-I.), (*Ghanshyampur*); Tika Ram Majhi (C.P.I.), (*Ghatsila*); Rajendra Pratap Singh (Cong.-I.), (*Ghorasahan*), Jagdish Sharma (B.J.P.), (*Ghosi*); Mrs. Urmila Devi (Cong.-I.), (*Giridih*); R. S. Pandey (Cong.-I.), (*Gobindganj*); Smt. Gayatri Devi (Cong.-I.), (*Gobindpur*), Hemant Kumar Jha (Cong.-I.), (*Godda*); Ramsharan Yadav (C.P.I.), (*Goh*); Chatru Ram Mahto (B.J.P.), (*Gomia*); Kali Pd. Pandey (Ind.), (*Gopalganj*); Madan Prasad Singh, (Cong.-I.), (*Gopalpur*); Ajit Kumar Singh (Cong.-I.), (*Gorea Kothi*); Raghunandan Manjhi (Cong.-I.), (*Gorkha—S.C.*); Bairagi Oraon, (Cong.-I.), (*Gumla*); Mohammed Shahjehan (Cong.-I.), (*Gurua*).

Jagannath Pd. Rai (Cong.-I.), (*Hajipur*); Mithilesh Kumar Pande (Cong.-I.), (*Harlakhi*); Arun Kumar (Ind.), (*Harnowth*); Md. Hadyatullah Khan (Cong.-I.), (*Harsidhi*); Gajendra Prasad Himansu (J.P.–S), (*Hasanpur*); Subodh Kant Sahay (J.P.), (*Hatiya*); Madan Mohan Chaudhary (Cong.-I.), (*Hayaghat*); Raghunandan Prasad (Cong.-I.), (*Hazaribagh*); Jagdish Prasad (B.J.P.), (*Hilsa*), Aditya Singh (Ind.), (*Hisua*); Harihar Singh (Cong.-I.), (*Hussainabad*); Ghanshayam Mahto, (A.I.F. Bloc), (*Ichagarh*); Srichand Singh (Cong.-I.), (*Imamganj*), Pankaj Kumar Sinha (Cong.-I.), (*Islampur*); Nangal Singh (Ind.), (*Jagannathpur*); Bir Bahadur Singh (Ind.), (*Jagdishpur*); Smt. Tara Gupta (Cong.-U.), (*Jahanabad*); Kumar Kalika Singh (Cong.-I.), (*Jalalpur*); Abdul Salam (C.P.I.), (*Jalley*); Dewan Soren (J.M.M.), (*Jamu*); Upendra Prasad Varma (J.P.–S), (*Jamalpur*); Dinanath Pandey (B.J.P.), (*Jamshedpur—E*); M. Samsuddin Khan, (Cong.-I.), (*Jamshedpur—W*); Arun Kumar Bose (C.P.I.), (*Jamtada*); Taneshwar Azad (Cong.-I.), (*Jamua*); Nardeo Prasad (Ind.), (*Jamui*); Birendra Singh (Ind.), (*Jandaha*); Jawahar Prasad Singh (Ind.), (*Jarmundi*); Shivanandan Prasad (Cong.-I.), (*Jhajha*); Dr. Jagannath Mishra (Cong.-I.), (*Jhamjarpur*); Surajdeo Singh (J.P.), (*Jharia*); Moidur Rahman (Cong.-I.), (*Jokihat*); Tulsi Rajak (C.P.I.), (*Jugsalai*); Mangan Insar (Ind.), (*Kadwa*); Smt. Ram Sukumari Devi (Cong.-I.), (*Kalyanpur*); Ram Ratan Ram (Cong.-I.), (*Kanke*); Nalini Ranjan Singh (Ind.), (*Kanti*); Tulsi Singh (J.P.–S), (*Karakat*); Mohammad Yasin (Cong.-I.), (*Kasba*); Sinheswar Sahi (Cong.-I.), (*Kateya*); Sitaram Chamaria (Cong.-I.), (*Kathihar*); Suresh Prasad Yadav (Cong.-U.), (*Katoria*); Shamayab Nabi (Cong.-I.), (*Keoti*); R. Shankar Sharma (J.P.), (*Kesaria*); Ram Sharan Yadav (J.P.–S), (*Khagdia*); Rame Lakhan Ram Raman (C.P.I.), (*Khajauli*); Jai Prakash Narayan Yadav (J.P.–S), (*Kharagpur*); Debi Lal Matisoy (B.J.P.), (*Kharsawan*); Imurao Sadho Kujur (Cong.-I), (*Khijri*); Karla Munda (B.J.P.), (*Khijri—S.T.*); Samu Pahan (Cong.-I), (*Khunti*); Singheshwar Mahto (Cong.-I) (*Kisanganj*); Vishwa Nath Gurmaita (Cong.-I), (*Kisanpur*); Mohammad Mushtaque (J.P.–S), (*Kishanganj*); Rajendra Nath Dawa (Cong.-I), (*Kodarma*); S. K. Bage (Cong.-I), (*Kolebira—S.T.*); Smt. Raj Kumari Devi (Cong.-I), (*Konch*); V. N. Rishi, (Cong.-I), (*Korha*); Nawal Kishore Bharati (J.P.–S), (*Kumarkhand*); Ram Prikshan Sah (J.P.–S.), (*Kurhani*); Sahdeo Prasad Yadav (J.P.–S), (*Kurtha*); Ashwani Kumar Sharma (Cong.-I), (*Lakhisarai*); Laliteshwari Pd. Sahi (Cong.-I), (*Lalganj*); Haridarshan Ram (Cong.-I), (*Latehar*); Lal Bihari Yadav (C.P.I.), (*Laukaha*); Viswamohan Sharma (Cong.-I), (*Lauriya*); Saimon Maraudi (J.M.M.), (*Litipara*); I. N. Bhagat (Cong.-I), (*Lohardaga*).

Radha Nandan Jha (Cong.-I.), (*Madhepur*); Radha Kant Yadav (J.P.–S), (*Madhepura*); Vraj Kishore Singh (Cong.-I.), (*Madhuban*); Raj Kumar Mahaseth (J.P.–S.), (*Madhubani*); Krishna Nand Jhan (Cong.-I.), (*Madhupur*); Awadh Bihari Singh (Cong.-I.), (*Mahagama*); Munshi Lal Rai (J.P.–S), (*Mahanar*); Uma Shankar Singh (J.P.), (*Maharajganj*); Devidhan Veera (J.M.M.), (*Maheshpur*); Lahtan Chaudhary (Cong.-I.), (*Mahishi*); Desai Chaudhary (J.P.–S), (*Mahuwa—S.C.*); Ram Narayan Ram (Cong.-I.), (*Mairwa—S.C.*); D. N. Champiya (Cong.-I.), (*Majhgaon*), R. B. Ram (Cong.-I.), (*Majorganj*); Ramashray Prasad Singh (Cong.-I.), (*Makhdumpur*); K. C. Bhagat (Cong.-I.), (*Mandar*); (Smt.) Ramnika Gupta (J.P.–S), (*Mandu*); Ram Nagina Singh (B.J.P.), (*Manika*); Ramashwar Dutt Sharma (Cong.-I.), (*Manjhi*); Ratnakar Nayak (B.J.P.), (*Manoharpur*); Bhishma Prasad Yadav (Cong.-I.), (*Marhaura*); Gan

Prasad Singh (J.P.–S), (*Masaudi*) ; Harendra Kishore Singh (Ind.), (*Mashrakh*) ; Janakdhari Pd. Kushwaha (C.P.I.), (*Meenapur*) ; Raj Mangal Mishra (J.P.), (*Mirganj*); Mahabir Paswan (Cong.-I.), (*Mohaniya*) ; Ram Chandra Rai (Cong.-U.), (*Mohiuddin Nagar*) ; Shyam Sunder Singh (Cong.-I.), (*Mokamah*) ; Ram Deo Singh Yadav (J.P.–S) (*Monghyr*) ; Premod Kumar Sinha (Cong.-I.), (*Motihani*) ; Smt. Prabhawati Gupta (Cong.-I.), (*Motihari*) ; Raghunath Pandey (Cong.-I.), (*Muzaffarpur*) ; Bisheshwar Khan (C.P.I.), (*Nala*) ; Ram Naresh Singh (Ind.), (*Nalanda*) ; Janardan Yadav (B.J.P.), (*Narpatganj*) ; Talib Ansari (Cong.-I.) (*Nathnagar*) ; Smt. Kamla Devi (Cong.-I.), (*Nautan*) ; G. S. Vidyarthi (C.P.I.-M), (*Navada*) ; Raghubansh Prasad Singh (Cong.-I.), (*Navinagar*) ; K. S. Chatterjee (C.P.I.-M), (*Nirsa*) ; Jangi Singh Chowdhary (J.P.-S), (*Nokha*) ; Virendra Prasad Singh (B.J.P.), (*Obra*) ; Abdul Stakim (C.P.I.-M.), (*Pakaur*) ; Ram Lakhan Singh Yadav (Cong.-U), (*Paliganj*) ; Kumud Ranjan Jhan (Cong.-I.), (*Pandaul*) ; Sankteshwar Singh (Cong.-I.), (*Panki*) ; Mrs. Parvati Devi (Cong.-I.), (*Parsa*) ; Nitishwar Pd. Singh (J.P.–S),* (*Paru*) ; Ramchandra Mishra (Cong.-I.), (*Parvatta*) ; Sheonandan Paswan (J.P.-S), (*Patepur—S.C.*) ; S. N. Srivastava, (B.J.P.), (*Patna Central*) ; Sharad Kumar Jain (Cong.-I.), (*Patna East*) ; Ranjit Sinha (Cong.-I.), (*Patna West*) ; Dilip Kumar Sinha (Cong.-I.), (*Peerpaiti*) ; Surendra Yadav (J.P.-S), (*Phulpuras*) ; Nand Lal Chaudhary (Cong.-I.), (*Pipra—S.C.*) ; Moonee Singh (Cong.-I.), (*Piro*) ; Suraj Mandal (J.M.M.), (*Podiyahat*) ; Sanatan Sardar (B.J.P), (*Potka*) ; Mohammad Shakur (Cong.-I.), (*Pranpur*) ; Rambriksha Choudhary (Cong.-I), (*Pupri*) ; Ajit Chandra Sarkar (C.P.I.-M.), (*Purnea*).

Vijay Kumar Singh (J.P.), (*Rafiganj*) ; Udai Narain Rai (J.P.–S), (*Raghopur*) ; Vijay Shankar Dubey (Cong.-I.), (*Raghunathpur*) ; Banwari Ram (J.P.), (*Rajauli*) ; Satyadev Narayan Arya (B.J.P.), (*Rajgir—S.C.*) ; Dhrub Bhagat (B.J.P.), (*Rajgir*) ; Dhrub Bhagat, (B.J.P.), (*Rajmahal*) ; Chaturi Ram (Cong.-I.), (*Rajpur*) ; Arjun Ram (J.M.M.), (*Ramgarh*) ; Prabhawati Singh (Cong.-I.), (*Ramgarh*) ; A. V. Shah (Cong.-I.), (*Ramnagar*) ; Juan Ranjan (Cong.-I.), (*Ranchi*) ; Yamuna Prasad Ram (Cong.-J.), (*Raniganj*) ; Sagir Ahmed (Cong.-I.), (*Raxaul*) ; Ramashray Ray (Cong.-I.), (*Rosera*) ; Vivekanand Giri (Cong.-I.), (*Runnisaidpur*) ; Dineshwar Prasad (J.P.–S), (*Sahar—S.C.*) ; Ramesh Jha (Cong.-I.), (*Saharsa*) ; Nawal Kishore Singh (Cong.-U.), (*Sahebganj*) ; Fakir Chand Ram (Cong.-I.), (*Sakra—S.C.*) ; Karpoori Thakur (J.P.–S), (*Samastipur*) ; Sidharthnath Roy (Cong.-I.), (*Sandesh*) ; Rambilash Mishra (J.P.–S), (*Sarairanjan*) ; Kade Majhi (B.J.P.), (*Saraikila*) ; Abhay Charan Lal (J.M.M.), (*Sarath*) ; Ram Sewak Singh (J.P.–S), (*Sasaram*) ; Anand Sharma (Cong.-I.), (*Shahpur*) ; Rajo Singh (Cong.-I.), (*Sheikhpura*) ; Raghunath Jha (Cong.-I.), (*Sheohar*) ; David Murmu (J.M.M), (*Shikaripura*) ; Sitaram Prasad (Cong.-I.), (*Shikarpur—S.C.*) ; Rameshwar Paswad (Ind.), (*Sikandra*) ; Dharmesh Prasad Varma (J.P.), (*Sikta*) ; Sital Prasad Gupta (Cong.-I.), (*Sikti*) ; Rajendra Singh (C.P.I.-M.), (*Silli*) ; N. K. Besra (B.J.P.), (*Simdega*) ; Jai Kumar Singh (Cong.-I.), (*Simheshwar*) ; Chaudhary Mohammed Salahuddin (Cong.-I.), (*Simri Bakhtiarpur*) ; Ishwari Ram Paswan (Cong.-I.), (*Simaria*) ; Anand Mahto (J.M.M.), (*Sindri*) ; Ramendra Yadav (Cong.-I.), (*Singheshwar*) ; Ramjatan Paswan (C.P.I.), (*Singhiya*) ; Bandi Oran (Cong.-I), (*Sisayea—S.T.*) ; Pir Mohammad Ansari (Cong.-I), (*Sitamarhi*) ; Janardan Tiwari (B.J.P.), (*Siwan*) ; Surya Narain Yadav (Cong.-U.), (*Sonbarsa—S.C.*) ; Anwarul Haque (Cong.-I.), (*Sonbarsa*) ; Ramashraya Singh (C.P.I.-M.), (*Sugauli*) ; Nand Kumar Manjhi (Cong.-I.), (*Sultanganj*) ; Uma Shankar Singh (Cong.-I.), (*Supaul*) ; N. P. Yadav (Cong.-I.), (*Sursand*) ; Ramji Prasad Mahto (Cong.-U.), (*Suryagarha*) ; Tiru Mochi Rai Munda (Cong.-I.), (*Tamar*) ; P. N. Singh, (Cong.-I.), (*Taraiya*) ; Narayan Yadav (C.P.I.), (*Tarapur*) ; Mohammad Hussain Azad (Cong.-I.), (*Thakurganj*) ; Leyandar Tiru (Cong.-I.), (*Torpa*) ; Jagdish Mandal (Cong.-I.), (*Triveniganj*) ; Binod Bihari Mahto (J.M.M.), (*Tundi*) ; Brishna Patel (J.P.–S), (*Vaishali*) ; Pitambar Paswan (J.P.–S), (*Varisnagar*) ; Ramdeo Verma (C.P.I.-M.), (*Vibhutipur*) ; Binod Singh (J.P.), (*Vishrampur*) ; Bhukhla Bhagat (Cong.-I.), (*Visunpur*) ; Bandishankar Singh (Cong.-I.), (*Warsaliganj*) ; Raghav Prasad (J.P.–S.), (*Ziradei*) ; H. A. Warden (Nominated).

BIHAR LEGISLATIVE COUNCIL

Chairman : Prithvi Chand Kisku : *Dy. Chairman :* Vacant.

Seats : 96. *Party Position :* Congress (1) : 42 ; Congress (U) : 3 ; Janata (J.P.) : 6 : Janata (S)/Lok Dal : 6 ; C.P.I. : 5 ; Independents : 6 ; Bharatiya Janata : 2 : Teachers : 1 : Janata (R.N.) : 1 ; Vacant : 24.

Graduates (8): Dr. Maheshwari Singh Manesh (Cong.-I.), (*Bhagalpur*) ; Kamal Nath Singh Takur (Cong.-I.), (*Darbhanga*) ; Ranjeet Bahadur Singh (Cong.-I.), (*Gaya*) ; Diwakar Pd. Sinh (Janata–J.P.), (*Monghyr*) ; Maha Chandra Pd. Singh (Cong.-I.), (*Muzaffarpur*) ; Ram Ishwar Singh (Cong.-I.), (*Patna*) ; Ramesh Pd. Singh (C.P.I.), (*Patna*) ; Basant Kumar Lal (Janata-J.P.), (*Ranchi*).

Teachers (8): Sharda Pd. Sinh (Ind.), (*Bhagalpur*) ; Arun Kumar (Cong.-I.), (*Gaya*) ; Dr. Umesh Pd. Verma (Cong.-I.), (*Monghyr*) ; Padmadeo Narayan Sharma (Janata–J.P.), (*Patna*) ; Parmeshwar (C.P.I.), (*Ranchi*) ; Sheonandan Pd. Singh (Ind.), (*Santhal Pargana*) ; Brinda Prasad Roy (Teachers), (*Torhut*) ; Jaimangal Singh (Ind.). (*Torhut*).

Local Authorities (34) : Jai Kumar Jain (Cong.-I.). (*Bhagalpur*) ; Vacant (*Bhojpur*) ; Vacant (*Bhojpur*) ; Vacant (*Champaran*) ; Lalan Shukla (Cong.-I.), (*Champaran*) ; Vacant (*Darbhanga*) ; Harish Chandra Jha (Cong.-I.), (*Darbhanga*) ; Vacant (*Darbhanga*) ; Vacant (*Dhanbad*) Vacant (*Hazaribagh*) ; Vacant (*Hazaribagh*) ; Ram Righan Singh (Cong.-I.), (*Monghyr*) ; Vacant (*Monghyr*) ; Raghunath Prasad (Cong.-I.). (*Muzaffarpur*) ; Naziruddin Haiderkhan (Cong.-I.), (*Muzaffarpur*) ; Jag Narayan Pathak (Cong.-I.), (*Palamau*) ; Vacant (*Patna*) ; Vacant (*Patna*) ; Ramkhelaban Singh (Cong.-I.), (*Patna*) ; Vacant (*Patna*) ; Vacant (*Purnea*) ; Vacant (*Purnea*) ; Budhram Bhagat (Cong.-I.), (*Ranchi*) ; Vacant (*Ranchi*) ; Vacant (*Saharsa*) ; Vacant (*Santhal Pargana*) ; Vacant (*Santhal Pargana*) ; Vacant (*Saran*) ; Vacant (*Saran*) ; Vacant (*Saran*) ; Dhananjay Mahto (Cong.-I.), (*Singhbhum*) Vacant (*Singhbhum*).

Legislative Assembly (34): Chandra Mohan Mishra (C.P.I.) : Fida Hussain Ansari (Cong.-I.) ; Ashutosh Bahadur Singh (Cong.-U.) ; Thakur Muneshwar Nath Singh (Janata-J.P.) ; Ram Nandan Singh (Cong.-U.) ; Babulal Madhukar (Janata (S)/Lok Dal) ; Laliteshwar Jha (Cong.-I.) ; Devendra Prasad Yadav (Janata (S) Lok Dal) : Baidnath Pandey (Janata–(S)/Lok Dal) ; Purushottam Prasad Singh (Cong.-I.) : Jogendra Prasad Chourasiya (Cong.-I.) ; Bageshwari Prasad Singh (Cong.-I.) ; S. Ali Haider (Janata–J.P.) ; Awdesh Kumar Singh (Cong.-I.) ; Ambika Prasad (Cong.-I.) : Sushri Rajeshwari Saroj Das (Cong.-I.) ; Prem Narayan Gadhwal (Cong.-I.) ; Khalid Rashid Swa (Cong.-I.) ; Raj Kishor

---

* (Raj Narain Group).

(Prasad), (Cong.-I.); Dip Narayan Choudhary (Cong.-I.); Ram Govind Singh (Cong.-U.); Indra Kumar (Janata (S) Lok Dal); Dhanraj Singh (Ind.); Smt. Kamala Singh (Janata–J.P.); Krishna Chandra Choudhary (C.P.I.); Duti Pahan (Janata–J.P.); Sadhusharan Singh (Cong.-I.); Sivendra Prasad Singh (Bharatiya Janata); Surendra Nath Sharma (Cong.-I.); Tripurari Prasad Singh (Janata–J.P.); Saryu B. Upadhyay (Cong.-I.); Mithileshwar Pd. Singh (Cong.-I.); Wasni Ahmad (C.P.I.).

Nominated (12): Shamucharan Tubid (Cong.-I.); Satyadeo Narayan Tiwari (Cong.-I.); Z. A. Jaferi (Janata R.N.); Prithvi Chand Kisku (Cong.-I.); Vinay Krishna Prasad (Cong.-I.); Upendra Maharathi (Ind.); Jagdish Singh (Ind.); Hit Narayan Jha (Cong.-I.); Poddar Ramavata Arun (Janata (S)/Lok Dal); Sardar Mauleshwar Singh (Cong.-I.); Siha Ram Tewari (Janata (S)/Lok Dal); Ram Parvesh Paswan (Cong.-I.); Smt. Hamida Naim (Cong.-I.).

GOA LEGISLATIVE ASSEMBLY

Speaker : Froilano Machado ; *Dy. Speaker :* V. G. Desai.

Seats : 30. *Party Position :* Indian National Congress (I) : 27 ; Maharashtravadi Gomantak Party : 2 ; Independent : 1 ; Women : Nil.

Electorate : 520,400. *Votes Polled :* 363,175.

Francisco Monte Piedade Cruz (Cong.-I.), (*Benaulim*); Harish Narayan Prabhu (Cong.-I.), (*Bicholim*); Dr. Wilfred Anthony De Souza (Cong.-I.), (*Calangute*); Vassu Paik Gaonkar (Cong.-I.), (*Canacona*); Froilano Machado (Cong.-I.), (*Cortalim*); Vijnayak Dharme Chodankar (Cong.-I.), (*Cumbarjua*); Jose Mario Vaz (Cong.-I.), (*Cuncolim*); Francisco Caetano Sardinha (Cong.-I.), (*Curtorim*); Herculano Teodoro Dourado (Cong.-I.), (*Dabolim*); Narsinhbhai Lallubhai Tandel (Cong.-I.), (*Daman*); Dr. Shamjibhai Bhikabhai Solanki (Cong.-I.), (*Diu*); Ramakant Dattaram Khalap (M.G.P.), (*Mandrem*); Shyamsunder Jairam Neogi (Cong.-I.), (*Mapusa*); Babuso Gaonker (M.G.P.), (*Marcaim*); Anant Narcinva Naik (Cong.-I.), (*Margao*); Hassan Haroon Shaikh (Cong.-I.), (*Marmugao*); Luizinho Faleiro (Cong.-I.), (*Navelim*); Vishnu Rama Naik (Cong.-I.), (*Pale*); Vishnu Anant Naik (Ind.), (*Panaji*); Deu Gunaji Mandrekar (Cong.-I.), (*Pernem*); Jaoildo Souza Aguiar (Cong.-I.), (*Ponda*); Vaikunt Govind Desai (Cong.-I.), (*Quepem*); Dilkush Fotu Desai (Cong.-I.), (*Rivona*); Gurudas Vasudeo Tari (Cong.-I.), (*Sanguem*); Teotonio Francisco Pereira (Cong.-I.), (*Santo-O-Andre*); Michael Fernandes (Cong.I.), (*Santa Cruz*); Pratapsingh Raoji Rane (Cong.-I.), (*Sattari*); Ramachandra Tukaram Prabhu (Cong.-I.), (*Shiroda*); Chandrakant Uttam Chondakar (Cong.-I.), (*Siolim*); Dayanand Ganesh Narvekar (Cong.-I.), (*Tivim*).

GUJARAT LEGISLATIVE ASSEMBLY

Speaker : Natwarlal Shah ; *Dy. Speaker :* Ramnik Dhami. *Electorates :* 6,578,052.

Seats : 182 ; *Party position :* Congress (I) : 144 ; Janata Party : 18 ; Bharatiya Janata Party : 10 ; Lok Dal : 1 ; Independents : 9 ; Women Members : 4 ; *Reserved Seats* – Scheduled Castes : 13 ; Scheduled Tribes : 27.

Kharashanker Vithaldas Joshi (Cong.-I.), (*Abdusa*); Dwarakadas Mohanlal Patel (Ind.), (*Amreli*); Ranchhodbhai Shanabhai Solanki (Cong.-I.), (*Anand*); Jesangbhai Khimjibhai (Cong.-I.), (*Anjar*); Nathubhai Narotambhai Patel (Cong.-I.), (*Ankleshwar*); Laxmanbhai Kalidas Patani (Cong.-I.), (*Asarwa*); Becharbhai Madhabhai Palasana (Ind.), (*Babra*); Chhatrasinh Amarsinhji Solanki (Cong.-I.), (*Balasinor*); Jitubhai Chhitubhai Halpati (Cong.-I.), (*Bardoli—S.T.*); Makrand Desai (B.J.P.), (*Baroda City*); Mahendersinh Takhatsinh Chauhan (Cong.-I.), (*Baroda-Rural*); Dhulabhai Dalabhai Gohil (J.P.), (*Bavla—S.C.*); Ramsingh Rupsingh Solanki (Cong.-I.), (*Bayand*); Madhavsinh Fulsinh Solanki (Cong.-I.), (*Bhadaran*); Bhimsi Kesur Karangiya (Cong.-I.), (*Bhanvad*); Rasiklal Nathalal Shah (Cong.-I.), (*Bhavnagar-North*); Trambaklal Mulhibhai Patel (Cong.-I.), (*Bhavnagar-South*); Manubhai Ambashanker Trivedi (Cong.-I.), (*Bhiloda*), Mohanlal Nemchand Shah (Cong.-I.), (*Bhuj*); Umedbhai Fatehsinh Gohel (Cong.-I.), (*Borsad*); Hathibhai Chhelbhai Khachar (Cong.-I.), (*Botad*), Mohmedbhai Hafezi Patel (Cong.-I.), (*Broach*). Dolatbhai Nathubhai Desai (Cong.-I.), (*Bulsar*); Chudasama Vijay sinhji Ladhubha (Cong.-I.), (*Cambay*). Amarsinhji Bhupatsinhji Veghela (Cong.-I.), (*Chaklashi*); Arvindbhai Tribhovandas Patel (B.J.P.), (*Chanasma*); Karsanbhai Bodabhai Rathava (Cong.-I.), (*Chhotaudaipur—S.C.*); Kanjibhai Maganbhai Patel (B.J.P.), (*Chikhli—S.C.*), Smt. Ushaben Babubhai Patel (Cong.-I.), (*Chorasi*), Karamsibhai Kanjibhai Makwana (Cong.-I.), (*Chotila*).

Umakant Ratanlal Joshi (J.P.), (*Dabhoi*); Govindbhai Mahujiabhai Patel (Cong.-I.), (*Dangs-Bansdo—S.T.*) Harisinh Chavda (J.P.), (*Danta*). Surendra Rajput (Cong.-I.), (*Dariapur-Kazipur*); Smt. Shantaben Khimjibhai Chavda (Cong.-I.), (*Dasada—S.C.*); Fatesinh Sodha (Cong.-I.), (*Daskroi*); Rambjibhai Hirabhai Vasava (Cong.-I.), (*Dediapada—S.T.*); Mohanbhai Visabhai Desai (J.P.), (*Deesa*); Khumansinh Gambhirsinh (Cong.-I.), (*Dehagam*); Kalubhai Virabhai Tarak (Cong.-I.), (*Deodar*); Raman Patel (Cong.-I.), (*Devgadhbarda*); Natvarlal Chandulal Shah (Cong.-I.), (*Dhandhuka*); Joitabhai Kasnabhai Patel (Cong.-I.), (*Dhanera*); Shankarbhai Ravjibhai Patel (Cong.-I.), (*Dharampur—S.T.*); Manubhai Kotadiya (J.P.), (*Dhari*); Parsotambhai Ravjibhai Makwana (Cong.-I.), (*Dholka*); Ramnikbhai Dhami (J.P.), (*Dhoraji*); Manekchand Nagindas Shah (Ind.), (*Dhragadhra*); Bhagvanbhai Lalitkumar Patel (Cong.-I.), (*Dohad—S.T.*); Smt. Lilaben Gaurishanker Trivedi (Cong.-I.), (*Dwarka*); Babubhai Vasanwala (J.P.), (*Ellisbridge*); Bachubhai Bhikhbhai Gohel (Cong.-I.), (*Gadhada—S.C.*); Dinkar Bhikhubhai Desai (Cong.-I.), (*Gamdevi*); Bapu Limbadia Kasambhai (Cong.-I.), (*Gandhinagar*); Kiritsinh Anopsinh Gohil (Cong.-I.), (*Ghogho*); Abdulrahim Ismail Khalpa (Cong.-I.), (*Godhra*); Keshubhai Savdas Patel (B.J.P.), (*Goudal*); Udwsinh Mohanbhai Baria (Cong.-I.), (*Halol*); Jivabhai Ghelubha Zala (J.P.), (*Halwad*); Nathbhai Devjibhai Patel (B.J.P.), (*Himatnagar*).

L. D. Parmar (Cong.-I.), (*Idar—S.C.*); Vasantbhai Parbhubhai Patel (Cong. I.), (*Jalalpure*); Abdul Rahim Tajuji (Cong.-I.), (*Jamalur*); Maganbhai Bhukhanbhai Solanki (Cong.-I.), (*Jambusar*); Charan Singh (Cong.-I.), (*Jam-Jodhpur*); M. K. Bloch (Cong.-I.), (*Jamnagar*); Bhanji Kama Parmar (Cong.-I.), *Jamnagar Rural—S.C.*); Mamaiya Haribhai Dabhi (Ind.), (*Jasdan*), Janmadas Samjibhai Vekaria (Cong.-I.), (*Jetpur*); Mohansinh Chhotubhai Rathwa (J.P.), (*Jetpur*); Revadas Limjibhai Vasava (Cong.-I.), (*Jhagadia—S.T.*); Virjibhai Limbabhai Mahid (Cong.-I.), (*Jholod—S.T.*); Bhanji Bhimji Patel (J.P.), (*Jodiya*); Haribhai Khushalbhai Parmar (Cong.-I.), (*Jotana—S.C.*); Gordhanbhai Gokalbhai Patel (Cong.-I.), (*Junagadh*); Karsanji Maganji Thakor (Cong.-I.), (*Kudi*); Keshubhai Thesia (Ind.), (*Kalawad*); Prabhatsinh Pratapsinh Chauhan (Cong.-I.), (*Kalol*), Shankerji Kalaji Thakore (Cong.-I.), (*Kalol*) ; Mohammed Husein Bareja (Cong.-I.), (*Kalupur*) ; Naranbhai Vanmalibhai Rathod (Cong.-I.), (*Kamrej—S.C.*) ; Shantilal Chhotalal Dhandhara (Cong.-I.), (*Kankrej*) ; Budhji Jitaji Chauhan (Cong.-I.), (*Kapadwanj*) ; Hargovinddas Khushaldas Nagar (Cong.-I.), (*Karjan—S.C.*) ; Maganbhai Gokadbhai Zala (Cong.-I.), (*Kathlal*) ; Devjibhai Bhikhabhai Vanavi (Cong.-I.), (*Keshod—S.C.*) ; Ashok Bhatt (B.J.P.), (*Khadia*) ; Hematbhai Rambhai Madam (Ind.), (*Khambhalia*) ; Jagdishchandraji Doljibhai Damor (Cong.-I.), (*Khedbrahma—S.T.*) ; Mohanbhai Nathubhai Desai (J.P.), (*Kheralu*) ; Arshibhai Kanabhai Kamaliya (Cong.-I.), (*Kodinar*); Ramjibhai Vallabhdas Desai (Cong.I.), (*Kundla*).

Khodidas Thakkar (Cong.-I.), (*Lathi*) ; Trambaklal Mohanlal Dave (Cong.-I.), (*Limbdi*) ; Malsinh Fatabhai Damor (Cong.-I.), (*Limdi*) ; Virsinh Bhulabhai Pasaya (Cong.-I.), (*Limkheda—S.T.*) ; Dhirendrasinhji Virbhadrasinhji Solanki (Cong.-I.), (*Lunawada*) ; Bansilal Bapalal Pandya (Cong.I.), (*Mahemdabad*) ; Balvantsinh Sudhansinh Sodha (Cong.-I.), (*Mahudha*) ; Vrijlal Durlabhji Jani (Cong.-I.), (*Mahuva*) ; Dhanjibhai Karsanbhai Dhodia (Cong.-I.), (*Mahuva—S.T.*) ; Hamriji Hathisingh Raijada (Cong.-I.), (*Maliya*) ; Muljibhai Kalidas Hudka (Cong.-I.), (*Manavadar*) ; Bhailal Ambalal Patel (Cong.-I.), (*Mandal*) ; Jaykumar Chunilal Sanghvi (Cong.-I.), (*Mandvi*) ; Sukabhai R. Antroliyya (Ind.), (*Mangrol*) ; Mansukhlal Janiabhai Vasava (Cong.-I.), (*Mangroli—S.T.*) ; Ramlal Ruplal (Cong.-I.), (*Maninagar*) ; Isvarsinh Shivaji Chavada (Cong.-I.), (*Mansa*) ; Parshottambhai Chaturbhai Patel (Cong.-I.), (*Matar*) ; Gunvantlal Manilal Pandya (Cong.I.), (*Meghraj*) ; Mrs. Roopkunvarba Jhala (Cong.-I.), (*Mehsana*) ; Ambalal Upadhyay (Ind.), (*Modasa*) ; Saradava Jivraj Thoban (Cong.-I.), (*Morvi*) ; Barjulbhai Navlabhai Patel (Cong.-I.), (*Motapondha—S.T.*) ; Virji Bhimji Dafda (Cong.-I.), (*Mundra—S.C.*) ; Dinsha Jhavebhai Patel (J.P.), (*Nadiad*) ; Lekhraj Bachani (B.J.P.), (*Naroda*) ; Bhil Meghabhai Jagabhai (*Naswadi—S.T.*) ; Mohanbhai Ranchhodbhai Talavia (Cong.-I.), (*Navsari—S.T.*) ; Govindbhai Barakiabhai Vasava (Cong.-I.), (*Nijhar—S.T.*).

Balubhai Devabhai Patel (Cong.-I.), (*Olpad*) ; Jitubhai Somabhai Parmar (Cong.-I.). (*Padra*) ; Amratlal Kalidas Patel (Cong.-I.), (*Palanpur*) ; Natubhai Bhikhabhai Dabhi (Cong.-I.), (*Palitana*); Ramanbhai Devabhai Patel (Cong.-I.), (*Pardi—S.T.*); Dahyabhai Pitambardas Patel (J.P.), (*Patan*) ; Govindbhai Shankerbhai Chauhan (Cong.-I.), (*Petlad*) ; S. Lakhani (Cong.-I.). (*Porbandar*) ; Maganbhai Manibhai Patel (J.P.), (*Prantij*) ; Khodidan Bhimji Zula (Cong.-I.), (*Radhanpur*) ; Shantilal Parshotambhai Patel (J.P.), (*Rajgadh*) ; Manoharsinhji Jadeja (Cong.-I.), (*Rajkot-I*) ; Manibhai Ranpara (Cong.-I.), (*Rajkot-II*) ; Bhanubhai Gigabhai Vaghela (Cong.-I.), (*Rajkot Rural—S.T.*) ; Presingbhai Devijibhai Vasava (Cong.-I.), (*Rajpipla—S.T.*) ; Pratapbhai Surgbhai Varu (Cong.-I.), (*Rajula*) ; Prabodh Raval (Cong.-I.), (*Rakhial*) ; Gondia Badhiabhai Muljibhai (Cong.-I.), (*Randhikpur—S.T.*) ; C. N. Patel (Cong.-I.), (*Raopura*) ; Babubhai Meghji Shah (B.J.P.), (*Rapar*).

Smt. Kokilaben Hariprasad Vyas (Cong.-I.), (*Sabarmati*) ; Viraji Navaji Thakor (B.J.P.), (*Sami*) ; Bhajibhai Bhanabhai Tadvi (Cong.-I.), (*Sankheda—S.T.*) ; Jivabhai Motibhai Damor (Cong.-I.), (*Santrampur*) ; Harishankar Pandya (Cong.-I.), (*Sarkhej*) ; Govindbhai J. Patel (Cong.-I.), (*Sarsa*) ; Prabhatsinh Jorsinh Parmar (Cong.-I.), (*Savli*) ; Shirish Purohit Doctor (Cong.-I.), (*Sayajiganj*) ; Manubhai Parmar (Cong.-I.), (*Shaher Kotda—S.T.*) ; Vadilal Ratilal Kamdar (Cong.-I.), (*Shahpur*) ; Parwatsinh Ghamirsinh Parmar (Cong.-I.), (*Shehra*) ; Sharifabhai Valibhai Bati (Cong.-I.), (*Sidhpur*) ; Dalsukbhai Jerambhai Gothani (J.P.), (*Sihor*) ; Mrs. Shantabahen Yogendrakumar Makwana (Cong.-I.), (*Sojitara—S.T.*) ; Rudabhai D. Vadker (J.P.), (*Somnath*) ; Vasanjibhai Ganjibhai Gamit (Cong.-I.), (*Songadh—S.T.*) ; Jashwantsinh Dansinh Chohan (Cong.-I.), (*Surat City East*) ; Krushnavdan Dhansukhlal Pachchigan (Cong.-I.), (*Surat City North*) ; Mohamedbhai Surti (Cong.-I.), (*Surat City-West*).

Dhanjibhai Hirabhai Baladhiya (Cong.-I.), (*Talaja*) ; Kalabhai Ranmalbhai Zala (Cong.-I.), (*Talala*) ; Vallabhbhai Popatlal Patel (Ind.), (*Tankara*) ; Malek Yasinmia Usufmia (Cong.-I.), (*Thasra*).; Vestabhai Chhotubhai Patel (Cong.-I.), (*Umargaon*) ; Hariharbhai Umashanker Khambhoija (Cong.-I.), (*Umreth*) ; Sidibhai Ukabhai Zala (Cong.-I.), (*Una*) ; Kanjibhai Lalludas Patel (J.P.), (*Unjha*) ; Balvantray Bachulal Manavar (Cong.-I.), (*Upletha*) ; Chelaram Dolatbhai Parmar (Cong.-I.), (*Vadgam—S.C.*) ; Keshji Shankerji Thakor (J.P.), (*Vagdod*) ; Sanatkumar Maganlal Mehta (Cong.-I.), (*Vaghodia*) ; Prabhatsinh Bhavabhai Makwana (Cong.-I.), (*Vagra*) ; Hembhai Derghabhai Parmar (Cong.-I.), (*Vav*) ; Amritlal Kalidas Patel (B.J.P.), (*Vijapur*) ; Daudbhai Miyabhai Patel (Cong.-I.), (*Viramgam*) ; Dhirajlal Fulabhai Ribadiya (J.P.), (*Visavadar*) ; Gangarambhai Bhachanddas (B.J.P.), (*Visnagar*) ; Amarsinh Bhilabhai Choudhary (Cong.-I.), (*Vyara—S.T.*) ; Arvindkumar Pranjivan Acharya (Cong.-I.), (*Wadhwan*) ; Pirzada Manjur Husain Abdul Mutlib (Cong.-I.), (*Wankaner*).

HARYANA VIDHAN SABHA

Speaker : Col. Rao Ram Singh ; *Dy. Speaker :* Kanwar Vijai Pal Singh.

Seats : 90. *Electorate :* 6,912,965 ; *Votes Polled:* 4,476,526. *Party Position :* Congress (I) : 52 ; Janata Party (S) : 23 ; Bharatiya Janata Party : 11 ; Janata Party: 4. Women : 4.

Bhajan Lal (Cong.-I.), (*Adampur*) ; Smt. Sushma Swaraj (J.P.), (*Ambala Cantt.*) ; Master Shiv Prasad (B.J.P.), (*Ambala City*) ; Master Jogi Ram (Cong.-I.). (*Assandh-S.C.*) ; Rao Bansi Singh (Cong.-I.), (*Ateli*) ; Ram Singh Maan (J.P.–S), (*Badhra*) ; Ude Singh Dalal (J.P.–S), (*Badli*) ; Mehar Singh Rathee (Cong.-I.), (*Bahadurgarh*) ; Rajinder Singh (Cong.-I.), (*Ballabhgarh*) ; Bhale Ram (J.P.–S), (*Baroda—S.C.*) ; Jai Narain Verma (J.P.–S), (*Barwala*) ; Smt. Shakuntala Bhagwaria (Cong.-I.), (*Bawal-S.C.*) ; Jagan Nath (Cong.-I.), (*Bawani Khera—S.C.*) ; Ajit Singh (J.P.–S), (*Beri*) ; Ran Singh (Cong.-I.), (*Bhattu Kalan*) ; Thakur Bir Singh (Cong.-I.), (*Bhiwani*) ; K. L. Poswal (Cong.-I.), (*Chhachhrauli*); Mani Ram (J.P.–S), (*Dabawali—S.C.*) ; Kukam Singh (J.P.–S), (*Dadri*) ; Jagdish Kumar Banihal (J.P.–S), (*Darbakalan*) ; Bhagi Ram (J.P.–S), (*Ellenabad-S.C.*) ; Deep Chand Bhatia (Cong.-I.), (*Faridabad*) ; Harphul Singh (J.P.–S), (*Fatehabad*) ; Shakrullah (Cong.-I.), (*Ferozepur Jhirka*) ; Kanwar Ram Pal Singh (Cong.-I.), (*Gharaunda*) ; Kanwal Singh (J.P.–S), (*Ghirai*) ; Ganga Ram (J.P.–S), (*Gohana*) ; Ishwar Singh (Cong.-I.), (*Guhla—S.C.*) ; Partap Singh Thakran (Cong.-I.), (*Gurgaon*)

Baldev Tayal (J.P.), (*Hansi*) ; Sant Kanwar (J.P.–S), (*Hassangarh*) ; Gaya Lal (Cong.-I.), (*Hassanpur—S.C.*) ; Aditya Vesh (Cong.-I.), (*Hathin*) ; Lala Balwant Rai Tayal (Cong.-I.), (*Hissar*) ; Des Raj (Cong.-I.), (*Indri*) ; Dr. Brij Mohan Gupta (B.J.P.), (*Jagadhri*) ; Inderjit Singh (Cong.-I.), (*Jatusana*) ; Captain Mange Ram (Cong), I.), (*Jhajjar—S.C.*) ; Mange Ram Gupta (Cong.-I.-(*Jind*) ; Zile Singh Malik (Cong.-I.), (*Julana*) ; Subedar

Prem Singh (Cong.-I.), (*Jundla*) ; Smt. Shanti Devi Rathee (Cong.-I.), (*Kailana*) ; Raghu Nath Goyal (B.J.P.), (*Kaithal*) ; Preet Singh (J.P.–S), (*Kalayat—S.C.*) ; Sardar Lachman Singh (Cong.-I.), (*Kalka*) ; Ram Lal Wadhwa (B.J.P.), (*Karnal*) ; Hari Chand Hooda (J.P.–S), (*Kiloi*) ; Hira Nand Arya (J.P.–S), (*Loharu*) ; Rao Dalip Singh (Cong.-I.), (*Mahendergarh*) ; Har Swarup Bura (Cong.-I.), (*Meham*) ; Gajraj Bahadur Nagar (Cong.-I.), (*Mewla Maharajpur*) ; Sher Singh (Cong.-I.), (*Mullana—S.C.*) ; Tek Ram (J.P.–S), (*Mundhal Khurd*); Sumer Chand Bhatt (Cong.-I.), (*Naggal*) ; Lal Singh (Cong.-I.), (*Naraingarh*) ; Phusa Rane (Cong.-I.), (*Narnaul*) ; Verender Singh (J.P.-S.), (*Narnaund*) ; Shamsher Singh Surjewala (Cong.-I.), (*Narwana*) ; Satvir Singh Malik (J.P.–S), (*Naultha*) ; Shiv Ram Verma (Cong.-I.), (*Nilokheri*) ; Sardar Khan (Cong.), (*Nuh*) ; Jagjit Singh Pohloo (Cong.), (*Pai*) ; Mool Chand Mangla (B.J.P.), (*Palwal*) ; Fateh Chand Vij (B.J.P.), (*Panipat*) ; Narain Singh (Cong.-I.), (*Pataudi*) ; Sardar Tara Singh (Cong.-I.), (*Pehowa*) ; Swami Agnivesh (J.P.), (*Pundri*).

Lehri Singh Mehra (Cong.-I.), (*Radaur—S.C.*) , Rizaq Ram (Cong.-I.), (*Rai*) ; Gulzar Singh (J.P.–S), (*Rajound*) ; Peer Chand (Cong.-I.), (*Ratia—S.C.*) ; Col. Rao Ram Singh (J.P.), (*Rewari*) ; Om Prakash (J.P.–S), (*Rohat*) ; Dr. Mangal Sein (B.J.P.), (*Rohtak*) ; Sardar Sukhdev Singh (Cong.-I.), (*Rori*) ; Bhagmal (B.J.P.), (*Sadhaura–S.C.*) ; Ram Kishan (Cong.-I.), (*Safidon*) ; Rao Ram Narain (Cong.-I.), (*Salhawas*) ; Mool Chand Jain (J.P.–S), (*Sambhalka*) ; Surender Singh Anjla (Cong.-I.), (*Shahabad*) ; Com. Shanker Lal (J.P.), (*Sirsa*) ; Kanwar Vijai Pal Singh (Cong.-I.), (*Sohna*) ; Devi Dass (B.J.P.), (*Sonepat*) ; Khurshid Ahmed (Cong.-I.), (*Taoru*) ; Devender Sharma (Cong.-I.), (*Thanesar*); Karam Singh (J.P.–S.), (*Tohana*) ; Surender Singh (Cong.-I.), (*Tosham*) ; Birender Singh (Cong.-I.), (*Uchanakalan*); Smt. Dr. Kamla Verma (B.J.P.), (*Yamunanagar*).

HIMACHAL PRADESH VIDHAN SABHA

Speaker : Thakur Sen Negi ; *Dy. Speaker* : Vacant.

Seats : 68. *Electorate* : 1,997,405. *Votes Polled* : 1,169,894. *Party Position* : Congress-I. : 37 ; Bharatiya Janata Party : 24 ; Janata Party : 1; Janata (S./Lok Dal) : 1 ; Communist (M.L.) : 1 ; Independent : 2 ; Vacancies 2. Woman Member : 1.

Ishar Dass (Cong.-I.), (*Ani—S.C.*) ; Nagin Chandra Pall (B.J.P.), (*Arki*) ; Sant Ram (Cong.-I.), (*Baijnath*) ; Tulsi Ram (Cong.-I.), (*Balh—S.C.*) ; Ranjit Singh Verma (Cong.-I.), (*Bamsan*) ; Gian Chand (B.J.P.), (*Banikhet*) ; Maheswar Singh (B.J.P.), (*Banjar*) ; Ram Chand (Cong.-I.), (*Bharmour—S.T.*) ; Shiv Kumar (Cong.-I.), (*Bhattiyat*) ; Anand Chand (Ind.), (*Bilaspur*) ; Moti Ram (Cong.-I.), (*Chachiot*) ; Kishori Lal (B.J.P.), (*Chamba*) ; Hans Raj (Cong.-I.), (*Chintpurani*) ; Radha Raman (B.J.P.), (*Chopal*) ; Om Chand (B.J.P.), (*Dharampur*) ; Brij Lal (Cong.-I.), (*Dharamsala*) ; Ram Pratap (C.P.I. (M.L.)), (*Doon*) ; Kaul Singh (Cong.-I.), (*Drang*) ; Sadhu Ram (B.J.P.), (*Gagret—S.C.*) ; Durga Dass (Cong.-I.), (*Gangath—S.C.*) ; Bachittar Singh (Cong.-I.), (*Geharwin—S.C.*) ; Narain Singh Swami (B.J.P.), (*Ghumarwin*) ; Rangila Ram (Cong.-I.), (*Gopalpur*) ; Harbans Singh (Cong.-I.), (*Guler*) ; Jagdev Chand (B.J.P.), (*Hamirpur*) ; Agya Ram (B.J.P.), (*Jaswan*) ; Kashmir Singh Rana (B.J.P.), (*Jawalamukhi*); Sujan Singh Pathania (Cong.-I.), (*Jawali*) ; Gulab Singh (Cong.-I.), (*Jogindernagar*) ; Ram Lal (Cong.-I.), (*Jubbal-Kothkai*) ; Pratap Chaudhary (B.J.P.), (*Kangra*) ; Joginder Pal (Cong.-I.), (*Karsog—S.C.*); Chaman Lal (Cong.-I.), (*Kasauli—S.C.*); Roop Dass (Cong.-I.), (*Kasumpti—S.C.*) ; Thakur Sen Negi (*Kinnaur—S.T.*) ; Daulat Ram Shankhyan (Cong.-I.), (*Kotkehloor*) ; Kunj Lal (B.J.P.), (*Kulu*) ; Bhaskra Nand (Cong.-I.), (*Kumarsain*) ; Ram Nath Sharma (Cong.-I.), (*Kutlehar*) ; Devi Singh (Cong.-I.), (*Lahaul-Spiti—S.T.*) ; Sukh Ram (Cong.-I.), (*Mandi*) ; Amar Singh Chaudhar (B.J.P.), (*Mewa—S.C.*) ; Dile Ram (B.J.P.), (*Nachan—S.C.*) ; Vacant (*Naduan*) ; Vacant (*Nadunta*) ; Hardyal (Cong.-I.), (*Nagrota*) ; Miss Shyama Sharma (J.P.), (*Nahan*) ; Vijayendra Singh (Cong.-I.), (*Nalagarh*) ; Sat Mahajan (Cong.-I.), (*Nurpur*) ; Siri Ram Lakshmi (Cong.-I.), (*Pachhad—S.C.*) ; Sarvan Kumar (B.J.P.), (*Palampur*) ; Milkh Ran (B.J.P.), (*Paonta-Doon—S.C.*) ; Yog Raj (Cong.-I.), (*Pragpur—S.C.*) ; Roop Singh (Cong.-I.), (*Rainuka*) ; Guler Chand (Cong.-I.), (*Rajgir—S.C.*) ; Mohan Lal (B.J.P.), (*Rajnagar—S.C.*) ; Ninzoo Ram (Cong.-I.), (*Rampur—S.C.*) ; Satya Dev (Janata S. Lok Dal), (*Rohru*) ; Vijay Kumar Joshi (Ind.), (*Santokhgarh*) ; Ram Rattan (B.J.P.), (*Shahpur*) ; Guman Singh Chauhan (Cong.-I.), (*Shillai*) ; Daulat Ram Chauhan (B.J.P.), (*Simla*) ; Gauri Shankar (Cong.-I.), (*Solan*) ; Shanta Kumar (B.J.P.), (*Sulah*) ; Roop Singh (B.J.P.), (*Sundernagar*) ; Mehar Singh Chauhan (Cong.-I.), (*Theog*) ; Gian Chand (Cong.-I.), (*Thural*) ; Des Raj (B.J.P.), (*Una*).

JAMMU AND KASHMIR LEGISLATIVE ASSEMBLY

Speaker : Babu Paramanand. *Dy. Speaker* : Janak Raj.

Seats : 75 ; *Electorate* : 2,661,057 ; *Votes Polled* : 1,803,921. *Party position* : National Conference : 48 ; Janata Party : 11 ; Congress(I) : 11 ; Lok Dal : 1 ; J. K. Peoples Conference : 1 ; Independent : 1 ; Bharatiya Janata Party : 1 ; Cong.-U : 1 ; Jamait-i-Islami : 1 ; Inquilabi National Conference : 1 ; Women members : 3 ; Nominated : 2.

Dharam Paul (Cong.-I.), (*Akhnoor*) ; Ghulam Mohi-ud-Din Shah (N.C.), (*Amirakadal*) ; Mirza Mohd. Afzal Beg (I.N.C.), (*Anantnag*) ; Ghulam Hussain Gilani (N.C.), (*Badgam*) ; Mohammad Khalil Johar (N.C.), (*Bandipora*) ; Molvi Abdul Rashid (N.C.), (*Banihal*) ; Ghulam-ud-Din Shah (N.C.), (*Baramulla*) ; Smt. Gurbachan Kumari Rana (Ind.), (*Banibrahmna—S.C.*) ; Mangat Ram (Cong.-I.), (*Basohli*) ; Syed Ahmed Saeed (N.C.), (*Beera*) ; Narain Dass (Lok Dal), (*Bhaderwah—S.C.*) ; Abdul Ghani Shah (N.C.), (*Bijbehara*) ; Dian Singh Kalhotra (J.P.), (*Billawar*) ; Parmanand (N.C.), (*Bishna—S.C.*) ; Ram Nath (J.P.), (*Chaamb*) ; Abdul Samad Mir (N.C.), (*Chadura*) ; Abdul Rahim Rather (N.C.), (*Charar-i-Sharief*) ; Bhim Singh (Cong.-U.), (*Chenani Ghordi*).

Mohd. Hussain (N.C.), (*Darhal*) ; Ghulam Nabi Kochak (N.C.), (*Devsar*) ; Gh. Qadir Wani (Cong.I.), (*Doda*) ; Vacant, (*Dooru*) ; Sheikh Mohammad Abdullah (N.C.), (*Ganderbal*) ; Haji Buland Khan (N.C.), (*Ghulab Garh*) ; Mohammed Akbar Lone (N.C.), (*Gulmarg*) ; Ghulam Mohammed Bhutt (N.C.), (*Habakadal*) ; Abdul Ghani Lone (J.K.P.C.), (*Handwara*) ; Ghulam Ahmed Gana (N.C.), (*Haveli*) ; Hissam-ud-Din Bandey (N.C.), (*Hazaratbal*) ; Baldev Singh (B.J.P.), (*Hiranagar*) ; Abdu Salam Deva (N.C.), (*Homeshali-bugh*) ; Abdul Rash Kabli (J.P.), (*Idgah*) ; Sheikh Gh. Mohd. Bhaderwah (N.C.), (*Inderwal*) ; Praduman Singh (Cong.-I.), (*Jammu Cantt.*) ; Ram Nath Balgotra (J.P.), (*Jammu East*) ; Harbans Lal Balgotra (J.P.), (*Jammu West*) ; Dhanraj Balgotra (J.P.), (*Jandrah-Gharota*).

[illegible] (Cong.-I.), (Kangan); [illegible] (N.C.), (Kargil); [illegible] Qadir Mir (N.C.), (Karnah); [illegible] Chand (J.P.), (Kathua—S.C.); Mohammed [illegible] (N.C.), ([illegible]); Bashir Ahmed [illegible] (N.C.), (Kishtwar); [illegible]-ud-Din (N.C.), (Kokernag); Ghulam Nabi Dar (N.C.), (Kulgam); Assadullah [illegible] (N.C.), (Kupwara); Mohd. Sultan Ganai (N.C.), (Langet); Skalzang Angdus (Cong.-I.), (Leh); Tulsi Ram [illegible] (Cong.-I.), (Marh—S.C.); Rafiq Hussain Khan (N.C.), ([illegible]); Abdul Samad Teeli (N.C.), (Nagin); [illegible] Mohammed Ittoo (N.C.), (Noorabad); Beli Ram (Cong.-I.), (Nowshera); Pyare Lal Handoo (N.C.), (Pahalgam); [illegible] Mohi-ud-Din (Cong.-I.), (Pampore); Abdul [illegible] (N.C.), (Pattan); Mohammed [illegible] Dar (I.N.C.), (Pulwama).

Mohammed Dilawar Mir (N.C.), (Rafiabad); Talib Hussain (N.C.), (Rajouri); Premnath Raju (N.C.), (Ramban); Prithvi Chand (J.P.), (Ramnagar—S.C.); Janak Raj (Cong.-I.), (Ranbirsinghpura); Rishi Kumar Kaushal (J.P.), (Reasi); Dhyan Singh (J.P.), (Samba); Ghulam Rasul Bhat (N.C.), (Sangrama); Mohammed Ashraf Khan (N.C.), (Shanoas); Sheikh Mohd. Mansoor (N.C.), (Shopian); Abdul Aziz Parrey (N.C.), (Sonawari), Syed Ali Shah Geelani (Jamat-i-Islami), (Sopore); Ch. Mohd. Aslam (Cong.-I.), (Suran); Mohammed Subhan Bhat (N.C.), (Tral); Shiv Charan Gupta (J.P.), (Udhampur); Mohammed Shaffi (N.C.), (Uri); Ghulam Qadir Wani* (N.C.), (Wachi); Ghulam Ahmed Shontoo (N.C.), Zadaibal); Molvi Mohd. Yasin Hamdani (N.C.). (Zainakadal).

Nominated: Begum Zaffar Ali (N.C.); Smt. Iqbal Kour (N.C.).

JAMMU & KASHMIR LEGISLATIVE COUNCIL

Chairman: Hakim Habibullah. *Deputy Chairman*: Atta Ullah Soharwardy.

Seats: 36; Vacant 2; *Party Position*: National Conference: [illegible]; Cong.-(I): 3; Inquilabi National Conference: 1; Independent: 3.

Legislative Assembly (21): T. A. Atri (N.C.); A. R. [illegible] (N.C.); Bodh Raj Bali (N.C.); Bashir Ahmed [illegible] (N.C.); Mirza Mohd. Yaqoob Beg (I.N.C.); Dr. Harbajan Singh (N.C.); Mohd. [illegible] (N.C.); Mohd. Dilawar [illegible] (N.C.); Mohd. Akbar Nengroo (N.C.); S. Piara Singh (N.C.); Aziz Mohd. [illegible] (N.C.); Lal Mohd. Sabir (N.C.); Gh. Mohammad Shah (N.C.); Hafizullah Shah (N.C.); Parmanand Sharma (N.C.); Sona Wang-Chuk (N.C.); Sheikh Abdul Jabar (N.C.); Wali Mohd. (N.C.); Atta Ullah Soharwardy (N.C.).

Local Authorities (1): Mohan Krishan Tickoo (N.C.).

Panchayat Constituencies (4): Moti Ram Baigra (Cong.-I.); Hakim Habibullah (N.C.); S. Kulbir Singh (Cong.-I.); Abdul Gani Makhdoomi (N.C.).

Nominated (8): Choudry Mohammad Shafi (Ind.); Master Roshan Lal (N.C.); A. G. Mastfarida (N.C.); Mohd. Sadiq Ali (N.C.); S. K. Abrol (N.C.); Devi Dass Thakur (N.C.); A. R. Wani (N.C.); Smt. Wazira Begum (N.C.).

KARNATAKA LEGISLATIVE ASSEMBLY

Speaker: K. H. Ranganath; *Dy. Speaker*: Bapurao Hulsoorkar.

Seats: 225; *Electorates*: 17,896,138. *Votes Polled*: [illegible]; *Party Position* (as on December [illegible]): Congress (I): 169; Congress (U): 28; Janata: 13; M.E.S.: 5; Independent: 1; Bharatiya Janata Party: 4; Communist Party of India: 3; Republican Party of India: 1; Muslim League: 1; Nominated members: 1.

M. Y. Patil (Cong.-I), (Afzalpur); A. P. Patil (Cong.-I), (Aland); Y. Ramakrishna (Cong.-I.), (Anekal—S.C.); [illegible] (J.P.), (Ankola); D. B. [illegible] (Cong.-I.), (Arasikere); V. S. Koujalgi (Cong.-I.), ([illegible]); K. B. Mallappa (J.P.), (Arakalgud); V. V. Pattar (Cong.-I.), (Athani); Manik Rao [illegible] Patil (Cong.-I), (Aurad); B. V. Chimmanakatti (Cong.-I), (Badami); P. K. [illegible] (Cong.-I), ([illegible]); [illegible] Muniraju (Cong.-I), (Bagepalli); G. S. Ashtekar (J.P.), (Bagewadi); R. C. Bale Kundargi (Cong.-I), (Bailhongal); A. G. Kodgi (Cong.-U), (Baindur); [illegible] (Cong.-I), ([illegible]—S.C.); K. [illegible] (Cong.-I), (Bannur); Bapurao Hulsoorkar (Cong.-I), (Basavakalyan); B. S. Patil (Cong.-I), (Basavana Bagewadi); Dr. H. L. Thimme Gowda (J.P.), (Basavanagudi); B. R. [illegible] (J.P.), (Belgaum); K. Bhaskar Naidu (Cong.-I), (Bellary); [illegible] Shivananjappa (Cong.-I), ([illegible]); B. H. [illegible] (Cong.-I), (Belur—S.C.); C. [illegible] (Cong.-I), (Bethamangala); K. [illegible] (Cong.-I), ([illegible]—S.C.); G. [illegible] (Cong.-I), (Bhadravati); B. Shivalingappa Khandre (Cong.-I), (Bhalki); S. A. [illegible] (Cong.-I), ([illegible]); T. [illegible] (Cong.-I), ([illegible]); B. Fernandes Michael (J.P.), (Bharatinagar); S. M. Yahya (Cong.-I), (Bhatkal); Ananda Kunda Hedge (Cong.-I.), (Bhramavara); V. N. Kushnoor (Cong.-I), (Bidar); S. H. S. Bakshi (Cong.-I), (Bijapur); S. S. Patil (Cong.-I), (Bilgi); I. P. D. Salappa (Cong.-I), (Binnypet); M. Mallappa (Cong.-I) (Birur); M. M. Malagi (Cong.-I), (Byadagi).

B. N. Kenge Gowda (Cong.-I), (Chamaraja); M. C. Basappa (Cong.-U), (Chamarajanagar); Kum. S. Pramila (Cong.-I), (Chamarajpet); D. Jayadevaraj Urs (Cong.-U), (Chamundeshwari); D. T. Ramu (Cong.-I), (Channapatna); N. Jayanna (Cong.-I), (Challakere); J. H. Patel (Cong.-U), (Chennagiri); Smt. Renuka Rajendran (Cong.-I), (Chikkaballapur); C. A. Chandregowda (Cong.-I), (Chikmagalur); N. Basavaiah (Cong.-I), (Chikkanayakanahalli); P. P. Hegde (Cong.-U), (Chikkodi); L. Lakshmisagar (J.P.), (Chikpet); Devendrappa Ghallappa (Cong.-I), (Chincholi); Chowda Reddy (Cong.-I), (Chintamani); Prabhakar R. Telkar (Cong.-I), (Chitapur); V. Masiyappa (Cong.-I), (Chitradurga); Kapu Sanjeeva Shetty (Cong.-I), (Coondapur); Pampapathi (C.P.I.), (Davangere); B. Shivanna (Cong.-I), (Deodurg); K. Narayanappa (Cong.-I), (Devanahalli); Bhavrao Deshpande (B.J.P.), (Dharwar); C. V. Pudakalakatti (Cong.-I.), (Dharwar-Rural); G. Rame Gowda (Cong.-U), (Doddaballapura); C. Muthinapendimath (Cong.-I.), (Gadag); Haranahalli Ramaswamy (Cong.-I.), (Gandasi); K. Lakshman (Cong.-I.), (Gandhinagar); C. Yadava Rao Sesha Rao (Cong.-I.), (Gangavathi); L. S. Naik (Cong.), (Gokak—S.T.); B. N. K. Rapaiah (Gowribidanur); Gatti Chandrashekar (Cong.-I.), (Gubbi); Qumanil Islam (M.L.), (Gulbarga); B. V. Janali (Cong.-I.), (Guledgudda); H. K. Shivarudrappa (Cong.-I.), (Gundlupet); Mallikarjuna Kharge (Cong.I.), (Gurmitkal—S.C.)

---

* Removed from the Party

N. Karibasava Gauda (Cong.-I), (*Hadagalli*) ; T. Somappa (Cong.-I), (*Hadalgi*) ; V. M. Ghadi (Cong.-I), (*Haliyat*), M. H. Tahsildar (Cong.-I), (*Hangal*) ; Raju Gowda (Cong.-I), (*Hanur*) ; D. Narayana Das (Cong.-I), (*Harapanahalli—S.C.*) ; H. Shivappa (Cong.-I), (*Harihar*) ; K. H. Hanume Gowda (Cong.-I), (*Hassan*) ; F. S. Taware (Cong.-I), (*Haveri*), Smt. Sushela Cheluvaraj (Cong.-U), (*Heggadadevanakote—S.C.*) ; G. B. Shankar Rao (Cong.-I), (*Hirekerur*) ; K. H. Ranganath (Cong.-I), (*Hiriyur—S.C.*), M. B. Thipperudrappa (Cong.-I), (*Holalkere*) ; G. Gasavannappa (Cong.-I), (*Holehonnur—S.C.*) ; H. D. Deve Gowda (Cong.-U), (*Holenarasipur*) ; H. B. Kadasiddappa (Cong.-I), (*Honnali*) ; Vacant, (*Hosadurga*) ; S. M. Sheernaly Chandrasekhar (Cong.-I.), (*Hosanagar*) ; B. N. Bache Gowda (Cong.-I.), (*Hoskote*); K. Gudu Sahed (Cong.-I.), (*Hospet*); M. G. Jarthargar (B.J.P.). (*Hubli*) ; S. R. Bommai (Janata), (*Hubli Rural*); S. S. Mahajan Shetty (Cong.-I.), (*Hukkeri*) ; D. T. Mayanna (Janata), (*Huliyurdurga*) ; S. B. Madanlal (Cong.-I.), (*Hulsoor—S.C.*); B. H. Patil (Cong.-I.), (*Humnabad*) ; S. S. Kavishetti (Cong.-I.), (*Hungund*); D. Devaraj Urs (Cong.-U), (*Hunsur*); B. S. Patil (Cong.-I.), (*Huvinahippergi*) ; R. R. Kallur (Cong.-I.), (*Indi*); G. H. Aswatha Reddy (Cong.-I.), (*Jagalur*) ; D. B. Pawar (Cong.-I.), (*Jamakhandi*) ; Jeevaraj Alva (Cong.-U), (*Jayamahal*) ; M. Chandrashekhar (Janata), (*Jayanagar*) ; Dharam Singh Narayan Singh (Cong.-I.), (*Jewargi*).

K. M. Thammaiah (Cong.-I), (*Kadur*) ; A. B. Jakanur (Cong.-I), (*Kagwal*) ; F. S. Patil (Cong.-I), (*Kalghatgi*) ; T. B. Jaya Chandra (Cong.-I), (*Kallambella*) ; Sudheendra Raokasbe (Cong.-I), (*Kalmala*) ; Govind P. Vadeyaraj (Cong.-I), (*Kamallapura*) ; M. Nagappa (Cong.-I), (*Kanakagiri*) ; C. Appaji (Cong.-I), (*Kanakapura*) ; M. Veerappa Moily (Cong.-I), (*Karkala*) ; D. V. Waingekar, (Cong.-I), (*Karwar*) ; B. Bhaskar Shetty (Cong.-I), (*Kapu*) ; H. D. Chowdaiah (Cong.-U), (*Keragodu*) ; N. B. Sirdesai (Janata), (*Khanapur*) ; G. Madegowda (Cong.-I), (*Kirugaval*) ; P. B. Patil (Cong.-I), (*Kittur*) ; M. Abdul Latheef (Cong.-U), (*Kolar*) ; C. M. Arumugham (R.P.I.), (*Kolar Gold Field—S.C.*) ; M. Siddamadaiah (Cong.-I), (*Kollegal—S.C.*) ; Veeranna Pampanna Mudgal (Cong.-I), (*Koppal*) ; Muddūramaiah (Cong.-I), (*Koratagere*) ; M. M. J. Sadyojatha (Cong.-I), (*Kottur*), H. Gangadharan (B.J.P.), (*Krishnaraj*) ; H. Viswanath (Cong.-I), (*Krishnarajnagar*) ; S. M. Lingappa (J.P.), (*Krishnarajpet*) ; S. V. Naik (Cong.-I), (*Kumta*) ; M. S. Katagi (Cong.-I), (*Kundagoul*) ; Andanaiah (Cong.-I), (*Kunigal*) ; M. Ramappa (Cong.-I), (*Kurugodu*) ; M. Ganganna Bheemappa (Cong.-I), (*Kushtagi*) ; A. Basavaraj Patil (Cong.-I), (*Lingasugur*) ; M. Manche Gowda (Cong.-I), (*Maddur*) ; Gangahanumaiah (Cong.-I), (*Madhugiri—S.C.*) ; M. S. Atmananda (Cong.-U), (*Mandya*) ; M. C. Nanaiah (Cong.-U), (*Madikeri*) ; Betlaswamy Gowda (Cong.-I), (*Magadi*) ; K. L. Mariswamy (Cong.-I.), (*Malawalli—S.C.*) ; P. Ram Dev (J.P.), (*Malleswaram*) ; P. N. Reddy (Cong.-I), (*Malur*) ; P. F. Rodrigues (Cong.-I), (*Mangalore*) ; R. Ambanna Naik Dorai (Cong.-I), (*Manvi*) ; Smt. Nagamma C. Keshavamurthy (Cong.-I), (*Mayakonda*) ; Patel Papanaik (Cong.-I), (*Molakalmuru*) ; Damodar Mulki (Cong.-I), (*Moodabidri*) ; J. S. Deshmukh (J.P.), (*Muddebihal*) ; J. K. Kale (Cong.-I), (*Mudhol—S.C.*) ; Smt. Motamma (Cong.-I), (*Mudigere-S.C.*) ; J. M. Reddy (Cong.-I), (*Mulbagal*) ; V. B. Bhavi (Cong.-I), (*Mundaragi*).

H. T. Krishnappa (Cong.-I), (*Nagamangala*) ; K. B. Shivaiah (Cong.-U), (*Nanjangud*) ; B. R. Patil (Cong.-I), (*Naragund*) ; Azeez Sait (Cong.-U), (*Narasimharaja*) ; S. V. Patil (Cong.-I), (*Navalgund*) ; K. Prabhakar (Cong.-U), (*Nelmangala—S.C.*) ; Chavan Balvant Gopal (J.P.), (*Nippani*) ; K. R. Rajagopal (Cong.-I), (*Pandavapura*) ; G. K. Takked (Cong.-I), (*Parasgad*) ; Nagappa (Cong.-I), (*Pavagada—S.C.*) ; K. S. Kalamari Gowda (Cong.-I), (*Periyapatna*) ; K. Rambhat (B.J.P.), (*Puttur*) ; R. S. Nadoni (Cong.-I), (*Raibag—S.C.*) ; Nazir Ahmed Siddiqui (Cong.-U), (*Raichur*) ; Mallur Anand Rao (Cong.-I), (*Rajajinagar*), A. K. Abul Samad (Cong.-I), (*Ramanagar*) ; R. S. Patil (Cong.-U), (*Ramdurg*) ; S. H. Nalavagal (Cong.-I), (*Ranibennur*) ; V. A. Mathikatti (Cong.-I), (*Ron*) ; A. B. Bedge (Cong.-I.), (Sadalga) ; L. T. Thimmappa Hedge (Cong.-I), (*Sagar*) ; J. D. Somappa (Cong.-I), (*Sakleshpur*) ; C. Rudrappa (Cong.-U), (*Sandur*) ; M. S. Patil (Cong.-I), (*Sankeshwar*) ; M. Madaiah (Cong.-U), (*Santhemaranahalli—S.C.*) ; K. L. Shivalinge Gowda (Cong.-I), (*Sathanar*) ; M. Sherkahan (Cong.-I), (*Sedam*) ; S. F. Bhairy (C.P.I.), (*Shahabad—S.C.*) ; Shivanna Sawoor (Cong.-I), (*Shahpur*) ; P. K. Ranganathan (Cong.-I), (*Shantinagar*) ; M. M. Nadaf (Cong.-I), (*Shiggon*) ; K. Yenkatappa (Cong.-I), (*Shikkaripur*) ; K. H. Srinivasa (Cong.-U), (*Shimoga*) ; B. E. Ramaiah (Cong.-I), (*Shiraguppa*) ; G. F. Upnal (Cong.-I), (*Shirhatti*) ; C. M. Ibrahim (Cong.-I), (*Shivajinagar*) ; Rajakumar Naik (Cong.-I), (*Shorapur*) ; M. H. Bekinalkar (Cong.-I), (*Singdi*) ; H. Narayanappa (Cong.-I), (*Sindhanoor*) ; S. Lingaiah (Cong.-U), (*Sira*) ; Umakant B. Borkar (Cong.-I), (*Sirsi—S.C.*) ; R. Gundu Rao (Cong.-I), (*Somwarpet*) ; S. Bangarappa (Cong.-I), (*Sorab*) ; H. C. Srikantaiah (Cong.-I), (*Sravanabelagola*) ; B. Ramaiah (Cong.-I), (*Sringeri*) ; Ramesh Kumar (Cong.-U), (*Srinivasapura*) ; M. Srinivasa (Cong.-I), (*Srirangapatna*) ; A. Ramachandra (Cong.-I), (*Sullia—S.C.*) ; B. Subbayya Shetty (Cong.-U), (*Suratkal*) ; P. Venkataramanna (Cong.-I), (*T. Narsipur—S.C.*).

H. M. Mallikarjunappa (Cong.-I), (*Tarikere*) ; Kadidal Divakara (Cong.-I), (*Tirthahalli*) ; B. B. Patil (Cong.-I), (*Tikota*) ; V. L. Shivappa (Cong.-I), (*Tiptur*) ; S. Shafi Ahmed (Cong.-I), (*Tumkur*) ; K. H. Ramakrishnaiah (Cong.-I), (*Turuvekere*) ; P. A. Pawashe (J.P.), (*Uchagaon*) ; Smt. Manorama Madhavaraj (Cong.-I), (*Udupi*) ; U. T. Fareed (Cong.-I), (*Ullal*), M. V. Rajasekharan (J.P.), (*Uttarhalli*) ; B. V. Ramachandra Reddy (Cong.-I), (*Varthur*) ; S. Govinda Gowda (Cong.-I), (*Vemagal*), G. K. Subbaiah (Cong.-I), (*Virajpet*) ; B. V. Kakkilaya (C.P.I.), (*Vittal*), S. N. Kulburgi (Cong.-I), (*Yadgiri*) B. Basavalingappa (Cong.-U), (*Yelahanka — S.C.*), L. Shivashankar Rao Desai (Cong.-I), (*Yelburga*) ; W. J. S. Merley (Nominated).

KARNATAKA LEGISLATIVE COUNCIL

Chairman : Smt. B. Basavarajeswari : *Dy. Chairman* : V. S. Krishna Iyer : *Leader of the House* : Kagodu Thimmappa

Seats : 63. *Party Position* : (January 1981) : Cong.-I : 28; Cong.-U : 11 ; B.L.D. : 1 ; Janata : 2 ; B.J.P. : 5 ; Independents : 2 ; Vacant : 14 ; *Total* 63 ; Women members: 5.

Elected by the Legislative Assembly (21) : R. B. Podar (J.P.) : Abdul Nazir Sab (Cong.-I.) ; T. N. Narasimha Murthy (Cong.-I.) ; B. M. Patil (Cong.-I.) ; D. Rajagopal (B.L.D.) ; M. Raghupathi (Cong.-I.) : M. Shivanna (Cong.-U.). D. B. Chandra Gowda (Cong.-U.) ; M. D. Nataraj (Cong.U.) : G. Puttaswamy Gowda (J.P.) ; M. C. Perumal (Cong.-U.) ; K. Rahaman Khan (Cong.-I.) ; L. G. Havanur (Cong.-U.) ; Smt. Jayamma Mallikarjunaswamy (Cong.-I.) ; R. L. Jaoappa (Cong.-U.) ; Kagodu Thimmappa (Cong.-I.). Blasius M. D'Souza (Cong.-I.) ; Mune Gowda (Cong.-I.) ; N. M. Mutalik Desai (Cong.-I.) ; N. V. Kotennavar (Cong.-I.) ; Miss Tara Devi (Cong.-I.).

Local Authorities' Constituency (21) : B. S. Patil (Cong.-I.) ; R. Dayananda Sagar (Cong.-I.) ; B. S. Viswanathan (Cong.-I.) ; B. G. Bhagavan (Cong.-I.) ; D. Kariyappa Gowda (Cong.-I.) ; Smt. B. Basavarajeswari (Ind.) ; H. B. Narayanaswamy (Cong.-U.) ; Vacant : 14.

Graduates' Constituency (6) : S. Mallikarjunaiah (B.J.P.) ; Y. S. Patil (B.J.P.) ; V. S. Krishna Iyer (J.P.) ; Gundaiah Setty (B.J.P.) ; B. K. Gudadinni (Cong.-I.) ; A. K. Subbaiah (B.J.P.).

Teachers' Constituency (6) : S. Channabasavaiah (Cong.-U.) ; T. A. Reddy (Cong.-U.) ; Smt. B. Padmavathi Vittal Rao (B.J.P.) ; Dr. A. B. Malaka Reddy (Cong.-I.) ; B. S. Horatti (Cong.-I.) ; S. S. Pujari (Cong.-I.).

Nominated (9) : T. V. Venkataswamy (Cong.-I.) ; Hajee Abdul Sattar Sait (Cong.-I.) ; Smt. J. J. Mandanna (Cong.-U.) ; Shantamallappa Patil (Cong.-I.) ; H. Srikantaiah (Cong.-I.) ; R. S. Manohar (Cong.-U.) ; Dr. H. Narasimhaiah (Cong.-I.) ; R. Peeranna (Cong.-I.) ; Smt. B. Jayamma (Cong.-I.).

KERALA LEGISLATIVE ASSEMBLY

Speaker : A. C. Jose ; *Dy.-Speaker* : Vacant.

Seats : 140 ; *Party Position* : Communist Party of India (Marxist) 34 ; Congress (U) 22 ; Communist Party of India 17 ; Kerala Congress — Mani group 8 ; Revolutionary Socialist Party 6 ; All India Muslim League 5 ; Kerala Congress — Pillai Group 1 ; Congress (I) 17 ; Indian Union Muslim League 14 ; Kerala Congress — Joseph Group 6 ; National Democratic Party 3 ; Praja Socialist Party 1 ; Janata Party 5 ; Independent 1, Women : 3.

C. P. Karunakaran Pillai (C.P.I.-M.), (*Adoor*) ; C. T. Krishnan (C.P.I.-M.), (*Alathur*) ; P. K. Vasudevan Nair (C.P.I.), (*Alleppey*) ; K. Mohammed Ali (Cong.-U.), (*Alwaye*) ; P. K. Chandranandan (C.P.I.-M.), (*Ambalapuzha*) ; A. P. Kurian (N.A.) (*Angamali*) ; K. K. Sreenivasan (Cong.-I.), (*Aranmula*) ; K. Pankajakshan (R.S.P.), (*Ariyanad*) ; Smt. K. R. Gouri (C.P.I.-M.), (*Aroor*) ; Vakkom Purushothaman (Cong.-U.), (*Attingal*) ; P. Devootty (C.P.I.-M.), (*Azhikode*) ; K. Chandrasekharan (J.P.), (*Badagara*) ; A. C. Shanmukha Das (Cong.-U.), (*Balussery*) ; N. P. Moideen (Cong.-U.), (*Beypore*) ; N. Chandrasekhara Kurup (C.P.I.-M.), (*Calicut—I*) ; P. M. Aboobacker (A.I.M.L.), (*Calicut—II*); P. Bhaskaran (J.P.), (*Cannanore*) ; E. Chandrasekharan Nair (C.P.I.), (*Chadayamangalam*) ; P. K. Ittoop (K. Cong.-M.), (*Chalakudi*) ; C. F. Thomas (K. Cong.-M.), (*Changanacherry*) ; J. Chitharanjan (C.P.I.), (*Chathannur*) ; Baby John (R.S.P.), (*Chavara*) ; K. K. Balakrishnan (Cong.-I.), (*Chelakkara—S.C.*) ; Smt. K. R. Saraswathy Amma (N.D.P.), (*Chengannur*) ; K. P. Prabhakaran (C.P.I.), (*Cherpu*) ; K. Krishnakutty (J.P.), (*Chittur*).

G. Varadan (C.P.I.-M.), (*Devi Colam—S.C.*) ; P. P. V. Moosa (A.I.M.L.), (*Edakkal*) ; R. S. Unni (R.S.P.), (*Eravipuram*) ; A. L. Jacob (Cong.-I.), (*Ernakulam*) ; Vaikom Viswam (C.P.I.-M.), (*Ettumanur*) ; B. V. Seethi Thangal (I.U.M.L.), (*Guruvayoor*) ; C. B. C. Warrier (C.P.I.-M.), (*Haripad*) ; K. T. Kumaran (C.P.I.), (*Hosdurg—S.C.*) ; Jose Kuttiyani (Cong.-I.), (*Idukki*) ; Ramachandran Kadannappalli (Cong.-U.), (*Irikkur*) ; Jose Thanikkal (Cong.-U.), (*Irinjalakuda*) ; O. Lukose (K. Cong.-M.), (*Kaduthuruthy*) ; Prof. K. A. Mathew (K. Cong.-J.), (*Kalloopara*) ; Smt. M. Kamalam (J.P.), (*Kalpetta*) ; Thomas Kallampalli (K. Cong.-M.), (*Kanjirapally*) ; B. M. Sheriff (C.P.I.), (*Karunagapally*) ; C. T. Ahmed Ali (I.V.M.L.), (*Kasargod*) ; Thachady Prabhakaran (Cong.-I.), (*Kayamkulam*) ; M. M. Hassan (Cong.-U.), (*Kazhakkuttam*) ; Smt. Bhargavi Thankappan (C.P.I.), (*Kilimanoor—S.C.*) ; Lonappan Nambadan (K. Cong.-M.), (*Kodakara*) ; V. K. Rajan (C.P.I.), (*Kodungallur*) ; P. V. . Mohammad (I.U.M.L.), (*Kodu Vally*) ; C. Vasudeva Menon (C.P.I.-M.), (*Kollengode*) ; P. Seethi Haji (I.U.M.L.), (*Kondothy*) ; V. S. Chandrasekharan Pillai (C.P.I.-M.), (*Konni*) ; T. M. Jacob (K. Cong.-J.), (*Kothamangalam*) ; R. Balakrishna Pillai (K. Cong.-P.), (*Kottarakkara*) ; K. M. Abraham (C.P.I.-M.), (*Kottayam*) ; M. R. Reghuchandra Bal (Cong.-I.), (*Kovalam*) ; T. K. Arumughan (C.P.I.-M.), (*Kozhalmannam—S.C.*) ; V. V. Joseph (C.P.I.-M.), (*Kundara*) ; K. P. Raman (A.I.M.L.), (*Kunnamangalam—S.C.*) ; K. P. Viswanathan (Cong.-U.), (*Kunnankulam*) ; P. P. Esthose (C.P.I.-M.), (*Kunnathunad*) ; Kallada Narayanan (R.S.P.), (*Kunnathur—S.C.*) ; M. V. Raghavan (C.P.I.-M.), (*Kuthuparamba*); Prof. Oommen Mathew (K. Cong.-J.), (*Kuttanad*) ; Korambayil Ahammed Haji (I.U.M.L.), (*Kuttipuram*).

K. Karunakaran (Cong.-I.), (*Mala*) ; E. K. Nayanar (C.P.I.-M.), (*Malampuzha*) ; U. A. Beeran (I.U.M.L.), (*Malappuram*) ; V. M. Sudheeran (Cong.-U.), (*Manalur*) ; C. H. Mohammed Koya (I.U.M.L.), (*Manjeri*) ; Dr. A Subba Rao (C.P.I.), (*Manjeshwar*) ; K. P. A. Majeed (I.U.M.L.), (*Mankada*) ; A. P. Hamza (I.U.M.L.), (*Mannarkkad*) ; A. V. Thamarakshan (R.S.P.), (*Mararikulam*); M. J. Zakaria (A.I.M.L.), (*Mattanchery*) ; S. Govinda Kurup (C.P.I.-M.), (*Mavelikkara*) ; A. V. Abdu Rahiman Hajee (A.I.M.L.), (*Meppayyur*) ; V. V. Joseph (K. Cong.-J.), (*Muvattupuzha*) ; K. T. Kanaran (C.P.I.), (*Nadapuram*) ; M. K. Krishnan (C.P.I.-M.), (*Narakkal—S.C.*) ; P. K. Gopalakrishnan (C.P.I.), (*Nattika*) , K. V. Surendranatha (C.P.I.), (*Nedumangad*) ; C. K. Thankappan (C.P.I.-M.), (*Neduvathur—S.C.*) ; E. Ramesan Nair (Cong.-I.), (*Nemom*) ; R. Sundaresan Nair (N.D.P.), (*Neyyatinkara*) ; Raghavan Pozhakadavil (Cong.-I.), (*Ollur*) ; V. C. Kabeer (Cong.-U.), (*Ottapalam*) ; K. M. Mani (Cong.-M.), (*Palai*); C. M. Sundaram (P.S.P.), (*Palghat*) ; T. P. Peethambaran Master (Cong.-U.), (*Palluruthy*) ; P. K. Velayudhan (Cong.-U.), (*Pandalam—S.C.*) ; N. Sundaran Nadar (Cong.-I.), (*Parassala*) ; A. C. Jose (Cong.-U.), (*Parur*) ; K. K. Nair (Ind.), (*Pathanamthitta*) ; E. K. Pillai (C.P.I.), (*Pathanapuram*) ; M. P. Gangadharan (Cong.-I.), (*Pattambi*) ; N. Subramoniya Shenoy (C.P.I.-M.), (*Payyannur*) ; C. A Kurian (C.P.I.), (*Peerumeda*) ; V. V. Dakshinamoorthy (C.P.I.-M.), (*Perambra*) ; K. P. Noorudin (Cong.-U.), (*Peravur*) ; A. K. Sasheendran (Cong.-U.), (*Peringalam*) ; N. Sooppy (I.U.M.L.), (*Perinthalmanna*) ; P. R. Sivan (C.P.I.-M.), (*Perumbavoor*) ; P. C. Chacko (Cong.-U.), (*Piravom*) ; K. Sreedharan (C.P.I.-M.), (*Ponnani*) ; P. C. George (K. Cong.—J.), (*Poonjar*) ; P. K. Sreenivasan (C.P.I.), (*Punalur*) ; Oommen Chandy (Cong.-U.), (*Puthuppally*).

Manimangalathu Kuttiali (Cong.-U.), (*Quilandy*) ; K Sivadasan (R.S.P.), (*Quilon*) ; M. C. Cheriyan (Cong.-U.), (*Ranni*) ; P. S. Sreenivasan (C.P.I.), (*Sherthalai*) ; K Sankaranarayanan (Cong.-I.), (*Srikrishnapuram*) ; K. K. Ramachandran Master (Cong.-I.), (*Sultan's Battery*) ; M. V. Rajagopalan (C.P.I.-M.), (*Tellicherry*) ; C. P. Moosankutty (C.P.I.-M.), (*Thaliparamba*) ; E. Ahmed (I.U.M.L.), (*Tanur*) ; P. C. Thomas (J.P.), (*Thiruvalla*) ; Cyriac John (Cong.-U.), (*Thiruvambadi*) ; P. J. Joseph (K. Cong.-J.), (*Thodupuzha*) ; P. T. Kunhutty Hajee (I.U.M.L.), (*Tirur*) ; K. Avkkaderkutty Naha (I.U.M.L.), (*Tirurangadi*) ; M. K. Kannan (C.P.I.-M.), (*Trichur*)

N.A. — Not available

P. Karunakaran (C.P.I.-M.), (*Trikkaripur*) ; T. K. Ramakrishnan (C.P.I.-M.), (*Trippunithura*) ; M. P. Thami (Cong.-I.), (*Trithala—S.C.*) ; C. S. Neelakantan Nair (N.D.P.), (*Trivandrum East*) ; K. Anirudhan (C.P.I.-M.), (*Trivandrum North*). P. A. Mohammed Kannu (I.U.M.L.), (*Trivandrum West*) ; K. Purushotthaman (C.P.I.-M.), (*Udma*); Thomas Joseph (K. Cong.-M.), (*Udumbanchola*); N.A. (*Vadakara*) ; T. K. Abdu (C.P.I.-M.), (*Vadakkekara*) ; M. K. Kesavan (C.P.I.), (*Vaikhom—S.C.*) ; Koliyakodu N. Krishnan Nair (C.P.I.-M.), (*Vamanapuram*) ; Varkala Radhakrishnan (C.P.I.-M.), (*Varkala*) ; M. K. Joseph (K. Cong.-M.), (*Vazhoor*) ; K. S. Narayanan Namboodiri (Cong.-I.), (*Wadakkancherry*) ; Dr. M. A. Kuttappan (Cong.-I.), (*Wandoor — S.C.*) ; M. V. Rajan Master (Cong.-I.), (*Wynad-North — S.T.*) ; Aryadan Muhamed (Cong.-U.), (*Nominated*) ; Stephen Padua (Cong.-U.), (*Nominated*).

MADHYA PRADESH LEGISLATIVE ASSEMBLY

Speaker : Yagyadutta Sharma.

Seats : 321 ; *Party Position* : Congress (I) : 246 ; Bharatiya Janata Party: 60; Communist : 2 ; Janata (J.P.) : 2 ; Janata (S)/Charan Singh Group Lok Dal : 1 ; Republican Party of India (Khobragadhe Group): 1 ; Independent : 8 ; Nominated : 1 ; Women Members : 18.

Tetku (Cong.-I), (*Abhanpur*) ; Bhurelal Firozi (B.J.P.), (*Agar—S.C.*) ; Dhirendrakumar Singh (Cong.-I.), (*Akaltara*) ; Magansingh Patel (Cong.-I.), (*Alirajpur—S.T.*) ; Thawarchand Ramlal (B.J.P.), (*Alot—S.C.*) ; Sundara (Cong.-I.), (*Amanganj—S.C.*) ; Rajendra Kumar (Cong.-I.), (*Amarpatan*) ; Premnarayan Jagdish Prasad (Cong.-I.), (*Amarwara—S.T.*) ; Kamodi Lal (Cong.-I.), (*Ambah—S.C.*) ; Madan Gopal (Cong.-I.), (*Ambikapur—S.T.*) ; Gurubux Atulkar (Cong.-I.), (*Amla—S.C.*) ; Mangilal Tejsingh (Cong.-I.), (*Anjad—S.T.*) ; Bisahulal (Cong.-I.), (*Anuppur—S.T.*) ; Vijai Kumar (Cong.-I.), (*Arang—S.C.*) ; Mahendra Singh (Cong.-I.), (*Ashoknagar*) ; Devilal Rekwal (B.J.P.), (*Ashta—S.C.*) ; Parshuram Singh Bhadoria (Cong.-I.), (*Attair*).

Raghunathsingh Jaswant Singh (Cong.-I.), (*Badnawar*) ; H. Gulam Ahmed (Cong.-I.), (*Badwara*) ; Blasiusekka (Cong.-I.), (*Bagicha—S.T.*) ; Kailash Joshi (B.J.P.), (*Bagli*) ; Sravankumar (Cong.-I.), (*Bahoriband*) ; Devendra Kumari (Cong.-I.), (*Baikunthpur*) ; Ganpatsingh (Cong.-I.), (*Baihar—S.T.*) ; Jodhasingh Markam (Cong.-I.), (*Bajag—S.T.*) ; Surendranath Khare (Cong.-I.), (*Balaghat*) ; Hiralal Sonbohar (Cong.-I.), (*Balod*) ; Ganeshshankar (Cong.-I.), (*Balodabazar*) ; Premnarayan Gorelal (Cong.-I.), (*Banda*) ; Jaswant Singh (Cong.-I.), (*Bareli*) ; Mahesh Prasad Mishra (Cong.-I.), (*Barghat*) ; Nanhelal Dhurva (Cong.-I.), (*Bargi—S.T.*) ; Udaysingh Pandya (B.J.P.), (*Barnagar*) ; Kailash Pandit (B.J.P.), (*Barwaha*) ; Umraosingh Phatla (Cong.-I.), (*Barwani*) ; M. B. Lal Bahadur Singh (Cong.-I.), (*Basna*) ; Foolchand Verma (B.J.P.), (*Basoda*) ; Revendra Singh (Cong.-I.), (*Bemetara*) ; Ramkishore Shukla (Cong.-I.), (*Beohari*) ; Laxminarayan Sharma (B.J.P.), (*Berasia*) ; Madhay Gopal Naseri (B.J.P.), (*Betul*) ; Kesharsingh Chauhan (B.J.P.), (*Bhainsdohi—S.T.*) ; Kamlapat Arya (Cong.-I.), (*Bhander—S.C.*) ; Baliram Kashyap (B.J.P.), (*Bhanpur—S.T.*) ; Kum. Ganga Potai (Cong.-I.), (*Bhanupratappur—S.T.*) ; Jagdish Prasad Agarwal (Cong.-I.), (*Bhatapara*) ; Kumar Bhartiya (Cong.-I.), (*Bhatgaon—S.C.*) ; Dongarsingh Patel (B.J.P.), (*Bhikangaon—S.T.*) ; Phoolchand Baphna (Cong.-I.), (*Bhilai*) ; Ch. Dilip Singh (B.J.P.), (*Bhind*) ; Shaligram Shrivastava (B.J.P.), (*Bhojpur*) ; Rasoon Ahmed Siddiquie (Cong.-I.), (*Bhopal North*) ; Satyanarayan Agrawal (Cong.-I.), (*Bhopal South*) ; M. Haroon M. Amin (Cong.-I.), (*Bhurhanpur*) ; Dattatrai Madhavrav (B.J.P.), (*Biaora*) ; Maniklal Parteti (Cong.-I.), (*Bichhiya—S.T.*) ; Mahadeo Rana (Cong.-I.), (*Bijapur—S.T.*) ; Yadvendra Singh (Cong.-I.), (*Bijawar*) ; Jagmohan Singh (Cong.-I.), (*Bijeypur*) ; B. R. Yadav (Cong.-I.), (*Bilaspur*) ; Chitrakant Jaiswal (Cong.-I.), (*Bilha*) ; Arvind Bhai (Cong.-I.), (*Bina*) ; Balaram (B.J.P.), (*Bindranawagarh—S.T.*) ; Balram Singh Vaish (Cong. I.), (*Birendranagar*); V Shankarlal (Cong.-I.), (*Bohani*); K. N. Pradhan (Cong.-I.), (*Budhni*).

Davendra Singh (Cong.-I.), (*Chachoda*) ; Charandas Mahant (Cong.-I.), (*Champa*) ; Chaturvedi Satyavrat (Cong.-I.), (*Chandla*) ; Bhawanilal (Cong.-I.), (*Chandrapur*) ; V. P. Saxena (Cong.-I.), (*Chaurai*) ; S. P. Bahadur Singh (Cong.-I.), (*Chhatarpur*) ; Vijaykumar Dhanpal (Cong.-I.), (*Chhindwara*) ; Ramchand Bajpayee (Cong.-I.), (*Chitrakoot*) ; Lakhan Jaisingh (B.J.P.), (*Chitrakoot—S.T.*) ; Goverdhan Netam (Cong.-I.), (*Chowki—S.T.*) ; Arjun Singh (Cong.-I.), (*Churhat*) ; Jagannath Singh (B.J.P.), (*Dobra*) ; C. N. Ramdhan (Cong.-I.), (*Damoh*) ; Parusram Dhurve (Cong.-I.), (*Damua—S.T.*) ; Mahendra Karma (C.P.I.), (*Dantewara—S.T.*) ; S. S. Shyam (Cong.-I.), (*Datia*) ; Dr. Parshuram Sahu (B.J.P.), (*Deori*) ; Patiraj Singh (Cong.-I.), (*Deosar—S.T.*) ; Ramkhelawan (Cong.-I.), (*Deotalab—S.C.*) ; Nirbhay Singh Patel (B.J.P.), (*Depalpur*) ; C. P. Shekhar (Cong.-I.), (*Dewas*) ; Piyarelal Balchandan (Cong.-I.), (*Dhamdha*) ; Jayaben (Cong.-I.), (*Dhamtari*) ; Vikram Verma (B.J.P.), (*Dhar*) ; Chaneshram Rathiya (Cong.-I.), (*Dharamjaigarh—S.T.*) ; Kirat Singh Thakur (Cong.-I.), (*Dharampuri—S.T.*) ; M. R. Giri (Cong.-I.), (*Dharsiwa*) ; Jagwa Devi (Cong.-I.), (*Dhauhani—S.T.*) ; Chida Nathu (Cong.-I.), (*Dhulkot—S.T.*) ; Munshilal (B.J.P.), (*Dimni—S.C.*) ; Dharamsingh Masram (Cong.-I.), (*Dindori—S.T.*) ; Jhumklal Bhadia (Cong.-I.), (*Dondilohara—S.T.*) ; Hiraram Verma (Cong.-I.), (*Dongargaon*) ; Dr. Tuman Lal (Cong.-I.), (*Dongargarh—S.C.*) ; Motilal Vora (Cong.-I.), (*Durg*).

Nagin Kochar (B.J.P.), (*Gadarwara*) ; Mohanlal Sethia (B.J.P.), (*Garoth*) ; Takkansingh Markam (Cong.-I.), (*Ghansaur—S.T.*) ; Nagoolal Malviya (B.J.P.), (*Ghatiya—S.C.*) ; R. U. Nanju (B.J.P.), (*Ghoradogri—S.T.*) ; Balendu Shukla (Cong.-I.), (*Gird*) ; Shreeram Jatava (B.J.P.), (*Gohad—S.C.*) ; K. P. Dwivedy (Cong.-I.), (*Gopadbanas*) ; Ramkishan Hajji (Cong.-I.), (*Goregaon—S.C.*) ; Baboolal Gaur (B.J.P.), (*Govindpura*) ; Laxman Singh Dodiya (Cong.-I.), (*Gulana*) ; Shivpratap Singh (Cong.-I.), (*Guna*) ; Harihar Prasad Sharma (Cong.-I.), (*Gunderdehi*) ; Rajendra Prasad (Cong.-I.), (*Gurh*) ; Tarasingh Viyogi (Cong.-I.), (*Gwalior*) ; V. S. Rajoria (Cong.-I.), (*Harda*) ; Motilal Manang (B.J.P.), (*Harsud—S.T.*) ; T. K. Sendhav (B.J.P.), (*Hatpiplya*) ; Snehsalilal Hazari (Cong.-I.), (*Hatta*) ; M. V. Harne (B.J.P.), (*Hoshangabad*) ; Haricharan Verma (Cong.-I.), (*Ichhawar*) ; Chandrashekhar Vyas (Cong.-I.), (*Indore—I*) ; Kanhaiyalal Yadav (Cong.-I.), (*Indore—II*) ; Mahesh Joshi (Cong.-I.), (*Indore—III*) ; Yagyadatt Sharma (Cong.I.), (*Indore—IV*) ; Suresh Seth (Cong.-I.), (*Indore—V*) ; Chauhan Vijaikumar (Cong.-I.), (*Itarsi*) ; Dinesh Chand (Cong.-I.), (*Jabalpur Cantonment*) ; Haji Insyat Mohd. (Cong.-I.), (*Jabalpur Central*) ; Mayadevi (Cong.-I.), (*Jabalpur East—S.C.*) ; Chandrakumar (Cong.-I.), (*Jabalpur West*) ; Bhursuram Nag (Cong.-I.), (*Jagdalpur—S.T.*) ; Kamala Prasad Singh (Cong.-I.), (*Jaisinghnagar—S.T.*) ; G. D. Motisingh Dhurbe (Cong.-I.), (*Jamai—S.T.*) ; Kanwar Bharat Singh (Cong.-I.), (*Jaora*) ; Sheo Prasad (Cong. I.), (*Jarhagaon S.C.*), Luis Beck (Cong.-I.),

---

N.A.—Not available.

(*Jashpur—S.T.*) ; Swami Prasad Pastor (Ind.), (*Jatara*) ; V. K. Saklecha (B.J.P.), (*Jawad*) ; Bapusingh Damar (Cong.-I.), (*Jhabua—S.T.*) ; Ajmer Singh (Cong.-I.), (*Jobat—S.T.*) ; Ramcharan Lal Mishra (Cong.-I.), (*Joura*).

Atmaram Dhurwa (Ind.), (*Kanker—S.T.*) ; Hanumant Singh (Cong.-I.), (*Karera*) ; Kanhaiyalal Sharma (Cong.-I.), (*Kasdol*) ; Rameshchandra Anandrao (Cong.-I.), (*Kasrawad*) ; L. T. Narayan (B.J.P.), (*Katangi*) ; Bodhram (Cong.-I.), (*Katghora*) ; Hamidullah Khan (Ind.), (*Kawardha*) ; Kum. Vimla Verma (Cong.-I.), (*Keolari*) ; Lambodar Beliyar (Cong.-I.), (*Keskal—S.T.*) ; Joga Hadma (B.J.P.), (*Kesloor—S.T.*) ; Purshottamrao Vipat (B.J.P.), (*Khachrod*) ; Domansingh Nagpure (R.P.I.-K.), (*Khairalani*) ; Laxminarain (Cong.-I.), (*Khallari*) ; Gangacharan Mishra (Cong.-I.), (*Khandwa*) ; Ahirwar Nathuram Bhamora (Cong.-I.), (*Khargapur—S.C.*) ; Chandrakant Ramakant (Cong.-I.), (*Khargone*) ; Laxmiprasad Patel (Cong.-I.), (*Kharsia*) ; K. N. P. Govindram (B.J.P.), (*Khategaon*) ; Smt. Rashimdevi (Cong.-I.), (*Kheragarh*) ; Vasudeo Chandrakar (Cong.-I.), (*Khertha*) ; Kanhaiyalal Khubansingh (Cong.-I.), (*Khilchipur*) ; Hariprasad Shukla (Ind.), (*Khujji*) ; H. M. P. Ahirwar (Cong.-I.), (*Khurai—S.C.*) ; Bhushanlal Girmali (B.J.P.), (*Kirnapur*) ; P. S. Kanhaiya Lal (Cong.-I.), (*Kolaras—S.C.*) ; Mankuram Sodi (Cong.-I.), (*Kondagaon—S.T.*) ; Madvi Handaram (Cong.-I.), (*Konta—S.T.*) ; Mathura Prasad Dubey (Cong.-I.), (*Kota*) ; Bhagwandeen (Cong.-I.), (*Kotma—S.T.*) ; Pratapsingh Baghal (Cong.-I.), (*Kukshi*) ; Chandrahas (Cong.-I.), (*Kurud*) ; Panbai (Cong.-I.), (*Kurwai—S.C.*) ; Ramashankar (Cong.-I.), (*Lahar*) ; Surendra Kumar Singh (Cong.-I.), (*Lailunga—S.T.*) ; S. D. Thakur (Cong.-I.), (*Lakhnadon—S.T.*) ; Y. B. Kangai (Cong.-I.), (*Lanji*) ; Gangaram Bandil (B.J.P.), (*Lashkar East*) ; Shitala Sahai (B.J.P.), (*Lashkar West*) ; Baijnath Chandrakar (Cong.-I.), (*Lormi*) ; Bhola (Cong.-I.), (*Lundra—S.T.*).

Ahirwar Laxman Das (Cong.-I.), (*Maharajpur*) ; Maksudanlal (Cong.-I.), (*Mahasamund*) ; Sitaram Sadho (Cong.-I.), (*Maheshwar*) ; Anandilal Chhajalani (Cong.-I.), (*Mahidpur*) ; Vijaya Mohan Tiwari (Cong.-I), (*Mahoouli*) ; Vijay Narayan (Cong.-I), (*Maihar*) ; Vijay (Cong.-I.), (*Majholi*) ; Kapoorchand Pyarelal (C.P.I.), (*Malehra*) ; Vedram (Cong.-I.), (*Malkharoda—S.C.*) ; N. D. Balkavi Bairagi (Cong.-I.), (*Manasa*) ; S. S. Solanki (Cong.-I.), (*Manawar—S.T.*) ; Ramesh Bais (B.J.P.), (*Mandirhasod*) ; Mohanlal (Cong.-I.), (*Mandla—S.T.*) ; Shamsunder Patidar (Cong.-I.), (*Mandsaur*) ; Vijay Singh (Cong.-I.), (*Manendragarh—S.T.*) ; Smt. Champa Devi (Cong.-I.), (*Mangawan*) ; Derhuprasad Dharatlehre (Cong.-I.), (*Marrow—S.C.*) ; Bhanwar Singh (Cong.-I.), (*Marwahi—S.T.*) ; Ramji Mahajan (Cong.-I.), (*Masod*) ; Banshilal (Cong.-I.), (*Masturi—S.C.*) ; Achyutanand (Cong.-I.), (*Mauganj*) ; Rai Singh (Ind.), (*Mehgaon*) ; Ghanshyam Seth Patidar (Cong.-I.), (*Mhuw*) ; Kaptan Singh (Cong.-I.), (*Morar*) ; Maharaj Singh (Cong.-I.), (*Morena*) ; Maniram Barange (Ind.), (*Multai*) ; Gajram Singh (Cong.-I.), (*Mungaoli*) ; Khelandas (Cong.-I.), (*Mungeli—S.C.*) ; Chandra Darshan (Cong.-I.), (*Murwara*) ; Nagendra Singh (B.J.P.), (*Nagod*) ; Laxmi Prasad Uikey (Cong.-I.), (*Nainpur—S.T.*) ; Shambhunath Naik (J.P.), (*Narainpur—S.T.*) ; S. S. Narayan Mushran (Cong.-I.), (*Narsimhapur*) ; Siddumal Dallumal (B.J.P.), (*Narsingharh*) ; U. C. K. Khatik (Cong.-I.), (*Naryaoli—S.C.*) ; Raghunandan Verma (Cong.-I.), (*Neemuch*) ; Tanwanth Keer (Cong.-I.), (*Nepanagar*) ; Raghurajsingh Tomar (B.J.P.), (*Nimarkhodi*) ; Dalpatsingh Uike (Cong.-I.), (*Nivas—S.T.*) ; R. R. Chaturvedi (Cong.-I.), (*Niwari*) ; Ratnesh Solomon (Cong.-I.), (*Nohata*) ; Gyan Singh (B.J.P.), (*Nowrozabad—S.T.*).

Deo Sai (Cong.-I.), (*Pal—S.T.*) ; Phulsingh (Cong.-I.), (*Pallar—S.C.*) ; Sheo Prasad Sharma (Cong.-I.), (*Pamgarh*) ; Bhesham Shah (Cong.-I.), (*Panagar—S.T.*) ; Sekharam Deokaram Patel (B.J.P.), (*Pandhana*) ; Madhavlal Dubey (Cong.-I.), (*Pandhurna*) ; Hat Ram Dubey (Cong.-I.), (*Panna*) ; Damu Patil (Cong.-I.), (*Parasia—S.C.*) ; T. T. Harish Chander (Cong.-I.), (*Paraswada*) ; Chelaram Chandraker (Cong.-I.), (*Patan**) ; Guru Bhagwat Prasad (Cong.-I.), (*Patan*†) ; Rampukar Singh (Cong.-I.), (*Pathalgaon—S.T.*) ; Gopaldas Munnilal (Cong.-I.), (*Patharia—S.C.*); Capt. Jaipal Singh (Cong.-I.), (*Pawai*); Smt. Gangabai (Cong.-I.), (*Perlawad—S.T.*) ; Bhaiya Sahab (Cong.-I.), (*Pichhore*) ; Prem Sai (Cong.-I.), (*Pilkha—S.T.*); Kum. Savita Banerjee (Cong.-I.), (*Piparia*) ; Hari Ballabh Shukla (Cong.-I.), (*Pohari*) ; Chandan Singh (Cong.-I.), (*Premnagar—S.T.*) ; Ambika Singh (Cong.-I.), (*Pushprajgarh—S.T.*) ; Digvijai Singh (Cong.-I.), (*Raghogarh*) ; Ramashray (Cong.-I.), (*Raigaon—S.C.*) ; Krishna Kumar (Cong.-I.), (*Raigarh*) ; Tarunprasad (Cong.-I.), (*Raipur Rural*) ; Swarupchand Jain (Cong.-I.), (*Raipur Town*) ; Gupta Jamnalal (B.J.P.), (*Rajgarh*) ; Jiwanlal Sahu (Cong.-I.), (*Rajim*) ; Kishorilal Shukla (Ind.), (*Rajnandgaon*) ; Barkubhai Chouhan (Cong.-I.), (*Rajpur*) ; Pyarelal (Cong.-I.), (*Rampur—S.T.*) ; Harsh Singh (Cong.-I.), (*Rampur Baghelan*) ; Shantilal Agrawal (Cong.-I.), (*Ratlam Rural*) ; Himmat Kothari (B.J.P.), (*Ratlam Town*), Mahadeoprasad Manoharlal (Cong.-I.), (*Rehli*) ; Muni Prasad (Cong.-I.), (*Rewa*) ; Ramashankar (J.P.‡), (*Ron*).

Suresh Chandra (Cong.-I.), (*Sabalgarh*) ; Shivkumar Jwalaprasad (Cong.-I.), (*Sagar*) ; Prabhudayal Gehlot (Cong.-I.), (*Sailana—S.T.*) ; Smt. Kusaridevi (Cong.-I.), (*Saja*) ; Larang Sai (B.J.P.), (*Samri—S.T.*) ; Dr. Gaurishankar (B.J.P.), (*Sanchi—S.C.*) ; Mohanlal (Cong.-I.), (*Saraipali*) ; Hulasram Manhar (Cong.-I.), (*Sarangarh—S.C.*) ; Amarsingh Kothar (B.J.P.), (*Sarangpur—S.C.*) ; Moolchand Patel (Cong.-I.), (*Sardarpur—S.T.*) ; Kamala Kumari Nareshchandra (Cong.-I.), (*Saria*) ; Dr. Lalta Prasad Khare (Cong.-I.), (*Satna*) ; Revnath Chore (Cong.-I.), (*Saunsar*) ; Prakash (B.J.P.), (*Sawer*) ; Sunderlal Patwa (B.J.P.), (*Sehore*) ; Shobharam Patel (Cong.-I.), (*Sendhwa*) ; Mangal Singh (Cong.-I.), (*Seondha—S.C.*) ; Abdul Rehman Faruqui (Cong.-I.), (*Seoni*) ; Hajarilal Raghuwanshi (Cong.-I.), (*Seonimalwa*) ; Ramsuman, (Cong.-I.), (*Shadora—S.C.*) ; Deshmukh Dhairyashelarao (Cong.-I.), (*Shahpur*) ; Sunderlal Ureti (Cong.-I.), (*Shahpura—S.T.*) ; Tarajoyti Sharma (Cong.-I.), (*Shajapur*) ; Raja Surendra Bahadur (Cong.-I.), (*Shakti*) ; Brijmohandas Maheshwari (B.J.P.), (*Shamsabad*) ; Badri Prasad (Cong.-I.), (*Sheopur*) ; Ganeshram Goutam (Cong.-I.), (*Shivpuri*) ; Dr. Shail Kumar (B.J.P.), (*Shujalpur*) ; Indrajit Kumar (Cong.-I.), (*Sidhi*) ; Ramnath (Cong.-I.), (*Sihawa—S.T.*) ; Smt. Manju Devi (Cong.-I.), (*Sihora*) ; Bansh Mani Prasad (Cong.-I.), (*Singrauli—S.C.*) ; Radheshyam (Cong.-I.), (*Sipat*) ; Rajmani Patel (Cong.-I.), (*Sirmaur*) ; Radharaman Bhargava (B.J.P.), (*Sironj*) ; Kailash Chawla (B.J.P.), (*Sitamau*) ; Sukhi Ram (Cong.-I.), (*Sitapur—S.T.*) ; Krishnapal Sing (Cong.-I.), (*Sohagpur*) ; B. K. K. Malviya (Cong.-I.), (*Sonkatch*) ; Yogendra Singh (B.J.P.), (*Sumawali*) ; Lal Vijay Pratap (Cong.-I.), (*Surajpur—S.T.*) ; Bitthal Bhai Lallubhai (Cong.-I.), (*Surkhi*) ; Rana Natwarsingh (Cong.-I.), (*Susner*) ; Champalal Arya (B.J.P.), (*Suwasra—S.C.*).

Taher Bahai (Cong.-I.), (*Takhatpur*) ; Lal Kiriti Kumar Singh (Cong.-I.), (*Tanakhar—S.T.*) ; D. S. Pahal Sai (Cong.-I.), (*Tapkara—S.T.*) ; Durgadas Suryawanshi (Cong.-I.), (*Tarana*) ; Shriniwas Tiwari (Cong.-I.), (*Teonthar*) ; Kantilal Bhuria (Cong.-I.), (*Thandla*) ; Sardar Singh (Cong.-I.), (*Tikamgarh*) ; Shyamlal Balmiki Pardeshi (Cong.-I.), (*Timarni—S.C.*) ; Dilip Singh (B.J.P.),

---

* Durg Dist. † Jabalpur Dist. ‡ Charan Singh Group.

(Udaipura), Dr. Rajendra Jain (Cong.-I.), (*Ujjain North*), Mahavir Prasad Vashistha (Cong.-I.), (*Ujjain South*) Shanti Sharma (Cong.-I.), (*Umaria*) ; Moharsingh (B.J.P.), (*Vidisha*) ; B. K. Sharma (Cong.-I.), (*Vijayaraghogarh*) ; K. D. Deshmukh (J.P.), (*Waraseoni*).

Nominated : Col. (Miss) Florence Watkins.

MAHARASHTRA LEGISLATIVE ASSEMBLY

Speaker . Saran Shankar Dighe ; *Dy. Speaker* Shankarrao C. Jagtap.

Seats : 281 ; *Party position* : Cong. (I) : 221 ; Cong. (U) : 17 ; Janata Party : 14 ; Bharatiya Janata Party : 14 ; Shetkari Kamgar Paksh : 8 ; Communist Party of India : 2 ; Communist Party (Marxist) : 2 ; Republican Party of India (Khobragade) : 1 ; Independent : 1 ; Nominee : 1 ; Women Members : 20.

Sirdam Dattatray Deshmukh (Cong.-I.), (*Achalpur*) ; R. Jiblaji Katekaye (Cong.-I.), (*Adyate*) ; Maroti Devrao Selke (Cong.-I.), (*Ahmednagar North*) ; S. M. I. Aziz (Cong.-I.), (*Ahmednagar South*) ; Kesawrao Nanasaheb Deshmukh (S.K.P.), (*Ahmedpur*) ; Smt. Parwathibai Gurlingappa Malgonda (Cong.-I.), (*Akkalkot*) ; Mohd. Hussein Khan (Cong.-I.), (*Akola*) ; Manohar Bhikaji Tayde (Cong.-I.), (*Akot*) ; Rameshbhai Dhikya Paura (Cong.-I.), (*Akrani—S.C.*) ; Dattatray Narayan Patil (S.K.P.), (*Alibag*) ; Gulabrao Wamanrao Patil (J.P.), (*Amalner*) ; Balchandra Y. Kulkarni (Cong.-I.), (*Ambad*) ; Nakul Pundalik Patil (Cong.-I.), (*Ambarnath*) ; Kisanrao Wankhele (J.P.), (*Ambegaon*) ; Mahadevrao Sukaji Sivankar (B.J.P.), (*Amgaon*) ; Surendra Chatrapal Bhayar (Cong.-I.), (*Amravati*) ; Chandrakant Tripathi (Cong.-I.), (*Andheri*) ; Baburao Madavi (Cong.-I.). (*Armori—S.C.*) ; Shivchand G. Chudewale (Cong.-I.), (*Arvi*) ; Bhimrao Anantrao Dhonde (Cong.-I.), (*Ashti*) ; Keshavrao V. Awthale (Cong.-I.), (*Aurangabad East*) ; Abdul Azim (Cong.-I.), (*Aurangabad West*) ; S. V. Utge (Cong.-U.), (*Ausa*) ; Smt. Shakuntala Nandkishore Sharma (Cong.-I.), (*Badnapur*) ; Ramkrishna Rao Meghe (Cong.-I.), (*Badnera*) ; Lakshman Tataram Pawar (Cong.-I.), (*Baglon*) ; Laxmanrao Tayade (Cong.-I.), (*Balapur*) ; S. B. Zakaria (Cong.-I.), (*Bandra*) ; Saratchandra Govindrao Pawar (Cong.-U.), (*Baramati*) ; Baburao Madhav Narke (Cong.-I.), (*Barsi*) ; Ganesh N. Dhutgaokar (Cong.-I.), (*Basmat*) ; Balaji Kathod Bhagat (Cong.-I.), (*Belapur*) ; Ramchandra Janardhan Devtale (Cong.-I.). (*Bhadravati*) ; Madhavrao T. Dalal (Cong.-U.). (*Bhandara*) ; Dr. Waman Ramchandra Sirekar (Cong.-I.), (*Bhandup*) ; Aminuddin A. A. Penwale (Cong.-I.), (*Bhawanipeth*) ; Sampathrao Annasaheb Chawan (Cong.-I.). (*Bhilwadiwanki*) ; Rajendra Sahebrao Jagtap (Cong.-U.), (*Bhir*) ; Gulam Mohamed Momin, (Cong.-I.), (*Bhiwandi*) ; Balajirao Gopalrao Deshmukh (Cong.-I.), (*Bhokar*) ; Ranganath Shivrao Patil (Cong.-U.), (*Bhokardon*) ; Shashikant R. Kadam (Cong.-I.). (*Bhopodi*) ; Anant Rao N. Thopate (Cong.-I.), (*Bhor*) ; A. Yasin Rajmohmed (Cong.-I.), (*Bhusawal*) ; Balwantrao Amrutrao Chawan (Cong. U.), (*Biloli*) ; Arun Vishnu Diwekar (Cong.-I.), (*Borgaon-Manju*) ; Ramchandra Damodar Naik (B.J.P.). (*Borivli*) ; Suresh Chintaman Khanorkar (Ind.), (*Brahmapuri*) ; Sakkaram Vithoba Aher (Cong.-I.), (*Buldana*)

Dinkar Diwan Chawan (Cong. U.), (*Chalisgaon—S.C.*) ; Vithalrao Kaljirao Chawan (Cong.-I.), (*Chandgao*) ; Dr. N. K. Gaikwad (Cong.-I.). (*Chandwad*) ; Yeshwantrao Gangaramji Serekar (Cong.-I.), (*Chandur*) ; Nareshkumar Chunnilal Pugliya (Cong.-I.), (*Chandrapur*) ; Chandmal Rajmal Lodha (Cong.-I.), (*Chausala*) ; Hashu Parsram Advani (B.J.P.), (*Chembur*) . Bharat Rajbao Bondre (Cong. U.), (*Chikhali*) ; Smt. Yashodhara Bhagiradhiji Bajaj (Cong.-I.), (*Chimur*) ; Shamim Ahmed (Cong.-I.). (*Chinchpokli*) ; Rajaram Keshav Shinde (Cong.-I.). (*Chiplun*) ; Smt. Saratchandrikabai S. Patil (Cong.-I.). (*Chanda*) ; Omprakash Vabal (Cong. I.), (*Colaba*) ; Dr. Baliram Waman Hirey (Cong.-I.), (*Dabhadi*) ; Smt. Sarayoo Govind Thakore (Cong.-I.), (*Dadar*) ; Mahadev Gopal Kadu (Cong.-I.), (*Dahanu—S.T.*) ; Gangaram Daulat Sakpal (J.P.), (*Dapoli*) ; Harish Rameshwar Mandhawa (Cong.-I.), (*Darwha*) ; Dr. Shankarrao Krishnarao Bhobde, (Cong.-I.), (*Daryapur*) ; Amrut Gangaram Rane (Cong.-I.), (*Deogad*) ; Babulal Soma Ahere (Cong.-U.), (*Deolali—S.C.*) ; Premnand Aavle (Cong.-I.), (*Dharavi—S.C.*) ; Krishnarao Bajirao Jagdale (Cong.-U.), (*Dhond*) ; Smt. Kamalabai Chagganlal Ajmera (Cong.-I.), (*Dhule*), Nanasaheb Narayanrao Embedwar (Cong.-I.), (*Digras*) ; Hari Shankar Mahale (J.P.), (*Dindori—S.T.*) ; Smt. Pratibha Devisinh Patil (Cong.-I.), (*Edlabad*) ; Smt. Parubai Chandrabhan Vagh (Cong.-I.), (*Erandol*) ; Maroti Sainu Kowase (Cong.-I.), (*Gadchiroli—S.T.*) ; Shivling Shivyogi Ghali (Cong.-I.), (*Gadhinglaj*) ; Janoba Hari Gaikwad (S.K.P.), (*Gangakhed—S.C.*) ; Ashok Rajaram Patil (Cong.-I.), (*Gangapur*) ; Madhavrao Shivajrao Pawar, (Cong.-I.), (*Georai*) ; Liladhar Samji Vyas (Cong.-I.), (*Ghatkopor*) ; Smt. Rajkumari Gopalnarayan Bajpayi (Cong.-I.), (*Gondia*) ; C. M. Sharma (Cong.-I.), (*Goregao*) ; Girijashankar Sinh H. Nagpure (Cong.-I.), (*Goregaon*) ; Ramchandra Sadashiv Bendal (Cong.-I.), (*Guhagar*) ; Smt. Suryakant J. Patil (Cong.-I.), (*Hadgaon*) ; Motiram S. Pawar (Cong.-I.), (*Haveli*) ; Arvind Tulsiram Kamle (Cong.-I.). (*Heir*) ; Dhanraj Lakshmanrao Kumbare (Cong.-I.), (*Hinganghat*) ; Sahebrao Shankarrao Desh (Cong.-I.), (*Hingoli*) ; Kallappa Baburao Awade (Cong.-U.), (*Ichalkaranji*) ; Bithalrao Ganpat Ghare (Cong.-I.), (*Igatpuri—S.T.*) ; Rajendra Kumar Baburao Gholap (Cong.-I.), (*Indapur*).

Dr. Shradha Prabhakar Thapre (Cong.-I.), (*Jalamb*) ; Suresh Bhikamchand Jan (Cong.-I.), (*Jalgaon*) ; Ramkishan Ramchandra Dayma (Cong.-I.), (*Jalna*) ; Ishwarlal S. Jain (Cong.-U.), (*Jamner*) ; Dhodiba Bhikoba Kadam (Cong.-U.), (*Jaoli*) ; Jayanth Ishwar Sohney (Cong.-I.), (*Jath—S.C.*) ; Lahanu Shidba Kom (C.P.I.-M.), (*Jawhar*) ; Manikrao Keshavrao Bhamble (Cong.-I.), (*Jintur*) ; Dilip Damdhere (Cong.-U.), (*Junnar*) ; Vikramsinh J. Khadge (Cong.-I.), (*Kagal*) ; Vinayak Yadavrao Bhosle (Cong.-I.), (*Kalamal—S.C.*) ; Smt. Rajni S. Sawant (Cong.-I.), (*Kalamnuri*) ; Bhagwantrao Manikrao Gaikwad (Cong.-I.). (*Kalmeshwar*) ; Arjun Tulsiram Pawar (Cong.-I.), (*Kalwan—S.T.*) ; R. Ganesh Kapse (B.J.P.), (*Kalyan*), Sureshbabu B. Devtale (Cong.-I.), (*Kamptee*) ; Iswarrao Narayanrao Bhosikar (Cong.-I.), (*Kandhar*) ; Anupchand Khimchand Shah (Cong.-I.), (*Kandivli*) ; Raibhan Rambhaji Jadhav (Cong.-U.), (*Kannad*) ; Pandurang Dadasaheb Patil (Cong.-U.), (*Karad North*) ; Vilasrao Balkrishna Patil (Cong.-U.), (*Karad South*) ; Ramkrishna Gagaramji Rathi (Cong.-I.), (*Karanja*) ; Dagdu Sakharam Nikalje (Cong.-U.), (*Karjat—S.C.*) ; Namdeorao M. Jagtap (Cong.-U.). (*Karmala*) ; Digvijay Bhaosaheb Khanvilkar (Cong.-I.), (*Karvir*) ; Arvind Dattatray Lele (B.J.P.), (*Kasbapeth*) ; Dr. Shrikant Ramchandra Jichkar (Cong.-I.), (*Katol*) ; Vithal Shripati Patil (Cong.-I.), (*Kavte Mahakal*) . Gangadhar Nilkhant Swami (Cong.-I.), (*Kej—S.C.*) ; Shivaji Shivramji Moghe (Cong.-I.), (*Kelapur—S.T.*) ; Thukaram Eknath Purve (Cong.-I.), (*Khalapur—S.C.*) ; Pandurang Pundalik Phutkar (B.J.P.), (*Khamgaon*) . Hanmantrao Y. Patil (Cong.-I.), (*Khanapur*), Keshavrao S. Patil (Cong.-I.), (*Khatav*) ; Thukkaram Baburao Kadam (Cong. I.). (*Khed*) , Ram Janardhan Kandge (Cong. U.), (*Khed Alandi*) . Meghji Hamsaraj Chedda

(Cong.-I.), (*Kherwadi*); Premkumar Shankardatt Sharma (B.J.P.), (*Khetwadi*); Kesawrao Champatrao Pachpute (Cong.-I.), (*Kinwat*); Lalsaheb B. Yadav (Cong.-I), (*Kolhapur*); Shankarrao Genuji Kohle (Cong.-I.), (*Kapangao*); Shankarrao Chimajirao Jagtap (Cong. U), (*Koregaon*); Datta Samant (Ind.), (*Kurla*); Rohidas Chudaman Patil (Cong.-I.), (*Kusumb*); Hiralal N. Bhaiya (Cong.-I.), (*Lakhandur*); Vilasrao D. Deshmukh (Cong.-I.), (*Latur*).

Dhanaji Ganpatrao Sathe (Cong.-I.), (*Madha*); Chandrakanth K. Deshmukh (Cong.-I.), (*Mahad*); F. M. Pinto (J.P.), (*Mahim*); Ram Jankidas Padangle (Cong.-I.), (*Malad*); B. A. Desai (Cong.-I.), (*Malabar Hill*); Nihal Ahmed S. Usman (J.P.), (*Malegaon*); Kisanlal Natmal Sancheti (B.J.P.), (*Malkapur*); Vijaysinh S. Mohite (Cong.-I.), (*Malsiras*); Keshav Venkatesh Rane (Cong.-I.), (*Malwan*); Vishnu Tathoba Sonavane (Cong. U), (*Man—S.C.*); Smt. Vimaladevi Gnandev Borade (Cong.-I.). (*Mangalvedha—S.C.*); Ashok Ganpat Savle (Cong.-I.). (*Mangaon*); Gajdhar Ramsinh Rathod (Cong. U). (*Mangrulpir*); G. Sitaramji Dak (Cong.-I.), (*Manjalegaon*); V. Subrahmanian (Cong.-I.), (*Matunga*); V. S. G. Patil (Cong.-I.), (*Maval*); Atmaram T. Bhosle (Cong.-I.), (*Mazagaon*); Ramrao Gopalrao Janak (Cong.-I.), (*Medshi*); Kisanrao Tukaram Sangle (Cong.-I.), (*Mehekar*); Narayan N. Patel (Cong.I-), (*Melghat—S.T.*); Mohanrao Ganpatrao Shinde (Cong.-I.), (*Miraj*); Chandrakant D. Niwalkar (S.K.P.), (*Mohal*); Smt. Kokilbai Jagannath Gawde (Cong.-I.), (*Morshi*); Sahebrao Sakoji Baradkar (Cong.-I.), (*Mudkhed*); N. S. Ravangaokar (Cong. U), (*Mukhed—S.C.*); Vidhura Vithoba Nawale (Cong. U), (*Mulshi*); Gaurishankar S. Trivedi (Cong. I), (*Mulund*); Krishnakanth Shivbhai Patel (B.J.P.), (*Mumbadevi*); Santaram Gopal Gholap (Cong.-I.), (*Murbad*); Suresh Balji Kanoth (Cong.-I.), (*Murtizapur*); Madhukar Kashinath Pichad (Cong.-I.), (*Nagar-Akola—S.T.*); Sayyad Ahmed (Cong.-I.), (*Nagpada*); Yakub Kamar Khan Mohmed (Cong.-I.), (*Nagpur Centre*); Satish Chaturvedi (Cong.-I.), (*Nagpur-East*); Survakanth J. Dongre (R.P.I.), (*Nagpur-North—S.C.*); Bhanwarilal B. Purohit (Cong.-I.), (*Nagpur-South*); G. M. Awari (Cong.-I.), (*Nagpur-West*); Ram Arjun Mahadik (Cong.-I.), (*Naigaon*); Kamal Kishore Nanasaheb Kadam (Cong. U), (*Nanded*); Jagannath Murlidhar Dhatrak (Cong.-I.), (*Nandgaon*); Ramesh P. Valvi (Cong.-I.), (*Nandurbar—S.T.*); Santaram Kondaji Vavre (Cong.-I.), (*Nasik*); Manikrao H. Gavith (Cong.-I.), (*Navapur—S.T.*); Babasaheb Anantrao Bhosle (Cong.-I.), (*Nehru Nagar*); Shivajirao B. Patil (Cong.-I.), (*Nilanga*); Malojirao Sadashivrao Mogal (Cong. S.), (*Niphad*), Vacant (*Omarga*); Smt. Jaywanti Behen N. Mehta (B.J.P.), (*Opera House*).

Krishnarao Maharu Patil (Cong.-I.), (*Pachora*); Shivajirao Sahebrao Kale (Cong.-I.), (*Paithan*); Vishnu Gopal Valvi (Cong.-I.), (*Palghar—S.T.*); Pandurang Bhanudas Dingre (Cong.-I.), (*Pandharpur*); Yeshwant Eknath Patil (Cong.-I.), (*Panhala*); Dinkar Balu Patil (S.K.P.), (*Panvel*), Chandansinh B. Saddhival (Cong.-I.), (*Paranda*); Abdul Rehman Khan (Cong.-I.), (*Parbhani*); Satish Motiram Pednekar (Cong.-I.), (*Parel*); Babasaheb Appaji Tube (C.P.I.), (*Parner*); Bhaskar Rajaram Patil (Cong.-I.), (*Parola*), Ramprasad V. Bhorade (Cong.-I.), (*Partur*), Vasant Chottelal Chauhan (Cong.-I.), (*Parwati—S.C.*); Babanrao Daulathrao S. Desai (Cong.-I.), (*Patan*); Dagauba Balaji Zodgaokar D. Dhakne (J.P.), (*Pathardi*); Mohan Mahadev Patil (S.K.P.), (Cong.-I.), (*Pathari*), Suryajirao Shankarrao Kadam (Cong. U), (*Penn*); Manik Mahadevrao Sabane (Cong.-I.), (*Phaltan*); (*Pulgaon*); Vithal Baburao Tupe (J.P.), (*Pune-Cantt.*) Sambajirao Ramchandra Kunjir (Cong. U), (*Purandhar*) Sudhakar R. Naik (Cong.-I.), (*Pusad*); Haribao Ramchandra Kadav (Cong.-I.), (*Radhanagar*); Prasad Baburao Tanpure (Cong.-I.), (*Rahuri*); Narayan Sakharam Tawde (J.P.), (*Rajapur*); Prabhakarrao B. Mamulkar (Cong.-I.), (*Rajura*); Madhukar Dhanshamrao Kimtkar (Cong.-I.), (*Ramtek*); Smt. Kusum Ramchandra Abhyankar (B.J.P.), (*Ratnagiri*); Ramkrishna Raghuram Patil (Cong.-I.), (*Raver*); Gopinath Pandurang Mundhe (B.J.P.), (*Renapur*); Jayant Krishnamurari Katakwar (Cong.-I.), (*Sakoli*); Sukhram Burya Malusare (Cong.-I.), (*Sakri—S.T.*); Jagannath Rao Jadhav (J.P.), (*Sangameshwar*); Bhikaji J. Khathal (Cong.-I.), (*Sangamner*); Smt. Shalinibai V. Patil (Cong.-I.), (*Sangli*); Ganpathrao A. Deshmukh (S.K.P.), (*Sangola*); S. Shankarrao Bondre (Cong. U.), (*Sangrul*); C. D. Ummachan (Cong.-I.), (*Santa Cruz*), Mahadevrao L. Tajne (Cong.-I.), (*Saoli*); Ramji Chimanji Naik (Cong.-I.), (*Saoner*); Abhaisingh S. Maharaj Bhosle (Cong.-I.), (*Satara*); Bhaurao Raghoji Patil (Cong.-I.), (*Sewree*); Purushottam Kalu Patil (J.P.), (*Shahada*); Mahadu Nago Barora (Cong. U), (*Shahapur*); Babasaheb Yashwant Rao Patil (Cong.-I.), (*Shahuwadi*); Sambhajirao Shankarrao Phatke (Cong.-I.), (*Shevgaon*); Raosaheb Bapusahib Tamkar (Cong.-I.), (*Shinganapur*); Dinkarrao Bapusaheb Yadav (S.K.P.), (*Shirala I*); Shivajirao Bapusaheb Deshmukh (Cong.-I.), (*Shirala II*); Annasaheb Sarangdhar Mhaske (Cong.-I.), (*Shirdi*); Indrasingh Chandrasingh Rajput (Cong.-I.), (*Shirpur*); Lakshman Sonopanth Joshi (B.J.P.), (*Shivajinagar*); Babanrao Bhikkaji Panchpute (Cong.-I.), (*Shrigonda*); Bhanudas Kashinath Murkute (Cong.-I.), (*Shrirampur*); A. R. Antulay (Cong.-I.), (*Shriwardhan*); Manikrao Palodkar (Cong. U), (*Sillod*); Rangrao Madhavrao Patil (Cong.-I.), (*Sind Khed*); Bhaskarrao Sampathrao Shingwane (Cong.-I.), (*Sindkhedraja*); Suryabhau Sukhdeo Gadakh (Cong. U), (*Sinnar*); Penta Rama Talandi (Cong.-I.), (*Sironcha—S.T.*); Suryakant Gulabrao Palande (Cong. U), (*Sirur*); Sushilkumar Sambhaji Rao (Cong.-I.), (*Solapur-N—S.C.*); Gurunath Shivappa Patil (Cong.-I.), (*Solapur City*); Bapurao Channappa Chakote (Cong. U), (*Solapur-N*); Dinanath Shirppa Kamle (Cong.-I.), (*Solapur-S*); Jiwa Pandu Gaweeth (C.P.M.), (*Surgana*).

Abhimanyu Noorji Walvi (Cong.-I.), (*Taloda—S.T.*); Dinkar Krishnaji Patil (Cong.-I.), (*Tasgaon*); Kanti Kisan Koli (Cong.-I.), (*Thane*); Sukhdeo Vithobhaji Dongre (Cong.-I.), (*Tiroda—S.C.*); Chandrakanth Ramchandra Thakur (Cong.-I.), (*Tiwsa*); Mrs. Lalita Rao (Cong.-I.), (*Trombay*); Sidramappa Nagappa Alure (Cong.-I.), (*Tuljapur*); Subhashchandra Narayanraoji Karemore (Cong.-I.), (*Tumsar*); Balasaheb Kishanrao Jadhav (Cong.-I.), (*Udgir*); Sitaldas Khubchand Harchandani (B.J.P.), (*Ulhasnagar*); Rajaram Premnath Patil (Cong. U), (*Umarga*); Tryambakrao Gopalrao Deshmukh (Cong.-I.), (*Umarkhed*); Mahammad Amin Khandvaani (Cong.-I.), (*Umerkhadi*); Bhausahib Govindrao Mulk (Cong.-I.), (*Umred*); Padamsinh Bajirao Patil (Cong. U), (*Usmanabad*); Shankar Aaba Gowari (Cong.-I.), (*Vada—S.T.*); Jayawant Gangaram Awale (Cong.-I.), (*Vadgaon—S.C.*); Govindrao Vamanrao Adik (Cong. U), (*Vaijapur*); Bapurao Harbaji Panghate (Cong.-I.), (*Vani*); S. N. Desai (Cong.-I.), (*Vengurla*); Pranlal Vohra (J.P.), (*Vile Parle*); Mrs. Tarabai Vartak (Cong.-I.), (*Vasai*); Prataprao Baburao Bhosle (Cong. U), (*Wai*); Ambadas Bapurao Sable (Cong.-I.), (*Walgaon*) Vishwasrao Atmaram Patil (J.P.), (*Walwa*); Pramod Bhahuraoji Shende (Cong.-I.), (*Wardha*); Rameshwar Prabhati Dhendule (*Washim—S.C.*); Sharad Shankar Dighe (Cong.-I.), (*Worli*); Jeevram Tukkaram Mahajan (Cong. U), (*Yawal*); Janardhan D. Patil (Cong.-I.) (*Yeola*); Mrs. Vijayatai J. Dhote (Cong.-I.), (*Yavatmal*) G. Woodman (*Anglo Indian Nominee*).

MAHARASHTRA LEGISLATIVE COUNCIL

Chairman : R. S. Gavai ; *Vice-Chairman :* A. G. Pawar.

Seats : 78 ; *Party Position :* Congress (I) ; 40 : Congress (U) : 9 ; Janata Party : 3 ; Shetkari Kamgar Paksha : 3 ; Bharatiya Janata Party : 7 ; Shiv-Sena : 3 ; Republican Party of India : 2 ; Independents : 10 ; Vacant : 1. Women Members : 6.

Local Authority Constituencies (22) : — Eknath Buvasaheb Nimbalkar (Cong. U), (*Ahmednagar*) ; Rambao Baburao Lingade (Ind.), (*Akola and Buldana*) ; Annasaheb Keshav Deshmukh (Cong.-I.), (*Amravati*) ; Baburao Kale (Cong.-I.), (*Aurangabad*) ; Kevalchand Kanhailal Jain (Cong.-I.),)*Bhandara*) ; Abdul Shafi (Cong.-I.), (*Chanda and Rajura*) ; Vacant (*Dhule*) ; Manohar G. Joshi (S.S.), (*Greater Bombay*) ; Rajaram A. Patil (J.P.), (*Greater Bombay*) ; Dajiba Parvat Patil (Cong.-I.), (*Jalgaon*) : Dasarath Narsingh Kamble (Cong.-I.), (*Kolhapur*) : Prabhakar N. Dharkar (Cong. U), (*Kulaba*) ; Haribao Jagobhai Naik (Cong.-I.), (*Nagpur*) ; Pandit Dharm Patil (Ind.), (*Nasik*) ; Shyamrao Sakharam Kadam (Cong. U), (*Parbhani and Nanded*) ; Vishwanath Baosaheb Patil (Cong.-I.), (*Pune*) ; Balchandra Ananth Sawant (Cong.-I.), (*Ratnagiri*) ; S. F. S. Makdum Pasha (Cong.-I.), (*Sangli-Satara*) ; Smt. Prabhawati S. Zadbuke (Cong.-I.), (*Sholapur*) ; Pandurang Shivram Deshmukh (Cong.-I.), (*Thane*) ; Lakshmanrao Shankarrao Deshmukh (Cong.-I.), (*Usmanabad*) ; Jagannathrao Ramchandrarao Danhge (Cong.-I.), (*Wardha-Yeotmal*).

Elected by Legislative Assembly (30) : Ramrao Wamanrao Adik (Cong.-I.) ; Arjun Shripat Kasture (Cong.-I.) ; Smt. Amtul Latif Zaferali Kazi (Cong.-I.) ; Ramkrishna Suryabhanji Gavai (R.P.I.) ; Ganpatrao Githe (Cong.-I.) ; Vinod Gupta (B.J.P.) ; Ramchandra Jagoba Garalfkar (Cong. U) ; Smt. Aalujal Chibbar (Cong.-I.) ; Vyangatrao Narsimhrao Jadhav (Cong.-I.) ; Jayant Shridhar Tilak (Cong.-I.) ; Narendra Mahipati Tidke (Cong.-I.) ; Rammanohar Tripathi (Cong.-I.) ; Jawaharlal Amolchand Darda (Cong.-I.) ; Kamlaprasad Parmanand Dube (Cong.-I.) ; Balbhimrao Narsimharao Deshmukh (S.K.P.) ; Shankarrao Sitaram Deshmukh (Cong.-I.) ; Pramod Nawalkar (S.S.) ; Arjun Giridhar Pawar (R.P.I.) ; Annasaheb Pandurang Patil (Cong.-I.) ; Baburao Kondaji Patil (Cong.-I.) ; Govindrao Madhavrao Patil (Cong.-I.) ; Smt. Mangala Gunvantrai Parikh (J.P.) ; Shamrao Lakshman Page (Cong.-I.) ; Ramchandra Sobar Bandharkar (S.K.P.) ; Wamanrao Shivram Mahadik (S.S.) ; Dattatray Raghobaji Meghe (Cong. U) ; Marutirao Padmakar Meher (Cong.-I.) ; Smt. Pramilaben Bhanushankar Yagnik (Cong.-I.) ; Smt. Prabha Rao (Cong.-I.) ; Pandurang Bapuji Salunke (Cong. U).

Teachers' Constituencies (7) : Prabhakar Anant Sant (Ind.), (*Bombay Divn.*) ; Motiram Roopa Chaudhary (Ind.), (*Bombay Divn.*) ; D. K. Deshmukh (Ind.), (*Marathwada Divn.*) ; Narayan Gnandev Patil (S.K.P.), (*Pune Divn.*) ; Tukaram Narayan Mathade (Ind.) (*Pune Divn.*) ; Prabhakar Yashwant Datar (Ind.), (*Vidarbha*) ; Dattatray Eknath Lanke (Ind.), (*Vidarbha*).

Graduates' Constituencies (7) : Gajanand Balchandra Kanitkar (B.J.P.), (*Gr. Bombay*) ; Madhu Devlekar (B.J.P.), (*Gr. Bombay*) ; Ganesh Prabhakar Pradhan (J.P.), (*Maharashtra*) ; Smt. Kumud Madhav Rangnekar (B.J.P.), (*Maharashtra*) ; Baorao Tulsiram Deshmukh (Ind.), (*Vidarbha*) ; Gangadhar Kashiram Fatnavis (B.J.P.), (*Vidarbha*) ; Motiramji Udabanji Lahane (B.J.P.), (*Vidarbha*).

Nominated (12) : Sardar Parshsing Ralasing Kalsi (Cong.-I.) ; Mohanlal Deepchand Golecha (Cong.-I.) ; Parshuram Maruti Chavan (Cong.-I.) ; Arun Moreshwar Donde (Cong.-I.) ; Ulhas Shivram Pawar (Cong.-I.) ; N. D. Manohar (Cong. U) ; M. G. Vaidya (B.J.P.) ; Atur Sangtani (Ind.) ; Rikhabchand K. Sharma (Cong.-I.); Ravindra Raut (Cong.-I.) ; Jaywantrao Bhosle (Cong.-I.).

MANIPUR LEGISLATIVE ASSEMBLY

Speaker: Y. Yaima Singh ; *Dy. Speaker:* W. Angou Singh.

Seats : 60. *Party Position :* Congress (I) : 39 ; Janata : 2 ; Cong. (U) : 12 ; Communist Party of India : 5 ; Communist Party of India (Marxist) : 1 ; Manipur People's Party : 11 ; Vacant : 1.

Loitongbam Amujon (Cong.-I.), (*Andro*) ; K. Pulinkanta Singh (Cong.-U.), (*Bishenpur*) ; Satkholal (Cong.-I.), (*Chandel—S.T.*) ; Somi A. Shimray (M.P.P.), (*Chingai—S.T.*) ; K. Vungzaliam (Cong.-I.), (*Churachandpur—S.T.*); Waikhom Jagor Singh (Cong.-I.), (*Heingang*) ; M. Ibotombi Singh (Cong.-I.), (*Heirok*) ; Holkhomang (Cong.-I.), (*Henglep—S.T.*) ; Elangbam Babudhom Singh (C.P.I.), (*Hiyanglam*) ; Devendra Singh (Cong.-I.), (*Jiribam*) ; Kshetri Irabot (C.P.I.), (*Kakching*) ; Thapa Kishore (Cong.-I.), (*Kangpokti*) ; R. Vio (Cong.-I.), (*Karong—S.T.*) ; Md. Abdul Matalip (Cong.-I.), (*Keirao*) ; L. Manaobi (M.P.P.), (*Keisamthong*) ; Thokchom Achouba Singh (C.P.I.), (*Khangabok*) ; Y. Kulla Singh (C.P.I.-M.), (*Khundrakpam*) ; C. Manihar Singh (M.P.P.), (*Khurai*) ; Henam Lokhon (Cong.-I.), (*Konthoujam*) ; Md. Muhamuddin (Cong.-I.), (*Kshetrigao*) ; K. Manimohan Singh (Cong.-I.), (*Kumbi*), Pheroijam Parijat (C.P.I.), (*Lamlai*) ; Puritsabam Sagor (Cong.-I.), (*Lamsang*) ; Okram Joy (M.P.P.), (*Langthabal*), Md. Helaluddin Khan (Cong.-I.), [illegible] Soshow Lorho (Cong.-I.), (*Mao—S.T.*), Khumujam Amutombi (M.P.P.), (*Mayang Imphal*) ; Mairenbam Koireng (J.P.), (*Moirang*) : Tounaojam Choba (Cong-I.), (*Nambol*) ; Wahengban Angou (Cong.-I.), (*Naoriya Pakhanglakpa*) : Gaikhangam (M.P.P.), (*Nungba—S.T.*) ; Yumnam Yaima Singh (Cong.-I.), (*Oinam*) ; L. Chandramani Singh (M.P.P.), (*Patsoi*) . Rishang Keishing (Cong.-I.), (*Phungyar—S.T.*) ; Moirangthem Kumar (Cong.-I.), (*Sagolband*) : Ngulkhohao (M.P.P.), (*Saikot—S.T.*) ; Khonsai Holkholet (Cong.-I.), (*Saikul—S.T.*) : L. S. John (Cong.-I.), (*Saitu—S.T.*) : Khwairakpam Chaoba (M.P.P.), (*Sekmai—S.C.*): Thangkhanlal (Cong.-I.), (*Singhat—S.T.*), I. Tompok Singh (Cong.-I.), (*Singjamei*) : Mayanglambam N. Singh (C.P.I.), (*Sugnu*) : Luikang (Cong.-I.), (*Tadubi—S.T.*) ; I. D. Dijuanang (Cong.-I.), (*Tamei—S.T.*) ; Jangam Lung (Ind.), (*Tamenglong—S.T.*) ; Jainson Hokip (Cong.-I.), (*Tengnoupal—S.T.*); H. Kangjamba Singh (Cong.-I.), (*Thanga*); Koijam Radhabinod (Cong.-I.), (*Thangmeiband*). Phungzathang (Cong.-I.), (*Thanlon—S.T.*) . Oinam Tomba Singh (*Thongju*) ; Th. Krishna Singh (Cong.-I.), (*Thoubal*); Ngurdinglien (Cong.-I.), (*Tipaimukh—S.T.*) : Yangmaso Shaiza (J.P.), (*Ukhrul—S.T.*) ; Paonam Achou (Cong.-I.), (*Uripok*) ; Md. Abdul Salam (M.P.P.), (*Wabgai*) ; Laishram Saratchandra (Cong.-I.), (*Wangjing Tentha*) ; Yungkham Irabot (Cong.-I.), (*Wangkhei*) ; Pangambam Munal (M.P.P.), (*Wangkhem*) ; Chungkham Rajmohan (Cong.-I.), (*Wan*[illegible] R. K. Dorendra Singh (Cong.-I.), (*Yaiskul*)

MEGHALAYA LEGISLATIVE ASSEMBLY

Speaker : **Winstone Syiemiong** ; *Dy. Speaker :* **Mrs. Miriam D. Shira.**

Seats : 60. *Electorate :* 585,023 ; *Votes polled :* 393,521. *Party Position :* United Meghalaya Parliamentary Democratic Forum 38 (excluding Speaker) ; All Party Hill Leaders' Conference 17 ; Public Demands Implementation Convention 2 ; Janata 1 ; Vacant 2 ; Woman member 1.

Bhadreswar Koch (UMPDF), (*Ampatigiri*) ; W. A. Sangma (UMPDF), (*Baghmara*) ; Grohonsing Marak (APHLC), (*Bajengdoba*) ; Jackman Marak (APHLC), (*Chokpot*) ; Bronson W. Momin (APHLC), (*Dadenggiri*) ; Armison Marak (APHLC), (*Dalamgiri*) ; Mukul Das (U.M.P.D.F.), (*Dalu*) ; Jungai Khongjoh (APHLC), (*Dienglieng*) ; P. Ripple Kyndiah (APHLC), (*Jaiaw*) ; Snomick Kalwing (UMPDF), (*Jirang*) ; Tylli Kyndiah (APHLC), (*Jowai*) ; Prithington Sangma (UMPDF), (*Kharkutta*) ; Alfrien Marak (APHLC), (*Kherapara*) ; Bhaskar Choudhury (UMPDF), (*Laban*) ; Peter Garnett Marbaniang (UMPDF), (*Laitumkhrah*) ; Bakstarwell Wanniang (UMPDF), (*Langrin*) ; Brington Buhai Lyngdoh (UMPDF), (*Langkyrdem*) ; Vacant (*Mahendraganj*) ; Fuller Lyngdoh Mawnai (UMPDF), (*Mairang*) ; Upstar Kharbuli (UMPDF), (*Malki-Nongthymmai*) ; Martin Narayan Majaw (PDIC), (*Mawhati*) ; Darwin D. Pugh (APHLC), (*Mawkhar*) ; Rowell Lyngdoh (UMPDF), (*Mawkyrwat*) ; Stanlington David Khongwir (UMPDF), (*Mawlai*) ; Dhrubanath Joshi (UMPDF), (*Mawprem*) ; Karadoklie E. Tariang (APHLC), (*Mawsynram*) ; Ledishon Nongsiang (UMPDF), (*Mawthengkut*) ; Beninstand G. Momin (UMPDF), (*Mendipathar*) ; Lambourne Kharlukhi (UMPDF), (*Mylliem*) ; H. Britainwar Dan (UMPDF), (*Nartiang*) ; Albin Lamare (APHLC), (*Nongbah-Wahiajer*) ; D. D. Lapang (UMPDF), (*Nongpoh*) ; Dominick Roblin Nongkynrih (PDIC), (*Nongkrem*) ; Maham Singh (UMPDF), (*Nongshken*) ; Winstone Syiemiong (UMPDF), (*Nongspung*) ; Endro Lawphniaw (UMPDF), (*Nongstoin*) ; Tubarlin Lyngdoh (UMPDF), (*Pariong*) ; Akramozzaman (UMPDF), (*Phulbari*) ; Dr. B. K. Roy (UMPDF), (*Pynthorumkhrah*) ; Mozibar Rahman (Janata), (*Rajabala*) ; H. Hadem (UMPDF), (*Raliang*) ; Jenden Ch. Marak (APHLC), (*Rangsakona*) ; Salseng C. Marak (UMPDF), (*Resubelpara*) ; M. Reidson Momin (UMPDF), (*Rongchugiri*) ; Pleander G. Momin (UMPDF), (*Rongjeng*) ; Crunden S. Sangma (APHLC), (*Rongram*) ; Albinstone M. Sangma (UMPDF), (*Rongrenggiri*) ; Obil Kyndait (UMPDF), (*Rymbai*) ; Meckenson K. Sangma (UMPDF), (*Salmanpara*) ; Vacant (*Selsella*) ; Stanley D. D. Nichols Roy (APHLC), (*Shella*) ; Medras Mylliem (UMPDF), (*Sohiong*) ; S Phaindrojen Swer (APHLC), (*Sohra*) ; Grosswell Mylliemngap (UMPDF), (*Sohryngkham*) ; Smt. Miriam D. Shira (UMPDF), (*Songsak*) ; Dr. Barrister Pakem (UMPDF), (*Sutnga-Shangpung*) ; Jogendra Nath Bantha (UMPDF), (*Tikrikilla*) ; Singjan Sangma (UMPDF), (*Tura*) ; Evansius Kek Mawlong (APHLC), (*Umroi*) ; John Deng Pohrmen (APHLC), (*War Jaintia*).

MIZORAM LEGISLATIVE ASSEMBLY

Speaker : Dr. Kenneth Chawngliana ; *Dy. Speaker :* C. Chawngkunga.

Seats : 33.

Party Position : People's Conference (P.C.) : 22 ; Congress-I. : 7, People's Conference (P.C. B) : 4 : Women : 2.

Smt. L. Thanmawii (P.C.), (*Aizawl East*) ; Brig. T. Sailo (P.C.), (*Aizawl North*) ; Sainghaka (Cong.-I.), (*Aizawl South*) ; Zairemthanga (P.C.), (*Aizawl West*) ; K. Lalsanga (P.C.), (*Buarpui*) ; Lal Thanhawla (Cong.-I). (*Champhai*) ; Sneha Kumar (P.C.), (*Chaungte*) ; Ellis Saidenga (P.C.), (*Hnahthial*) ; Dr. Kenneth Chawngliana (P.C.), (*Kawnpui*) ; Saikapthianga (Cong.-I.), (*Kawrthah*) ; Joe Ngurdawla (P.C.), (*Khawbung*) ; J. H. Rothuama (P.C. B), (*Khawhai*) ; C. Chawngkunga (P.C.), (*Kolasib*) ; Lalhmingthanga (P.C.), (*Lunglei*) ; K. Biakchungnunga (P.C.), (*Lungpho*) ; F. Ngurchhina (P.C. B), (*N. Vanlaiphai*) ; P. B. Rosanga (P.C.), (*Ngoko*) ; P. Lalupa (P.C. B), (*Phuldungsei*) ; J. Thankunga (P.C.), (*Ratu*) ; S. Vadyu (Cong.-I.), (*Saiha*) ; C. Vulluaia (P.C.), (*Sairang*) ; L. Piandenga (P.C.), (*Saitual*) ; H. Rammawi (P.C.), (*Sangau*) ; Lalthanzauva (P.C. B), (*Sateek*) ; Bualhranga (P.C.), (*Serchhip*) ; F. Malsawma (P.C.), (*Suongpuilawn*) ; B. Lalchungnunga (P.C.), (*Tawipui*) ; Hari Kristo Chakma (Cong.-I.), (*Tlabung*) ; C. L. Rualo (Cong.-I.), (*Tlungvel*) ; Hiphei (Cong.-I.), (*Tuipang*) ; Smt. K. Thansiami (P.C.), (*Nominated*) ; Biakchhunga (P.C.), (*Nominated*) ; V. Lalnunzira (P.C.), (*Nominated*).

NAGALAND LEGISLATIVE ASSEMBLY

Speaker : Vitsonei K. Angami ; *Dy. Speaker :* Horangse. *Seats :* 60 ; *Electorate :* 88,783 ; *Votes Polled :* 78.843 ; *Party Position :* Naga National Democratic Party : 31 ; United Democratic Front : 1 (Supporting N.N.D.P.) ; Congress-I. : 27 ; Vacant : 1.

A. Longnyiem (Cong.-I.), (*Aboi*) ; Kihoto (Cong.-I.), (*Aghunato*) ; Khehoto (Cong.-I.), (*Akuluto*) ; Dr. Bendangtoshi (Cong.-I.), (*Alungtaki*) ; Shurhozelie (NNDP), (*Angami—North I*) ; Chupfu-o (NNDP), (*Angami North II*) ; Vitsonei K. Angami (NNDP), (*Angami South I*) ; Vizol (NNDP), (*Angami—South II*) ; Dr. Setu (NNDP), (*Angami—West*) ; Sentichuba (NNDP), (*Angelyongpang*) ; S. C. Jamir (Cong.-I.), (*Aonglenden*) ; Tsukjemwati (Cong.-I.), (*Arkokong*) ; Kiyezhe L. Chishi (Cong. I.), (*Atoizu*) ; Tsenlamo Kikon (NNDP), (*Bhandari*) ; Yamuzo (NNDP), (*Chazuba*) ; Soyie (NNDP), (*Chizami*) ; Anwar Hussain (Cong.-I.), (*Dimapur-I*) ; I. Vikheshe (Cong.-I.), (*Dimapur II*) ; Deblal Mech (Cong.-I.), (*Dimapur III*) ; K. Shdikhu (Cong.-I.), (*Ghaspani I*) ; Rokonicha (NNDP), (*Ghaspani II*) ; Kariba (Cong.-I.), (*Impur*), Imchalemba (NNDP), (*Jangpetkong*) ; J. B. Jasokie (NNDP), (*Kohima Town*) ; Dalle Namo (NNDP), (*Koridang*) ; Horangse (NNDP), (*Longkhim-Chare*), Chenlom (NNDP), (*Longleng*) ; Chekhutso (NNDP), (*Meluri*) ; Manwai Awang (Cong.-I.), (*Moka*) ; Takuyaba (NNDP), (*Mokokchung Town*) ; L. Metna (Cong.-I.), (*Mon Town*) ; T. Imtimeren (Cong.-I.), (*Mongoya*) ; Thangpong (NNDP), (*Noklak*) ; C. Chongshen (Cong.-I.), (*Noksen*) ; L. Lungalang (NNDP), (*Peren*) ; Lhiweshielo (Cong.-I.), (*Pfutsero*) ; Vejoyi (NNDP), (*Phek*) ; Pohwaug (NNDP), (*Phomching*) ; Huska (UDF supporting NNDP), (*Pughoboto*) ; Khichingse (Cong.-I.), (*Pungro-Kiphire*) ; Mhonshan Murry (NNDP), (*Sanis*) ; Kaito (Cong.-I.), (*Satakha*) ; Yopikyu (NNDP), (*Seyochubg Sitimi*) ; K. Zungkum Yimchunger (NNDP), (*Shamatorr-Chessore*) ; Kanito (Cong.-I.), (*Suruhuto*) ; Bangjak Phom (Cong.-I.), (*Tamlu*) ; Noke (NNDP), (*Tapi*) ; Manlem (NNDP), (*Tehok*) ; N. C. Zeliang (Cong.-I.), (*Tenning*) ; Pongom (NNDP), (*Thonoknyu*) ; P. K. Along (NNDP), (*Tizit*) ; Vacant (*Tobu*) ; R. S. Rengma (NNDP), (*Tseminyu*) ; H. Sao Chang (Cong.-I.), (*Tuensang Sadar I*) ; Tochi Hanso (NNDP), (*Tuensang Sadar II*) ; T. Tali (NNDP), (*Tuli*) ; T. A. Ngulie (Cong. I.), (*Tyui*) . P. Enyie Konyak (Cong.-I.), (*Wakching*) Rainbow Ezung (Cong.-I.), (*Wokha*) ; Ghutoshe (Cong.-I.), (*Wakching*) ; Rainbow Ezung (Cong.-I.), (*Wokha*) ; Ghutosbe (Cong. I.), (*Zunheboto*).

ORISSA LEGISLATIVE ASSEMBLY

Speaker. S. T. Rath; *Deputy Speaker* · Himansu Sekhar Padhi

No. of Constituencies · 147

Electorate. 13,806,801. *Votes Polled* 6,495,080.

Party Position (excluding Speaker) : Congress (I) : 121; Lok Dal/Janata (S) (Charan Singh Group) : 11; Communist Party of India : 4; Janata (J.P.) : 3; Congress (U) : 2; Independent : 4; Vacant : 2; Women Members : 5; Members of the Scheduled Tribes : 34; Scheduled Castes : 22

Jayadeb Jena (Cong.-I.), (*Anandapur—S.C.*), Santosh Kumar Pradhan (Cong.-I.), (*Angul*); Ragbab Parida (Cong.-I.), (*Aska*); J. B. Patnaik (Cong.-I.), (*Athgarh*); Bhajaman Behera (Cong.-I.), (*Athmallik*); Sarat Deb (J.P-.S.), (*Aul*); Rama Chandra Hansdah (Cong.-I.), (*Bahalda—S.T.*); Kauria Majhi (Cong.-I.), (*Baisinga—S.T.*); Arun Dey (C.P.I.), (*Balasore*); Sahura Mallik (Cong.-I.), (*Beliguda—S.T.*); Basudev Mohàpatra (Cong.-I.), (*Balikuda*); Basanta Behera (Cong.-I.), (*Balipatna—S.C.*); Kangoi Singh (Cong.-I.), (*Bangriposi—S.T.*), Akshaya Kumar Patnaik (Cong.-I.), (*Banki*); Samir Kumar Routray (Cong.-I.), (*Baramba*); Sitakanta Mohapatra (Cong.-I.), (*Barchana*); Jadumani Padhan (Cong.-I.), (*Bargarh*); Srikanta Kumar Jena (J.P.-S.) (*Bari Derabisi*), Prasanna Kumar Dash (Cong.-I.), (*Baripada*); Bhopal Chandra Mohapatra (Cong.-I.), (*Basta*); Jagabandhu Das (Cong.-I.), (*Basudevpur*); Kailas Chandra Mohapatra (Cong.-I.), (*Bogunia*); Krushna Charan Patnaik (Cong.-I.), (*Berhampur*); Jugal Kishore Patnaik (Cong.-I.), (*Bhadrak*), Purushottam Sethi (Cong.-I.), (*Bhandaripokhari—S.C.*); Somanath Rath (Cong.-I.), (*Bhanjanagar*); Mohan Nag (Cong.-I.), (*Bhatli—S.C.*); Kartikeswar Patra (Cong.-I.), (*Bhograi*) Dayanidhi Naik (Cong.-I.), (*Bhawanipatna—S.C.*); Ramakrushna Pati (C.P.I.), (*Bhubaneswar*); Rajib Lochan Hota (Cong.-I,), (*Bijapur*); Naba Kishore Mallick (Cong.-I.), (*Binjharpur—S.C.*); Pradipt Hota (Cong.-I.), (*Binka*); Jumus Bilung (Cong.-I.), (*Biramitrapur—S.T.*); Hrushikesh Hota (Cong.-I.), (*Birmaharajpur*); Dambarudhar Ulaka (Cong.-I.), (*Bissam-Cuttack—S.T.*); Mahammed Mizafar Hussain Khan (Cong.-I.), (*Bolangir*); Basanta Kumar Dandapat (Cong.-I.), (*Bonai—S.T.*), Himanshu Shekhar Padhi (Cong.-I.), (*Boudh*); Gangadhar Mohapatra (Cong.-I.), (*Bruhmagiri*); Upendra Dixit (Cong.-I.), (*Brajrajnagar*); Saharei Oram (J.P.-S.), (*Champua—S.T.*); Netrananda Mallick (Cong.-I.), (*Chandbali—S.C.*); Biswanath Sahu (C.P.I.), (*Chatrapur*); Chintamani Dyan Samantra (Ind.), (*Chikiti*); Debendranath Mansingh (Cong.-I.), (*Chilka*); Gangadhar Madi (Cong.-I.), (*Chitrakonda—S.T.*); Kanhu Charan Lenka (Cong.-I.), (*Choudwar*); Srikanta Panda (Cong.-I.), (*Cuttack City*); Dolgobinda Pradhan (Cong.-I.), (*Cuttack Sadar*); Smt. Phulmani Santa (Cong.-I.), (*Dabugam—S.T.*)

Harihar Karan (Cong.-I.), (*Daspalla*); Jagannath Rout (Cong.-I.), (*Dhamnagar*); Gajanan Naik (Cong.-I.), (*Dharamgarh—S.C.*); Kangali Panda (Ind.), (*Dharamsala*); Aswini Kumar Behera (Cong.-I.), (*Deogarh*); Smt. Nandini Satpathy (Cong.-U.), (*Dhenkanal*), Damodar Rout (J.P.-S.), (*Ersama*); Antariyami Pradhan (J.P.-S.), (*Gobindpur*) Haladhar Mishra (Cong.-I.), (*Gondia*); Ghanashyam Behera (Cong.-I.), (*Gopalpur—S.C.*); Bhagirathi Gomango (Cong.-I.), (*Gunupur—S.T.*); Trinath Nayak (J.P.-S.), (*Hindol—S.C.*) Brundaban Nayak (J.P.-S.), (*Hinjili*); Sribatcha Naik (Cong.-I.), (*Jaganathaprasad—S.C.*) Krushna Chandra Mallik (Cong.-I.), (*Jagatsinghpur—S.C.*); Niranjan Jena (Cong.-I.), (*Jajpur—S.C.*); Gadadhar Giri (J.P.), (*Jaleswar*), Sundar Mohan Majhi (Cong.-I.), (*Jashipur—S.T.*); Suresh Kumar Routray (Cong.-I.), (*Jatni*); Raghunath Patnaik (Cong.-I.), (*Jaypore*); Birendra Pandey (Cong.-I.), (*Jharsuguda*); Maheswar Barad (Cong.-I.), (*Junagarh*).

Baikunthanath Swain (Cong.-I.), (*Kakatpur*); Kailash Chandra Mohapatra (Cong.-I.), (*Kamakhyanagar*); Prasanna Kumar Pal (Cong.-I.), (*Kantabanji*); Raghunath Hembram (J.P.-S.), (*Karanjia—S.T.*); Radha Govinda Sahu (Cong.-I.), (*Kavisuryanagar*); Indramani Rout (Cong.-I.), (*Kendrapara*); Jogendra Naik (Cong.-I.), (*Keonjhar—S.T.*); Bhuninder Singh (Cong.-I.), (*Kesinga*); Trinath Samantray (Cong.-I.), (*Khallikote*); Bibhuti Bhusan Singh (Ind.), (*Khandapara*); Rames Soren (Cong.-I.), (*Khunta—S.T.*); Anup Singh Deo (Ind.), (*Khariar*); Prasanna Kumar Patsani (Cong.-I.), (*Khurda*); Surendranath Patnaik (Ind.), (*Kissannagar*); Nrusinghananda Brahma (Cong.-I.), (*Koraput*); Kanhu Charan Naik (Cong.-I.), (*Kodala*); Man Mohan Mathur (Cong.-I.), (*Koksara*); Ashok Kumar Das (J.P.-S.), (*Korai*); Basudev Majhi (Cong.-I.), (*Kotapad—S.T.*); Jagateswar Mirdha (Cong.-I.), (*Kuchinda—S.T.*); Smt. Saraswati Hembram (Cong.-I.), (*Kuliana—S.T.*); Hemananda Biswal (Cong.-I.), (*Laikora—S.T.*); Anantaram Majhi (Cong.-I.), (*Lakshmipur—S.T.*); Balgopal Mishra (Ind.), (*Loisingha*); Sk. Matlub Ali (Cong.-I.), (*Mahanga*); Maka Laxmaya (Cong.-I.), (*Malkangiri—S.C.*); Prakash Chandra Debata (Cong.-I.), (*Melchhamunda*); Udaya Narayan Dev (J.P.-S.), (*Mohana*); Tejraj Majhi (Cong.-I.), (*Narala—S.T.*); Bhanu Prakash Joshi (Cong.-I.), (*Nawapara*); Bansidhar Sahoo (Cong.-I.), (*Nayagarh*); Akshaya Kumar Acharya (Cong.-I.), (*Nilgiri*); Rabindra Kumar Sethi (Cong.-I.), (*Nimapara—S.C.*); Habibulla Khan (Cong.-I.), (*Nowrangpur*); Satya Bhusan Sahu (Cong.-I.), (*Padmapur*), Bibhudhendra Pratap Das (Cong.-I.), (*Pallahara*); Bijoy Kumar Jena (Ind.), (*Parlakhemundi*); Biswathan Mallik (Cong.-I.), (*Patamandai—S.C.*); B. Mohapatra (J.P.-S.), (*Patkura*); Hrusikesh Naik (J.P.-S.), (*Patnagarh—S.T.*); Brajamohan Thakur (Cong.-I.), (*Patnagarh*); Chandra Sekhar Behera (Cong.-I.), (*Phulbani—S.C.*); Bipin Das (Cong.-I.), (*Pipli*); Chandrama Santa (Cong.-I.), (*Pottangi—S.T.*); Gadadhar Mishra (Cong.-I.), (*Puri*).

Nesson Soreng (Cong.-I.), (*Raghunathapali—S.T.*); Abhimanyu Kumar (Cong.-I.), (*Rairakhola—S.C.*); Sidhalal Murmu (Cong.-I.), (*Rairangpur—S.T.*); Mukharam Naik (Cong.-I.), (*Rajgangpur—S.T.*); Nalinikanta Mohanty(J.P.-S.), (*Rajnagar*); NiranjanPatnaik (Cong.-I.), (*Ramachandrapur*); Gorasang Savara (Cong.-I.), (*Ramagiri—S.T.*); Ramakanta Mishra (Cong.-I.), (*Ranpur*); Ulaka Ramachandra (Cong.-I.), (*Rayagada—S.T.*); Gurupada Nanda (Cong.-I.), (*Rourkela*), Ramesh Chandra Singh Bhoi (Cong.-I.), (*Saintala*); Mayadhar Sethi (Cong.-I.), (*Salepur—S.C.*); Aswini Kumar Guru (Cong.-I.), (*Sambalpur*); Rabindra Kumar Das (Cong.-I.), (*Satyabadi*); Parsuram Panigrahi (J.P.-S.), (*Simulia*); Dhaneswar Kumbhar (Cong.-I.), (*Sonepur—S.C.*); Pitambar Panda (C.P.I.), (*Soro*); Sarat Rout (Cong.-I.), (*Sukinda*); Kishore Chandra Patel (Cong.-I.), (*Sundargarh*); Gantayat Swain (Cong.-I.), (*Saruda*); Brundaban Behera (J.P.), (*Talcher—S.C.*); Gajadhar Majhi (Cong.-I.), (*Talsara—S.T.*); Chandrasen Nayak (Cong.-I.), (*Telkoi—S.T.*); Basanta Kumar Biswal (Cong.-I.), (*Tirtol*); Lalit Mohan Gandhi (Cong.-I.), (*Titilagarh—S.C.*); Rabaneswar Madhei (Cong.-I.), (*Udala—S.T.*); Nagarjun Pradhan (Cong.-I.), (*Udayagiri—S.T.*); Parama Pujari (Cong.-I.), (*Umerkote—S.T.*).

PONDICHERRY LEGISLATIVE ASSEMBLY

Speaker : M. O. H. Farook ; *Dy. Speaker :* L. Josoph Mariadoss.

Seats : 30. *Electorate :* 319,244. *Votes Polled :* 256,595 : *Party Position :* Cong.-I. : 10 ; Dravida Munnetra Kazagam : 14 ; Janata Party : 3 ; Communist (Marxists) : 1 ; Indian Union Muslim League : 1 ; and All India Anna Dravida Munetra Kazhagam : 1. Woman : 1.

P. Subburayan (DMK), (*Ariyankuppam*) ; P. Uthiravelu (J.P.), (*Bahour—S.C.*) ; C. M. Achraff (Cong.-I.), (*Bussy*) ; V. Kathiruvelu (Cong.-I.), (*Cassicade*) ; G. Murugesan (Cong.-I.), (*Embalam*) ; V. M. Salih Maricar (Indian Union Muslim League), (*Karaikal*) ; S. Savarirajan (Cong.-I.), (*Karaikal—South*) ; G. Panjavarnam (DMK), (*Kettucherry*) ; M. A. Shanmugam (DMK), (*Kuruvinatham*) ; M. O. H. Farook (Cong.-I.), (*Lawspet*) ; K. V. Raghavan (C.P.I.-M.), (*Mahe*) ; D. Ramachandran (DMK), (*Mannadipet*) ; V. Sabapathy alias Kothandaraman (Cong.-I.), (*Modeliarpeth*) ; G. Palaniraja (DMK), (*Muthialpet*) ; M. Chandrakasu (Cong.-I.), (*Nedungadu*) ; P. Ramalingam (AIADMK), (*Nelithope*) ; V. M. C. Sivakumar (DMK), (*Neravy Grand Aldee*) ; Subbaraya Gounder (J.P.), (*Nettapakkam*) ; Na. Manimaran Alias Marimuthu (DMK), (*Orlea.npeth*) ; P. Murthy (DMK), (*Ossudu—S.C.*) ; Settha Vedanayagam (DMK), (*Uppalam*) ; G. Perumalraja (DMK), (*Ozhukarai*) ; N. K. Sachindranath (Cong.-I.), (*Palloor*) ; L. Joseph Mariadoss (DMK), (*Raj Bhavan*) ; Mrs. Renuka Appadurai (Cong.-I.), (*Reddiarpalayam*) ; V. Pothaperumal (J.P.), (*Thattanchavady*) ; P. Cattavarayane (Cong.-I.), (*Thirubuvanai—S.C.*) ; N. V. Ramalingam (DMK), (*Thirunallar*) ; M. Venugopal (DMK), (*Villenour*) ; Kamichetty Parasurama Varaprasada Rao Naidu (DMK), (*Yanam*).

PUNJAB LEGISLATIVE ASSEMBLY

Speaker : Brij Bhushan Mehra ; *Dy. Speaker :* Gulzar Singh.

Seats : 117. *Party position :* Congress (I) : 65 ; Shiromani Akali Dal : 36 ; C.P.I. : 9 ; C.P.I.(M) : 4 ; Bharatiya Janata Party : 1 ; Independent : 2 : Women members : 6.

Sajjan Kumar Jakhar (Cong.-I.), (*Abohar*) ; Kulwant Singh (C.P.I.), (*Adampur*) ; Harcharan Singh Ajnala (Cong.-I.), (*Ajnala*) ; Dalip Singh Pandhi (S.A.D.), (*Amloh—S.C.*) ; Prof. Darbarilal (Cong.-I.), (*Amritsar-Central*) ; Brij Bhushan Mehra (Cong.-I.), (*Amritsar-North*) ; Pirthipal Singh (Cong.-I.), (*Amritsar-South*) ; Seva Ram (Cong.-I.), (*Amritsar-West*) ; Basant Singh (Cong.-I.), (*Anandpur Sahib-Ropar*); Darshan Singh Jhabal (C.P.I.-M.), (*Attari—S.C.*) ; Tej Singh (S.A.D.), (*Bagha Purana*) ; Dalipchand (Cong.-I.), (*Balachaur*) ; Ujagar Singh (Cong.-I.), (*Balluana—S.C.*) ; Jagat Ram (Cong.-I.), (*Banga—S.C.*) ; Venod Sharma (Cong.-I.), (*Banur*) ; Surjit Singh Barnala (S.A.D.), (*Barnala*) ; Gopal Krishna Chatrath (Cong.-I.) ; (*Batala*) ; Jiwan Singh Umarnangal (S.A.D.), (*Beas*) ; Kundan Singh Patang (S.A.D.), (*Bhadaur—S.C.*) ; Surinder Kapur (Cong.-I.), (*Bhatinda*) ; Sukhjinder Singh Khaira (S.A.D.), (*Bholath*) ; Parshotam Singh (S.A.D.), (*Budhlada*) ; Smt. Satwant Kaur Sandhu (S.A.D.), (*Chamkaur Sahib—S.C.*) ; Lal Singh (Cong.-I.), (*Dakala*) ; Basant Singh Khalsa (S.A.D.), (*Dakha—S.C.*) ; Gurbachan Singh Cheema (Cong.-I.), (*Dasuya*) ; Smt. Rajinder Kaur (Cong.-I.), (*Dhananla*) ; Sarwan Singh (C.P.I.), (*Dharamkot*) ; Raj Kumar (C.P.I.), (*Dhariwal*) ; Sant Singh (S.A.D.), (*Dhuri*) ; Jai Muni (Cong.-I.), (*Dinanagar*) ; Baldev Singh Maan (S.A.D.), (*Dirbha*) ; Jasmat Singh Dhilon (Ind.), (*Faridkat*) ; Santokh Singh Randhawa (Cong.-I.), (*Fatehgarh*) ; Kanshi Ram (Cong.-I.), (*Fazilka*), Balmukand Sharma (Cong.-I.), (*Ferozepur*) ; Gurnaib Singh Brar (Cong.-I.), (*Ferozepur Cantt.*) ; Pt. Sarwan Kumar (Cong.-I.), (*Garh Shankar*) ; Joginder Nath (Cong.-I.), (*Garhdiwala—S.C.*) ; Smt. Jasev Kaur Sandhu (S.A.D.), (*Ghanaur*) ; Parkash Singh Badal (S.A.D.), (*Gidder Baha*) ; Rattanlal (Cong.-I.), (*Gurdaspur*) ; Khushalchand Seth (B.J.P.), (*Guru Harsahai*) ; Kundan Singh (Cong.-I.), (*Hoshiarpur*).

Jagroop Singh (Cong.I.), (*Jagraon*); Manga Singh(Cong.-I.), (*Jallalabad*), Tara Singh Layallpuri (S.A.D.), (*Jandiala*) ; Baldev Singh Khiala (S.A.D.), (*Joga*) ; Ramlal Chitti (Cong.-I.), (*Jullundur Cantt.*) ; Yash (Cong.-I.), (*Jullundur Central*) ; Gurdial Saini (Cong.-I.), (*Jullundur North*), K P. Darshan Singh (Cong. I.), (*Jullundar South—S.C.*) ; Ujagar Singh Sekhwan (S.A.D.), (*Kahnuan*); Raghbir Singh (S.A.D.), (*Kapurthala*) ; Jagjit Singh (Cong.-I.), (*Kartarpur*) ; Lakha Singh (Cong.-I.), (*Khadoor Sahib—S.C.*) ; Shamsher Singh (Cong.-I.), (*Khanna—S.C.*) ; Jagat Singh (Cong.-I.), (*Kharar*) ; Bhagwan Das (Cong.-I.), (*Kot Kapura*); Daya Singh (Cong.-I.), (*Kumkalan—S.C.*) ; Hardipinder Singh (S.A.D.), (*Lambi*) ; Amar Singh (C.P.I.), (*Lehra*) ; Balwant Singh (S.A.D.), (*Lohian*); Om Prakash Gupta (Cong.-I.), (*Ludhiana-East*); Sardarilal Kapoor (Cong.-I.), (*Ludhiana-North*) ; Birpaul Singh (Cong.-I.), (*Ludhiana Rural*) ; Jaginder Pal Pandey (Cong.-I.), (*Ludhiana-West*) ; Kartar Singh Vaid (S.A.D.), (*Mahilpur—S.C.*) ; Parkash Singh Majitha (S.A.D.), (*Majitha*) ; Smt. Sajida Begum (Cong.-I.), (*Malerkotla*) ; Motu Ram (Cong.-I.), (*Malout—S.C.*) ; Buta Singh (C.P.I.), (*Mansa*) ; Nachhattar Singh Gill (Cong.-I.), (*Moga*); Ravi Inder Singh (S.A.D.), (*Morinda*) ; Dr. Kewal Krishan (Cong.-I.), (*Mukerian*) ; Harchand Singh Brar (S.A.D.), (*Muktsar*) ; Gurdarshan Singh (Cong.-I.), (*Nabha*) ; Darbara Singh (Cong.-I.), (*Nakodar*) ; Ku. Sarh Parashar (Cong.-I.), (*Nangal*) ; Amar Nath (Cong.-I.), (*Narot Mehra—S.C.*) ; Gulzar Singh (Cong.-I.), (*Nathana—S.C.*) ; Vacant, (*Naushehra Panuan*) ; Dilbagh Singh (Ind.), (*Nawan Shahar*) ; Saghar Singh (C.P.I.), (*Nihalsinghwala*) ; Sarwan Singh Cheema (C.P.I.-M), (*Nurmahal*) ; Dr. Bhagat Singh (S.A.D.), (*Pakka Kalan—S.C.*) ; Gurdev Singh Badal (S.A.D.), (*Panjgrain—S.C.*) ; Ram Swaroop Baghi (Cong.-I.), (*Pathankot*) ; Brahm Mohindra (Cong.-I.), (*Patiala-Town*) ; Naranjan Singh Patti (S.A.D.), (*Patti*) ; Beant Singh (Cong.-I.), (*Payal*) ; Piara Ram Dhannowalia (Cong.-I), (*Phagwara—S.C.*) ; Sarwan Singh Phillaur (S.A.D.), (*Phillaur*) ; Mohinder Singh Sarupwali (S.A.D.), (*Qadian*) ; Arjan Singh Lilt (S.A.D.), (*Qila Raipur*) ; Jagdev Singh Jassowal (Cong.-I.), (*Rai Kot*) ; Prof. Balwant Singh (C.P.I.-M.), (*Raipura*) ; Iqbal Singh (Cong.-I.), (*Raja Sansi*) ; Babusingh Master (C.P.I.), (*Rampura Phul*) ; Sant Ram Singla (Cong.-I.), (*Samana*) ; Karam Singh Gill (Cong.-I.), (*Samrala*) ; Sukhdev Singh Dhindga (S.A.D.), (*Sangrur*) ; Balwinder Singh Bhunder (S.A.D.), (*Sardulgarh*) ; Hari Mitter Hans (Cong.-I.), (*Shamchaurasi–S.C.*) ; Chand Singh (C.P.I.-M.), (*Sherpur—S.C.*) ; Baldev Singh Loomba (C.P.I.), (*Shutrana—S.C.*) ; Birdevinder Singh (Cong.-I.), (*Sirhind*) ; Natha Singh Dalam (S.A.D.), (*Srihargobindpur*) ; Chamanlal (Cong.-I.), (*Sujanpur*) ; Atma Singh, (S.A.D.), (*Sultanpur*) ; Gurbachan Singh (S.A.D.), (*Sunam*) ; Avtar Singh Gatwali (Cong.-I.), (*Talwandi*) ; Smt. Surjit Kaur Kalkat (Cong.-I.), (*Tanda*) ; Prem Singh Lalpura (S.A.D.), (*Taran Taran*) ; Majar Singh Ubboke (S.A.D.), (*Valtoha*) ; Sohan Singh (C.P.I.), (*Verka*) ; Harcharan Singh Hero (Cong.-I.), (*Zira*)

RAJASTHAN LEGISLATIVE ASSEMBLY

Speaker : Poonam Chand Bishnoi.

Total No. of seats : 200 ; *Party position* : Congress-I : 136 ; Bharatiya Janata Party : 32 ; Janata Party : 8 ; Janata (S) (Charan Singh Group/Lok Dal) : 7 ; Congress-U : 3 ; Pragatisheel Dal: 9; Communist Party of India-M: 1 ; Communist Party of India : 1 ; Independents : 2 ; Women : 7.

Smt. Samundar Kunwar (Cong.-I.), (*Ahore*) ; K. C. Meghwal (B.J.P.), (*Ajmer East—S.C.*) ; B. D. Shastri (B.J.P.), (*Ajmer West*) ; Jitmal Jain (B.J.P.), (*Alwar*) ; Sushra Pushpa Jain (B.J.P.), (*Amer*) ; Nanu Ram (Cong.-I.), (*Asind*) ; Mahendra Kumar Parmar (Cong.-I.), (*Aspur—S.T.*) ; Cheetar Lal Arya (B.J.P.), (*Atru—S.C.*) ; Uday Ram Cong.-I.), (*Badi Sadari*) ; Nathu Ram (Cong.-I.), (*Bagidora—S.T.*) ; Sujan Singh Yadav (Cong.-I.), (*Bahrodh*) ; Smt. Kamla Bainiwal (Cong.-I.), (*Bairath*) ; Aslam Khan (Cong.-I.), (*Bali*) ; Kunji Lal (J.P.), (*Bamanvas*) ; Nathu Singh (B.J.P.), (*Bandi Kui*) ; Devendra Singh (Cong.-I.), (*Banera*) ; Shivram Sharma (Cong.-I.), (*Bani Park*) ; Badri Prosad Gupta (Cong.-I.), (*Bansur*) ; Haridev Joshi (Cong.-I.), (*Banswada*) ; Raghavir Singh Kaushal (B.J.P.), (*Baran*) ; Shiv Singh (Pragatisheel Dal), (*Bari*) ; Devdett Tiwari (Cong.-I.), (*Barmer*) ; Jagdish Prasad Tiwari (Cong.-I.), (*Bassi*) ; Jagan Singh (Cong.-I.), (*Bayana*) ; Ghan Shyam (Cong.-I.), (*Begun*) ; Gyan Singh Chaudhari (Cong.-I.), (*Bhadra*) ; Raj Bahadur (Cong.-U.), (*Bharatpur*) ; Ram Narain Dudi (Cong.-I.), (*Bhilara*) ; Bansilal Patwa (B.J.P.), (*Bhilwara*) ; Smt. Lakshami Kumari Chundwat (Cong.-I.), (*Bhim*) ; Smt. Bhagwati Devi (Cong.-I.), (*Bhinai—S.C.*) ; Suraj Pal Singh (Cong.-I.), (*Bhinmal*) ; Pursram Maderna (Cong.-I.), (*Bhopalgarh*) ; Bulakidas Kalla (Cong.-I.), (*Bikaner*) ; Brij Sunder Sharma (Cong.-I.), (*Bundi*).

B. S. Shikhawat (B.J.P.), (*Chabra*) ; Shobra Jamal (Cong.-I.), (*Chitorgarh*) ; B. D. Dousi (Cong.-I.), (*Chohtan*) ; Tejpal (Cong.-I.), (*Choumu*) ; Govind Amalia (Cong.-I.), (*Chourasi—S.T.*) ; Bhalu Khan (Cong.-I.), (*Churu*) ; Balchand Arya (B.J.P.), (*Dag—S.C.*); Bahadur Singh (Janata-S), (*Danpur—S.T.*); Narayan Singh (Cong.-I.), (*Dantaramgarh*) ; Sohanlal Banshiwal (B.J.P.), (*Dausa—S.C.*); Umaid Singh Rathore (J.P.), (*Deedwana*) ; Raja Man Singh (Ind.), (*Deeg*) ; Ram Ragunath Chaudhari (Cong.-I.), (*Degana*) ; Dinesh Dangi (Cong.-I.), (*Desuri S.C.*) ; Ramdev Singh (Cong.-I.), (*Dhod*) ; Banwari Lal (Cong.-I.), (*Dholpur*) ; Daudyal Joshi (B.J.P.), (*Digod*) ; C. L. Kunwaria (Cong.-I.), (*Dudu—S.C.*) ; Rewat Ram Chowdhary (Cong.-I.), (*Dungargarh*) ; Nathu Ram (Cong.-I.), (*Dungarpur—S.T.*) ; Trilok Singh (C.P.I.-M.), (*Fatehpur*) ; Radhe Shyam Hardyal (Cong.-I.), (*Ganganagar*) ; Bharatlal (Pragatisheel Dal), (*Gangapur*) ; Amarchand (Cong.-I.), (*Gangrar—S.C.*) ; Pujilal (Cong.-I.), (*Ghataul—S.T.*) ; Megh Raj Tawad (C.P.I.), (*Gagunda—S.T.*) ; Virendra Pratap Singh (J.P.), (*Gudha*) ; Hema Ram Chandhuri (Cong.-I.), (*Gudhamalani*) ; Atma Ram (Cong.-I.), (*Hanumangarh*) ; Bhanwarlal Sharma (B.J.P.), (*Hawamahal*) ; Bharausi (Janata-S.), (*Hindaun—S.C.*) ; Prabhu Lal Sharma (Cong.-I.), (*Hindoli*) ; Ratan Lal Tambi (Pragatisheel Dal), (*Jahazpur*) ; Dr. Ujala Arora (B.J.P.), (*Jaipur-Rural*) ; C. Singh Bhati (B.J.P.), (*Jaisalmer*) ; Vaid Bhairulal Bhardwaj (Cong.-I.), (*Jamwaramgarh*) ; Mangilal, (Cong.-I.), (*Jalaur—S.C.*) ; Ram Karan (Cong.-I.), (*Jayal—S.C.*) ; Shivdan Singh Rathore (Cong.-I.), (*Jetaram*) ; Anang Kumar Jain (B.J.P.), (*Jhalra Patan*) ; Sheesh Ram Aula (Cong.-I.), (*Jhunjhunu*) ; Ahamad Baksh Sindhi (Cong.-I.), (*Jodhpur*); Taquiuddin (Cong.-I.), (*Johari Bazar*)

Chav Khan (Janata-S.), (*Kaman*) ; Mohanlal Jat (Cong. I.), (*Kapasan*) Jagtar Singh (Cong.-I.), (*Karanpur*) ; Janardhan Singh Gahlot (Cong.-I.), (*Karauli*) ; Babulal Bairwa (Pragatisheel Dal), (*Kathumar—S.C.*) ; Tulsi Ram (Cong.-I.), (*Kekri—S.C.*) ; Manphool Ram (Cong.-I.), (*Kesari Sinhpur—S.C.*) ; Sampat Ram (Cong.-I.), (*Khairtal—S.C.*) ; Chunilal (B.J.P.), (*Khandar—S.C.*) ; Mahadeo Singh (Cong.-I.), (*Khandela*) ; Prithvi Singh (Cong.-I.), (*Khanpur*) ; Bhairon Singh Gurjar (Cong.-I.), (*Kharchi*) ; Ruplal Parmar (Cong.-I.), (*Kherwara—S.T.*) ; Mala Ram (B.J.P.), (*Khetri*) ; Har Sahay (Cong.-I.), (*Kishanganj—S.T.*) ; Kesrichand Chaudhari (Cong.-I.), (*Kishangarh*) ; Shiram Gotewala (Cong.-I.), (*Kishanpole*) ; Devi Singh Bhati (J.P.), (*Kolayat*) ; L. K. Chaturvedi (B.J.P.), (*Kotah*) ; Shriram Rawat (Cong.-I.), (*Kotputli*) ; Hiralal Devpura (Cong.-I.), (*Kumbhalgarh*) ; Hari Singh (Cong.-I.), (*Kumhar*) ; Fateh Singh (Janata-S.), (*Kushalgarh—S.T.*) ; Pursram Moradia (Cong.-I.), (*Lachmangarh—S.C.*) ; Ram Dhan (Cong.-I.), (*Ladnu*) ; Ram Kishan (Cong.-I.), (*Ladpura*) ; Ishwarlal Saini (Cong.-I.), (*Lakshamangarh*) ; Ram Sahay Sonad (Cong.-I.), (*Lalsot—S.T.*) ; Kamla Bhai (Cong.-I.), (*Lasadia—S.T.*) ; Ram Singh Bishnoi (Cong.-I.), (*Looni*) ; Mahu Ram Legha (Cong.-I.), (*Lumkaransar*) ; Hari Singh (Cong.-I.), (*Mahuwa*) ; Abdul Rehman Chowdary (Cong.-I.), (*Makrana*) ; Surendra Vyas (Cong.-I.), (*Malpura*) ; Biharilal Parik (Cong.-I.), (*Mandal*) ; S. C. Mathur (Cong.-I.), (*Mandalgarh*) ; Ghasiram Yadav (Cong.-I.), (*Mandavar*) ; Lachchu Ram (Janata-S.), (*Mandawa*) ; Bherulal (Cong.-I.), (*Manohar Thana*) ; Syed Md. Ayaz Maharaj (Cong.-I.), (*Masuda*) ; Hanuman Prasad Prabhakar (Cong.-I.), (*Mavli*) ; Ram Lal (Cong.-U.), (*Medta*) ; Harendra Mirdha (Cong.-I.), (*Moondwa*).

Yadunath Singh (Janata-S.), (*Nadbai*); Murad Khan (Cong.-I.), (*Nagar*); Maharam Chaudhari (Janata-S.), (*Nagaur*) ; Surya Kumar (Cong.-I.), (*Nainwa*) ; Govind Singh (Cong.-I.), (*Nasirabad*); C. P. Joshi (Cong.-I.), (*Nathdwara*); Bhanwar Singh (Cong.-I.), (*Nawalgarh*); Rameshwar Lal Chowdhury (Cong.-I.), (*Nawan*); Bhopal Singh (B.J.P.), (*Neembaheda*); Mohanlal Modi (Pragatisheel Dal), (*Neem-Ka-Thana*); Dwarka Prasad Bairwa (Cong.-I.), (*Niwai—S.C.*); Laxmi Narayan (Cong.-I.), (*Nohra*); Surja Ram (Cong.-I.), (*Nokha—S.C.*) ; Narendra Singh Bhatty (Cong.-I.), (*Osiyan*) ; Amara Ram Chaudhari (Cong.-I.), (*Pachpadra*) ; Manekmal Mehta (Cong.-I.), (*Pali*) ; Jethmal Burbar (Cong.-I.), (*Parbatsan—S.C.*) ; Gopal Pacherwal (J.P.), (*Patan S.C.*) ; Ram Kunwar Bairwa (J.P.), (*Phagi—S.C.*) ; Ulka Ram (Cong.-I.), (*Phalasia—S.C.*) ; Poonamchand Vishnoi (Cong.-I.), (*Phalodi*) ; Dr. Hari Singh (Cong.-I.), (*Phulera*) ; Harilal Arya (B.J.P.), (*Pipalda*) ; Shodan Singh (Pragatisheel Dal), (*Pirawa*) , Hazarilal Sharma (J.P.), (*Pilani*) ; Jivraj Singh (Cong.-I.); (*Pilibanga*) ; Bhura Ram (Cong.-I.), (*Pindwara-Abu—S.T.*) ; Hiralal Arya (B.J.P.), (*Pipalda—S.C.*) ; Nandlal Meena (B.J.P.), (*Pratapgarh—S.T.*) ; Smt. Suraj Devi Malhotra (Cong.-I.), (*Pushkar*) ; Sukhlal Saincha (Cong.-I.), (*Raipur*) ; Dula Ram (Cong.-I.), (*Raisinghnagar—S.C.*) ; Pradyuman Singh (Cong.-I.), (*Rajakhera*) ; Samrathlal (B.J.P.), (*Rajgarh—S.C.*) ; Nanalal (Cong.-I.), (*Rajsamand—S.C.*) ; H. K. Sharma (B.J.P.), (*Ramganjmandi*) ; Jai Krishna Sharma (Cong.-I.), (*Ramgarh*) ; Ratnaram Chowdhari (Cong.-I.), (*Raniwara*) ; Jaidev Prosad Indoria (Cong.-I.), (*Ratangarh*) ; Changaram Bakolia (Cong.-I.), (*Reodar*) ; Ram Prasad (Cong.-I.), (*Rupawas*).

Deepchand (Ind.), (*Sadulpur*); Smt. Kamla Bhil (Cong.-I.), (*Sagwara—S.T.*); Ramlal Upadhyaya (Cong.-I.), (*Salara*); Than Singh Meena (Cong.-I.), (*Salumber*); Smt. Vidya Pathak (B.J.P.), (*Sanganer*); Mahendra Singh (Cong.-I.), (*Sangaria*); Rangji Meena (B.J.P.), (*Sapotra—S.C.*); Kanak Raj Mehta (Pragatisheel Dal), (*Sanchore*); D

K. Meena (Cong.-I.), (*Sarara—S.T.*); Mohanlal Sharma (B.J.P.), (*Sardar-Shahar*); Man Singh Deora (Cong.-I.), (*Sardarpura*); Hans Raj (B.J.P.), (*Sawai-Madhopur*); Devilal (Cong.-I.), (*Shahpura—S.C.*); Khet Singh Rathore (Cong.-I.), (*Shergarh*); Deependra Singh (Cong.-I.), (*Shree-Madhopur*); Amin Khan (Cong.-I.), (*Shiv*); Ghanshyam Tiwari (B.J.P.), (*Sikar*); Ram Kishore Mina (B.J.P.), (*Sikrai—S.T.*); Devi Sahai Gopalia (Cong.-I.), (*Sirohi*); Ghara Ram Phulwaria (Cong.-I.), (*Siwana—S.C.*); Madhav Singh Diwan (Cong.-I.), (*Sojat*); Bhanwarlal Meghwal (Pragatisheel Dal), (*Sujangarh—S.C.*); Gokulchand Sharma (Cong.-I.), (*Sumerpur*); Sunderlal (Pragatisheel Dal), (*Surajgarh—S.C.*); Narpatram Barbarh (Cong.-I.), (*Sursagar—S.C.*); S. K. Bishnoi (Cong.-I.), (*Suratgarh*); Piru Ram (Cong.-I.), (*T.B.—S.C.*); Chandanmal Baid (Cong.-I.), (*Taranagar*); Shobha Ram (Cong.-I.), (*Thanaghazi*); Din Mohammad (Cong.-I.), (*Tijara*); Chet Ram (Cong.-I.), (*Toda Bhim—S.T.*); Chaturbhuj (Cong.-I.), (*Todarai Singh*); Mahavir Prasad (B.J.P.), (*Tonk*); G. C. Kataria (B.J.P.), (*Udaipur*); Bheroolal (Cong.-I.), (*Udaipur-Rural*); Ram Lal (Cong.-I.), (*Uniyara*); Rao Kamlendra Singh (J.P.), (*Vallabhnagar*); V. P. Bajari (Cong.-I.), (*Vyawar*); Jagannath Pahadia (Cong.-I.), (*Weir—S.C.*).

SIKKIM LEGISLATIVE ASSEMBLY

Speaker : Sonam Tshering ; *Dy. Speaker :* Lall Bahadur Basnet ; Woman member : Nil.

Total No. of seats : 32 ; *Party position :* Sikkim Janata Parishad : 21 ; Sikkim Congress (Revolutionary) : 8 ; Sikkim Prajatantra Congress : 1 ; Independent : 2.

Sherab Palden (S.J.P.), (*Assam-Lingsey*); Til Bahadur Limbu (S.J.P.), (*Barmiok*); B. P. Kharel (Cong.-R.), (*Central Pendam-E. Pendam*); C. B. Rai (Cong.-R.), (*Chakung*); Pradeep Yonzon (Ind.), (*Damthang*); Padam Bahadur Gurung (S.J.P.), (*Daramdin*); Padam Lall Gurung (Cong.-R.), (*Dentam*); Athup Lepcha (S.J.P.), (*Dzongu*); Lall Bahadur Basnet (S.J.P.), (*Gangtok*); I. B. Limbu (S.J.P.), (*Geyzing*); B. B. Gurung (Cong.-R.), (*Jorethang—Nayabazar*); Soman Tshering (S.J.P.), (*Kabi-Tengda*); T. D. Thatal (S.J.P.), (*Khamdong*); Tenzing Dadul Bhutia (S.J.P.), (*Lachen-Mangshila*); J. B. Pradhan (Cong.-R.), (*Lossing-Pachekhani*); Samten Tshering (S.J.P.), (*Martam*); Mohan Prasad Sarma (S.J.P.), (*Melli*); Ram Lepcha (Cong.-R.), (*Pathing*); Dugo Bhutia (Ind.), (*Rakdong-Tintek*); Chamla Tshering (S.J.P.), (*Ralang*); Dorjee Tshering Bhutia (Cong.-R.), (*Ranka*); B. B. Lohar (S.J.P.), (*Ratepani-West Pendam*); Tulshi Sharma (S.J.P.), (*Regu*); K. N. Upreti (Cong.-R.), (*Rhenock*); Katuk Bhutia (S.J.P.), (*Rincheupong*); Dadul Bhutia (S.J.P.), (*Rumtek*); Lhachen Gonchen Rimpuchhi (S.J.P.), (*Sangha*); N. B. Bhandari (S.J.P.), (*Soreong*); N. B. Khatiwada (S.P.C.), (*Tami-Tarku*); Dowgyal Pentso Bhutia (S.J.P.), (*Tashiding*); Garjaman Gurung (S.J.P.), (*Wak*); Sanchaman Limbu (S.J.P.), (*Yoksam*).

TAMILNADU LEGISLATIVE ASSEMBLY

Speaker : K. Rajaram ; *Dy. Speaker :* P. H. Pandian.

Total Seats : 234 ; Nominated : 1.

Party Position : All India Anna Dravida Munnetra Kazhagam : 129 ; Dravida Munnetra Kazhagam : 36 ; Indian National Congress (Indira) : 31 ; Communist Party of India (Marxist) : 11 ; Communist Party of India : 10 ; Gandhi Kamaraj National Congress : 6 ; All India Forward Bloc : 3 ; Tamil Nadu Kamaraj Congress : 3 ; Janata (J.P.) : 2 ; Makkal Katchi : 1 ; Muslim League : 1 ; Republican Party (Gavai) : 1 ; Women Members : 6.

C. Ganesan (A.I.A.D.M.K.), (*Achrapakkam—S.C.*); K. M. Abdul Rajack (A.I.A.D.M.K.), (*Alandur*); P. Thirumaran (A.I.A.D.M.K.), (*Alangudi*); R. Navneetha Krishnapandian (G.K.N.C.), (*Alangulam*); Easwaramoorthy (C.P.I.-M.), (*Ambasamudram*); G. Vishwanathan (A.I.A. (A.I.A.D.M.K.), (*Anaicut*); S. Krishnamoorthi (A.I.A. D.M.K.), (*Andimadam*); S. S. Rajendran (A.I.A.D.M.K.), (*Andipathi*); M. Karunanidhi (D.M.K.), (*Annanagar*); P. Gurusamy (A.I.A.D.M.K.), (*Anthiyur—S.C.*); M. Vijaya-sarathi (A.I.A.D.M.K.), (*Arakkonam—S.C.*); S. Thirunava-karasu (A.I.A.D.M.K.), (*Aranthangi*); P. S. Sennimalai (A.I.A.D.M.K.), (*Aravakurichi*); A. M. Sethuraman (A.I.A.D.M.K.), (*Arcot*); T. Arumugan (D.M.K.), (*Ariya-lur*); A. C. Shanmugam (A.I.A.D.M.K.), (*Arni*); M. Pitchai (A.I.A.D.M.K.), (*Aruppukottai*); A. Vellaisamy (A.I.A.D.M.K.), (*Athoor*); C. Palanimuthu (Cong.-I.), (*Attur*); M. Arumugam (C.P.I.), (*Avanasi—S.C.*); B. S. Doraisamy (A.I.A.D.M.K.), (*Bargur*); P. G. Narayanan (A.I.A.D.M.K.), (*Bhavani*), G. K. Subramaniam (A.I.A. D.M.K.), (*Bhavanisagar*); V. V. Swaminathan (A.I.A. D.M.K.), (*Bhuvanagiri*); K. M. S. Subramanian (A.I.A. D.M.K.), (*Bodinaickanur*); Anoor P. G. Jagadeesan (A.I.A.D.M.K.), (*Chengalpattu*); T. Swami Kannu (A.I.A.D.M.K.), (*Chengam—S.C.*); A. Rahman Khan (D.M.K.), (*Chepauk*); P. H. Pandian (A.I.A.D.M.K.), (*Cheranmadevi*); Babu Janarthanan (D.M.K.), (*Cheyyar*); K. R. Ganapathy (A.I.A.D.M.K.), (*Chidambaram*); S. Sivaraman (Cong.-I.), (*Chinnasalem*); K. Ramani (C.P.I.), (*Coimbatore-East*); C. Aranganayagam (A.I.A.D.M.K.), (*Coimbatore-West*); S. Retnaraj (D.M.K.), (*Colachel*); M. Rangajathan (D.M.K.), (*Coonoor—S.C.*); Babu Govindrajan (D.M.K.), (*Cuddalore*); R. T. Gopalan (A.I.A.D.M.K.), (*Cumbum*).

A. Periasamy (A.I.A.D.M.K.), (*Dharampuram—S.C.*); S. Aranganathan (A.I.A.D.M.K.), (*Dharampuri*); N. Varadarajan (C.P.I.-M.), (*Dindigul*); I. Ganesan (A.I.A.D.M.K.), (*Edappadi*); L. Elayaperumal (Cong.-I.), (*Egmore—S.C.*); S. Muthusamy (A.I.A.D.M.K.), (*Erode*); N. Ramachandran (D.M.K.), (*Gingee*); K. A. Sengottayam (A.I.A.D.M.K.), (*Gobichettipalayan*); K. Hutchi (A.I.A.D.M.K.), (*Gudalur*); K. R. Sundaram (C.P.I.-M.), (*Gudiyatham*); R. S. Munnirathinam (A.I.A. D.M.K.), (*Gummidipundi*); A. Selvarasan (D.M.K.), (*Harbour*); C. Sabapathy (A.I.A.D.M.K.), (*Harur—S.C.*); T. Venkata Reddy (Cong.-I.), (*Hosur*); S. Sivasamy (C.P.I.), (*Ilayangudi*); P. Thangavelu (Cong.-I.), (*Jayan Kondam*); V. Sathiamoorthy (A.I.A.D.M.K.), (*Kadaladi*); A. Shahul Hameed (Muslim League), (*Kadayanallur*); P. S. Thiruvengadam (D.M.K.), (*Kalasapakkam*); P. Venkatasubramanian (A.I.A.D.M.K.), (*Kancheepuram*); M. Kannan (A.I.A.D.M.K.), (*Kandamangalam—S.C.*); K. G. Krishnaswamy (A.I.A.D.M.K.), (*Kangayam*), S. Muthu Krishnan (A.I.A.D.M.K.), (*Kanyakumari*), C. V. Velappan (A.I.A.D.M.K.), (*Kapilamalai*); C. T. Chidambaram (D.M.K.), (*Karaikudi*); M. Chinnasamy (A.I.A.D.M.K.), (*Karur*); E. Ramalingam (D.M.K.), (*Kathumannar Koil*); N. A. Poongavanam (C.P.I.), (*Katpadi*); Dr. K. Samarasam (A.I.A.D.M.K.), (*Kaveri-pathinam*); P. Vijayaraghavan (Janata-J.P.), (*Killiyoor*);

K. V. Kandasamy (A.I.A.D.M.K.), (*Kinathukadavu*); S. Alagarsamy (C.P.I.), (*Koilpatti*); T. Marimuthu (A.I.A.D.M.K.), (*Kolathur—S.C.*); K. R. Chinnarasu (A.I.A.D.M.K.), (*Krishnagiri*); P. M. Thangavelraj (Cong.-I.), (*Krishnarayapuram—S.C.*); R. Karuppaiah (C.P.I.), (*Kulithalai*); K. S. M. Pakeer Mohamed (Cong.-I.), (*Kumbakonam*); A. Thangarasu (A.I.A.D.M.K.), (*Kurinjipadi*); R. Rajamanikam (D.M.K.), (*Kuttalam*); Anbil Dharmalingam (D.M.K.), (*Lalgudi*).

N. Sankariah (C.P.I.-M.), (*Madurai-East*), P. Nedumaran (T.N.K.C.), (*Madurai-Central*); M. G. Ramachandran (A.I.A.D.M.K.), (*Madurai-West*); S. D. Ugamchand (A.I.A. D.M.K.), (*Madurantakam*); K. Paramalai (T.N.K.C.), (*Manamadurai—S.C.*); P. Kaliyamoorthi (A.I.A.D.M.K.), (*Mangalur—S.C.*); M. Ambikapathy (C.P.I.), (*Mannargudi*); M. A. Rajkumar (A.I.A.D.M.K.), (*Marungapuri*); N. Kittappa (D.M.K.), (*Mayuram*); A. Chinnadurai (A.I.A.D.M.K.), (*Melmalyanur*); K. V. Veeran Ambalam (Cong.-I.), (*Melur*); S. Palanisamy (A.I.A.D.M.K.), (*Methupalayam*); K. P. Nachimuthu (A.I.A.D.M.K.), (*Mettur*); S. Balakrishna (A.I.A.D.M.K.), (*Modakurichi*); N. Kuppusamy (A.I.A.D.M.K.), (*Morappur*); K. Dhanukoddi Thevar (A.I.F.B.), (*Mudukulathur*); R. Sundaramurthy (Cong.-I.), (*Mugaiyur*); M. K. Rajamanickam (A.I.A.D.M.K.), (*Musiri*); T. K. Kapali (A.I.A.D.M.K.), (*Mylapore*); R. Umanath (C.P.I.-M.), (*Nagapattinam*); M. Vijayasarathy (A.I A.D.M.K.), (*Nagercoil*); R. Arunachalam (A.I.A.D.M.K.), (*Namakall—S.C.*); M. John Vincent (A.I.A.D.M.K.), (*Nanguneri*); N. A. Kalairasan (A.I.A.D.M.K.), (*Nannilam—S.C.*); M. Andi Ambalam (Cong.-I.), (*Natham*); T. Anabazaghan (A.I.A.D.M.K.), (*Natrampalli*); N. Krishnamoorthi (D.M.K.), (*Nelli Kuppam*); Smt. A. S. Ponnammal (T.N.K.C.), (*Nilakottai—S.C.*); K. Kuppusamy (A.I.A.D.M.K.), (*Oddanchatram*); M. Sivaperuman (A.I.A.D.M.K.), (*Omalur*); T. Veeraswamy (A.I.A.D.M.K.), (*Orathanad*); M. Appadurai (C.P.I.), (*Ottapidaram—S.C.*); P. Mohammed Ismail (Janata-J.P.), (*Padmanabhpuram*); M. B. Munnuswamy (D.M.K.), (*Palacode*); N. Palanivel (C.P.I.-M.), (*Palani—S.C.*); V. Karuppasamy Pandian (A.I A.D.M.K.), (*Palayamkottai*); P. N. Paramsiva Gounder (A.I.A. D.M.K.), (*Palladam*); P. M. Narasimhan (A.I.A.D.M.K.), (*Pallipet*); K. Rajaram (Speaker), (*Panamarathupathi*); S. Ramachandran (A.I.A.D.M.K.), (*Panruti*); S. Rajaraman (Cong.-I.), (*Papanasan*); R. Thavasi (A.I.A.D.M.K.), (*Paramakudi—S.C.*); N. V. N. Somu (D.M.K.), (*Park Town*); S. D. Somasundaram (A.I.A.D.M.K.), (*Pattukottai*); P. Theerath Raman (G.K.N.C.), (*Pennagaram*); J. S. Raju (D.M.K.), (*Perambalur—S.C.*); S. Balan (D.M.K.), (*Perambur*); G. Moorthy (Republican Party-Gavai), (*Peranambut—S.C.*); M. R. Govindan (A.I.A. D.M.K.), (*Peravurani*); K. Gopala Krishnan (A.I.A. D.M.K.), (*Periyakulam*); P. M. Venkitesan (A.I.A. D.M.K.), (*Pernamallur*); T. K. Nallappan (C.P.I.), (*Perundurai*); Kovaithambi (A.I.A.D.M.K.), (*Perur*); M. V. Rathinam (A.I.A.D.M.K.), (*Pollachi*); L. Balaraman (Cong.-I.), (*Polur*); P. Kandaswamy (A.I.A.D.M.K.), (*Pongalur*); R. Chakrapani (A.I.A.D.M.K.), (*Ponneri—S.C.*); N. Vijayabalan (A.I.A.D.M.K.), (*Poompuhar*); D. Rajarathinam (D.M.K.), (*Poonamalli*); R. Vijaya Raghunatha Tondaiman (Cong.-I.), (*Pudukottai*); K. Anbazagan (D.M.K.), (*Purasawalkam*).

V. Rajasekharan (Cong.-I.), (*Dr. Radhakrishna Nagar*), E. Muthu Ramalingam (G.K.N.C.), (*Radhapuram*); P Mokkaiyan (A.I.F.B.), (*Rajapalayam—S.C.*); T. Ramasamy (A.I.A.D.M.K.), (*Ramanathapuram*), Durai Murugan (D.M.K.), (*Ranipet*); K. P. Ramalingam (A.I.A.D.M.K.), (*Rasipuram*), M. Sundaram (Cong.-I.), (*Rishivandian*), P. Ponnurangan (D.M.K.), (*Royapuram*); D. Purushothaman (D.M.K.), (*Saidapet*); G. Krishnaraj (A.I.A.D.M.K.), (*Salem-I*); Salem M. Arumugam (A.I.A.D.M.K.), (*Salem-II*); A. Baluchamy (A.I.A.D.M.K.), (*Samyanallur—S.C.*), P. Durairaj (A.I.A.D.M.K.), (*Sankaranarayanar Koil—S.C.*); S. Kalitheerthan (A.I.A.D.M.K.), (*Sankarapuram*), P. Danapal (A.I.A.D.M.K.), (*Sankari—S.C.*); R. Rangasamy (A.I.A.D.M.K.), (*Sathyamangalam*); S. N. Ramasamy (G.K.N.C.), (*Sattan Kulam*); K. K. S. S. R. Ramachandran (A.I.A.D.M.K.), (*Sattur*); R. Muthaiah (A.I.A. D.M.K.), (*Sedapathi*); S. Sivaprakasam (A.I.A.D.M.K.), (*Sendamangalam*); A. Chandra Sekharan (Cong.-I.), (*Sholavandan*); C. Gopal (A.I.A.D.M.K.), (*Sholinghur*); A. D. Kulasekar (D.M.K.), (*Singanallur*); K. Balasubramanian (A.I.A.D.M.K.), (*Sirkali—S.C.*); O. Subramanian (Cong.-I.), (*Sivaganga*); V. Balakrishnan (A.I.A. D.M.K.), (*Sivakasi*); Smt. D. Yasodha (Cong.-I.), (*Sriperumbudur*); R. Soundrarajan (A.I.A.D.M.K.), (*Srirangam*); E. Ramasubramanian (A.I.A.D.M.K.), (*Srivaikuntam*); R. Thamaraikanni (A.I.A.D.M.K.), (*Srivilliputhur*); Pammal Nallathambi (D.M.K.), (*Tambaram*); S. Semmali (A.I.A.D.M.K.), (*Taramangalam*); Sattanatha Karayalar (Makkal Katchi), (*Tenkasi*); D. R. Rajaram Naidu (Cong.-I.), (*Thalli*); T. Rajambal (Cong.-I.), (*Thalvasal—S.C.*); D. Venugopal (D.M.K.), (*Thandarambattu*); S. Natarajan (D.M.K.), (*Thanjavar*); Dr. K. Sourirajan (G.K.N.C.), (*Theagarajanagar*); V. R. Jeyaraman (A.I.A.D.M.K.), (*Theni*); S. Kesava Athithan (A.I.A.D.M.K.), (*Thiruchendur*); N. S. V. Chitthan (Cong.-I.), (*Thirumangalam*); N. Sundararaj (Cong.-I.), (*Thirumayam*); V. Subramanian (D.M.K.), (*Thirunavallur*); G. Chockalingam (D.M.K.), (*Thiruporur—S.C.*); K. Kalimuthu (A.I.A.D.M.K.), (*Thirupparan Kundram*); A. N. Arunagiri (Cong.-I.), (*Thiruppathur*); R. Manimaran (A.I.A.D.M.K.), (*Thirupur*); P. Uthirapathy (C.P.I.), (*Thiruthuraipundi—S.C.*); S. Anguchamy (A.I.A.D.M.K.), (*Thiruvadnai*); S. Pattabiraman (A.I.A.D.M.K.), (*Thiruvallur*); K. Narayanasamy (Cong.-I.), (*Thiruvannamalai*); Gurusamy (A.I.A.D.M.K.), (*Thiruverambur*); S. Ramalingam (D.M.K.), (*Thiruvidamarudur*); J. Hemachandra (C.P.I.-M.), (*Thiruvattar*); Kumari Anandan (G.K.N.C.), (*Thiruvottiyur*); M. Chinnaraj (A.I.A.D.M.K.), (*Thondamuthur*); R. Periasamy (Cong.-I.), (*Thottiyam*); K. A. Krishnasamy (A.I.A.D.M.K.), (*Thousand Lights*); K. M. Thangamai (Cong.-I.), (*Tindivanam*); C. Ponnaiyan (A.I.A.D.M.K.), (*Tiruchengode*); K. Soundrarajan (A.I.A. D.M.K.), (*Tiruchirapalli-II*); P. Musiri Puthu (A.I.A. D.M.K.), (*Tiruchirapalli*); Dr. V. R. Neduncheziyan (A.I.A.D.M.K.), (*Tirunelveli*); B. Sundaram (D.M.K.), (*Tirupattur*); R. Shanmugam (A.I.A.D.M.K.), (*Tiruthani*); M. Subramanian (A.I.A.D.M.K.), (*Tiruvaiyaru*); M. Sellamuthu (C.P.I.-M.), (*Tirvnarur—S.C.*); N. Sivagnanam (Cong.-I.), (*Tiruvenam*); K. S. G. Haja Shreef (Cong.-I.), (*Triplicane*); S. V. Rajendran (A.I.A.D.M.K.), (*Tuticorin*).

K. Kallan (Cong.-I.), (*Udhagamandalam*); Kolandaivelu (A.I.A.D.M.K.), (*Udumalpet*); K. Rangasamy (A.I.A.D.M.K.), (*Ulundurpet*); V. Arengarajan (A.I.A.D.M.K.), (*Uppilia Puram*); S. Andi Thevar (A.I.F.B.), (*Usilampatti*); Anoor P. G. Jagdisan (A.I.A. D.M.K.), (*Uttiramerur*); Smt. Gomathi Srinivasan (A.I.A. D.M.K.), (*Valangaiman—S.C.*); A. T. Karuppaiah (C.P.I.), (*Valparai—S.C.*); C. Kuppusamy (A.I.A.D.M.K.), (*Vandavasi—S.C.*); N. Kulasekara Pandian (A.I.A. D.M.K.), (*Vaniyambadi*); N. Muthuvel (D.M.K.), (*Vanur—S.C.*); N. Perumal (A.I.A.D.M.K.), (*Varahur—S.C.*); R. Krishnan (C.P.I.-M.), (*Vasudevanallur*); M. S. Manickam (A.I.A.D.M.K.), (*Vendaranyam*); V. P. Balasubramanian (A.I.A.D.M.K.), (*Vedasandur*); Selvi P. Vijaylakshmi (A.I.A.D.M.K.), (*Veerapandi*); D. Ramasamy (A.I.A.D.M.K.), (*Vellakoil*); V. M. Devaraj (D.M.K.), (*Vellore*); R. K. Perumal (A.I.A.D.M.K.), (*Vilathi Kulam*); D. Moni (C.P.I.-M.), (*Vilovancode*); J. C. D. Prabhaharan (A.I.A.D.M.K.), (*Villivakkam*); K. P. Palaniyappan (D.M.K.), (*Villupuram*); R. Thyagarajan (Cong.-I.), (*Virdhachalam*): M. Sundrarajan (A.I.A.D.M.K.), (*Virudhunagar*); R. Thiruman (A.I.A.D.M.K.), (*Yercaud—S.T.*); Smt. Margaret Elizabeth Felix (*nominated*).

TAMIL NADU LEGISLATIVE COUNCIL

Chairman: Dr. M. P. Sivagnanam; *Dy. Chairman:* Pulavar Pulamaipithan; *Secretary:* C. K. Ramaswamy.

An estimate of party position in the Council is as follows: All India Anna Dravida Munnetra Kazhagam 16; Dravida Munnetra Kazhagam 5; Teachers'-Graduates' Progressive Front 4; Congress (I) 3; Indian Union Muslim League 1; United Party 1; Communist Party of India 1; Communist Party of India (Marxist) 1; Gandhi-Kamaraj National Congress 1; Independent 8; Chairman 1; Vacant 21; Total 63; Women 4.

Local Authority Constituency (21): All vacant.

Legislative Assembly Constituency (21): V. V. V. Anandam (G.K.N.C.); S. Arumugam (D.M.K.); A. J. Doss (Cong.-I.); O. S. Doraisamy (A.I.A.D.M.K.); S. R. Eradaha (A.I.A.D.M.K.); Jeppiar (A.I.A.D.M.K.); Kaduvetti Kannappan (A.I.A.D.M.K.); P. Manickam (C.P.I.); J. M. Miakhan (I.U.M.L.); S. Muthu (A.I.A.D.M.K.); A. Nallasivan (C.P.M.); Neela Narayanan (D.M.K.); S. Raghavanandam (A.I.A.D.M.K.); K. Raja Mohammed (A.I.A.D.M.K.); C. Ramalingam (A.I.A.D.M.K.); K. Ramamoorthi (Cong.-I.); R. D. Seethapathy (D.M.K.); P. U. Shanmugam (A.I.A.D.M.K.); E. V. A. Vallimuthu (A.I.A.D.M.K.); Rm. Veerappan (A.I.A.D.M.K.); Arcot N. Veerasami (D.M.K.).

Graduates' Constituency (6): Dr. H. V. Hande (A.I.A.D.M.K.), (*Madras District*); G. Vasantha Pai (Ind.), (*Madras District*); G. Swaminathan (Ind.), (*Tamil Nadu East Central*); A. R. Damodaran (U.P.), (*Tamil Nadu North*); D. Santosham (T.G.P.F.), (*Tamil Nadu South*); Dr. T. R. Janarthanam (A.I.A.D.M.K.), (*Tamil Nadu West Central*).

Teachers' Constituency (6): A. Leelavathi (T.G.P.F.), (*Madras-Chengalpattu*); P. R. Thomas (T.G.P.F.), (*Madurai-Ramanathapuram*); C. R. Lakshmikandhan (T.G.P.F.), (*North Arcot-South Arcot*); S. Muthusamy (Ind.), (*Salem-Dharmapuri-Coimbatore Nilgiris*); K. Meenakshisundaram (Ind.), (*Thanjavur-Tiruchirapalli-Pudukkottai*); M. Sankaralingam (D.M.K.), (*Tirunelveli-Kanyakumari*).

Nominated (9): K. Arunachalam (Ind.); Mandakini Krishnamurthi (Ind.); P. Munuswamy (Cong.-I.); Dr. Rajah Sir M. A. Muthiah Chettiar (Ind.); Pulavar Pulamaipithan (A.I.A.D.M.K.); P. Sithadevi Krishnasamy (A.I.A.D.M.K.); Dr. M. P. Sivagnanam (Ind.); Tara Cherian (Ind.); E. S. Venkatesan (A.I.A.D.M.K.).

TRIPURA LEGISLATIVE ASSEMBLY

Speaker: Sudhanwa Deb Barma; *Dy. Speaker:* Jyotirmoy Das.

Seats: 60; *Electorate:* 961,998; *Party Position:* C.P.I.-M.: 49; Tripura Upajati Juba Samity: 4; R.S.P.: 2; Forward Bloc: 1; Independent: 1; Vacant: 3. Woman Member: 1.

Manik Sarkar (C.P.I.-M.), (*Agartala*); Nagendra Jamatia (T.U.J.S.), (*Ampinegar—S.T.*); B. C. Deb Barma (C.P.I.-M.), (*Asharambari—S.T.*); Jadab Majumdar (C.P.I.-M.), (*Badharghat*); Ratimohan Jamatia (T.U.J.S.), (*Bagma—S.T.*); Hari Charan Sarkar (C.P.I.-M.), (*Bamutia—S.C.*); Bibekananda Bhowmik (C.P.I.-M.), (*Banamalipur*); Jyotir-Smt. Gauri Bhattacharjee (C.P.I.-M.), (*Barjala*); Jyotirmoy Das (C.P.I.-M.), (*Belonia*); Syamal Saha (C.P.I.-M.), (*Birganj*); Bhanulal Saha (C.P.I.-M.), (*Bishalgarh*); Araber Rahaman (C.P.I.-M.), (*Boranagar*); Baidyanath Majumdar (C.P.I.-M.), (*Chandipur*); Harinath Deb Barma (T.U.J.S.), (*Charailam*); Purna Mohan Tripura (C.P.I.-M.), (*Chawmanu—S.T.*); Samar Choudhury (C.P.I.-M.), (*Dhanpur*); Tarani Amarendra Sharma (Ind.), (*Dharmanagar*); Tarani Mohan Sinha (C.P.I.-M.), (*Fatikray*); Niranjan Deb Barma (C.P.I.-M.), (*Golaghati*); Badal Choudhury (C.P.I.-M.), (*Hrishyamukh*).

Brajamohan Jamatia (C.P.I.-M.), (*Jolaibari—S.T.*); Umesh-Ramkumar Nath (C.P.I.-M.), (*Jubarajnagar*); Umeshchandra Nath (C.P.I.-M.), (*Kadamtala*); Tapankumar Chakraborty (C.P.I.-M.), (*Kailashar*); Keshabchandra Majumder (C.P.I.-M.), (*Kakraban*); Mohanlal Chakraborty (C.P.I.-M.), (*Kalyanpur*); Malilal Sarkar (C.P.I.-M.), (*Kamalasagar*); Bimal Singha (C.P.I.-M.), (*Kamalpur*); Mandida Riyan (C.P.I.-M.), (*Kanchanpur*); Akhil Debnath (C.P.I.-M.), (*Khayerpur*); S. K. Thakur Singha (C.P.I.-M.), (*Khowai*); Manindra Deb Barma (C.P.I.-M.), (*Krishnapur—S.T.*); Kaminideb Barma (C.P.I.-M.), (*Kulai—S.T.*); Fayzur Rahaman (C.P.I.-M.), (*Kurti*); Khagen Das (C.P.I.-M.), (*Majlishpur*); Rashiram Deb Barma (C.P.I.-M.), (*Mandaibazar—S.T.*); Mathari Choudhury (C.P.I.-M.), (*Manu—S.T.*); Nareshchandra Ghosh (C.P.I.-M.), (*Matarbari*); Radharaman Deb Nath (C.P.I.-M.), (*Mohanpur*); Sumanta Kumar Das (C.P.I.-M.), (*Nalchar—S.C.*).

Bindubhushan Malakar (C.P.I.-M.), (*Pabiachhara—S.C.*); Mohanlal Chakma (C.P.I.-M.), (*Pacharthal—S.T.*); Subodh Chandra Das (C.P.I.-M.), (*Panisagar*); Nripon Chakraborty (C.P.I.-M.), (*Pramodnagar*); Anil Sarkar (C.P.I.-M.), (*Pratapgarh—S.C.*); Jogesh Chakraborty (R.S.P.), (*Radhakishorepur*); Ramkumar Dev Barma (C.P.I.-M.), (*Raima Valley—S.T.*); Nakul Das (C.P.I.-M.), (*Rajnagar—S.C.*); Dasaratha Deb (C.P.I.-M.), (*Ramchandraghat—S.T.*); Biren Datta (C.P.I.-M.), (*Ramnagar*); Sunil Kumar Choudhury (C.P.I.-M.), (*Sabroom*); Gopalchandra Das (R.S.P.), (*Salgarh—S.C.*); Dinesh Deb Barma (C.P.I.-M.), (*Saloma—S.T.*); Drao Kumar Reang (T.U.J.S.), (*Santir Bazar*); Abhiram Deb Barma (C.P.I.-M.), (*Simna—S.T.*); Subal Rudra (C.P.I.-M.), (*Sonamura*); Rudreswar Das (C.P.I.-M.), (*Surma—S.C.*), Sudhanwa Deb Barma (C.P.I.-M.), (*Takarjala—S.T.*), Jitendra Sarker (C.P.I.-M.), (*Toliamura*); Braja Gopal Roy (F.B.), (*Town Bordowali*).

UTTAR PRADESH VIDHAN SABHA

Speaker : Shripati Mishra ; *Dy. Speaker* : Yadvendra Singh.

Seats : 426 ; *Party Position* : Congress-I. : 314 ; Janata Party (S) Charan Singh Group/Lok Dal : 58 ; Congress-U. : 13 ; Bharatiya Janata Party : 11 ; Communist Party : 7 ; Janata Party : 5 ; Janata Party (S) Raj Narain Group : 4 ; Soshit Samaj Dal : 1 ; Independent : 12 ; Nominated : 1 ; Women Members : 21.

Thamman Singh (B.J.P.), (*Afzalgarh*) ; Kiranpal Singh (J.P.-S.), (*Aganta*) ; Dr. K. S. Kaushal (Cong.-I.), (*Agra-Cantt.*) ; Om Prakash Jindal (Cong.-I.), (*Agra-East*) ; Azad Kumar Kardam (Cong.-I.), (*Agra-West—S.C.*) ; Parmai Lal (B.J.P.), (*Ahirauri—S.C.*) ; Gaurishankar (Cong.-U.), (*Ajitmal—S.C.*) ; Prijadarshi Jaitli (Cong.-I.), (*Akbarpur*); Laturi Singh (J.P.-S.), (*Aliganj*); Mrs. Pushpa Chauhan (Cong.-I.), (*Aligarh*); A. K. Baipai (Cong.-I.), (*Allahabad-North*); S. B. Jaiswal (Cong.-I.), (*Allahabad-South*); Ch. Naunihal Singh (Cong.-I.), (*Allahabad-West*) ; Gobardhan (Cong.-I.), (*Almora*); Rajkumar Sanjai Singh (Cong.-I.),(*Amethi*); Khurshid Ahmed (Cong.-I.), (*Amroha*); Pravin Kumar (Cong.-I.), (*Anup-Shahr*); Kalyan Singh (Cong.-I.), (*Aonla*); A. R. Khan Neshtar (Cong.-I.), (*Aryanagar*); Anwar Khan (Cong.-I.), (*Atarauli*); Shambhunath (Cong.-I.), (*Atarotiya*) ; Dhaniram Verma (J.P.-S.), (*Auraiya*) ; Yogesh Chandra (Cong.-I.), (*Aurayi*) ; Nirmal Kumar (Cong.-I.), (*Ayodhya*) ; Ram Kumar Singh (Cong.-I.), (*Azamgarh*).

Rameshivar Prasad (Cong.-I.), (*Baberu*) ; Beni Bai (Cong.-I.), (*Babina*) ; Shiv Darshan (Cong.-I.), (*Bachrawan*) ; S. Krishan Goyal (Cong.-I.), (*Badaur*) ; Kunurvi Singh Negi (Ind.), (*Badrikedar*) ; Gopalram Das (Cong.-I.), (*Bagishwar—S.C.*) ; Mahesh Chand (Cong.-I.), (*Baghpat*) ; Nakli Singh (Cong.-I.), (*Baghra*) ; Raja Mahendra R. Singh (J.P.-S.), (*Bahi*) ; Amba Prasad (Ind.), (*Bahiri*) ; Saritun Singh (J.P.-S.), (*Bahjoie*) ; Dharma Pal (B.J.P.), (*Bahraich*) ; Kashi Nath Mishra (Cong.-I.), (*Ballia*) ; Man Bahadur (Cong.-I.), (*Balrampur*) ; Chandra Prakash Sharma (Cong.-I.), (*Banda*) ; Gopinath Dixit (Cong.-I.), (*Bangarman*) ; Bacha Pathak (Cong.-I.), (*Bansdih*) ; Kailash Parasad (Cong.-I.), (*Bansgaon—S.C.*) ; Deena Nath (Cong.-I.), (*Bansi*) ; Ramakant Mishra (Cong.-I.), (*Bara*) ; Surendra Singh (Cong.-I.), (*Barauli*) ; Ashfak Ahmad (Cong.-I.), (*Bareilly Cantt.*) ; Ram Singh Khanna (Cong.-I.), (*Bareilly City*) ; Mohan Singh (J.P.-S.), (*Barhaj*) ; Babu Ram (Cong.-I.), (*Barkheda—S.C.*) ; Dharmvir Singh (J.P.-S.), (*Barnava*) ; Ram Krishna (Cong.-I.), (*Barsati*) ; Smt. Almeda Ammal (Cong.-I.), (*Basti*) ; Nathu Lal (Cong.-I.), (*Bavan—S.C.*) ; Mukhtar Anis (J.P.-S.), (*Behta*) ; Ramlal Verma (Cong.-I.), (*Beniganj—S.C.*) ; Prabhunarain Singh (Cong.-I.), (*Beyalsi*) ; Banwari Ram (Cong.-I.), (*Bhadohi—S.C.*) ; B. S. Vishrad (Cong.-I.), (*Bhagwantnagar*) ; Gore Lal Shakya (Cong.-I.), (*Bharthana*) ; Haribansh Sahai (J.P.-S.), (*Bhatpar Rani*) ; Khrushid Ahmed (Ind.), (*Bhinga*) ; Subedar Singh (Cong.-I.), (*Bhogaon*) ; G. S. Sankhwar (Cong.-I.), (*Bhognipur-S.C.*) ; Bhami Pratap Singh (Cong.-I.), (*Bhojipura*) ; S. P. Saroj (Cong.-I.), (*Bihar—S.C.*) ; Azizur Rehman (Cong.-I.), (*Bijnom*) ; Sitaram Nishad (Cong.-I.), (*Bhikapur*) ; Daljit Singh (Cong.-I.), (*Bilaspur*) ; Hari Shankar (Cong.-I.), (*Bilgram*) ; Mohilal Dehalvi (J.P.-S.), (*Bilhaur—S.C.*) ; Kesho Ram (Cong.-I.), (*Bilsi—S.C.*) ; Abrar Ahmed (Cong.-I.), (*Binavar*) ; Rampyare Pandey (Cong.-I.), (*Bindki*) ; Prabhakar Nath Trivedi (Cong.-I.), (*Birapur*) ; Krishna Vir Singh (Cong.-I.), (*Bisauli*) ; Tej Bahadur (Cong.-I.), (*Bisalpur*) ; Ram Kumar Bhargava (Cong.-I.), (*Biswan*) ; Saidul Hasan (Cong.-I.), (*Bulandshahr*).

Ambika Singh (Cong.-I.), (*Captanganj*) ; Sarpat (Cong.-I.), (*Chakiya—S.C.*) ; Gulab Singh (Cong.-I.), (*Chakrauta—S.T.*) ; Purushottam (Cong.-I.), (*Chanbe—S.C.*) ; Ram Singh (Cong.-I.), (*Chanda*) ; S. P. Shastri (Cong.-I.), (*Chandauli—S.C.*) ; Amiruddin (Cong.-U.), (*Chandpur*) ; J. S. Maurya (Cong.-I.), (*Chandusi—S.C.*) ; Devi Prasad (Cong.-I.), (*Charda—S.C.*) ; Mohanlal, (Cong.-I.), (*Charkhari—S.C.*) ; Ram Prasad (Cong.-I.), (*Charthaval—S.C.*) ; H. K. Srivastave (J.P.-S.), (*Chaubepur*) ; Vijai Prakash (Cong.-I.), (*Chayal—S.C.*) ; Narendra Singh (J.P.-S.), (*Chhaprauli*) ; Chandan Singh (J.P.-S.), (*Chhata*) ; Radhiy Shyam Verma (J.P.-S.), (*Chibramau*) ; Srinath Singh (Cong.-I.), (*Chiraigaon*) ; Yadunath (J.P.-S.), (*Chunar*) ; Ram Govind (J.P.-S.), (*Chilkahar*) ; Brigunath (Cong.-I.), (*Chillupar*) ; Nazir Ali (J.P.-S.), (*Dadraul*) ; Bijaipal (Cong.-I.), (*Dadri*) ; Har Narain Singh (Cong.-I.), (*Dalmau*); Krishna Magan Singh (Cong.-I.), (*Dariabad*); Smt. Santosh Kumari (Cong.-I.), (*Dataganj*); Vijay Singh Rana (J.P.-S.), (*Dayalbagh*); Dwarka Nath Dhavan (Cong.-I.), (*Dehradun*); Mahavir Singh (Cong.-I.), (*Deoband*); Vidyasagar Nautial (C.P.I.), (*Deoprayag*); Bhagwandin Kushwaha (J.P.-S.), (*Derapur*); Shyar Singh (J.P.-S.), (*Dhampur*); Ram Ganam (Cong.-I.), (*Dhanapur*); Tej Narian Trivedi (Ind.), (*Dhaurahara*); Markandeya Chand (Cong.-U.), (*Dhuriyapar*) ; Swami Nampal (Cong-I.), (*Dibai*) ; Charu Chandra Ojha (Cong.-I.), (*Didihat*) ; Babulal (Cong.-I.), (*Diksir—S.C.*) ; Ram Harsh (Cong.,-U.), (*Dildarnagar*) ; Bhola Pandey (Cong.-I.), (*Duaba*) ; Vijai Singh (Cong.-I.), (*Dudhi*) ; Kamal Usuph (J.P.-S.), (*Dumariyaganj*).

Vacant (*Etah*) ; Maharaj Singh (Cong.-I.), (*Etmadpur—S.C.*) ; Ram Haresh Mishra (Cong.-I.), (*Fakharpur*) ; Nandram (B.J.P.), (*Faridpur—S.C.*) ; Vimal Prasad Tiwari (Cong.-I.), (*Farrukhabad*) ; Mahesh Upadhyaya (Cong.-I.), (*Fatehabad*) ; Vacant (*Fatehpur*) ; Jamuna Prasad (J.P.-S.), (*Fatehpur—S.C.*) ; Badan Singh (J.P.-S.), (*Fatehpur Sikri*) ; Khudadin Anrari (Cong.-I.), (*Fazilnagar*) ; Gulam Nabi (Cong.-I.), (*Firozabad*) ; Ram Naresh Shukla (Cong.-I.), (*Gadwara**) ; Ram Shiromani (Cong.-I.), (*Gadwara†*) ; Aqbal Hussain (Cong.-U.), (*Gaisari*) ; Babu Singh (J.P.-S.), (*Gambhiri*) ; Smt. Dhaneshwari Devi (Cong.-I.), (*Gangapur*) ; Jitendra Pal Singh (Cong.-I.), (*Gangeswari—S.C.*) ; K. Virendra Singh Dhanal (Cong.-I.), (*Garh Mukteswar*) ; Nand Kishore Singh (J.P.-S.), (*Gauribazar*) ; Smt. Rajapati Devi (Cong.-I.), (*Gauriganj*) ; K. S. S. Kushwaha (Cong.-I.), (*Ghatampur*) ; Surendra Kumar (Cong.-U.), (*Ghaziabad*) ; Ram Narain (J.P.-S.), (*Ghazipur*); Lallusingh Chauhan (C.P.I.), (*Ghiror*) ; Kedar (Cong.-I.), (*Ghosi*) ; Sardar Singh (J.P.-S.), (*Gokul*) ; Raghuraj Prasad Upadhyay (Cong.-I.), (*Gonda*) ; Dalsingar (Cong.-I.), (*Gopalpur*) ; Vacant (*Gorakhpur*) ; Vilayati Ram Katyal (Cong.-I.), (*Govindnagar*) ; Kanhiya Lal (J.P.-S.), (*Gowardhan—S.C.*) ; Ranjit Singh Joo Deo (Cong.-I.), (*Grautha*) ; Smt. Premvati (J.P.-S.), (*Gunnaur*) ; Buddhi Narain (Cong.-I.), (*Gyanpur*).

Shyamlal Bajpai (Cong.-I.), (*Haidargarh*) ; Ram Bhajanlal (Cong.-I.), (*Haidrabad*) , Smt. Genda Devi (Cong.-I.), (*Haizar Bazar—S.C.*) ; Akbar Ahmed (Cong.-I.), (*Haldurani*) ; Pratap Narain (Cong.-I.), (*Hamirpur*) ; Rajendra Tripathi (Cong.-I.), (*Handiya*) ; Bhup Singh Kar (Cong.-I.), (*Hapur*) ; Naresh Chandra (Cong.-I.), (*Hardoi*) ; Ramvansh Singh (Cong.-I.), (*Hardwar*) ; Paragi Lal Chaudhari (Cong.-I.), (*Hargoan—S.C.*) ; Sachidanand (Cong.-I.), (*Harha*) ; Smt. Vimala Rakish (J.P.-S.), (*Haroda—S.C.*) ; Surendra Pratap Narain (Cong.-I.), (*Harraiya*) ; Bhikha Lal (C.P.I.), (*Hasanganj—S.C.*) ; Raisuddin Varsi (J.P.-S.), (*Hasanpur*) ; Jhagar Singh (Cong.-I.), (*Hastinapur—S.C.*) ; Amarnath Singh (Cong.-I.), (*Haswa*) ; Kuber (J.P.-S.), (*Hata—S.C.*) ; Pandit Surajbhan (J.P.-S.), (*Hathras*) ; Rajendra Singh (J.P.-S.), (*Iglas*) ; Rajkishore Rao (Cong.-I) (*Ikhuna—SC.*); **Shripat Mishra** (Cong.-I.),

---

* Pratapgarh Dist.   † Jaunpur Dist.

(*Isauli*) ; Sukhda Mishra (Cong.-I.), (*Itawa*) ; Mata Prasad Pandey (J.P.-S.), (*Itwa*) ; Ram Sevak (Cong.-I.), (*Jagdishpur—S.C.*); Jagdish Narain (Cong.-I.), (*Jahanabad*); Ramji Ram (Cong.-I.), (*Jahangirganj—S.C.*); Surendra Singh (Cong.-I.), (*Jahurabad*); Devendra Pandey (Cong.-I.), (*Jaisinghpur*); Jhilmit Ram (Cong.-I.), (*Jakhaniya—S.C.*) ; Udaivir Singh (Cong.-I.), (*Jalalabad*); Sher Bahadur (Cong.-I.), (*Jalalpur*) ; Ram Singh (Cong.-I.), (*Jalesar—S.C.*) ; **Sahab Singh** (Cong.-I.), (*Jamaniyan*) ; Deepak (Cong.-I.), (*Jansath—S.C.*) ; Vishnu Dayal Verma (Cong.-I.), (*Jasrana*) ; Balram Singh Yadav (Cong.-I.), (*Jaswantnagar*) ; Kamala Prasad Singh (Cong.-I.), (*Jaunpur*) ; Kumari Sumanlata Dixit (Cong.-I.), (*Jeneralganj*) ; Hari Singh (Cong.-I.), (*Jewar—S.C.*) ; Rajendra Agnihotri (B.J.P.), (*Jhansi*) ; Bainath Kushwaha (J.P.-S.), (*Jhursi*).

Jaideep Singh (Ind.), (*Kabar*) ; Jairaj Gautam (Cong.-I.), (*Kadipur*) ; Hukam Singh (J.P.-S.), (*Kairana*) ; Sunder Singh (Cong.-I.), (*Kaisarganj*) ; Shankar Singh (J.P.-S.), (*Kalpi*) ; Ramnarayan Pathak (Cong.-I.), (*Kalyanpur*) ; Balbir Singh (B.J.P.), (*Kamalyan*) ; Veerendra Singh (J.P.-S.), (*Kandhla*) ; Vacant, (*Kannauj — S.C.*) ; Kunuwar Narain Mishra (Cong.-I.), (*Kanpur Cantt.*); Umeshwar Pratap Singh (Cong.-I.), (*Karnailganj*); Dr. Shivanand Nautial (Ind.), (*Karnprayag*) ; Shiv Naresh (Cong.-I.), (*Karvi*) ; Raj Mangal Panday (Cong.-U.), (*Kasaya*) ; Manpal Singh (Cong.-I.), (*Kasganj*) ; Gurhiya Satendra Chandra (Cong.-I.), (*Kashipur*); Murlidhar Munim (Cong.-I.), (*Katara Bazar*) ; J. S. Vikal Saketi (Cong.-I.), (*Katehari*) ; Smt. Ghuri Dur (J.P.), (*Kaudiram*) ; Puramohand (Cong.-I.), (*Kaul—S.C.*) ; Rash Prasad (Cong.-I.), (*Kaunch—S.C.*) ; Ram Krishna (Cong.-I.), (*Kauth*) ; Anwar Mehd Khan (J.P.-S.), (*Kayamganj*) ; Ram Sumjhavan (Cong.-I.), (*Kerakat*) ; K. P. Tiwari (Cong.-I.), (*Kerchhana*) ; Shivmangal Singh (Cong.-I.), (*Kerhal*) ; Krishna Dutt (Cong.-I.), (*Khaga*) ; Shivraj Singh (Cong.-I.), (*Khair*) ; Ram Asre Paswan (J.P.-S.), (*Khalilabad—S.C.*) ; Damodar Sharma (Cong.-I.), (*Kharkhanda*) ; Dharmvir Singh (Cong.-I.), (*Khatauli*) ; Biharilal (Cong.-I.), (*Khatima*) ; Chander Singh (Cong.-I.), (*Khokda*) ; Mandaleshwar Singh (Cong.-I.), (*Kheragarh*) ; Divakar Vikram Singh (J.P.-S.), (*Khesraha*) ; Budh Pal Singh (Cong.-I.), (*Khurja*) ; Jang Bahadur (Cong.-I.), (*Khuthan*) ; Munshi Lal (Cong.-I.), (*Kishni—S.C.*) ; Indrajit (Cong.-I.), (*Kishanpur*) ; Bhim Singh (Cong.-I.), (*Kithaud*) ; Udal (C.P.I.), (*Kolsala*) ; Gori Shankar Bhaiya (J.P.-S.), (*Kopacheet*) ; Niyaz Hasan Khan (Cong.-I.), (*Kunda*) ; Abbar Hussian (J.P.-S.*), (*Kundepki*).

Hargovind Verma (J.P.-S.), (*Laharpur*) ; Maharani Dohare (Cong.-I.), (*Lakhana—S.C.*) ; Jaffar Ali Nagvi (Cong.-I.), (*Lakhimpur*) ; Kazi Mohinddir (J.P.-S.), (*Laksar*) ; Birender Pratap Sahi (Ind.), (*Lakshmipur*) ; Triveni (Cong.-I.), (*Lalganj*) ; Om Prakash Richariya (Cong.-I.), (*Lalitpur*) ; C. Mohan Singh Negi (Cong.-I.), (*Lansdoun*) ; Rudra Pratap (J.P.-S.), (*Leoria*) ; Smt. Primvati Tewari (Cong.-I.), (*Lucknow Cantt.*) ; Mohd. Rafi Siddiqui (Cong.-I.), (*Lucknow Central*) ; Smt. Swarup Kumari Bakshi (Cong.-I.), (*Lucknow East*) ; K. L. Mahendra (Cong.-I.), (*Lucknow West*).

Kesri Prasad (Cong.-I.), (*Macchli Shahar*) ; V. K. Chaudhri (Cong.-I.), (*Machrehta—S.C.*) ; Dalganjan Singh (J.P.-S.), (*Madhogarh*) ; Inder Pratap Singh (Cong.-I.), (*Mahasi*) ; Ammar Rizir (Cong.-I.), (*Mahmoodabad*) ; Babulal (Ind.), (*Mahoba*) ; Trivedi (Cong.-I.), (*Mahona*) ; S. S. Bundela (Cong.-I.), (*Mahrauni*) ; F. P. Visharad (J.P.-S.), (*Maharajganj—S.C.*) ; Raghuvir Singh Yadav (Cong.-I.), (*Mainpuri*) ; J. S. Vidyarthi (Cong.-I.), (*Majhanpur—S.C.*) ; Lok Path (Cong.-I.), (*Majhwan*) ; Baijnath Kureel (Cong.-I.), (*Malihabad—S.C.*) ; Ram Asre Verma (Ind.), (*Mallanwa*) ; Chhedi Lal (Cong.-I.), (*Manakpur—S.C.*) ; Shiromani (Cong.-I.), (*Manikpur—S.C.*) ; Haridwar Pandeya (Cong.-I.), (*Maniram*) ; Lokmani (Cong.-I.), (*Mant*) ; Sirya Nath (Cong.-I.), (*Mariahu*); Rijvanur Rahman (Cong.-I.), (*Masauli*) ; Brahm Dutt (Cong.-I.), (*Masoori*) ; Dayal Kishna (Cong.-I.), (*Mathura*) ; Khairul Bashar (Ind.), (*Mau*) ; K. B. Mishra (Cong.-I.), (*Maudaha*) ; Bhagirath (Cong.-I.), (*Mauranipur—S.C.*) ; Mansoor Ahmed (Cong.-I.), (*Meerut*) ; A. S. Sethi (Cong.-I.), (*Meerut Cantt.*) ; Mohd. Navi (Cong.-U.), (*Mehdwal*) ; Deepu (Cong.-I.), (*Mehnagar—S.C.*) ; Bashram Das (Cong.-I.), (*Meja—S.C.*) ; Mitrasen (C.P.I.), (*Milkipur*) ; Azhar Imam (Cong.-I.), (*Mirzapur*) ; Ramratan Singh (Cong.-I.), (*Mishrikh*) ; Sukhvir Singh Gahlant (Cong.-I.), (*Modinagar*) ; Banshidhar Raj (Cong.-I.), (*Mohammadi*) ; S. B. Rawat (J.P.-S.), (*Mohanlalganj—S.C.*) ; Vijay Shankar Singh (Cong.-I.), (*Mohmedabad*†) ; R. S. Yadaw (Cong.-I.), (*Mohamadabad*††) ; Mohd. Ali (Ind.), (*Morna*) ; Dudhnath (Cong.-I.), (*Mubarakpur*) ; Ram Chandra (Cong.-I.), (*Mughalsarai*) ; Tapeshwar (Cong.-I.), (*Muhammadabad Gohna—S.C.*) ; D. N. Banmahanth (Cong.-I.), (*Mujehna*) ; Panne Lal (Cong.-I.), (*Mundera Bazar—S.C.*) ; H. M. Saddiq (Cong.-I.), (*Muradabad*) ; Riyasat Husain (Ind.), (*Muradabad Rural*) ; Rajpal Singh (Cong.-I.), (*Muradabad-West*) ; I. D. Tyagi (Cong.-I.), (*Muradnagar*) ; Amar Singh (Ind.), (*Muzaffarabad*) ; Vidya Bhushan (Cong.-I.), (*Muzaffarnagar*).

Vacant, (*Nagal—S.C.*) ; Ram Awadh Prasad (Cong.-I.), (*Nagarpurav—S.C.*); Bishanlal (Cong.-I.), (*Nagina*) ; S. N. S. Negi (Cong.-I.), (*Nainital*) ; Rati Ram (Cong.-I.), (*Najibabad*) ; Yashpal Singh (Cong.-I.), (*Nakud*) ; Jata Shankar Singh (B.J.P.), (*Nanpara*) ; H. P. Pandey (Cong.-I.), (*Naraini*) ; Raj Kumar (Cong.-I.), (*Nathupur*) ; M. P. Pandey (Cong.-I.), (*Naugarh*) ; Mahesh Prasad (Cong.-I.), (*Naurangiya—S.C.*) ; Mohd. Amin (Cong.-I.), (*Nawabganj*¶) ; Chatram Gangwar (Ind.), (*Nawabganj***) ; Smt. Parvati Devi (J.P.-S.), (*Nawabganj*‡); Hans Raj (Cong.-I.), (*Nidhaulikalan*) ; Satish Ajmani (Cong.-I.), (*Nighasan*) ; Jagdish Singh (Cong.-I.), (*Nigohi*) ; C. Brahmachari (Cong.-I.), (*Nijamabad*) ; Brij Kishore (Cong.-I.), (*Padrauna*) ; Vir Bahadur Singh (Cong.-I.), (*Paniyara*); Malik Mohd. Zamir Ahmed (Cong.-I.), (*Patiyali*); Basudev Singh (Cong.-I.), (*Patti*); Narendra Singh Bhandari (Ind.), (*Pauri*); Chidalal Chandhari (Cong.-I.), (*Pela*) ; Shyam Narian Tewari (Ind.), (*Pharenda*) ; Abdul Qalam (Cong.I.), (*Phulpur*) ; Smt. Kamla Devi (Cong.I.), (*Pihani*) ; Charanjeet Singh (Cong.-I.), (*Pilibhit*) ; Kedar Nath Singh (Cong.-U.), (*Pipraich*) ; Narendra Singh Bishat (Cong.-I.), (*Pithoragarh*) ; Lal Pratap Singh (Cong.-I.), (*Pratapgarh*) ; Shyam Surat Upadhyaya (Cong.-I.), (*Pratappur*) ; Roop Ram (Cong.-I.), (*Punvayan—S.C.*) ; Vinod Kumar (Cong.-I.), (*Puranpur*) ; Ganya Singh (Cong.-I.), (*Purva*).

Ramesh Chandra (Cong.-I.), (*Rae Barelli*) ; Ram Charan (Cong.-I.), (*Rajgarh*) ; Ramswarup Verma (S.S.D.), (*Rajpur*) ; Sugriv Singh (Cong.-I.), (*Ramkola*) ; Gajendra Singh (Cong.-I.), (*Ramnagar*§) ; Paramatma Prasad Singh (Cong.-I.), (*Ramnagar*@) ; Muhammed Aazam Khan (J.P.-S.), (*Rampur*) ; Pramod Kumar (Cong.-I.), (*Rampur Khas*) ; Jaswantsingh Bisht (Ind.), (*Ranikhet*) ; Tej Bahadur (Cong.-I.), (*Rari*) ; Hardev (Cong.-I.), (*Rasra—S.C.*) ; Swami Prasad Singh (Cong.-I.), (*Rath*) ; Kallu Ram (Cong.-I.), (*Robbertsganj—S.C.*) ; Ram Singh (Cong.-I.), (*Roorki*) ; Pradeep Kumar Yadav (J.P.-S.), (*Rudauli*) , Bhaskar Pandey (Cong.-I.), (*Rudrapur*).

Javed Ali (Cong.-I.), (*Sadabad*) ; Ramdhani (J.P.-S.), (*Sadat—S.C.*) ; Dr. Mohmed Umar (Cong.-I.), (*Sadullanagar*) ; Hari Prasad (Cong.-I.), (*Safipur—S.C.*) ; Panchanan (Cong.-I.), (*Sagadi*) ; Surendra Kapil (Cong.-I.), (*Saharanpur*) ; Mir Mazhar Ali (Cong.-I.), (*Sahaswan*)

---

* Raj Narain Group.
§ Barabanki Dist.
† Ghazipur Dist.
@ Basti Dist.
†† Farukhabad Dist.
¶ Allahabad Dist.
** Bareilly Dist.
‡ Barabanki Dist.

Kishori Shukla (Cong.-I.), (*Sahjanva*) ; Ram Karan (J.P.-S.), (*Saidpur*) ; Netrapal Singh (Cong.-I.), (*Sakit*) ; Durga Prasad Mishra (B.J.P.), (*Salempur*) ; Shiv Balak (Cong.-I.), (*Salon—S.C.*) ; Shariatulla (Cong.-I.), (*Sambhal*) ; Kudasiya Begum (Cong.-I.), (*Sandila*) ; Rameshwar Nath Chaube (Cong.-I.), (*Sanha*) ; Lalsa (Cong.-I.), (*Saraimir—S.C.*) ; Sayed Jakiuddin (Cong.-I.), (*Sardhana*); Smt. Sunita Chauhan (Cong.-I.), (*Sareni*) ; Vijai Kumar (Cong.-I.), (*Sarojini Nagar*) ; Devendra Bahadur Singh (Cong.-I.), (*Sarsaul*) ; Rulha Singh (J.P.-S.), (*Sarsawa*) ; Ajitkumar Singh (Cong.-I.), (*Sarvankhera*) ; Dr. Dharam Pal (Cong.-I.), (*Sasni—S.C.*) ; Krishna Kumar (Cong.-I.), (*Sataon*) ; Baban Singh (Cong.-I.), (*Seeyar*) ; Dhuprai (Cong.-I.), (*Seorahi*) ; Ram Autar Dixit (Cong.-I.), (*Shahabad*) ; Banshidhar (Cong.-I.), (*Shahabad—S.C.*) ; Pahalwan (Cong.-I.), (*Shahganj—S.C.*) ; Nawab Sikandar Ali Khan (Cong.-I.), ((*Shahjehanpur*) ; Dharam Singh (Cong.-I.), (*Shikarpur—S.C.*) ; Jagadish Singh (Cong.-I.), (*Shikohabad*) ; Smt. Kamla Sahni (Cong.-I.), (*Shoharatgarh*) ; Upendra Bahadur Singh (Cong.-I.), (*Shoharatgarh*) ; Upendra Bahadur Singh (Cong.-I.), (*Shrinagar*) ; Janardan Prasad Ojha (J.P.), (*Shyam Deorava*) ; Ram Sagar (J.P.-S.), (*Sidhaur—S.C.*) ; Ram Lal (Cong.-I.), (*Sidholi—S.C.*) ; Yashpal Singh (Cong.-I.), (*Sikandrabad*) ; Smt. Pushpa Chauhan (Cong.-I.), (*Sikandrarao*) ; Nirbhai Narain Singh (Cong.-I.), (*Sikandarpur*) ; Jagdish Prasad (Cong.-I.), (*Sirathu—S.C.*) ; Smt. Kamla Dariyawadi (Cong.-I.), (*Sisamau—S.C.*) ; Yadvendra Singh (Cong.-U.), (*Siswa*) ; Rajendra Kumar Gupta (B.J.P.), (*Sitapur*) ; Hemchand Nimesh (Cong.-I.), (*Sivalkhas—S.C.*) ; Madhav Prasad (Cong.-I.), (*Sohaval*) ; Radheshyam Patel (J.P.-S.), (*Sorao*); Kumari Urmila Agnihotri (Cong.-I.), (*Soroan*) ; Mueed Ahmed (Cong.-I.), (*Sultanpur*) ; Balbir Singh (B.J.P.), (*Swar Tanda*) ; Chattar Singh (J.P.-S.), (*Syana*) ; Shonath Singh (Cong.-I.), (*Syohara*).

Gopi Nath Verma (J.P.-S.), (*Tanda*) ; Khushhal Singh Rogad (Cong.-I.), (*Tehri*) ; Ram Pal Singh (Cong.-I.), (*Thakurdwara*) ; Somansh Prakash (Cong.-I.), (*Thana Bhavan*) ; Satya Pal Singh (J.P.-S.), (*Tilhar*) ; Haji Mohd. Vasim (Cong.-I.), (*Tiloi*); Viswanath Pratap Singh (Cong.-I.), (*Tindwari*); Mangal Dev (Cong.-I.), (*Tulsipur*); Gulab Sehra (Cong.-I.), (*Tundla—S.C.*) ; Shiv Pal Singh (J.P.-S.), (*Unnao*) ; Suresh Dutt Paliwal (Cong.-I.), (*Urai*) ; Kunwar Yogendra Singh (Cong.-I.), (*Urmada*) ; Fakhre Alam (Cong.-U.), (*Usehat*) ; Maskar Jafri (C.P.I.), (*Utraula*) ; Baldev Singh Arya (Ind.), (*Uttarkashi—S.C.*) ; Mandvi Prasad Singh (Cong.-I.), (*Varanasi Cantt.*) ; Mohd. Safiurahman Ansari (Cong.-I.), (*Varanasi North*) ; Kailash Tandon (Cong.-I.), (*Varanasi South*) ; Gajendra Singh (Cong.-I.), (*Vidhuna*) ; A. C. Grice : Nominee.

UTTAR PRADESH VIDHAN PARISHAD

Chairman : Virendra Bahadur Singh Chandel ; *Dy. Chairman :* Shiv Prasad Gupta.

Seats : 108 ; *Party Position :* Congress (I) 23 ; Akhil Bhartiya Lok Dal 15 ; Bhartiya Janata Party 5 ; Janata Party (J.P.) 5 ; Janata (S) 5 ; Teachers' Constituency 8 ; Congress (Urs) 4 ; Nirdaliya 7 ; C.P.I. 3 ; Rashtravadi Dal 1 ; Vacant 32 ; Women Members 7.

Elected by the Legislative Assembly (39) : Smt. Indra Mohini (Cong.-I.) ; Chandra Shakher Chaurasia (Cong.-I.) ; Jagdish Chandra Dixit (Cong.-I.) ; Smt. Padma Seth (Cong.-I.) ; Bhola Dutt Pandey (Cong.-I.) ; Mahavir Rana (Cong.-I.) ; Mahirajdhawj Singh (Cong.-I.) ; Mata Prasad (Cong.-I.) ; Mahendra Singh (Cong.-I.) ; Raj Pal (Cong.-I.) ; V. N. Khanna (Cong.-I.) ; Smt. Sia Dulari (Cong.-I.) ; Km. Saraswati Ammal (Cong.-I.) ; Surat Chandra Ramola (Cong.-I.) ; Km. Sataya Sood (Cong.-I.) ; Saiad-Ali (Cong.-I.) ; Hasim Raza Abadi (Cong.-I.) ; Guru Dutt Solanki (A.B.L.D.) ; Tirath Singh (A.B.L.D.) ; Nisar Ahmed (A.B.L.D.) ; Mahipal Singh Shastri (A.B.L.D.) ; Rajeshwar Singh (A.B.L.D.) ; R. C. Azad (A.B.L.D.) ; Ram Singh (A.B.L.D.) ; Ram Saran (A.B.L.D.) ; Madhuban Singh (B.J.P.) ; R. K. Sahi (B.J.P.) ; Lalji Tandon (B.J.P.) ; Ram Naresh Singh (B.J.P.) ; Abbas Ali (Janata (J.P.)); Ram Lakhan Shukla (Janata—J.P.) ; Saru Prasad Tyagi (Janata—J.P.) ; Smt. Prabha Vati (Janata-S); Visram Rai (Janata-S); Daya Nand Vyas (Cong.-Urs); Guru Prasad (C.P.I.) ; Z. A. Ahmed (C.P.I.) ; Saru Pandey (C.P.I.) ; Vishva Nath Pratap Singh (Cong.-I.).

Local Authority Constituency (11) : Satya Narain Singh (A.B.L.D.), (*Azamgarh cum Gazipur*) ; Vindhya Chal Rai (Cong.-Urs), (*Azamgarh cum Gazipur*) ; Nagendra Nath Singh (Janata—J.P.), (*Basti cum Gorakhpur*) ; Ram Kishan Dewedi (Cong.-Urs), (*Basti cum Gorakhpur*) ; Anandeshwar Prasad Singh (Janata-S), (*Deoria cum Balia*) ; Ram Ratan Singh (Cong.-I.), (*Fatepur cum Banda*) ; Malaim Singh (Cong.-Urs), (*Jalauin cum Etawa*) ; Virendra Bahadur Singh Chandel (Cong.-I.), (*Kanpur cum Farukabad*) ; Har Mohan Singh Yadav (A.B.L.D.), (*Kanpur cum Farukabad*) ; Uma Kant (Cong.-I.), *Varanasi cum Mirzapur*) ; Raj Behari Singh (Cong.-I.), (*Varanasi cum Mirzapur*).

Graduates' Constituency (9) : Shiv Prasad Gupta (A.B.L.D.), (*Agara*) ; Laxmi Sahai Saxena (Janata-S), (*Allahabad*) ; Dr. A. P. Singh (Nirdaliya), (*Bareli*) ; Kranti Kumar (Nirdaliya), (*Garhwal cum Kumaon*) ; Krishna Pal Singh (Nirdaliya), (*Gorakhpur cum Faizabad*) ; Jagendra Swarup (Nirdaliya), (*Kanpur cum Jhansi*) ; H. K. Avasthi (Nirdaliya), (*Lucknow*) ; T. P. Misra (Cong.-I.), (*Meerut*) ; Raj Nath Singh (Nirdaliya), (*Varanasi*).

Teachers' Constituency (9) : Rajendra Prasad Gupta (T.P.), (*Agra*) ; Mandhata Singh (T.P.), (*Allahabad*) ; B. C. Sharma (T.P.), (*Bareli*) ; Dhani Ram Singh Nagi (T.P.), (*Garhwal cum Kumaon*) ; R. P. Ozha (*Rastravadi Dal*) ; Har Prasad Tewari (T.P.), (*Kanpur*) ; S. C. Saxena (T.P.), (*Lucknow*) ; Om Prakash Sharma (T.P.), (*Meerut*) ; Sunir Kumar (T.P.), (*Varanasi*).

Nominated (8) : Abdul Rashid (A.B.L.D.) ; Trilok Chand Tyagi (A.B.L.D.) ; Gayani Harichandra Singh (A.B.L.D.); Km. Daya Bahen (B.J.P.) ; Jagannath Shastri (Janata -J.P.) ; Baij Nath Pal (Janata-S); Shyama Prasad Pradeep (Nirdaliya) ; Cheedi Prasad (A.B.L.D.).

WEST BENGAL LEGISLATIVE ASSEMBLY

Speaker : Syed A. M. Habibullah ; *Dy. Speaker :* Kalimuddin Shams.

Seats : 295 ; *Electorate :* 26,030,704 ; *Votes polled :* 14,542,813. An estimate of *party position* in the Assembly is as follows : C.P.I. (M) : 178 (including one Independent member supported by C.P.I.(M) ; Forward Bloc : 27 ; R.S.P. : 20 ; R.C.P.I. : 3 ; Forward Bloc (M) : 2 ; B. B. Cong. : 1 ; Janata : 20 ; Janata (S) : 4 ; Bharatiya Janata Party : 2 ; Cong. : 2 ; Cong.-I : 23 ; S.U.C. : 4 ; C.P.I. : 3 ; C.P.I. (M.L.) : 1 ; Muslim League : 1 ; Independents : 3 ; Nominated : 1 ; Women Members : 4.

A. K. Bose (C.P.I.-M), (*Alipore*) ; Nani Bhattacharya (R.S.P.), (*Alipurduar*) ; Hashim Abdul Halim (C.P.I.-M), (*Amdanga*); Barindranath Koley (C.P.I.-M.), (*Amta*); Habib Mustafa (C.P.I.-M.), (*Araidanga*); Ajoykumar Dey (J.P.), (*Arambagh*); D. C Kuiry (F.B.), (*Arsha*); Bijoy Pal (C.P.I.-M.), (*Asansol*); Nani Kar (C.P.I.-M.), (*Ashokenagar*); Lutfal Haque (Cong.-I.), (*Aurangabad*); Sreedhar Malik (C.P.I.-M.), (*Ausgram—S.C.*).

Mostafa Bin Quasem (C.P.I.-M.), (*Baduria*); Kamalakshi Biswas (F.B.), (*Bagdaha—S.C.*); Smt. Nirupama Chatterjee (C.P.I.-M.), (*Bagnan*); Abhinash Pramanik (C.P.I.-M.), (*Balagarh—S.C.*); Bikram Tudu (C.P.I.-M), (*Balarampur—S.T.*); Patitpaban Pathak (C.P.I.-M), (*Bally*); Sachin Sen (C.P.I.-M.), (*Ballygunge*); Biswanath Choudhuri (R.S.P.),(*Balurghat*); Sudhangshu SekharMajhi (C.P.I.-M.), (*Banduan—S.T.*); Partha De (C.P.I.-M), (*Bankura*); Sunil Basu Roy (C.P.I.-M), (*Barabani*); Rabishankar Pandey (Janata-S), (*Barabazar*); Motish Roy (R.S.P.), (*Baranagar*); Saral Deb (F.B.), (*Barasat*); Ashwinikumar Raj (C.P.I.-M.), (*Barjora*); Hemen Majumdar (C.P.I.-M.), (*Baruipur*); Amalendra Roy (R.S.P.), (*Barwan*); Kalipada Barman (R.S.P.), (*Basanti—S.C.*); Prabir Sengupta (C.P.I.-M.), (*Bansberia*); Narayan Mukherjee (C.P.I.-M.), (*Basirhat*); Niranjan Mukherjee (C.P.I.-M.), (*Behala East*); Rabin Mukherjee (C.P.I.-M.), (*Bahala West*); Timir Baran Bhaduri (R.S.P.), (*Beldanga*); Subhas Chakraborti (C.P.I.-M.), (*Belgatchia*); Lakshmicharan Sen (C.P.I.-M.). (*Belgatchia West*); Krishnapada Ghosh (C.P.I.-M.), (*Beliaghata*); Debabrata Bandopadhyay (R.S.P.), (*Berhampore*); K. H. Rahaman (Cong.-I.), (*Bhagabangola*); Haripada Jana (J.P.), (*Bhagabanpur*); Daud Khan (C.P.I.-M.), (*Bhangore*); Satyapada Bhattacharyya (R.S.P.), (*Bharatpur*); Bholanath Sen (Cong.-I.), (*Bhatar*); Sitaram Gupta (C.P.I.-M.), (*Bhatpara*); Jagdishchandra Das (C.P.I.-M.), (*Bijpur*); Sambhunath Mandi (C.P.I.-M.), (*Binpur—S.T.*); Sundar Naskar (C.P.I.-M.), (*Bishnupur East—S.C.*); Pravaschandra Roy (C.P.I.-M.), (*Bishnupur West*); Jyotsnakumar Gupta (R.S.P.). (*Bolpur*); Ranjit Mitra (C.P.I.-M.), (*Bongaon*); Abdul Hasan (C.P.I.-M.), (*Bowbazar*); K. Roy Barman (C.P.I.-M.), (*Budge Budge*); Dwarkanath Tah (C.P.I.-M.), (*Burdwan North*); B. K. Chowdhury (C.P.I.-M.). (*Burdwan South*); Nikhil Das (R.S.P.), (*Burtola*).

Abdur Razzak Molla (C.P.I.-M.), (*Canning East*); Chittaranjan Mridha (C.P.I.-M.), (*Canning West—S.C.*); Binay Kumar Biswas (Ind. supported by L.F.), (*Chakdah*); Sailendranath Chattopadhya (C.P.I.-M.), (*Champdani*); Bhabani Mukherjee (C.P.I.-M.), (*Chandernagore*); Malin Ghosh (C.P.I.-M.), (*Chanditala*); Umapati Chakraborty (C.P.I.-M.), (*Chandrakona*); Sahabuddin Mondal (C.P.I.-M.), (*Chapra*); Subhas Goswami (R.S.P.), (*Chhatna*); Sambucharan Ghosh (F.B.), (*Chinsurah*); Maha Bacha Munsi (C.P.I.-M.), (*Chopra*); Sandip Das (J.P.), (*Chowringhee*); Rashbehari Pal (J.P.), (*Contai North*); Satyabrata Maity (J.P.), (*Contai South*); Smt. Aparajita Goppi (F.B.), (*Cooch-Behar North*); Bimal Kanti Basu (F.B.), (*Cooch-Behar West*); Buddhadev Bhattacharjee (C.P.I.-M.), (*Cossipur*); Tamang Dawa Lama (C.P.I.-M.), (*Darjeeling*); Pradyot Kumar Mahanti (J.P.), (*Dantan*); P. C. Phodikar (C.P.I.-M), (*Daspur*); Syed Morazzam Hossain (C.P.I.-M.), (*Debra*); A. K. M. Hassan Uzzasman (M.L.), (*Deganga*); Jatin Chakrabarty (R.S.P.), (*Dhakuria*); Kripa Sindhu Saha (F.B.), (*Dhaniakhali—S.C.*); Banamali Roy (C.P.I.-M.), (*Dhupguri—S.C.*); A. Q. Molla (C.P.I.-M.), (*Diamond Harbour*); Kamal K. Guha (F.B.), (*Dinhata*); Joykesh Mukherjee (C.P.I.-M.), (*Domjur*); Md. Abdul Bari (C.P.I.-M.), (*Domkal*); Bhaktibhusan Mandal (F.B.), (*Dubrajpur*); Santi Ghatak (C.P.I.-M.), (*Dum Dum*); Dilipkumar Mazumdar (C.P.I.-M.), (*Durgapur I*); Tarun Chatterjee (C.P.I.-M.), (*Durgapur II*).

Probodhchandra Sinha (J.P.), (*Egra*); Sailen Sarkar (C.P.I.-M.), (*English Bazar*); Md. Nezamuddin (C.P.I-.M.), (*Entally*); J. N. Singha Roy (C.P.I.-M.), (*Falakata—S.C.*); Nemaichandra Das (C.P.I.-M.), (*Falta*); Abul Hasnat Khan (C.P.I.-M.), (*Farakka*); Kantichandra Biswas (C.P.I.-M.), (*Gaighata*); Sufal Murmu (C.P.I.-M.), (*Gajol—S.T.*); Debranjan Sen (F.B.), (*Galsi*); Nabani Bouri (C.P.I.-M.), (*Gangajalghati—S.C.*); Ahindra Sarkar (C.P.I.-M.), (*Gangarampur*); Chhedilal Singh (C.P.I.-M.), (*Garden Reach*); Suvendu Mandal (C.P.I.-M.), (*Garhbeta East*); Santosh Bisui (C.P.I.-M.), (*Garhbeta West—S.C.*); Gopal Mandal (C.P.I.-M.), (*Ghatal—S.C.*); Ramzan Ali (F.B.), (*Goalpokhar*); Nanuram Roy (J.P.), (*Goghat—S.C.*); Santosh Rana (C.P.I.-M.L.), (*Gopiballavpur*); Ganeshchandra Mondal (R.S.P.), (*Gosaba—S.C.*); Sarkar Murmu (C.P.I.-M.), (*Habibpur—S.T.*); Nirode Roychowdhury (C.P.I.-M.), (*Habra*); Sukumar Mondal (C.P.I.-M.), (*Hanskhali—S.C.*); Trilochan Mal (R.C.P.I.), (*Hansan—S.C.*); Shaikh Imajuddin (Cong.-I.), (*Hariharpara*); Nanigopal Malakar (C.P.I.-M.), (*Haringhata*); Balai Bandopadhyay (C.P.I.-M.), (*Haripal*); Birendra Kumar Maitra (J.P.), (*Harishchandrapur*); Kshitranjan Mondal (C.P.I.-M.), (*Haroa—S.C.*); Amiya Banerjee (C.P.I.-M.), (*Hasnabad*); Sudhanshu Mandal (C.P.I.-M.), (*Hingalganj—S.C.*); Bamapada Mukherjee (C.P.I.-M.), (*Hirapur*); Sudhin Kumar (R.C.P.I.), (*Howrah Central*); Chittabrata Muzumdar (C.P.I.-M.), (*Howrah North*); Pralay Talukdar (C.P.I.-M.), (*Howrah South*); Dr. Ambarish Mukhopadhayay (C.P.I.-M.), (*Hura*).

Badan Bora (C.P.I.-M.), (*Indas—S.C.*); Dr. B. B. Majhi (Cong.-I.), (*Indpur—S.C.*); Abdul Karim Chowdhury (Cong.), (*Islampur*); Dr. Zainal Abedin (Cong.), (*Itahar*); K. Bhattacharya (C.P.I.-M.), (*Jadavpur*); M. Ansaruddin (C.P.I.-M.), (*Jagatballavpur*); Nihar Kumar Basu (F.B.), (*Jagatdal*); Shanti Ram Mahato (Cong.-I.), (*Jaipur*); Atahar Rahaman (C.P.I.-M.), (*Jalangi*); Nirmal Kumar Bose (F.B.), (*Jalpaiguri*); Sunil Santra (F.B.-M.), (*Jamalpur—S.C.*); Bikash Chowdhury (C.P.I.-M.), (*Jamuria*); Manindranath Jana (C.P.I.-M.), (*Jangipara*); Habibur Rahman (Cong.-I.), (*Jangipur*); Satya Ranjan Mahato (F.B.), (*Jhalda*); Ramchandra Satpati (C.P.I.-M.), (*Jhargram*); Haripada Bharati (B.J.P.), (*Jorabagan*); Vishnukant Shastri (B.J.P.). (*Jorasanko*); Debaprasad Sarkar (S.U.C.), (*Joynagar*).

Kalimuddin Shams (F.B.), (*Kabitirtha*); Hrishikesh Maity (C.P.I.-M.), (*Kakdwip*); Manohar Tirkey (R.S.P.), (*Kalchini—S.T.*); Samsuddin Ahmad (Cong.-I.), (*Kaliachak*); Debsaran Ghosh (R.S.P.), (*Kaliganj*); Nabakumar Ray (Cong.-I.), (*Kaliaganj—S.C.*); Smt. Renu Leena Subba (Ind.), (*Kalimpong*); Guruprasad Sinha Ray (C.P.I.-M.), (*Kalna*); Nitaicharan Adak (C.P.I.-M.), (*Kalyanpur*); R. R. Banerjee (C.P.I.-M.), (*Kamarhati*); A. C. Sinha (Cong.-I.), (*Kandi*); Lakshi Narayan Saha (C.P.I.-M.), (*Kanksa—S.C.*); Hazi Sajjad Hussain (Cong.-I.), (*Karandighi*); Samarendranath Sanyal (C.P.I.-M.), (*Karimpur*); Surendranath Majee (C.P.I.-M.), (*Kashipur—S.T.*); Dr. Harmohan Sinha (C.P.I.-M.), (*Katwa*); Khudi Ram Singh (C.P.I.-M.), (*Keshiary—S.T.*); Rajanikanta Doloi (Cong.-I.), (*Keshpur—S.C.*); Raicharan Majhi (C.P.I.-M.), (*Ketugram—S.C.*); Sunirmal Paik (J.P.), (*Khajuri—S.C.*); Panchanan Digpati (J.P.), (*Khanakul—S.C.*); Purnachandra Malik (C.P.I.-M.), (*Khandoghosh — S.C.*); Sk. Siraj Ali (C.P.I.-M.), (*Kharagpur-Rural*); Sudhir Chandradas Sharma (J.P.). (*Kharagpur Town*); Mahubul Haque (Cong.-I.), (*Kharba*); Kamal Sarkar (C.P.I.-M.), (*Khardah*); Dinabandhu Majhi (C.P.I.-M.), (*Khargram*); Gunadhar Choudhury (C.P.I.-M.), (*Kotulpur*); Parimal Mitra (C.P.I.-M.), (*Kranti*); Jnanendranath Biswas (C.P.I.-M.), (*Krishnaganj—S.C.*); Kashikanta Maitra (J.P.), (*Krishnagar East*); Amritendu Mukherjee (C.P.I.-M.). (*Krishnagar West*); Krishnadhan Haldar (C.P.I.-M.), (*Kulpi—S.C.*); Probodh Purkait (S.U.C.), (*Kultali*

S.C.); Madhu Banerjee (F.B.), (*Kulti*); Dwijendranath Roy (C.P.I.-M.), (*Kumarganj*); John A. Baxla (R.S.P.), (*Kumargram—S.T.*); Dawa Narbu La (Cong.-I.), (*Kurseong*); Dhirendra Nath Sarkar (Cong.-I.), (*Kushmandi—S.C.*).

Sunilkumar Majumdar (C.P.I.-M.), (*Labhpur*); **Abdus Sattar** (Cong.-I.), (*Lalgola*); Sushil Kujur (R.S.P.), (*Madarihal—S.T.*); Radhikaranjan Pramanik (C.P.I.-M.), (*Magrahat East—S.C.*); Chhobhan Gazi (C.P.I.-M.), (*Magrahat West*); D. N. Sen (C.P.I.-M.), (*Mahammad Bazar*); Mir Abdus Sayeed (C.P.I.-M.), (*Maheshtala*); Dr. Saswati P. Bag (J.P.-S.), (*Mahisadal*); Tarakbandhu Roy (R.S.P.), (*Mainaguri—S.C.*); Mohanlal Oraon (C.P.I.-M.), (*Mal—S.T.*); Subhendukumar Chowdhury (C.P.I.-M.), (*Malda—S.C.*); Nakulchandra Mahato (C.P.I.-M.), (*Manbazar*); Renupada Halder (S.U.C.), (*Mandirbazar—S.C.*); Nikhilananda Sar (C.P.I.-M.), (*Mangalkot*); Subodh Chowdhury (C.P.I.-M.), (*Manikchak*); Shyamal Chakravarty (C.P.I.-M.), (*Maniktala*); Hemantakumar Roy (C.P.I.-M.), (*Manteswar*); D. C. Dakua (C.P.I.-M.), (*Mathabhanga—S.C.*); Satyaranjan Bapuli (Cong.-I.), (*Mathurapur*); Panchanan Let (C.P.I.-M.), (*Mayureswar—S.C.*); Sadakanta Roy (F.B.), (*Mekliganj—S.C.*); Benoy Konar (C.P.I.-M.), (*Memari*); Khamakhya Charan Ghosh (C.P.I.), (*Midnapur*); Pulak Bera (C.P.I.-M.), (*Moyna*); Kiranmoy Nanda (J.P.), (*Mugberia*); Dr. Motahar Hossain (Cong.-I.), (*Murarai*); Smt. Chhaya Ghosh (F.B.), (*Murshidabad*).

Debi Prosad Basu (C.P.I.-M.), (*Nabadwip*); **Birendranarayan Ray** (C.P.I.-M.), (*Nabagram*); **Punai Uraon** (C.P.I.-M.), (*Nagrakata—S.T.*); **Gopal Basu** (C.P.I.-M.), (*Naihati*); **Mir Fakir Mohammad** (C.P.I.-M.), (*Nakashipara*); Bhabaniprosad Chattopadhyay (F.B.), (*Nalhati*); **Syed A. M. Habibullah** (C.P.I.-M.), (*Nadanghat*); Manoranjan Roy (Ind.), (*Nandanpur*); Prabir Jana (J.P.), (*Nandigram*); Banamali Das (C.P.I.-M.), (*Nanur—S.C.*); J. K. Biswas (R.S.P.), (*Naoda*); Krishnadas Roy (Cong.-I.), (*Narayangarh*); Bankimbehari Maity (J.P.-S.), (*Narghat*); S. N. Chowdhury (C.P.I.-M.), (*Natabari*); Budhadeb Singh (C.P.I.-M.), (*Nayagram—S.T.*); Jaminibhusan Saha (C.P.I.-M.), (*Noapara*); Anil Mukherjee (F.B.), (*Onda*); Madhabendu Mohanta (C.P.I.-M.), (*Palashipara*); Santoshkumar Das (F.B.), (*Panchla*); D. N. Chakraborty (C.P.I.-M.), (*Pandua*); G. K. Bhattacharyya (C.P.I.-M.), (*Panihati*); S. R. Maji (J.P.-S.), (*Panskura East*); Dr. Sk. Omar Ali (C.P.I.), (*Panskura West*); Gobinda Bauri (C.P.I.-M.), (*Para—S.C.*); Janmejay Ojha (J.P.), (*Pataspur*); Gunadhar Maity (C.P.I.-M.), (*Patharpratima*); Patras Ming (C.P.I.-M.), (*Phansidewa—S.T.*); Haripada Jana (J.P.), (*Pingla*); Brajogopal Neogy (C.P.I.-M.), (*Polba*); Manoranjan Nath (C.P.I.-M.), (*Purbasthali*); Monoranjan Hazra (C.P.I.-M.), (*Pursura*); Mahadeb Mukherjee (C.P.I.-M.), (*Purulia*).

Bijoy Bauri (S.U.C.), (*Raghunathpur—S.C.*); Khagendranath Sinha (C.P.I.-M.), (*Raiganj—S.C.*); Ramnarayan Goswami (C.P.I.-M.), (*Raina*); Upendra Kisku (C.P.I.-M.), (*Raipur—S.T.*); Rabindranath Mandal (C.P.I.-M.), (*Rajarhat—S.C.*); Dhirendranath Roy (C.P.I.-M.), (*Rajganj—S.C.*); Siddheswar Mandal (F.B.), (*Rajnagar—S.C.*); B. Das Mahapatra (J.P.), (*Ramnagar*); S. S. Mondal (F.B.), (*Rampurhat*); Satischandra Biswas (C.P.I.-M.), (*Ranaghat East*); Gourchandra Kundu (C.P.I.-M.), (*Ranaghat West*); Suchand Soren (Ind.), (*Ranibandh—S.T.*); Haradhan Roy (C.P.I.-M.), (*Raniganj*); Dr. Ashok Mitra (C.P.I.-M.), (*Rashbehari Avenue*); Mohammad Ali (C.P.I.-M.), (*Ratua*); Gouranga Samanta (B.B.C.), (*Sabang*); Hazari Biswas (C.P.I.-M.), (*Sagardighi—S.C.*); Prabhanjan Mandal (C.P.I.-M.), (*Sagore*); Sundar Hazra (C.P.I.-M.), (*Salbani*); Kumudranjan Biswas (C.P.I.-M.), (*Sandeshkhali—S.C.*); Haran C. Hazra (C.P.I.-M.), (*Sanskrail—S.C.*); Bimalananda Mukherjee (R.C.P.I.), (*Santipur*); Jyoti Basu (C.P.I.-M.), (*Satgachia*); Binoy Banerjee (J.P.), (*Sealdah*); Kamalkrishna Bhattacharyya (C.P.I.-M.), (*Serampore*); Dr. Kanailal Bhattacharyya (F.B.), (*Shibpur*); Nalinikanta Guha (F.B.), (*Shyampukur*); Sasabindu Bera (J.P.), (*Shyampur*); Biren Bose (C.P.I.-M.), (*Siliguri*); Gopal Bandopadhyay (C.P.I.-M.), (*Singur*); Dipak Sengupta (F.B.), (*Sitai*); Sudhir Pramanik (C.P.I.-M.), (*Sitalkuchi—S.C.*); Sukhendu Khan (C.P.I.-M.), (*Sonamukhi—S.C.*); Gangadhar Naskar (C.P.I.-M.), (*Sonarpur—S.C.*); Suniti Chattaraj (Cong.-I.), (*Suri*); Shibanath Das (Cong.-I.), (*Sutahata—S.C.*); Mohd. Sahorab (Cong.-I.), (*Suti*); Humayun Choudhury (Cong.-I.), (*Suzapur*); Anisur Rahman (C.P.I.-M.), (*Swarupnagar*); Mohinimohan Panda (C.P.I.-M.), (*Taldangra*); Sumantakumar Hira (C.P.I.-M.), (*Taltola—S.C.*); Biswanath Mukherjee (C.P.I.), (*Tamluk*); Nathaniel Murmu (R.S.P.), (*Tapan—S.T.*); Ram Chatterjee (F.B.-M.), (*Tarakeswar*); Mohammed Amin (C.P.I.-M.), (*Titagarh*); Prasantakumar Sur (C.P.I.-M.), (*Tollygunge*); Manindranath Barma (C.P.I.-M.), (*Tufanganj—S.C.*); Pannalal Maji (C.P.I.-M.), (*Udaynarayanpur*); Lakhan Bagdi (C.P.I.-M.), (*Ukhra—S.C.*); Rajkumar Mondal (C.P.I.-M.), (*Uluberia North—S.C.*); Arabindo Ghosal (F.B.), (*Uluberia South*); Santashri Chattopadhyay (C.P.I.-M.), (*Uttarpara*); Samarkumar Rudra (C.P.I.-M.), (*Vidyasagar*); A. K. Ray (C.P.I.-M.), (*Vishnupur*); Neil A. O'Brien (*Nominated*).

GOVERNMENT OF INDIA PERSONNEL

(Corrected upto February 1, 1982. Further changes, if any, appear in "Late Particulars" at the end of the book.)

President: N. Sanjiva Reddy.

President's Secretariat. Rashtrapati Bhavan, New Delhi 110004

Principal Secretary to the President, V. K. Rao; *Addl Secy.*, V. K. Dar; *Military Secy.*, Major-General P. E. Menon; *Press Secy.*, K. Suryanarayana; *Private Secy.*, K. S. Sastry

Vice-President: M. Hidayatullah

CABINET MINISTERS

Prime Minister incharge of Science & Technology, Atomic Energy, Space & Electronics: Smt. Indira Gandhi; *Finance:* Pranab Kumar Mukherjee; *External Affairs:* P. V. Narasimha Rao; *Home Affairs:* Giani Zail Singh, *Defence:* R. Venkataraman; *Energy:* A. B. A. Ghani Khan Chaudhuri; *Planning:* S. B. Chavan; *Railways:* P. C. Sethi; *Shipping & Transport:* Veerendra Patil; *Information & Broadcasting:* Vasant Sathe; *Petroleum, Chemicals & Fertilizers:* T. Shiv Shankar; *Law, Justice & Company Affairs:* Jagannath Kaushal; *Health & Family Welfare:* B. Shankaranand; *Tourism & Civil Aviation:* A. P Sharma; *Parliamentary Affairs and Works & Housing:* Bhishma Narain Singh; *Agriculture, Rural Reconstruction & Civil Supplies:* Rao Birendra Singh; *Industry and Steel & Mines:* Narayan Datt Tiwari; *Communications:* C. M. Stephen; *Irrigation:* Kedar Panday.

Ministers of State

Labour: Bhagwad Jha Azad; *Commerce:* Shivraj V. Patil; *Supply & Rehabilitation:* Bhuta Singh; *Steel:* Charanjit Chanana; *Industry and Steel & Mines:* Mrs. Ram Dulari Sinha; *Home:* N. R. Laskar; *Communications:* Yogendra Makwana; *Shipping & Transport:* Sitaram Kesri; *Tourism & Civil Aviation:* Kurshed Alam Khan; *Deptt. of Coal:* Gargi Shankar Mishra; *Law & Company Affairs:* A. A. Rahim; *Irrigation:* Z. R. Ansari; *Education & Social Welfare:* Mrs. Sheila Kaul; *Energy:* Vikram Mahajan; *Agriculture & Rural Reconstruction:* Baleshwar Ram; *Railways:* C. K. Jaffar Sharief; *Deptt. of Science & Technology, Electronics & Environment:* C. P. N. Singh; *Petroleum, Chemicals & Fertilizers:* Dalbir Singh; *Finance:* Sawai Singh Sisodia; *Agriculture:* R. V. Swaminathan; *Home Affairs & Deptt. of Parliamentary Affairs:* P. Venkatasubbaiah.

Deputy Ministers

Commerce: P. A. Sangma; *Works & Housing:* B. M. Mohanty; *Education:* P. K. Thungon; *Health & Family Welfare:* Miss Kumudben Joshi; *Agriculture & Civil Supplies:* Mohammad Usman Arif; *Electronics:* Dr. M. S. Sanjiva Rao; *Defence:* K. P. Singh Deo; *Finance:* Janardan Pujari; *Parliamentary Affairs:* Kalpanath Rai; *Information & Broadcasting:* Arif Mohammad Khan; *Supply & Rehabilitation:* Giridhar Gomango; *Labour:* Dharam Vir; *Agriculture:* Kum. Kamla Kumari; *Railways & Parliamentary Affairs:* Mallikarjun; *Communications:* Vijay N. Patil.

PRIME MINISTER'S OFFICE, New Delhi 110011.

Principal Secretary to the Prime Minister, Dr. P. C Alexander; *Information Adviser,* H. Y. Sharada Prasad; *Addl. Secy.,* Dr. Arjun Kumar Sengupta; *Joint Secs.,* V. S. Tripathi, R. Rajamani, C. R. Gharekhan; *Spl. Assistant,* R. K. Dhawan; *Private Secy.,* Om Parkash; *Sr. Petitions Officer,* M. L. Aseri.

CABINET SECRETARIAT, Rashtrapati Bhavan, New Delhi 110004.

Cabinet Secretary, C. R. Krishnaswamy Rao Sahib; *Sr. Adviser,* R. N. Kao; *Secy. (Co-ordn.),* U. C. Agarwal; *Dir.,* N. F. Suntook; *O.S.D.,* R. S. Paramasivan; *Addl. Secy., & Chmn., J.I.C.,* Prem Kumar; *Addl. Dir.,* G. C. Saxena; *Secs.,* R. Parameswar, Praveen Singh, A Chandrasekhar.

LOK SABHA SECRETARIAT, New Delhi 110001.

Speaker: Bal Ram Jakhar; *Dy. Speaker:* G. Lakshmanan; *Secy.:* Avtar Singh Rikhy.

RAJYA SABHA SECRETARIAT, New Delhi 110001

Chairman, Mohammad Hidayatullah; *Dy. Chmn.,* Shyam Lal Yadav; *Secy.-Genl.,* Sudershan Agarwal.

DEPARTMENT OF ATOMIC ENERGY, Chhatrapati Shivaji Maharaj Mrg., Bombay 400039.

Chmn., Atomic Energy Commission & Principal Secy. to the Govt. of India, Dr. H. N. Sethna; *Secy. to the Govt. of India & Dir., Bhabha Atomic Research Centre, Trombay,* Dr. R. Ramanna; *Members, Atomic Energy Commn.,* J. R. D. Tata, C. R. Krishnaswamy Rao Sahib R. Ramanna, R. N. Malhotra, D. V. Kapur, S. Dhawan *Secy. to the Commn.,* T. Sethumadhavan; *Addl. Secy.,* M. Panchappa; *Jt. Secs.,* J. G. Kanga, Y. V. Pai; *Dir., Power Projects Engg. Dn.,* Dr. M. R. Srinivasan; *Head, Publicity Dn.,* A. S. Raj; *Editor, "Nuclear India" & "Parmaanu",* Jagannath Sharma.

DEPARTMENT OF ELECTRONICS, Lok Nayak Bhavan, Near Khan Mkt., New Delhi 110003.

Minister, Smt. Indira Gandhi; *Min. of State,* C. P. N. Singh; *Dy. Minister,* Dr. M. S. Sanjiva Rao; *Secretary,* Dr. P. P. Gupta; *Secy. (Electronics Commn. & ex-Officio Jt. Secy., Deptt. of Electronics),* Ashok Parthasarathi; *Adviser (STOC),* Maj.-Gen. K. K. Mehta (Retd.); *Dirs.,* T. R. Raman (*Technl.*), Dr. N. W. Nerurkar, Prof. P. C. P. Bhatt (*Computer Devpt.*), P. K. Bandyopadhyay (*Non-Technical*).

Electronics Commission, E-Wing, Pushpa Bhavan, Chirag Delhi-Madangir Rd., New Delhi 110062.

Chmn., P. P. Gupta; *Members,* Prof. J. Das, Prof. S. Dhawan, Prof. V. Rajaraman, S. Ghosh, G. Ramachandran, C. R. Krishnaswamy Rao Sahib; *Secy.,* Ashok Parthasarathi; *Dir., Inf., Plng. & Analysis Group,* Dr. N. Seshagiri.

DEPARTMENT OF PARLIAMENTARY AFFAIRS, 90, Parliament House, New Delhi 110001.

Minister, Bhishma Narain Singh; *Minister of State,* P. Venkatasubbiah; *Dy. Ministers,* Kalpanath Rai, Mallikarjun; *Secretary,* Ishwari Prasad.

DEPARTMENT OF SCIENCE & TECHNOLOGY, Technology Bhavan, New Mehrauli Rd., New Delhi 110029.

Chmn., Scientific Advisory Cttee. to the Cabinet, Vacant; *Secretary,* Prof. M. G. K. Menon.

DEPARTMENT OF ENVIRONMENT, Technology Bhavan, New Mehrauli Rd., New Delhi 110016.

Chmn., National Cttee. on Environment Planning (NCEP), B. B. Vohra; *Secretary,* Dr. S. Z. Qasim.

Council of Scientific & Industrial Research, Rafi Marg, New Delhi 110001.

Vice-Pres., C.S.I.R., Prof. S. Nurul Hasan; *Secy. to Govt. of India & Director-General, C.S.I.R.,* Dr. G. S. (Sidhu.

DEPARTMENT OF SPACE, F Block, Cauvery Bhavan, Kempegowda Rd., Bangalore 560009. (Branch Sectt., Lok Nayak Bhavan, 3rd Flr., New Delhi 110003).

Secretary, Prof. S. Dhawan; *Addl. Secy.,* T. N. Seshan; *Dir.,* K. A. Varadan

Space Commission & ISRO, *Chmn.,* Prof. S. Dhawan, *Secy., Space Commn. & Mem. (F. & A.), ISRO Council,* T. N. Seshan.

Indian Space Research Organisation (ISRO), F Block, Cauvery Bhavan, Kempegowda Rd., Bangalore 560009.

Chmn., Dr. S. Dhawan; **Vikram Sarabhai Space Centre (VSSC),** Post ISRO, Trivandrum 695022. *Dir.,* Dr. V. R. Gowariker; **Space Applications Centre (SAC),** Jodhpur Tekra, Ahmedabad 380053. *Dir.,* Prof. E. V. Chitnis; **SHAR Centre,** Sriharikota 524124 (Nellore Dist. – A.P.). *Dir.,* N. Pant; **ISRO Satellite Centre (ISAC),** A-1-6, Peenya Ind. Estate, Peenya, Bangalore 560058. *Dir.,* Prof. U. R. Rao.

MINISTRY OF AGRICULTURE, Krishi Bhavan, Dr. Rajendra Prasad Rd., New Delhi 110001.

Minister, Rao Birendra Singh; *Ministers of State,* R. V. Swaminathan, Baleshwar Ram; *Dy. Ministers,* Kum. Kamla Kumari, Mohammad Usman Arif

Department of Agriculture & Co-operation

Secretary, S. P. Mukerji; *Addl. Secs.,* R. C. Sood, P. R. Dubhashi, K. C. S. Acharya; *Jt. Secs.,* N. Rajagopal, M. Y. Priolkar, Smt. S. Satyabhama, Dr. G. S Vidyarthy, M. A. K. Tayab, Samar Singh, M. Sankaranarayanan, R. C. Gupta, Smt. S. L. Singla, P. D. Srivastava; *Chief Agrl. Expert*, Harbans Singh; *Animal Husb. Commr.*, Dr. O. N. Singh; *Addl. Inspector-Genl. of Forests*, N. D. Bachketi; *Chmn., Agricultural Prices Commn.*, Dr. A. S. Kahlon; *Comm. (Fert.)*, S. S. Mahdi.

Department of Agricultural Research & Education

Director-Genl., ICAR & Secretary, Dr. O. P. Gautam.

Department of Food

Secretary, B. C. Gangopadhyay; *Addl. Secy.*, B. S. Raghavan; *Jt. Secs.*, Kamala Prasad, C. N. Raghavan, S. V. Sastry; *Chief Dirs.*, N. R. Banerjee, Brig. P. C. S. Saghera; *Exec. Dir. (F.N.B.)*, Vacant; *Chief Engr., (Rice Mills)*, M. Kuppuswamy.

Directorate of Cashewnut Development, M. G. Rd., Ernakulam, Cochin 682011.

Directorate of Cocoa, Arecanut & Spices Development, 1/500, Cannanore Rd., Calicut 673005.

Director, Dr. C. K. George; *Dy. Dirs.*, E. Velappan, C. S. Abraham.

Directorate of Coconut Development, Ernakulam, Cochin 682011.

Directorate of Cotton Development, 14, R. Kamani Mrg., Ballard Estate, Bombay 400038.

Dir., K. Ramachandran; *Jt. Dir.*, K. T. Janbandhu; *Dy. Dirs.*, R. M. Pavaskar (*Mktg. & Plng.*); J. Krishnamurthy (*Devpt.*); A. B. Royabhowmik (*Devpt.*).

Directorate of Economics & Statistics, Krishi Bhavan, New Delhi 110001.

Directorate of Extension, Shastri Bhavan, New Delhi 110001.

Directorate of Jute Development, Nizam Palace Campus, 234/4, Acharya J. B. Rd., Calcutta 700020.

Directorate of Lac Development, Circular Rd., Ranchi 834001.

Directorate of Millets Development, 4, Krishnamachari Rd., Madras 600034.

Directorate of Oilseeds Development, Telhan Bhavan, Himayatnagar, Hyderabad 500029.

Directorate of Plant Protection, Quarantine & Storage, N.H. IV, Faridabad 121001.

Directorate of Pulses Development, C-60/E, Mahanagar Extn., Lucknow 226006.

Directorate of Rice Development, 241, Pataliputra Colony, Patna 800013.

Directorate of Sugarcane Development, 1, Shyam Enclave, Gyani Border, P. O. Sahibabad 201005. Ghaziabad Dist., U.P.

Tambaku Vikas Nideshalaya (Directorate of Tobacco Development), 27, Eldams Rd., Teynampet, Madras 600018.

Dir., A. N. Singh; *Dy. Dir.*, S. Kori; *Field Officer*, N. Rajendran; *Statistician*, M. Seethamma.

MINISTRY OF CIVIL SUPPLIES, Krishi Bhavan, New Delhi 110001.

Minister, Rao Birendra Singh; *Dy. Minister*, Mohammad Usman Arif; *Secretary*, A. K. Majumdar

Forward Markets Commission, ' Everest ', 100, Marine Drive, Bombay 400002. *Chmn.*, B. N. Kapre; *Mem.*, M. G. Jawle.

MINISTRY OF COMMERCE, Udyog Bhavan, New Delhi 110011.

Minister of State, Shivraj V. Patil; *Deputy Minister*, P. A. Sangma; *Secretary*, Abid Hussain; *Addl. Secs.*, C. Venkataraman, Kum. Roma Mazumdar; *Addl. Secy. & Financial Adviser*, S. P. Gugnani; *Economic Adviser*, Dr. V. Agnihotri; *Jt. Secs.*, T. S. R. Subramanian, S. K. Sarkar, A. S. Chatha, K. G. Ramanathan, Smt. Usha Vohra, S. Gopalan, K. P. Anand.

Department of Textiles

Secretary, A. K. Dutt; *Jt. Secs.*, B. K. Zutshi, V. K. Shunghlu, A. K. Mukherjee.

Office of the Chief Controller of Imports and Exports, New Delhi 110011.

Chief Controller, Mani Narayanswamy; *Addl. Chief Controller*, B. R. Basu; *Legal Adviser*, M. P. Singh; *Export Commr.*, A. Ramachandran; *Jt. Secs.*, K. Jayaraman, Takhat Ram, B. K. Biswas, I. V. Chunkath, M. E. Thomas, S. K. Grewal.

Offices of the Jt. Chief Controllers of Imports & Exports: Central Licensing Area, Indraprastha Bhavan, New Delhi 110002; New C.G.O. Bldg., New Marine Lines, Bombay 400020; 4, Esplanade East, Calcutta 700069; 39, Rajaji Salai, Madras 600001; 11-6-860, Red Hills, Hyderabad 500004; Multistoreyed Bldg., A Block, Lal Darwaja, Ahmedabad 380001; Cauvery Bhavan, 7th Flr., Bangalore 560009; 7/194, Swaroop Nagar, Kanpur 208002; *Other Offices: Dy. CCI & E:* T. D. Rd., Ernakulam, Cochin 682011; Santa-Inez, Ashirvad Bldg., Panaji 403001 (Goa); C. B. R. Bldg., The Mall, Amritsar 143001; Rajgarh Rd., Gauhati 781003; Bldg. 'A', Guru Teg Bahadur Commercial Complex, T.T. Nagar, Bhopal 462003; Udyog Bhavan, Jaipur 302005; *Controllers of Imports & Exports:* P. Box No. 14, Pondicherry 605001; Desai Bldg., Bhupindra Rd., Rajkot 360001; Residency Rd., Srinagar 190001; 25-8-109, Main Rd., Visakhapatnam 530001; Irishna Nagar, Nagri Dighir Par, Agartala 799001; Admve. Bldg., K.F.T. Zone, Gandhidham 370201; Biscomaun Bldg., Gandhi Maidan, Patna 800001; CSO-288, Sector 35-D, Chandigarh 160023; Bajrakabati Rd., Cuttack 753001; Shillong 793001.

Office of the Custodian of Enemy Property for India, Kaiser-I-Hind Bldg., Currimbhoy Rd., B. Estate, Bombay 400038.

Custodian of Enemy Property, Smt. Rani Jadhav.

Directorate-General of Commercial Intelligence and Statistics, 1, Council House St., Calcutta 700001.

Director-General of Commercial Intelligence & Statistics, D. C. Datta; *Sr. Dy. Directors-Genl.*, M. C. Mookerjee, S. K. Mozumdar.

All India Handicrafts Board, Block 7 (West), Ramakrishna Puram, New Delhi 110022.

Devpt. Commr. for Handicrafts, Shiromani Sharma; *Jt. Devpt. Commrs.*, Miss Renu Sahni, Gyan Prakash, K. K. Kak; *Pub. Officer*, M. V. Narayana Rao.

Office of the Textile Commissioner, New C.G.O. Bldg., 48, New Marine Lines, Bombay 400020.

Textile Commissioner, R. K. Takkar; *Addl. Textile Commr.*, Suresh Kumar; *Indl. Adviser*, H. Ramakrishna Rao; *Jt. Textile Commr.*, T. Ramachandra Rao; *Adviser (Cotton)*, C. Sridharan; *Regional Offices: Ahmedabad, Amritsar, Bombay, Calcutta, Coimbatore, Madras & Kanpur, Powerloom Weavers' Service Centres:* C/o Meghwal Weavers Co-op. Socy., Madanganj, Kishangarh 305802 (*Rajasthan*); Samabay Boarding, Haridas Chatterjee St., Gava 823001; C/o Indl. Co-op. Sizing, Processing & Calendering Socy. Ltd., Burhanpur 450331 (*M.P.*); Nizamuddin Pura 275001, Azamgarh Dist. (*U.P.*); Sub-Office of the Textile Commr., C/o Ichalkaranji Powerloom Weavers Co-op. Assocn. Ltd., Ichalkaranji 416115; Indl. Co-op. Assocn. Compd., Malegaon 423203, Nasik Dist.; C/o Regl. Office of the Textile Commr., 20, R. N. Mukherjee Rd., Calcutta 700001.

Development Commissioner for Handlooms, Udyog Bhavan, New Delhi 110011.

Development Commr., B. Ramadorai; *Jt. Devpt. Commrs.*, Dr. N. P. Seshadri, M. P. Pinto, P. Shankar.

Cardamom Board, Banerji Rd., Cochin 682018.

Chmn., K. Mohanachandran; *Dir. (Cardamom Devpt.)*, K. V. George; *Secy.*, K. G. Nayar; *Pub. Officer*, K. R. Kurup.

Coffee Board, P. Box No. 5302, Bangalore 560001.

Chmn., Vacant; *Chief Coffee Mktg. Officer*, N. Ramji; *Dir. of Propaganda*, V. Balu; *Dev. Officer*, A. R. Krishnaswamy; *Dir. of Research*, S. Vishveshwara; *Secy.*, A. N. Balaram.

Rubber Board, Kottayam 686001.

Chmn., M. M. Jacob; *Rubber Prodn. Commr.*, P. Mukundan Menon; *Secy.*, V. Bhaskara Pillai.

Central Silk Board, Meghdoot, 95-B, Marine Drive, Bombay 400002.

Chmn., B. Basavaiya; *V. Chmn.*, B. Ramadorai; *Secy.*, A. P. Bhatekar; *Dy. Dir. (Pub.)*, K. I. Ahmed.

Tea Board, 14, Biplabi Trailokya Maharaj Sarani, Calcutta 700001.

Chmn., B. K. Goswami; *Dy. Chmn.*, Jayanta Sanyal; *Secy.*, N. D. Mitra; *Dir. of Tea Devpt.*, S. S. Nandkeolyar.

Tobacco Board, Lakshmipuram, Guntur 522002.

Chmn., M. Venkataratnam; *Exec. Dir.*, Dr. P. K. Ramaiah; *Secy.*, N. Sanjeeva Rao.

MINISTRY OF COMMUNICATIONS, Sanchar Bhavan, 20, Asoka Rd., New Delhi 110001.

Minister, C. M. Stephen; *Minister of State*, Yogendra Makwana; *Dy. Minister*, V. N. Patil; *Secretary*, S. K. Ghose; *Addl. Secs.*, K. Thomas Kora, R. R. Savoor; *Wireless Adviser*, T. V. Srirangan.

Posts & Telegraphs Board: Sanchar Bhavan, 20, Asoka Rd., New Delhi 110001.

Chmn. & Dir. Genl., P. & T., S. K. Ghose; *Members:* N. C. Talukdar (*Admn.*); R. R. Savoor (*Finance*); M. L. Gaind (*PO*); V. S. Arunachalam (*PD & AF*); M. M. Kini (*TD*); P. K. Verghese (*TO*); *Secy.*, H. S. Shah.

Heads of Postal Circles

Postmasters-General, M. S. Paulrajan (*Andhra Circle*), G. V. S. Rao (*N. E. Circle*), Shiv Kumar (*Bihar Circle*), R. K. Saiyed (*Delhi Circle*), M. S. Raghavan (*Gujarat* Circle), S. N. Bajpe (*J. & K. Circle*), V. N. Cyril (*Kerala* Circle), K. R. Murthy (*Karnataka Circle*), Mrs. S. Chaurasia (*M.P. Circle*), A. K. Sen (*Maharashtra Circle*), S. K. Parthasarathy (*Orissa Circle*), S. B. Jain (*Punjab* Circle), B.T. Menghani (*Rajasthan Circle*), P. S. Raghavachari (*Tamil Nadu Circle*), M. U. Khan (*U. P. Circle*), B. N. Dubey (*West Bengal Circle*).

Heads of Telecommunications Circles

General Managers, Telecom.: T. H. Choudary (*Andhra Circle*), M. A. Ramaswami (*N.E. Circle*), Satya Pal (*Bihar Circle*), Y. N. Warhadkar (*Gujarat Circle*), H. S. Sodhi (*J. & K. Circle*), B. S. G. K. Setty (*Karnataka Circle*), N. R. Hiregange (*Kerala Circle*), William Vaz (*Mahrashtra Circle*), M. N. Mathur (*M.P. Circle*), C. K. Sane (*Orissa Circle*), G. T. Narayan (*N.W. Circle*), R. K. Dhingra (*Rajasthan Circle*), U. D. N. Rao (*Tamil Nadu Circle*), S. K. Pande (*U.P. Circle*), H. L. Mukherjee (*West Bengal Circle*).

Heads of Telephone Districts

General Managers, Telephones: P. C. Jauhari (*Bombay*), M. P. Agarwala (*Calcutta*), A. S. Wakhle (*Delhi*), R. D. Arya (*Madras*), D. K. Sangal (*Hyderabad*), J. D. A. John (*Bangalore*), S. G. Sane (*Ahmedabad*), A. S. Sivasubramaniam (*Pune*), S. M. Prasad (*Kanpur*). *Dist. Mgrs.:* M. V. Bhaskara Rao (*Nagpur*), A. N. Prasad (*Patna*), D. K. Gupta (*Jaipur*), A. P. Gupta (*Lucknow*), Kajampady Rama (*Ernakulam*), D. B. Sehgal (*Indore*), T. Ramamurthy (*Coimbatore*), Balwant Singh (*Amritsar*), V. Ramaswamy (*Surat*), V. Lamba (*Ludhiana*), B. B. Karandikar (*Vadodara*), P. C. Rattan (*Rajkot*), M. C. Joshi (*Chandigarh*), H. Venkatachallam (*Trivandrum*), R. C. Verma (*Gauhati*), S. Ramachandran (*Madurai*), Kishan Kumar (*Jullundur*), S. K. Garg (*Agra*).

Overseas Communications Service, Hqrs. Office, Videsh Sanchar Bhavan, Bombay 400023.

Director-General, K. C. Katiyar; *Dy. Dirs.-Genl.*, D. K Narasimhan, Y. V. Joshi, G. S. Gundu Rao, S. K. Thakar, V. Ramasamy; *Other Offices:* Switching Complex, Videsh Sanchar Bhavan, Bombay 400023; Videsh Sanchar Bhavan, Bangla Sahib Rd., New Delhi 110016; Vikram Satellite Earth Stn., Arvi, Pune 412401; Beam Wireless Stn., Dighi, Pune 411015; 62, Wallajah Rd., Madras 600002; 18, Rabindra Sarani, Podar Court, Calcutta 700001; Tropo Project, Dagga House, Behind Minto Circle School, Raj Bagh, Srinagar.

MINISTRY OF DEFENCE, South Block, New Delhi 110011.

Minister, R. Venkataraman; *Dy. Minister*, K. P. Singh Deo; *Secretary*, P. K. Kaul; *Scientific Adviser to the Defence Minister & Secy., Defence Research & Devpt.*, Dr. V. S. Arunachalam; *Secretary (Defence Prodn.)*, M. C. Sarin; *Addl. Secy.*, S. K. Bhatnagar; *Addl. Secy., & Financial Adviser*, B. M. Prabhu; *Addl. Secy. (Defence Supplies)*, Vacant; *Joint Secs.*, S. N. Rao, K. A. Nambiar, S. R. Kathodar, P. V. Desai, C. V. Narayanan, K. K. Mathur, S. Jambunathan, K. Aravamudan, T. U. Vijayasekharan; *Dir.-Genl. of Resettlement*, Maj.-Gen. V. S. Krishnamurthy; *Dir.-Genl. of Coast Guard*, Vice-Admiral V. A. Kamath.

Indian Army, Army Hqrs., New Delhi 110011.

Chief of Army Staff, Gen. K. V. Krishna Rao; *Vice-Chief of Army Staff*, Lt. Gen. A. M. Sethna; *Dy. Chief of Army Staff*, Lt. Gen. K. Sunderjee; *General Officer Commanding-in-Chief, Eastern Command*, Fort William, Calcutta 700021, Lt. Gen. A. S. Vaidya; *General Officer Commanding-in-Chief, Southern Command*, Pune 411001, Lt. Gen. T. S. Oberoi; *General Officer Commanding-in-Chief, Western Command*, Simla 171001, Lt. Gen. S. K. Sinha; *General Officer Commanding-in Chief, Central Command*, Lucknow 226002, Lt. Gen. W. A. G. Pinto; *General Officer Commanding-in-Chief, Northern Command*, 56 APO, Lt. Gen. S. P. Malhotra; *Adjutant-General*, Lt. Gen. M. L. Chibber; *Quarter Master-General*, Lt. Gen. M. L. Ghai; *Master-General of Ordnance*, Lt. Gen. T. B. Nanda; *Military Secretary*, Lt. Gen. R. K. Jasbir; *Engineer-in-Chief*, Lt. Gen. P. R. Puri; *Signal Officer-in-Chief*, Lt. Gen. V. C. Khanna;

Director of Supplies and Transport, Lt. Gen. Y. D. Sahasrabuddhe; *Director of Ordnance Services*, Lt. Gen. S. S. Sandhu; *Director of Electrical & Mechanical Engineering*, Lt. Gen. H. S. Banga; *Director, Mil. Intelligence*, Maj. Gen. Gowri Shankar.

Indian Navy, Naval Hqrs., New Delhi 110011.

Chief of Naval Staff, Admiral O. S. Dawson; *Vice-Chief of Naval Staff*, Vice-Admiral Sardari Lal Sethi; *Flag Officer Commanding-in-Chief, Western Naval Command, Shahid Bhagat Singh Rd., Bombay* 400001, Vice-Admiral M. P. Awati; *Flag Officer Commanding-in-Chief, Eastern Naval Command, Visakhapatnam*, Vice-Admiral M. K. Roy; *Flag Officer Commanding-in-Chief, Southern Naval Command, Cochin*, Vice-Admiral R. H. Tahiliani; *Flag Officer Commanding, Goa Area*, Rear Admiral S. Paul; *Chief of Material*, Vice-Admiral A. K. Bhatia; *Chief of Personnel*, Vacant; *Flag Officer Commanding, Western Fleet*, Rear Admiral J. G. Nadkarni, *Flag Officer Commanding, Eastern Fleet*, Rear Admiral S. Jain; *Dy. Chief of Naval Staff*, Rear Admiral S. Mookherjee.

Indian Air Force, Air Hqrs., Vayu Bhavan, New Delhi 110011.

Chief of Air Staff, Air Chief Marshal Dilbagh Singh; *Vice-Chief of Air Staff*, Air Marshal T. S. Brar; *Deputy Chief of Air Staff*, Air Marshal C. K. V. Gole; *Air Officer-in-Charge, Maintenance*, Air Marshal C. S. Naik; *Air Officer-in-Charge, Personnel*, Air Marshal S. Jena; *Air Officer-in-Charge (Adm.)*, Air Marshal E. D. R. Nair; *Air Officer Commanding-in-Chief, Western Air Command, Palam, New Delhi*, Air Marshal L. M. Katre; *Air Officer Commanding-in-Chief, Central Air Command, Allahabad*, Vacant; *Air Officer Commanding-in-Chief, Eastern Air Command, Shillong*, Air Marshal S. D. Wollen; *Air Officer Commanding-in-Chief, Maintenance Command, Nagpur*, Air Marshal K. I. S. Chhabra; *Air Officer Commanding-in-Chief, Training Command, Bangalore*, Air Marshal E. P. R. Nair; *Air Officer Commanding-in-Chief, South Western Air Command*, Air Marshal J. R. Bhasin.

Directorate of Public Relations, Ministry of Defence, New Delhi 110011.

Ordnance Factory Board, 6, Esplanade East, Calcutta 700069.

Chmn., P. Rajagopalan.

Directorate-General, National Cadet Corps, West Block No. 4, Ramakrishnapuram, New Delhi 110022.

Director-General, Maj. Gen. Narindar Singh.

Office of the D.G., A.F.M.S., D.H.Q., P.O., New Delhi 110011, *Dir.-General, Armed Forces Medical Services*, Lt. Gen. H. S. Seth; *Dy. Dir.-General*, Maj. Gen. L. D. Khurana.

Defence Institute of Fire Research, New Delhi 110046.

Defence Science Laboratory, Metcalfe House, New Delhi 110010

Defence Scientific Information & Documentation Centre, Metcalfe House, New Delhi 110006

Directorate of Aeronautics, D-1 Block, Sena Bhawan, New Delhi 110011

Directorate of Electronics, D-1 Block, Sena Bhawan, New Delhi 110011

Directorate of Engineering, R. & D. Orgn., D-1 Block, Sena Bhawan, New Delhi 110011

Directorate of Military Lands & Cantonments, H. Block, New Delhi 110011

Directorate of Naval Research & Development, D-1 Block, Sena Bhawan, New Delhi 110011.

Directorate of Psychological Research, West Block, No. 8, R. K. Puram, New Delhi 110022.

Directorate of Research in Basic Sciences, M. Block, New Delhi 110011.

Directorate-General of Resettlement, Maulana Azad Rd., New Delhi 110011.

Electronic Data Processing Centre, Signal's Enclave, New Delhi 110010.

Institute of Armament Technology, Girinagar, Pune 411025.

National Defence Academy, Khadakvasla, Pune 411023.

Commandant, Air Marshall M. J. Dotiwalla.

National Defence College, 6, Tees January Mrg., New Delhi 110011.

Solidstate Physics Laboratory, Lucknow Rd., Delhi 110007.

MINISTRY OF EDUCATION & CULTURE, Shastri Bhavan, New Delhi 110001.

Min. of State, Smt. Sheila Kaul; *Dy. Minister*, P. K. Thungon; *Secretary*, Mrs. Anna Malhotra; *Addl. Secs.*, Mir Nasrullah, S. S. Gill; *Ednl. Adviser (Technl.)*, Prof. C. S. Jha; *Ednl. Adviser*, Kireet Joshi; *Jt. Secs.*, M. R. Kolhatkar, S. Ramamoorthi, S. Sathyam, J. A. Kalyanakrishnan; *Jt. Ednl. Advisers*, Dr. (Mrs.) Kapila Vatsyayan, Dr. D. N. Misra.

Central Board of Secondary Education, 17-B, Indraprastha Estate, New Delhi 110002.

Dept. of Adult Education, J-17, Hauz Khas Enclave, New Delhi 110016.

National Archives of India, Janpath, New Delhi 110002.

National Gallery of Modern Art, Jaipur House, New Delhi 110011.

National Library, Belvedere, Calcutta 700027.

National Council of Educational Research & Training, NIE Campus, Sri Aurobindo Marg, New Delhi, 110016. To bring about qualitative improvement of education in India especially at school level. To this end the Council undertakes aids, promotes and co-ordinates research in all branches of edn.; pre-service & in-service trg. at advanced level; organises extension services; disseminates improved techniques & practices etc. etc. *Dir.*, Dr. S. K. Mitra.

School of Planning & Architecture, 4, Block B, Indraprastha Estate, New Delhi 110002.

University Grants Commission, Bahadur Shah Zafar Marg, New Delhi 110002.

Chmn., Dr. (Mrs.) Madhuri R. Shah; *V. Chmn.*, Prof. B. Ramchandra Rao; *Secy.*, R. K. Chhabra; *Addl. Secy.*, Dr. D. Shankar Narayan.

MINISTRY OF ENERGY, Shram Shakti Bhavan, New Delhi 110001.

Minister, A. B. A. Ghani Khan Chaudhuri; *Min. of State*, Vikram Mahajan; *Secretary*, T. R. Satischandran; *Jt. Secs.*, B. Sinha, Smt. Otima Bordia, P. M. Belliappa, S. Ramesh, Kamalakar Mishra, D. Rajagopalan (*Financial Adviser*).

Central Electricity Authority Ltd., West Block No. VIII, Ramakrishnapuram, New Delhi 110022.

Chmn., S. N. Roy; *Members*, Dr. R. Rajagopalan, A. K. Shah, A. N. Singh, L. R. Puri.

Department of Coal, Shastri Bhavan, Dr. Rajendra Prasad Rd., New Delhi 110001.

Minister of State, G. S. Mishra, *Secretary*, Vacant; *Addl. Secy.*, R. P. Khosla; *Joint Secs.*, P. K. Lahiri, L. N. Laddha, A. Rangachari.

Coal India Ltd., 10, N. Subhas Rd., Calcutta 700001.

Coal Controller, 1, Council House St., Calcutta 700001.

MINISTRY OF EXTERNAL AFFAIRS, New Delhi 110011.

Minister, P. V Narasimha Rao; *Foreign Secretary*, M. K. Rasgotra; *Secs.*, K. S. Bajpai, Romesh Bhandari, K. Natwar Singh; *Addl. Secs.*, S. K. Singh, J. R. Hiremath, S. P. Jagota; *Jt. Secs.*, N. N. Jha, A. R. Deo, U. C. Soni, M. H. Ansari, S. K. Arora, K. K. Bhargava, Smt. M. Bhalla, H. D. Bhalla, P. Johari, R. N. Mulye, A. N. Ram, C. Dasgupta, Ranjit Sethi.

Central Passport & Emigration Organisation

J.S. (CPV), M. K. Mangalmurti; *R.P.Os.*, S. K. Gudi (*Ahmedabad*), S. B. Veerabhadrappa (*Bangalore*), S. M. Mathur (*Bhopal*), S. C. Deb (*Bhubaneswar*), D. K. Kudtarkar (*Bombay*), A. K. Basu (*Calcutta*), S. R. Chaudhury (*Chandigarh*), Ram Lal (*New Delhi*), K. P. Kesavan (*Ernakulam*), B. K. Gogoi (*Gauhati*), R. Chandrasekharan (*Hyderabad*), A. S. Narkar (*Jaipur*), M. M. Saigal (*Jullundur*), P. Parameswaran (*Kozhikode*), Arun Kumar (*Lucknow*), Vacant (*Madras*), R. S. Prasad (*Patna*), Vacant (*Srinagar*).

MINISTRY OF FINANCE, North Block, New Delhi 110001.

Minister: Pranab Kumar Mukherjee; *Minister of State:* Sawai Singh Sisodia; *Dy. Minister:* Janardan Pujari; *Adviser*, K. R. Puri; *Secretary*, G. Ramachandran.

Department of Economic Affairs

Secretary: R. N. Malhotra; *Chief Economic Adviser:* Vacant; *Addl. Secs.:* S. V. S. Juneja, R. K. Kaul; *Economic Advisers:* Dr. Mehfooz Ahmed, Montek Singh Ahluwalia; *Joint Secs.:* A. C. Tiwari, M. R. Sivaraman, Yogesh Chandra, D. K. Chatterjee, N. K. Sengupta, R. P. Kapoor, V. P. Sawhney, V. K. Dixit, D. R. Mehta.

Insurance Wing, Nirvachan Sadan, Ashoka Rd., New Delhi 110001; *Addl. Secy.*, Miss Kusum Lata Mital; *Controller of Insurance*, R. K. Mahajan; *Addl. Controller*, S. Subramanian.

Department of Economic Affairs (Banking Divn.), Jeewan Deep Bldg., Parliament St., New Delhi 110001

Addl. Secy., R. K. Kaul.

Department of Expenditure

Secretary (Expenditure), G. C. Baveja; *Addl. Secy.*, C. G. Somiah; *Controller-Gen. of Accts.*, K. Lalit; *Jt. Secs.*, V. S. Jafa, N. K. Panda, H. V. Krishnan, K. V Rabindran Nair, D. Sankaraguruswamy.

Bureau of Public Enterprises, Mayur Bhavan, 7th Flr., New Delhi 110001.

Director-General, P. K. Basu; *Jt. Secy.*, A. S. Bhandari; *Advisers*, S. M. Patankar (*Finance*), T. K. Saran (*Constrn.*), K. L. Sehgal (*Prodn.*); *Jt. Advisers*, A. K. Roychowdhary (*Finance*), D. K. Jain (*Finance*), V. T. Kale (*Prodn.*), I. M. Aga (*Prodn.*), B. D. Jethra (*Prodn.*), Syed Ahmed Ali; (*Prodn.*) M. S. Nagar; (*Prodn.*), S. S. Kaimal (*Constrn.*), T. S. Ratnam (*Constrn.*), Karam Chand (*Constrn.*); *Dirs.*, Y. P. Kapoor (*Wages*), Dr. K. C. Sethi (*I & R*), *Faridkot House, 1st Flr.: Chmn., PESB*, Vacant; *Adviser (Pers. Mgmt.)-cum-Secy., PESB*, C. P. Mittal

Department of Revenue

Secretary, V. B. Eswaran; *Spl. Secretary*, Vacant; *Addl. Secy., Admn. & Gold Control Admnr.*, M. V. N. Rao; *Addl. Secy.*, D. N. Mehta; *Jt. Secs.*, D. N. Lal, K. L. Rekhi.

Central Board of Excise and Customs

Chmn., Central Board of Excise & Customs and Ex-officio Addl. Secy., S. Venkatesan; *Members*, G. S. Sawhney, C. T. A. Pillai, S. Venkataraman, R. C. Misra, A. K. Bandyopadhyay, J. Dutta; *Addl. Secy.*, B. B. Gujral.

Central Board of Direct Taxes

Chmn., Central Board of Direct Taxes and Ex-officio Addl. Secy., Jagdish Chand; *Members*, G. D. Tandon, S. T. Tirumalachari, J. C. Kalra, M. W. A. Khan, M. S. Sivaramakrishnan.

Central Revenues Control Laboratory, Agricultural Research Institute, New Delhi 110012.

Settlement Commission for (IT & WT), R. 2, 4th Flr., Loknayak Bhavan, Khan Mkt., New Delhi 110003.

Chmn., V. V. Badami.

Enforcement Directorate, Loknayak Bhavan, 6th Flr., Khan Mkt., New Delhi 110003.

Director, M. S. Bindra; *Spl. Dir.:* D. C. Mandal; *Addl. Dir.*, R. Swaminathan. *Delhi Zonal Office* — Loknayak Bhavan, 6th Flr., Khan Mkt., New Delhi 110003; *Bombay Zonal Office* — Janmabhoomi Chambers, Walchand Hirachand Mrg., Bombay 400001; *Subsidiary Office:* Mittal Chambers, 2nd Flr., N. Point, Bombay 400021; *Calcutta Zonal Office* — 8, Lindsay St., Calcutta 700087; *Special Unit, Calcutta* — 225/C, A. J. C. Bose Rd., Calcutta 700020; *Madras Zonal Office:* — Shastri Bhavan, 3rd Flr., III Block, 35, Haddows Rd., Madras 600006; *Jullundur Zonal Office* — 39, Green Park, Jullundur 144001; *Varanasi Sub-Zonal Office* — 36, Gandhi Nagar (Sigra), Varanasi 221001; *Jaipur Mobile Unit* — SB-109, Bapunagar, Tonk Rd., Lal Kothi, Jaipur 302004; *Srinagar Sub-Zonal Office* — 151, Rajbagh, Srinagar 190001; *Agra Sub-Zonal Office* — 33/123, Adarsh Nagar, Pratapura, Agra 282001; *Ahmedabad Sub-Zonal Office* — Bldg. 'B', Stadium House, Navrangpura, Ahmedabad 380009; *Goa Sub-Zonal Office* — Shanta Bldg., No. 11-C, 2nd Flr., St. Inez, Panaji 403001, Goa; *Bangalore Unit* — 9/1, Madras Bank Rd., Bangalore 560001; *Hyderabad Mobile Unit* — No. 10-3-772, Vijayanagar Colony, Hyderabad 500028; *Madurai Mobile Unit* — 42, Besant Rd., Central Excise Wing, Madurai 625002; *Kozhikode Sub-Zonal Office* — Mayoor Rd., Calicut 673004; *Trivandrum Sub-Zonal Office* — C. V. Raman Pillai Rd., Thycaud, Trivandrum 695014; *Gauhati* Piyali Phookhan Rd., Rehabari, Gauhati *Office* — 781008.

India Government Mint, Shahid Bhagatsingh Rd., Bombay 400023.

Gen. Manager, G. R. Kahate

India Government Mint, Alipore, Calcutta 700088.

Gen. Manager, H. N. Gupta; *Works Manager*, G. S Ramakrishna.

India Government Mint, Hyderabad 500004

Mint Master, R. Ramdas; *Works Manager*, K. K Parakalan

India Security Press. Nasik Rd., 42210

Gen. Manager & Controller of Stamps, India Security Press, P. S. Shivaram; *Dy. Gen. Manager, India Security Press*, N. P. Sarnaik; *Gen. Manager Currency Note Press*, S. D. Idgunji

National Savings Commissioner for India, P. Box No. 96, Seminary Hills, Nagpur 440001.

National Savings Commr. for India, K. Ganesan; *Dy. National Savings Commrs.*, S. S. Tewary, Ajit Singh; *Regnl. Dir. (Pub.)*, Maheshwar Rao.

Narcotics Department, 19, The Mall, Morar, Gwalior 474006.

Narcotics Commr., M. M. Bhatnagar; *Dy. Narcotics Commr. (Enf.)*, M. C. Sharma; Uttar Pradesh Unit, Lucknow, *Deputy Narcotics Commr.*, R. K. Tiwari; Madhya Pradesh Unit, Neemuch, *Dy. Narcotics Commr.*, S. Chandra; Rajasthan Unit., Kota, *Dy. Narcotics Commr.*, L. N. Mankad.

Govt. Opium & Alkaloid Factories of India, H.O.: 87-88, C.P. Colony, Morar, Gwalior 474006; *Sales Marketing and Exports Office:* Saraswati House, 5th Flr., 27, Nehru Place, New Delhi 110019.

Chief Controller: M. M. Bhatnagar; *Gen. Managers, Govt. Opium & Alkaloid Works*, A. L. Mediratta (*Ghazipur*), T. R. S. Krishnan (*Neemuch*)).

Reserve Bank of India, Central Officer, Post Box 406, Bombay 400001.

Governor, Vacant; *Dy. Governors*, Amitabha Ghosh, Dr. C. R. Rangarajan, Dr. M. V. Hate; *Exec. Dirs.*, W. S. Tambe, Dr. H. B. Shivamaggi, Dr. P. D. Ojha, R. Mitra; *Chief Manager*, B. N. Srivatsava; *Chief Accountant*, M. R Karuppanchetty; *Secy.*, M. L. T. Fernandes; *Chief Officer, Agricultural Credit Deptt.*, G. P. Bhave; *Chief Officer, Deptt. of Banking Operations & Devpt.*, U. K. Sarma; *Chief Officer, Indl. Finance Deptt.*, Vacant; *Chief Officer, Premises Deptt.*, R. Guha; *Controller, Exchange Control Deptt.*, T. N. A. Iyer; *Officer-in-Charge, Economic Deptt.*, V. S. Kadam; *Officer-in-Charge, Deptt. of Stats.*, K. P. N. Nair; *Legal Adviser*, N. V. Sundaram; *Adviser, Mgmt. Services Deptt.*, Dr. Y. B. Damle; *Adviser, Rural Plng. & Credit Cell*, Vacant; *Chief Officer, Deptt. of Non-Banking Cos.*, R. Annaji Rao; *Press Relations Officer*, B. Rangaswamy.

State Bank of India, New Administrative Bldg., Madame Cama Rd., Nariman Point, Bombay 400021.

Central Office: Chmn., P. C. D. Nambiar; *Mg. Dir.*, H. Mukherjee; *Dy. Mg. Dirs.*, H. S. Majumder (*Operations*), P. S. Vaidya (*Associate Banks*), R. P. Goyal (*Devpt. & Plng.*); *Chief Gen. Managers*, S. K. Datta (*Plng.*), T. Shanmugam (*Personnel & Human Resources Devpt.*), A. S. Puri (*Recruitment*), S. P. Sen Gupta (*Merchant Banking*), M. Susheel Chander (*Intnl. Dn*).

Local Head Offices: Chief Gen. Managers, Vacant (*Bengal Circle*), N. N. Mahajan (*Bombay Circle*), K. S. T. Pani (*Madras Circle*), G. S. Srivastava (*Delhi Circle*), A. M. Mariappan (*Kanpur Circle*); S. K. Nathan (*Hyderabad Circle*), S. D. Ganda (*Patna Circle*), C. S. Kalyanasundaram (*Bhopal Circle*), B. S. Nawathe (*Bhubaneswar Circle*), H. C. Bhambhani (*Chandigarh Circle*), S. V. Shanmugamvadivelu (*N. Eastern Circle*).

Associate Banks: Mg. Dirs., P. S. Santhanakrishnan (*State Bank of Hyderabad*), G. K. Ahluwalia (*State Bank of Patiala*), B. K. Ghose (*State Bank of Saurashtra*), M. B. Deshmukh (*State Bank of Mysore*), N. C. Banerjee (*State Bank of Travancore*), H. Mukherji (*State Bank of Indore*), M. B. Dutta (*State Bank of Bikaner & Jaipur*).

Life Insuranse Corporation of India, *Central Office:* 'Yogakshema', Jeevan Bima Marg, Bombay 400021.

Chmn., J. R. Joshi; *Mg. Dirs.*, A. S. Gupta; V. Dixit; *Exec. Dirs.*, S. Hariharan (*Inv.*); S. G. Subrahmanyan (*Dev.*); J. H. Ghadiali (*Bldgs.*); N. Sundaresan (*G. & S.*); *Chief (PHS)*, D. Basu; *Dir. (Actl.)* V. Sesha Ayyar; *Chief (Personnel)*, N. K. Shinkar; *Dir., (Accounts)*, E. B. Mistry; *Chief (O. & M.)*, D. R. Iyer; *Chief Vigilance Officer*, A. R. Srinivasan; *Zonal Managers*, R. Narayanan (*New Delhi*); N. Balasubramanian (*Bombay*); C. R. Thakore, (*Calcutta*); S. V. Narayanan (*Madras*); M. G. Diwan (*Kanpur*); *Manager (PR & Pub.)*, P. Y. Mehta

General Insurance Corpn. of India, Ind. Assurance Bldg., Churchgate, Bombay 400020.

Chmn., Ashok Goenka; *Mg. Dir.*, Rayachoti V. M. Rao; *Chmn.-cum-Mg. Dirs.*, N. N. Lahiri (*National*), A.C. Mukherji (*New India*), K. N. Malhotra (*Oriental*), M. R. Rayakar (*United India*).

MINISTRY OF HEALTH & FAMILY WELFARE, Nirman Bhavan, New Delhi 110011.

Minister, B. Shankaranand; *Dy. Minister*, Miss Kumudben Joshi; *Secretary*, S. S. Sidhu; *Addl. Secy. & Commr. (Family Welfare)*, Vacant; *Addl. Secy.*, C. V. S. Mani; *Jt. Secs.*, N. N. Vohra, R. K. Singhal, T. V. Antony, R. Natarajan, R. R. Gupta; *Spl. Commr. (Traditional Systems of Medicine)*, Vacant; *Hon. Adviser in Homoeopathy*, Dr. Diwan Harish Chand; *Dy. Commrs.*, Dr. (Miss) E. V. Sebastian, Dr. S. N. Mukherjee, Dr. K. T. Chitre; *Dirs.*, A. K. Singhal, R. V. Srinivasan, I. C. Bansal, S. S. Nair.

Directorate-General of Health Services, Nirman Bhavan, New Delhi 110011.

Director-General of Health Services, Dr. I. D. Bajaj; *Addl. Dir.-Genl.*, Dr. D. B. Bisht; *Dy. Dirs.-Genl.*, Dr. Ranjit Sen (*Plng.*), Vacant (*Medical*), Dr. M. D. Saigal (*Rural Health Schemes*); *Dir., Central Govt. Health Services*, Dr. (Kum.) V. N. Khare.

All-India Institute of Hygiene & Public Health, 110, Chittaranjan Avenue, Calcutta 700073.

Central Drugs Laboratory, 3, Kyd St., Calcutta 700016.

Central Drugs Standard Control Organisation, Ministry of Health, New Delhi 110011.

Drugs Controller (India), Dr. S. S. Gothoskar.

MINISTRY OF HOME AFFAIRS, North Block, New Delhi 110001.

Minister, Giani Zail Singh; *Ministers of State*, P. Venkatasubbaiah, N. R. Laskar; *Secretary*, T. N. Chaturvedi; *Addl. Secs.*, M. L. Kampani, S. Varadan, S. Narayanaswamy, P. K. Kathpalia; *Joint Secs.*, S. S. Jog, Bhupinder Singh, P. S. Krishnan, K. N Bhanot, R. V. Pillai, R. M. Agrawal, G. S. Grewal, T. S. Murthy, K. B. Srinivasan, A. Banerjee, P. P. Srivastava, H. V. Goswami; *Inspector-Genl., Border Security Force*, Shiv Swarup; *Chmn., Minorities Commn.*, M. H. Beg.

Commissioner for Linguistic Minorities in India, 40, Amarnath Jha Marg, Allahabad 211002. *Commr.*, B. P. Singh.

Office of the Commissioner for Scheduled Castes and Scheduled Tribes, West Block No. 1, Wing No. 7, 1st Flr., R. K. Puram, New Delhi 110022.

Commr. for Scheduled Castes and Scheduled Tribes, Shishir Kumar; *Dy. Commrs.*, R. R. Rozika, S. K. Kaul.

Registrar-General, Kotah House Annexe, 2-A, Mansingh Rd., New Delhi 110011.

Jt. Registrar-Genl. (Vital Stats.), Dr. M. Holla; *Dy. Registrars-Genl.*, V. P. Pandey, K. K. Chakravorty (*Census & Tabulation*), N. G. Nag (*Social Studies*).

Department of Personnel & Administrative Reforms

Secretary, A. C. Bandopadhyay; *Addl. Secy.*, K. D. Madan; *Jt. Secs.*, P. N. Abbi, Hari Mohan Mathur, P. K. Mattoo, T. V. Ramanan, T. Ramaswamy, K. C Sharma.

Central Bureau of Investigation, Hqrs. Office: Sardar Patel Bhavan, Parliament St., New Delhi 110001.

Director, CBI & IGP/SPE, J. S. Bawa; *Jt. Dirs.*, E. N. Renison, B. M. Saighal, M. M. Reddy.

Bureau of Police Research & Development, B-1688, Curzon Rd. Barracks, Kasturba Gandhi Mrg., New Delhi 110001.

Central Forensic Science Laboratory, East Block VII. R. K. Puram, New Delhi 110022.

Directorate-General of Central Reserve Police Force, R. K. Puram, New Delhi 110022.

Institute of Secretariat Trg. & Management, West Block 1, Wing 5, R. K. Puram, New Delhi 110022.

Lal Bahadur Shastri National Academy of Administration, Charleville, Mussoorie 248179.

MINISTRY OF INDUSTRY, Udyog Bhavan, New Delhi 110011.

Minister, Narayan Datt Tiwari; *Minister of State*, Mrs. Ram Dulari Sinha.

Department of Industrial Development

Secretary, S. M. Ghosh; *Secretary, (TD) & D.G.T.D.*, K. S. Rajan; *Addl. Secy. & Financial Adviser*, N. Rajan; *Addl. Secy.*, R. N. Chopra; *Jt. Secs.*, B. R. R. Iyengar, R. K. Tikku, R. Srinivasan, S. L. Kapur, C. K. Modi: *Security Adviser & DG (IC)*, M. C. Sharma.

Department of Heavy Industry

Secretary, Dr. D. V. Kapoor.

Bureau of Industrial Costs & Prices, Lok Nayak Bhawan, 7th Flr., New Delhi 110003

Coir Board, Post Box 1752, Ernakulam South, Cochin 682016.

Chmn., P. V. Swaminathan; *Secy., Coir Board & Dir., Central Coir Research Inst.*, G. N. Prabhu.

Khadi and Village Industries Commission, Gramodaya. Irla Rd., Vile Parle (West), Bombay 400056.

Chmn., A. M. Thomas; *Member Secy.*, Tara R. Sathe; *Member*, Dr. Govind Das Richharia; *Chief Exec Officer*, R. K. Ganguly; *Dir. of Pub.*, B. B. Betgiri.

Office of the Salt Commissioner, P. Box No. 139, Jaipur 302001.

Salt Commr., K. L. Sahni; *Dy. Salt Commrs.*, D. V. Kirtikar (*Hqrs.*); B. Revanna, *Ajanta Commercial Centre, B. Block, 4th Flr., Ashram Rd., Ahmedabad* 380014; P. Subramanian, *Shastri Bhavan, P. B. No.* 706, *Madras* 600006; *Asstt. Salt Commr.*, S. V. Gokhale, *Exchange Bldg., G.P.O. Box No.* 1561, *Bombay* 400001; E. K. Sarma, *Lindsay St., Calcutta* 700016

The Patent Office, 214, Acharya Jagadish Bose Rd., Calcutta 700017.

Controller General of Patents, Designs and Trade Marks, Dr S. Vedaraman, Central Bldg., M Karve Rd., Bombay 400020; *Jt. Controller of Patents & Designs*, Shanti Kumar, The Patent Office, 214, Acharya Jagadish Bose Rd., Calcutta 700017. *Branch Offices* Todi Estates, Lower Parel (West), Bombay 400013; 61, Wallajah Rd., Madras 600002; Municipal Mkt. Bldg., Saraswati Mrg., Karol Bagh, New Delhi 110005.

Small Scale Industries, Nirman Bhavan, Maulana Azad Rd., New Delhi 110011

Development Commr., S. S Verma; *Joint Devpt Commr.*, R. P. Sinha.

Trade Marks Registry, Central Bldg., M Karve Rd Bombay 400020.

Controller-General of Patents, Designs & Trade Marks, Dr. S. Vedaraman; *Jt. Registrars of Trade Marks*, Mohideen Basha; *Dy. Registrars of Trade Marks*, R. A. Acharya (*Calcutta*); C. S. Rao (*Madras*); M. R. Bhalerao (*Delhi*); K. C. Kailasam (*Bombay*).

MINISTRY OF INFORMATION AND BROADCASTING, Shastri Bhavan, New Delhi 110001

Minister, Vasant Sathe; *Dy. Minister*, Arif Mohammad Khan; *Secretary*, S. B. Lal; *Jt. Secs.*, S. R. Singh. J. K. Bhattacharya, S. Upasani, Suresh Mathur; *Dirs.*, B. Narayan (*Song & Drama Dn.*), D. S. Mehta (*Pubn. Dn.*), R. Narayan (*Research & Reference Dn.*), V. N Majgaonkar (*Photo Dn.*), Vacant (*Film Festivals*), T. A. Ramiah (*Field Publicity*), N. L Chowla (*Indian Instt. of Mass Communication*); *Registrar of Newspapers for India*, K. G. Joglekar; *Chmn., Press Commission of India*, Justice K. K. Mathew; *Chmn., Press Council of India*, Justice A. N. Grover.

Directorate of Advertising & Visual Publicity, Samachar Bhavan, Parliament St., New Delhi 110001. *Dir.*, P. B Barthakur.

Directorate-General, All-India Radio, Akashwani Bhavan, Parliament St., New Delhi 110001

Director-General, Vacant; *Chief Engr.*, P. R. S. Narsimhan; *Dy. Directors-General*, K. C. Sharma (*Programmes*), P. Mathur (*Inspection*), D. P. Puri (*Admn.*), Pratap Kapur (*News*), S. Kandaswami (*East*). R. D. Sharma (*Security*), R. C. Bhusnurmath (*West*).

Directorate-General, Doordarshan (Television) India, Mandi House, Copernicus Mrg., New Delhi 110001

Director-General, Shalendra Shanker; *Addl. Dir.-General*, Kamleshwar; *Chief Engr.*, R. B. L. Srivastava, *Dy. Dirs.-General*, A. R. Shinde, Miss Mira Mozoomdar, M. Amin, R. N. Malik; *Dir.* (*Personnel*), J. C Dangwal; *Pub. Relation Officer*, Kum. Sipra Ray; *Dirs., Doordarshan Kendras*, Kum. Jaichandi Ram (*Ahmedabad*), A. A. Shroff (*Bombay*), Shiv S. Sharma (*Calcutta*), S. C. Garg (*Delhi*), A. S. Tatari (*Lucknow*), Bhashir Bhatt (*Jullundur/Amritsar*), S. K. Kapoor (*Madras*), A. S. Grewal (*Srinagar*), Mohd. Rafique (*Upgrah Doordarshan Kendra, Cuttack*), N. P. Vithal (*Upgrah Doordarshan Kendra, Hyderabad*), R. C. Puri (*Upgrah Doordarshan Kendra, New Delhi*).

Press Information Bureau, Shastri Bhavan, Dr. Rajendra Prasad Rd., New Delhi 110001

Principal Information Officer, Wilfred Lazarus; *Addl Principal Inf. Officer-cum-Addl. Inf. Adviser to the Prime Minister*, U. C. Tiwari, *Dirs. of Pub Relations*: R. N Mahadevan, S. N. Dhar, V. Bhanumurti, Kirpa Sagar C. Lalsangliana

Regional Offices: C. G. O Building Annexe, 101, Maharshi Karve Road, Bombay 400020; Shastribhawan 26, Haddows Rd., Nungambakkam, Madras 600006, 8, Esplanade East, Calcutta 700001

Branch Offices: *Eastern Region*, Brijbansi Sadan, Budh Marg, Old Secretariat Block No. 19, Cuttack; Fatic Chandra Rd., Uzan Bazar, Gauhati; Lower Achammiere Shillong; Banamalipur, Agartala; *Southern Region* "Green House", 2nd Floor, Nampally Station Rd

Hyderabad (A.P.); No. 24, Cubbon Rd., Bangalore; No. 3062/1, Madhavpur, Lemington Rd., Hubli; 23, Sivaganga Rd., Sathamangalam, Madurai; Gandhinagar Rama Rd., Vijayawada; T.C. 25/749, Regal House, Thampanoor, Trivandrum; Warriam Rd., Kumari Mandir, Ernakulam South, Cochin. *Western Region:* Akhandanand Hall, Bhadra, Ahmedabad; Mani Kunj, Sardar Nagar, St. No. 9, Rajkot; Narula Bldg., Jawahar Lal Nehru Marg, Nagpur; 'Chitra Kuti', Tilak Rd., Pune; Daulat Bldg., II Floor, St. Inez, Panaji, Goa; *Northern Region:* Sherwani Rd., Srinagar; Gian Niwas Near Gurdwara Sunder Singh, Raghunath Bazar, Jammu; G. T. Rd., Jullundur; S.C.O. No. 53-55, Sector 17, Chandigarh; Mayfair Extn. Bldg., Lal Bagh, Lucknow; IInd Floor Piplani Bldg., Kabir Rd., Varanasi; Ekant Bhavan, Civil Lines, City Station Rd., Gurudwara Govind Nagar, Raipur; Patrakar Bhavan, Malviya Nagar, Bhopal; 7/1, Yashwant Niwar Rd., Indore; D-28, 'Ruby House', Subhash Marg., 'C' Scheme, Jaipur; Manik Bhavan, Gumanpura, Kota.

Information Centres:

Tropical Bldg., H. Block, Conn. Circus, New Delhi 110001; G. T. Rd., Jullundur 144001; Residency Rd., (Opp. Pratap Park), Srinagar 190001; Paona Bazar, Imphal 795001 (Manipur); Aberdeen Bazar, Port Blair; Aizawl (Mizoram) & Kohima (Nagaland).

Ministry of Irrigation, Shram Shakti Bhavan, Rafi Mrg., New Delhi 110001.

Minister, Kedar Panday; *Minister of State*, Z. R. Ansari; *Secretary*, C. C. Patel; *Jt. Secy. (Adm.)*, Mrs. R. M. Shroff; *Commr. for Indus Waters and Ex-Officio Joint Secy.*, I. P. Kapila; *Commr. (Ganga Basin)*, N. L. Shankaran.

Central Board of Irrigation & Power, Malcha Marg, Chanakyapuri, New Delhi 110021.

President, E. C. Saldanha; *Vice-Presidents*, C. A. Srinivasan, R. K. Shingal; *Secy.*, C. V. J. Varma.

Central Water Commission, Bikaner House, New Delhi 110011.

MINISTRY OF LABOUR, Shram Shakti Bhavan, Rafi Marg, New Delhi 110001.

Minister of State, Bhagwat Jha Azad; *Dy. Minister*, Dharam Vir; *Secretary*, B. G. Deshmukh; *Addl. Secy.*, R. K. A. Subrahmanya; *Jt. Secs.*, H. Pais, Kum. M. Seth, Smt. Girija Eswaran, S. Loveraj (D.G. (LW)).

Board of Arbitration, 401, Nirmal Tower, 26, Barakhamba Rd., New Delhi 110001

Directorate-General of Employment and Training, Shram Shakti Bhavan, Rafi Marg, New Delhi 110001.

D.G. & Joint Secretary, S. Loveraj; *Directorate of Emp. Exchanges: Dir.*, K. Kumar; *Directorate of Trg.: Dir.*, B. N. Guha Biswas, *Directorate of Apprenticeship Trg. Dir.*, Lt.-Col. K. C. Saxena.

Directorate of Mines Safety, Dhanbad 826001.

Labour Bureau, Cleremont, Simla 171004.

Office of the Chief Labour Commissioner (C), Shram Shakti Bhavan, Rafi Marg, New Delhi 110001.

Chief Labour Commissioner, P. N. Razdan; *Jt. Chief Labour Commr.*, Vacant; *Dy. Chief Labour Commrs.*, M. R. Raju, T. R. Malhotra, K. Sharan; *Adm. Officer*, B. N. Tewari, *Regnl. Labour Commrs.*, Inderjit Singh, R. P. Bhatnagar

Office of the Central Provident Fund Commissioner, 9th Flr., Mayur Bhavan, Conn. Circus, New Delhi 110001

Central Provident Fund Commr., L. D. Mishra; *Dy. Central Provident Fund Commr.*, S. P. Mehrotra; *Regnl., Provident Fund Commrs., Hqrs.*, A. N. Roy, D. S. Thukral, S. A. Ali; *Construction Engr.*, J. K. Dewan.

Employees' State Insurance Corporation, ESIC Bldg., Kotla Rd., New Delhi 110001.

Director-General, Har Mander Singh; *Medical Commr.*, Dr. V. M. Chaimalia; *Insurance Commr.*, I. C. Sarin; *F.A. & C.A.O.*, Vacant; *Director of Adm.*, D. D. Sethi

Regional Offices: ESIC Bldg., 5/1, Grant Lane, Calcutta 700012; "Marble Hall", 25, Sterling Rd., Nungambakkam, Madras 600034; ESIC Bhavan, Lower Parel, Bombay 400013; Ashram Mrg., Navrangpura, Ahmedabad 380014; Near K. R. B. Clinic, Basai Dara Pura, Ring Rd., New Delhi 110015; ESIC Bhavan, Sarvodaya Nagar, Kanpur 208005; Brahma Vihar, 5, New Palasia, Indore 452001; 5-9-23, Hill Fort Rd., Hyderabad 500483; ESIC Bhavan, Opp. Cold Storage, Bhavani Singh Rd., Jaipur 302001; ESIC Bhavan, Block No. 3, Sector 19-A, Madhva Marg, Chandigarh 160017; ESIC Bhavan, North Swaraj Round, Trichur 680001; ESIC Bldg., 13, Kumara Park East Extn., Bangalore 560001; Lakhmi Bhavan, Budh Marg, Patna 800001; House of Sh. R. M. Dass, Plot No. 40, Unit No. 3, Bhubaneshwar; ESIC Building, P.O. Bamunimaidan, Gauhati 781021; ESIC Bhavan, Ganesh Peth, Nagpur 440018; Sadar Bldg., 966, Raviwarpeth, Pune 411002; 23-23-B, EMCA House, Ansari Rd., Darya Ganj, New Delhi 110002.

Central Board for Workers' Education, 1400, West High Court Rd., Gokulpeth, Nagpur 440010.

Chmn., G. Ramanujam; *Dir.*, H. C. Gupta.

Coal Mines & Mica Mines Labour Welfare Fund Organisation, Jagjivan Nagar, Dhanbad 826001.

Directorate-General of Factory Advice Service & Labour Institutes, Kharkana Salah Seva Aur Shram Vigyan Kendra, Mahanideshalaya, Sion, Bombay 400022.

Director-General, A. K. Chakrabarty; *Dy. Director-Genl.* Dr. S. S. Ramaswamy.

Central Labour Institute, Sion, Bombay 400022. Regnl. Labour Inst., Patipukar, Lake Town, Calcutta 700089. Regnl. Labour Instt., Sarvodaya Nagar, Kanpur 208005. Regnl. Labour Instt., Adyar, Madras 600020.

MINISTRY OF LAW, JUSTICE & COMPANY AFFAIRS, Shastri Bhavan, Dr. Rajendra Prasad Rd., New Delhi 110001

Minister, Jagannath Kaushal; *Minister of State*, A. A. Rahim

Department of Legal Affairs

Attorney-General of India, Lal Narayan Sinha; *Solicitor-General of India*, K. Parasaran; *Addl Solicitor-General of India*, Milan Kumar Banerji.

Secretary, P. B. Venkatasubramanian; *Jt. Secs. & Legal Advisers*, M. B. Rao, B. S. Sekhon, N. S. Mehta, P. K. Kartha, S. K. Bahadur, N. C. Gupta (*Bombay*), S. D. Jha, B. D. Gupta, M. C. S. Murthy (*Calcutta*), *Chmn., F.E.R.A. Board*, M. B. Rao; *Chmn., Law Commission*, M. K. Mathew; *Members*, Nasirullah Beg, J. P. Chaturvedi; *Mem.-Secy.*, V. V. Vaze

Legislative Department

Secretary, R. V. S. Peri Sastri; *Jt. Secs. & Leg. Counsels*, A. K. Srinivasamurthy, S. Ramaiah, Smt. V. S. Rama Devi, Inderjit Lal Ahluwalia, B. P. Bhatnagar; *Jt. Secs.*, N. Rangarajan, B. K. Sharma (*Draftsman*).

Central Wakf Council, C. Nizamuddin West, New Delhi 110013.

Income-Tax Appellate Tribunal, (Hqrs., Bombay); C.G.O. Bldg., 101, M. Karve Rd., Bombay 400020.

Pres., T. D. Sugla; *Registrar*, G. P. Bajpai; *Benches at:* 23-A, Thornhill Rd., Allahabad 211001; Loknayak Bhawan, N.D.M.C. Complex, Khan Mkt., New Delhi 110003; New Income-Tax Bldg., 22, Nungambakkam High Rd.; Madras 600034; 225-C, Alepe Court, Acharya J. Bose Rd., Calcutta 700029; Shapoor House, 5/9/22 1-B, Adarsh Nagar, Hyderabad 500029; Central Revenue Bldg., 3rd flr., Gardinar Rd., Patna 800006; Parshwanath Chambers, Behind Harshid Chambers, Ashram Rd., Ahmedabad 380013; Elengical House, 1/2, Cunningham Rd.. Bangalore 560052: Satgamava, XXIII/375-A, Mahatma Gandhi Rd., Ernakulam, Cochin 682011; 16/3, Old Palasia Rd., Indore 452001; Bungalow No. 41, Sector 2A, Chandigarh 160002, Bank of India Bldg., Kingsway, Nagpur 440001; House of Smt. Sitadevi Misra, Doimundi, Cuttack 753009 ; Rajasthan Chamber of Commerce & Ind. Bldg., M. I. Rd., Jaipur 302001; Flora House, 46, Napier Town, Jabalpur 482001; 94/A, Mahatma Gandhi Rd., Pune 411001; Oriental Bldg., Fancy Bazar, Gauhati 781001; S. S. Santokh Singh Rd., Amritsar 143001.

Department of Company Affairs, Shastri Bhavan, 5th Flr., A Wing, Dr. Rajendra Prasad Rd., New Delhi 110001.

Secretary, Deptt. of Company Affairs & Chmn., Company Law Board, K. S. Bhatnagar ; *Jt. Secretaries, Deptt of Company Affairs & Members, Company Law Board*, S. C. Mittal, A. Neelakantan, S. Chakravarty; *Members, Company Law Board*, S. M. Dungar (*Hq.*), S. C. Bafna (*Bombay*); *Director of Investigation & Inspection*, N. D. Bhatia.

NORTHERN REGION

Regional Dir., Company Law Board, Kanpur, S. Kumar; *Registrar of Companies, Kanpur*, V. P. Kapoor, *Registrar of Companies, Delhi & Haryana*, Sooraj Kapoor; *Registrar of Companies, Jullundur*, N. N. Maulik; *Registrar of Companies, Jaipur*, S. P. Dixit; *Registrar of Companies, Jammu & Kashmir*, M. M. Singh Jain.

WESTERN REGION

Regional Dir., Company Law Board, Bombay, Smt. S. Achyuthan; *Registrar of Companies, Bombay*, T. S. V. P. Sarma; *Registrar of Companies, Gwalior*, S. K. Saxena; *Registrar of Companies, Ahmedabad*, K. G. Ananthakrishnan; *Registrar of Companies, Goa, Panaji*, M. L Ganvir.

EASTERN REGION

Regional Dir., Company Law Board, Calcutta, A. R. Khare; *Registrar of Companies, Calcutta*, S C Basu; *Registrar of Companies, Shillong*, S. R. Kom; *Registrar of Companies, Cuttack*, S. Seal; *Registrar of Companies, Patna*, P. K Chatterjee

SOUTHERN REGION

Regional Dir., Company Law Board, Madras, I. D. Venkataraman. *Registrar of Companies, Madras*, B Bhavani Shankar; *Registrar of Companies, Hyderabad*, V. S. Raju, *Registrar of Companies, Ernakulam*, K Panchapakesan; *Registrar of Companies, Bangalore*, P. T. Gajwani, *Registrar of Companies, Pondicherry*, B. Koteswar Rao

MINISTRY OF PETROLEUM, CHEMICALS & FERTILIZERS, Shastri Bhavan, Dr. Rajendra Prasad Rd., New Delhi 110001.

Minister, T. Shiv Shankar; *Min. of State*, Dalbir Singh.

Department of Petroleum

Secretary, L. Kumar; *Jt. Secs.*, R. K. Bhargava, M. P. Modi, S. L. Khosla, P. P. Khanna; *Advisers*, S. S. Sachdeva, T. S. Nayar; *Chmn. & Mg. Dir., Hindustan Petroleum Corpn. Ltd.*, R. M. Bhandari; *Ag. Chmn. & Mg. Dir., Bharat Petroleum Corpn. Ltd.*, U. M. Kini; *Mg. Dir., Bongaigaon Refinery & Petrochemicals Ltd., Dhaligaon* 783380, *Goalpara Dist.* (*Assam*), Vacant; *Mg. Dir., Indo-Burma Petroleum — Balmer Lawrie & Co., Allahabad Bank Bldg.*, 17, *Parliament St., New Delhi* 110001, A. F. Bhalla; *Mg. Dir., Oil India Ltd., Allahabad Bank Bldg.*, 17, *Parliament St., New Delhi* 110001, C. R. Jagannathan.

Oil Industry Development Board

Chmn., T. Shiv Shankar (*Min. for Petroleum, Chemicals & Fertilizers*); *Members*, L. Kumar (*Secy., Deptt. of Petroleum*) ; T. S. Nayar (*Adviser, Refineries*) ; Yogesh Chandra (*Jt. Secy., Deptt. of Economic Affairs*); Vacant (*Chmn., Indian Petrochemicals Corpn. Ltd.*); Col. S. P. Wahi (*Chmn., Oil & Natural Gas Commission*); C. R. Das Gupta (*Chmn., Indian Oil Corpn. Ltd.*) ; K. S. Sarma (*Chmn. & Mg. Dir., Fertilizer* (*Plng. & Devpt.*) *India Ltd.* ; Dr. I. B. Gulati (*Indian Instt. of Petroleum*); Raja Kulkarni (*Pres., National Fedn. of Petroleum Workers*).

Oil and Natural Gas Commission, Post Box No. 20, Tel Bhavan, Dehra Dun 248003.

Chmn., Col. S. P. Wahi; *Members*, V. Ramanujachari (*Finance*); P. N. Jha (*Materials*); S. N. Talukdar (*Exploration*); H. G. T. Woodward (*Onshore*); Dr. A. K. Malhotra (*Offshore*); *Secretary*, K. K. Dhar.

Projects: Western Region, Makarpura Rd., Baroda 390009; *Ahmedabad Project*, Jn. of Kaba Kalel Rd., Sabarmati, Ahmedabad 380005; *Ankleshwar Project*, Ankleshwar 393001; *Cambay Project*, P.O. Kansari (via Anand) ; *Mehsana Project*, Near Aerodrome Rd., Mehsana 384001 ; *Eastern Region*, Nazira (Sibsagar Distt., Assam); *Cachar Project*, Silchar 788001 (Assam); *Central Region*, 41, Chowringhee Rd., Calcutta 700071; *West Bengal Project*, 1/1, Taratola Rd., Calcutta 700088; *Jaisalmer Project*, 114, Nehru Park Rd., Bhakat Sagar, Jodhpur; *Krishna-Godavari Project*, 36-10-13, Stadium Rd., Rajamundry (AP); *Puranpur Project*, Civil Lines, Bareilly 243001; *Tripura Project*, Agartala 799001; *Offshore Region*, BOP, Nariman Pt., Bombay 400021; *Geoscience Division, Central Circle*, 50, Jawahar Lal Nehru Rd., Calcutta 700071; *Northern Circle*, Tel Bhavan, Dehra Dun; *Southern Circle*, 6th floor, SPIC Centre, 97, Mount Rd., Madras 600032; *New Delhi Office*, 607, Kailash, 6th floor, Kasturba Gandhi Marg, New Delhi 110001; *Hydrocarbons India Ltd.*, 7th floor, Bank of Baroda Bldg., 16, Parliament St., New Delhi 110001; *Iraq Project*, Braiha Mohalla, Post Box No. 3 & 5, Basrah (Iraq) ; *Titan Project* (*ONGC*), C-5, Community Centre, Safdarjang Development Area, New Delhi 110016 ; *Institutes : K. D. Malaviya Institute of Petroleum Exploration*, 9, Kaulagarh Rd., Dehra Dun 248195; *Institute of Drilling Technology*, Kaulagarh Rd., Dehra Dun ; *Institute of Reservoir Studies*, Chandkheda, Sabarmati, Ahmedabad 380005

Indian Oil Corporation Ltd., 254-C, Dr. Annie Besant Rd., Prabhadevi, Bombay 400025

Chmn., C. R. Das Gupta; *Finance Dir.*, K. L. Goel; *Pub. Relations Manager*, K. K. Misra; *Secy.*, D. B. Puri.

Marketing Division

Mg. Director: S. Ketharaman, *Marketing Dir.* M. S Rana; *Gen. Managers:* R. Gurumoorthy (*Lubes*), P. F Mathews (*Supplies*), J. Jayaraman (*Sales*), R. M. Basrur (*Personnel*): *Financial Controller:* G. S. Pandya

Regions: *Western Regn.:* Clarke Rd., Mahalaxmi, Bombay 400034; *Northern Regn.:* Indian Oil Bhavan, Janpath, New Delhi 110002; *Eastern Regn.:* 1, Shakespeare Sarani, Calcutta 700071; *Southern Regn.* ' Khivraj Mansion ', 738, Anna Salai, Madras 600002; *Gen. Managers: Bombay:* D. N. Sharma; *Calcutta:* S. C Ghosh; *New Delhi:* B. M. Lal; *Madras:* Bakshi.

Research & Development Centre, Sector 13, Plot No. 1, Faridabad 121001 (Haryana). *Head, R & D Centre* Dr. J. S. Ahluwalia.

Refineries & Pipelines Division, Indian Oil Bhavan Janpath, New Delhi 110001.

Managing Director, T. K. Sinha; *Financial Controller*, T. S. Anand; *Gen. Manager* (*Tech.*), J. L. Vasudeva; *Gen. Manager* (*PJ*), N. Guha Roy; *Gen. Manager* (*Personnel*), Bimal Kapoor; *Chief Management Services Manager*, O. P. Sehgal; *Chief Personnel Manager*, R. Sharan; Gauhati Refinery, P.O. Noonamati 781020, Gauhati (Assam); *Gen. Manager*, R. R. Verma; Barauni Refinery, P.O. Barauni Oil Refinery 851101, Begusarai Dist. (Bihar): *Gen. Manager* (*Offtg.*), T. S. Krishnamurthy; Gujarat Refinery, P.O. Jawaharnagar 391320, Baroda Dist.; *Gen. Manager*, K. K. Malhotra; Haldia Refinery, P.O. Haldia 721606, Midnapore Dist. (W. Bengal); *Gen. Manager*, N. L. Majumdar; Mathura Refinery Project, P.O. Mathura Refinery, Mathura 281001 (U.P.); *Gen. Manager*, S. K. Nayak; Pipelines Wing: 809, Kailash Bldg., 26, Kasturba Gandhi Marg, New Delhi 110001; *General Manager* (*Offtg.*), N. V. Balwani

Geological Survey of India, 27, J. L. Nehru Rd., Calcutta 700016; *Dir.-Genl.*, V. S. Krishnaswamy (*Coal Wing* - *29, J. L. Nehru Rd., Calcutta* 700016); (*N. Region* — *3, Gokhale Mrg., Lucknow* 226005); (*W. Region* — *Sawai Jaisingh Highway, Jaipur* 302017); (*S. Region* - 5-5-449, *Mukaram Jahi Rd., Hyderabad* 500001); (*Central Region* - *New Secretariat Bldg., Nagpur* 440001); (*Eastern Region* - 12 *A & B, Russell St., Calcutta* 700016); (*North Eastern Region* — *Kumud Villa Complex, Nongrim Hills, Laitumkhrah, Shillong* 793003); (*A.M.S.E Wing, 6/1, South Public Sqr., New Krishna Park, Basavangudi, Bangalore* 560004)

Department of Chemicals & Fertilizers, Shastri Bhavan, Dr Rajendra Prasad Rd., New Delhi 110001

Secretary, K. V Ramanathan; *Joint Secs.*, S. M Kelkar, V Kumar, Dr. V. Venkitanarayanan, V. Malik, *Adviser* (*F*), D. G Rao; *Advisers:* D K Roy (*Drugs*), K Aghoramurthy (*Chemicals*)

MINISTRY OF PLANNING, Yojana Bhavan, Parliament St., New Delhi 110001

Minister, S B Chavan

Department of Statistics, Sardar Patel Bhavan, Parliament St., New Delhi 110001

Secretary, Vacant; *Dir.-Genl. Central Statistical Orgn & Ex Officio Addl. Secy., Deptt. of Stats.*, Dr K C. Seal.

National Sample Survey Organisation (*Field Operations Divn.*), West Block No 8, Wing 6 Ramakrishnapuram New Delhi 110022; Rajabahadur Mansion, 32, Apollo St., Bombay 400023; 294 1, Acharya P. C Rd Calcutta 700009, 35, Haddows Rd., Madras 600006 (Addresses of other offices can be had from the Hqrs.)

MINISTRY OF RAILWAYS, Rail Bhavan, New Delhi 110001

Minister, P. C. Sethi; *Minister of State*, C. K. Jaffer Sharief; *Dy. Minister*, Mallikarjun; *Chairman, Railway Board*, M S. Gujral; *Financial Commr.*, A. V Poulose; *Members*, B. B. Lal (*Mechanical*), K. P. Jayaram (*Staff*), M. V. Basrur (*Engg.*); *Adviser*, T. V. Madhav (*Intl. Relations*), M. S. Gill (*Finance*); *Dirs.*, Dr. P. C. Bhalla (*Health*), J. M. Sharma (*Vigilance*), C. Lalsangliana (*Public Relations*), H. D. Bhalla (*Mechanical Engg.*), R. P. Singh (*Traffic Transportation*), H. C. Ohari (*Plng.*), K. Subramanian (*Signalling & Telecommunications*), M. P. Gupta (*Stats. & Economics*); *Secretary, Rly. Board*, Himmat Singh.

Commission of Railway Safety (See Min. of Tourism & Civil Aviation).

Railway Rates Tribunal, Poonamallee High Rd., Madras 600008. *Chairman*, Justice T. Ramaprasad Rao; *Mem.*, V. K. Sthanunathan; *Secy.*, V. Natarajan.

Research, Designs & Standards Organisation, Manak Nagar, Lucknow 226011. *Director-General*, M. K. Kapur; *Dy. Dir.-Genl.*, Jagjit Singh.

MINISTRY OF RURAL RECONSTRUCTION, Krishi Bhavan, Dr. R. Prasad Rd., New Delhi 110001.

Minister, Rao Birendra Singh; *Min. of State*, Baleshwar Ram; *Secretary*, S. C. Varma; *Addl. Secs.*, S. S. Sidhu, M. Subramanian; *Jt. Secs.*, B. K. Sharma, G. L. Bailur, R. K. Rath, P. G. Muralidharan, J. N. Kaul; *Agri. Mktg. Adviser*, G. S. Shukla.

National Institute of Rural Development, Rajendranagar, Hyderabad 500030.

MINISTRY OF SHIPPING & TRANSPORT, Transport Bhavan, Sansad Mrg., New Delhi 110001.

Minister: Veerendra Patil; *Minister of State:* Sitaram Kesri; *Secretary:* Mohinder Singh; *Chmn., National Shipping Board:* Daulatsinhji Jadeja; *Addl. Secy.*, S. P. Ambrose; *Jt. Secs.:* S. S. Shukla, B. B. Mahajan, A. Padmanaban, D. K. Jain, Yashwant Sinha; *Director-Genl.* (*Roads Devpt.*) *& Addl. Secy.:* J. S. Marya; *Devpt. Adviser:* H. R. Laxminarayan; *Secy., Border Roads Devpt. Board:* K. R. K. Menon: *Chief Controller of Chartering:* S. N. Banerjee; *Director-Genl. of Border Roads:* S. S. Ahluwalia.

Directorate-General of Shipping, Jahaz Bhavan, Walchand Hirachand Mrg., Bombay 400001.

Director-General of Shipping, Vacant; *Sr. Dy. Director-Genl. of Shipping*, S. M. Ochaney; *Dy. Directors-Genl.*, K S Sidhu, B. K. Pawar, R Padmanabhan, S. K. Mathur.

Technical Advisers

Nautical Adviser to the Govt of India, Capt. P S Vanchiswar; *Chief Surveyor with the Govt of India*, Vacant.

Directorate of Marine Engineering Training, P. 19, Taratolla Rd., Calcutta 700088. *Branch:* Hay Bunder Rd., Bombay 400033. *Director*, K. Kishor.

Mercantile Marine Department, Old C. G. O Bldg. South Wing M Karve Mrg., Bombay 400020. *Other Offices.* Marine House, Hastings, Calcutta 700022, Old High Court Bldgs., Madras 600001, 57, Harbour Approach Rd., Visakhapatnam 530001; Willingdon Island, Cochin 682003; " Taj Prakash Bhavan ", Pandit Nehru Mrg., Jamnagar 361001; Mormugao 403803, Goa, Harbour Bunglow, 334, South Beach Rd., Tuticorin 628001.

Indian Register of Shipping, 72, Maker Towers 'F', 7th Flr., Cuffe Parade, Colaba 400005. *Chmn.*, Capt. J. C Anand; *Chief Executive*, S. R. Khare; *Secy.*, B. K Thakkar.

Lighthouses and Lightships Department, East Block 10, Level IV, Ramakrishnapuram, New Delhi 110022

Dir.-Genl. of Lighthouses & Lightships and Chief Inspector of Lighthouses in India, K. R. Bose; *Dy. Dirs.-Genl.*, B. S. Srivasthan (*Calcutta*), S. L. Kapoor (*Jamnagar*); *Admve. Officer*, B. K. Saha.

Seamen's Welfare Office, Nou Bhavan, R Kamani Marg, B. Estate, Bombay 400038.

Principal Seamen's Welfare Officer, V. Ranganathan. CALCUTTA — Marine House, Hastings, Calcutta 700022. *Principal Seamen's Welfare Officer*, K. V. Sugavaneswaran. MADRAS — Old High Court Bldg., Madras 600001. *Seamen's Welfare Officer*, Garib Das.

Shipping Development Fund Committee, 608, Kailash, K. Gandhi Mrg., New Delhi 110001.

MINISTRY OF SOCIAL WELFARE, Shastri Bhavan, Dr. Rajendra Prasad Rd., New Delhi 110001.

Minister of State, Mrs. Sheila Kaul; *Secretary*, Mrs. Sarla Grewal; *Jt. Secs.*, Smt. Nirmal Buch, J. C. Jetli, Bhaskar Ghose.

Central Social Welfare Board, Jeevan Deep Bldg., New Delhi 110001. *Chmn.*, Smt. Sushila Rohatgi; *Secy.*, Smt. Sarala Gopalan.

MINISTRY OF STEEL & MINES, Udyog Bhavan, New Delhi 110011.

Minister, Narayan Datt Tiwari; *Ministers of State*, Dr. Charanjit Chanana, Mrs. Ram Dulari Sinha; *Secretary*, A. S. Gill.

Department of Steel

Spl. Secy., Vacant; *Addl. Secy.*, D. N. Ghosh; *Jt. Secs.*, D. D. Borwankar, K. Sivaramakrishnan, I. C. Kumar; *Dirs.*, A. N. Rajagopalan, Y. L. Rajwade, J. C. Mathur.

Iron & Steel Control Organisation, 234/4, Acharya Jagdish Bose Rd., Calcutta 700020.

Iron & Steel Controller, P. K. Sarkar; *Jt. Iron & Steel Controller:* S. N. Biswas

Steel Authority of India Ltd. (SAIL), Ispat Bhawan, Lodhi Rd., New Delhi 110003.

Chmn., S. Samarapungavan; *Vice-Chmn.*, Dr. Gokul Mukherjee; *Mg. Dirs.*, Dr. N. S. Datar (*Rourkela Steel Plant*), N. K. Mitra (*Bhilai Steel Plant*), Vacant (*Durgapur Steel Plant*), D. R. Ahuja (*Bokaro Steel Plant*), J. R. Sangameswaran (*Indian Iron & Steel Co. Ltd.*), V. Subramaniam (*Visakhapatnam Steel Project*); *Exec. Dirs.*, D. Mukherjee (*Alloy Steels Plant, Durgapur*), A. A. Raju (*Salem Steel Project*): *Secy.*, L. A. K. Prasad

Department of Mines, Shastri Bhavan, New Delhi 110001.

Secretary, R. Ganapati; *Addl. Secy.*, D. Bandopadhyay; *Jt. Secy.*, I. G. Jhingran.

Indian Bureau of Mines, New Secretariat Bldg., Nagpur 440001.

Controller-Genl., D. N. Bhargava; *Controllers of Mines*, D. M. Sen, Dr. S. C. Singhal, S. Balagopal; *Regnl. Controllers of Mines*, M. Mukherjee (*Ajmer*), S. S. Dhesi (*Bangalore*), N. L. Chatterjee (*Calcutta*), L. G. Laghate (*Goa*), B. Roy (*Hazaribagh*), G. V. Rao, (*Hyderabad*), B. C. Mishra (*Nagpur*), Amir Singh (*Nellore*), A. N Bose (*Udaipur*); *Dy. Controllers of Mines*, M. P Kusum (*Dehra Dun*), H. N. Bandopadhyaya (*Jabalpur*)

MINISTRY OF SUPPLY & REHABILITATION, Nirman Bhavan, New Delhi 110011

Minister of State, Bhuta Singh; *Dy. Minister*, Giridhar Gomango

Department of Supply

Secretary, B. C. Mathur

Directorate-General of Supplies and Disposals (Hqrs. Office), Jeevan Tara Bldg., Parliament St., New Delhi 110001.

Director-General of Supplies & Disposals, Kaushal Kumar; *Addl. Director-Genl.*, J. C. Bhandari; **Calcutta Office:** 6, Esplanade East, Calcutta 700069. **Bombay Office:** Sapt Bldg., Graham Rd., Ballard Estate, Bombay 400038. *Directorate of Supplies (Textiles)*, 5th Flr., New C.G.O. Bldg., New Marine Lines, Bombay 400020. **Madras Office:** 35, Haddows Rd., Madras 600006. **Kanpur Office:** 7/29-B, Tilaknagar, Kanpur 208002. *Inspection Circles:* I. Ganesh Chandra Avenue, Calcutta 700013; Aayakar Bhavan Annexe, New Marine Lines, Bombay 400020; 35, Haddows Rd., Madras 600006; Jamshedpur 831007; Burnpur 713325; 5/28, Nawabganj, Kanpur 208002; Block No. 13, Jamnagar House, New Delhi 110011.

Department of Rehabilitation, Jaisalmer House, New Delhi 110011.

Secretary: B. C. Mathur; *Jt. Secs.*, A. U. Sarma, G. I. Misra, N. R. Hota, V. S. Rajagopalan; *Chairman & Chief Administrator, Dandakaranya Project, Koraput (Orissa)*, P. M Mohapatra

MINISTRY OF TOURISM & CIVIL AVIATION, Sardar Patel Bhavan, Parliament St., New Delhi 110001.

Minister, A. P. Sharma; *Min. of State*, Khurshed Alam Khan; *Secretary*, B. Venkataraman; *Jt. Secs.*, C. M. Chaturvedi, Miss P. Lal; *Director-Genl. of Civil Aviation*, G. R. Kathpalia; *Director-Genl. of Tourism*, K. K. Srivastava; *Addl. Director-Genl. (T)*, Miss A. Mehta; *Director-Genl. of Meteorology*, Dr. P. K Das.

Air Routes and Aerodromes Directorate, International Airports

Dirs. of Aerodromes, B. K. R. Rao (*Delhi*); S. W. J. Norton (*Madras*); S. L. Pereira (*Bombay*); S. K. Bose (*Calcutta*).

Air Routes & Aerodromes Directorates

Regnl. Controllers of Aerodromes, Vacant (*Bombay*); M. M. Simon (*Madras*); R. G. Srivastava (*Delhi*); Vacant (*Calcutta*)

Regional Headquarters

Regnl. Directors, Jagdish Chander Malhotra (*Bombay*), S. D. Bahl (*Delhi*); V. Chandrasekhar (*Madras*); B Hajra (*Calcutta*).

Commission of Railway Safety, 16-A, Ashok Mrg., Patiala House, Lucknow 226001.

Chief Commissioner of Railway Safety, P. M. N. Murthy; *Dy. Commrs.*, Vacant (*Gen.*), K. Bhojraj (*ET*), F. J. Correya (*Optg.*), Vishva Prakash (*S&T*) M. C. Sinha (*Mech.*), *Commrs of Rly. Safety*, N. P Vithal (*Central Circle-Bombay*), A. A. Rego (*Western Circle-Bombay*), K. Ganapati (*Eastern Circle-Calcutta*), S. Subramanian (*S.E. Circle-Calcutta*), B. P. Sastry (*Southern Circle-Bangalore*), Suresh Chandra (*Northern Circle-Lucknow*), K. J. N. Kutty (*N.E. Circle-Gorakhpur*).

MINISTRY OF WORKS & HOUSING, Nirman Bhavan, New Delhi 110011.

Minister, Bhishma Narain Singh; *Dy. Min.*, B. M. Mohanty; *Secretary*, M. K. Mukharji; *Jt. Secs.*, S. T. Veeraraghavan, L. M. Menezes, S. R. Adige, M. Srinivasan, S. C. Pandey.

Central Public Works Department, Nirman Bhavan, New Delhi 110011.

National Buildings Organisation, 'C' Wing, Nirman Bhavan, New Delhi 110011.

Directorate of Estates, Nirman Bhavan, New Delhi 110011.

SUPREME COURT OF INDIA, Tilak Marg, New Delhi 110001.

Chief Justice of India: Y. V. Chandrachud; *Judges:* Justice P. N. Bhagwati; Justice S. M. Fazal Ali; Justice V. D. Tulzapurkar; Justice D. A. Desai; Justice R. S. Pathak; Justice A. D. Koshal; Justice O. Chinnappa Reddy; Justice A. P. Sen; Justice E. S. Venkatramiah; Justice Baharul Islam; Justice A. Varadarajan; Justice A. N. Sen; Justice V. B. Eradi; Justice R. B. Misra; *Registrars:* R. Narasimhan (*Judl.*); R. Subba Rao (*Admn*).

CENTRAL VIGILANCE COMMISSION, No. 3, Dr. Rajendra Prasad Rd., New Delhi 110001.

Central Vigilance Commissioner: R. K. Trivedi; *Secy.*, Smt. Kusum Prasad.

Comptroller and Auditor-General of India, 10, Bahadur Shah Zafar Marg, New Delhi 110002.

Comptroller & Auditor-General of India, Gian Prakash; *Dy. Comptroller & Auditor-Genl. of India*, T. Rengachari; *Addl. Dy. Comptrollers & Auditors-Genl.*, P. P. Gangadharan; (*also Chairman, Audit Board*), G. B. Singh, A. B. Shirali.

ELECTION COMMISSION, Nirvachan Sadan, Asoka Rd., New Delhi 110001.

Chief Election Commr., S. L. Shakdher; *Secs.*, K. Ganesan, R. D. Sharma, Dr. R. P. Bhalla.

MONOPOLIES & RESTRICTIVE TRADE PRACTICES COMMISSION, Travancore House, Kasturba Gandhi Marg, New Delhi 110001.

The Commission started functioning from August 6, 1970. The Monopolies and Restrictive Trade Practices Act, 1969 has been enacted to ensure that the operation of the economic system does not result in the concentration of economic power to the common detriment and to provide for the control of monopolies and the prohibition of monopolistic and restrictive trade practices. The Commission makes enquiries and reports to the Central Govt. on matters referred to it by the Central Govt. under various sections dealing with the expansion of existing undertakings, establishment of new ones, and matters relating to mergers, amalgamations or takeovers/division of undertaking as well as monopolistic trade practices. As regards Restrictive Trade Practices, the Commission functions like a Court. Appeals against the Commission's orders lie with the Supreme Court.

Chairman: Justice S. Madhusudan Rao; *Members:* H. M. Jhala, Dr. P. S. Sanghvi; *Secy.*, S. M. Bagai.

PLANNING COMMISSION, Yojana Bhavan, Parliament St., New Delhi 110001.

Chairman, Smt. Indira Gandhi; *Dy. Chmn.*, S. B. Chavan; *Members*, Pranab Kumar Mukherjee, Mohammed Fazal, R. Venkataraman, Prof. S. Chakravarti; *Secy.*, Vacant; *Advisers*, M. N. Chaudhuri, Smt. P. P. Trivedi, U. Vaidyanathan, G. V. Ramakrishna, K. Kanungo, Baldev Singh (*State Plans*), Vacant (*Energy*), M. Satyapal (*Ind. & Minerals*), M. R. Shroff (*Plan Co-ordn.*), K. S. S. Murthy (*Irri.*), S. H. Govil (*M.P. & D.*), D. R. Gupta (*Fin. Resources*), Dr. S. P. Gupta (*Perspective Plng.*), Dr. V. G. Bhatia (*Intnl. Economics*), Nitin D. Desai (*Project Appraisal*), A. V. R. Char (*Labour, Emp. & Manpower*), Dr. S. N. Saraf (*Edn.*), Prakash Narayan (*Transport*), C. K. Modi (*Village & Small Inds.*).

UNION PUBLIC SERVICE COMMISSION, Dholpur House, Shahjahan Rd., New Delhi 110011.

Chairman: Dr. M. L. Shahare; *Members:* N. S. Saksena, S. R. Mehta, Dr. N. A. Noor Muhammad, Dr. Mrs. R. O. Dhan, J. R. Bansal, Air Vice-Marshal A. S. Bakshi, Dr. K. Venkataramiah; *Secy.*, B. R. Patel.

GOVT. AGENCIES:

Anthropological Survey of India, Indian Museum, 27, J. L. Nehru Marg, Calcutta 700016. *Dir.*, H. K. Rakshit, *Regnl. Offices:* Central Regn., 11, Seminary Hills, Nagpur; Southern Regn., Gokulam Rd., Aryalaya, Mysore; North East Regn., Lachumiere, Shillong; North West Regn., Hardwar Rd., Dehra Dun; Andaman & Nicobar Regn., Port Blair; Western Regn., 1, Old Fatehpura, Udaipur; Eastern Regn., Indian Museum, 27, J. L. Nehru Rd., Calcutta 700016; Zonal Anthropological Museum, Jagdalpur, Bastar Dist.

Archaeological Survey of India, New Delhi 110011.

Director-General, Dr. (Mrs.) D. Mitra.

Botanical Survey of India, Indian Botanic Garden, P.O. Botanic Garden, Howrah 711103.

Director, Dr. S. K. Jain; *Central National Herbarium*, Howrah; *Indian Botanic Garden*, Howrah; *Central Botanical Laboratory*, Howrah; *Industrial Section of Indian Museum*, Calcutta. *Regional Offices: Eastern Circle*, Shillong; *Central Circle*, Allahabad; *Northern Circle*, Dehradun; *Andaman Circle*, Port Blair; *Arid Zone Circle*, Jodhpur; *Western Circle*, Pune; *Southern Circle*, Coimbatore; *Arunachal Field Station*, Itanagar; *Sikkim Himalayas Station*, Gangtok.

Department of Explosives, Old High Court Bldgs., Civil Lines, Nagpur 440001.

Chief Controller of Explosives, Charanjit Lal; **East Circle:** 8, Esplanade East, Calcutta 700001; **Sub-Circles:** Rebeiro's Bldg., Pub-Sarania, Gauhati 781003; Saradalaya, 48/1, Gorai Rd., Asansol 713301; 8, Zulu Park, Hazaribagh 825301; P. O. Indian Explosives, Gomia 829112; **West Circle:** Industrial Assurance Bldg., Opp. Churchgate Stn., Bombay 400020; **South Circle:** Shastri Bhavan, 35, Haddows Rd., Madras 600006; **Sub-Circles:** 2/139, Sivakasi-Virudhunagar Rd., Thiruthangal 626130 (Via) Sivakasi, Ramanathapuram Dist. (T. Nadu); 55, Marredpally (West), Secunderabad 500026; **North Circle:** 2/60, Ramnagar Colony, Civil Lines, Agra 282002; **Sub-Circle,** C/o Gen. Manager, Ordnance Factory, Bhandara.

Survey of India, Hqrs., Dehra Dun 248001.

Surveyor-General, Maj.-Gen. K. L. Khosla; **Map Publication Directorate,** Hathibarkala, Dehra Dun; **Northern Circle:** 17, E. C. Rd., Dehra Dun; **Geodetic & Research Branch,** Dehra Dun; **Eastern Circle:** 13, Wood St., Calcutta 700016; **Southern Circle:** 22, Richmond Rd., Bangalore 560025; **Centre for Survey Trg. & Map Prodn.,** Hyderabad 500039; **Pilot Map Prodn. Plant,** Hyderabad 500039; **Survey Trg. Instt., Research &**

Development, Hyderabad 500039; **South Central Circle,** Hyderabad 500039; **Western Circle,** Jaipur 302006; **Central Circle,** Jabalpur 482001; **North Western Circle,** Chandigarh 160017; **North Eastern Circle,** Shillong 793001; **Directorate, Survey (Air),** New Delhi 110022; **South Eastern Circle,** Sahid Nagar, Bhubaneswar 751007.

Zoological Survey of India, 34, Chittaranjan Ave., Calcutta 700012. *Dir.*, K. K. Tiwari; *W. Regnl. Stn.*, 1182/2, Ferguson College Rd., "Shivajinagar", Pune 411065; *S. Regnl. Stn.*, 100, Santhome High Rd., Madras 600028; *Marine Biological Stn.*, 12, Leith Castle St., Madras; *N. Regnl. Stn.*, 13, Subhas Rd., Dehra Dun; *Eastern Regnl. Stn.*, Shillong; *Desert Regnl. Stn.*, Jodhpur; *Central Regnl. Stn.*, Jabalpur; *Gangetic Plains Regnl. Stn.*, Patna; *High Altitude Zoology Field Stn.*, Solan (H.P.); *Andaman & Nicobar Field Stn.*, Port Blair; *Freshwater Biological Stn.*, ZSI. 3-5-1907/2, Himayatnagar, Hyderabad 500029; *Kakdwip Field Stn.*, ZSI, P.O. Kakdwip 743347, 24-Parganas Dist. (W.B.); *Estuarine Biological Stn.*, 251, Hill Patna, Bijipur, Berhampur 765001 (Orissa); *Western Ghats Field Research Stn.*, 2/355, Kizhakheyil, East Nadakhar, Calicut 673006 (Kerala).

India Meteorological Department, Mausam Bhavan, Lodi Rd., New Delhi 110003.

Director-General of Meteorology, Dr. P. K. Das; *Addl. Director-General of Meteorology*, S. K. Das (*Instruments*); *Dy. Director-Genl. of Meteorology*, H. M. Choudhury (*Climatology & Geophysics*); *Dirs.*, Dr. A. K. Mukherjee (*Weather Forecasting*); Dr. A. S Ramanathan (*Hydrometeorology*); Dr. S. M. Kulshrestha (*Instruments*); Dr. A. A. Ramasastry (*Instruments*); G. P. Srivastava (*Instruments*); S. D. S. Abbi (*Publications*); Dr. N. Sen Roy (*Telecom.*); G. R. Gupta (*NHAC*); U. Gopal Rao (*Sat. Met.*); Dr. H. N. Srivastava (*Seismology*); *Regnl. Dirs.*: Dr. N. S. Bhaskar Rao (*Madras*); C. E. J. Daniel (*Bombay*); S. K. Ghosh (*New Delhi*); T. S. S. Anjaneyulu (*Calcutta*); V. P. Kamble (*Nagpur*).

Indian Institute of Astrophysics, Bangalore 560034. *Director:* Dr. M. K. V. Bappu.

Indian Institute of Geomagnetism, Colaba, Bombay 400005.

Indian Institute of Tropical Meteorology, Ramdurg House, Ganeshkhind Rd., Pune 411005. An autonomous research orgn. specialising in studies on tropical meteorology and allied fields.

STATES ADMINISTRATIVE PERSONNEL

(Corrected upto Feb. 1, 1982. Further changes, if any, appear in "Late Particulars" at the end of the book.)

ANDAMAN & NICOBAR ISLANDS, Port Blair. *Chief Commr.*, S. L. Sharma; *Chief Secy.*, B. K. Singh; *Devpt. Commr.*, B. R. Tamta; *Secy.* (*Inds.*), R. S. Sethi; *Finance Secy.*, K. P. Lakshmana Rao; *Secy., Judl.*, K. B. Menon; *Chief Conservator of Forests*, Lathan Zama; *Inspector-Genl. of Police*, F. L. R. Siama.

ANDHRA PRADESH, Hyderabad.

Governor: K. C. Abraham.

***Ministers**

Chief Minister in charge of Gen. Adm., Home, Prisons, Services, Law & Order, Scheduled Castes & Scheduled Tribes, Inf. & Public Relations etc., T. Anjiah; *Co-operation*, N. Amaranatha Reddy; *Legislature Affairs*, E. Ayyapu Reddy; *Forests & Wakfs*, M. A. Aziz; *Major Industries and Urdu Academy*, M. Baga Reddy; *Endowments*, P. V. Choudary; *Minor Irrigation*, C. Das; *Marketing & Warehousing Corpn., etc.*, Ch. Hanumaiah; *Ports, Commerce, Export Promotion, A.P.S.T.C., etc.*, M. M. Hashim; *Tech. Edn., Indian Medicine, etc.*, T. Hayagrivachari; *Excise*, C. Jagannadha Rao; *Land Revenue, etc.*, N. Janardhana Reddy; *Highways, Roads & Bldgs., etc.*, Divi Kondaiah Choudary; *Medical & Health, etc.*, A. Madan Mohan; *Comml. Taxes, Khadi & Village Inds.*, M. Manik Rao; *Finance, Plng., State Lotteries, Sports, etc.*, K. Prabhakara Reddy; *Animal Husb., Dairy Devpt., etc.*, B. Ramdev; *Social Welfare, Harijan Welfare, etc.*, K. Ranga Rao; *Transport including A.P.S.R.T.C.*, K. Rosaiah; *Municipal Adm., etc.*, B. Sarojini Pulla Reddy; *Special Employment Schemes, etc.*, Bhattam Srirama Murthy; *Major Irrigation, etc.*, G. V. Sudhakara Rao; *Power, etc.*, A. Veerappa; *Mines & Geology, etc.*, S. Venkata Reddy; *Primary, Secondary & Collegiate Edn., etc.*, B. Venkatarama Reddy; *Labour, Civil Supplies, etc.*, G. Venkataswamy; *Edn.*, K. Kesavi Rao; *Panchayat Raj*, N. Srinivasa Reddi; *Agriculture*, Ch. Venkat Rao.

***Ministers of State**

Municipal Adm., S. Alwardas; *Sugar Industry, Cane Devpt.*, etc.; T. Bala Goud; *Archives & Archaeology & Museums, etc.*, N. Chandrababu Naidu; *Youth Services, etc.*, P. Janardhan Reddy; *Handlooms & Textiles*, G. Nageswara Rao; *Relief & Rehabilitation, etc.*, C. Rajanarasimha; *Rural Devpt., etc.*, Dr. Y. S. Rajasekhar Reddy; *Fisheries, etc.*, Goka Ramaswamy; *Tribal Welfare, etc.*, D. Ravindra Naik; *Housing, etc.*, K. Satyanarayana Raju; *Backward Classes Welfare, etc.*, M. Tulasidas; *Rural Water Supply*, Paladugu Venkata Rao; *Ground Water & A. P. Irri. Devpt. Corpn.*, V. Venkateswara Rao; *Women & Child Welfare, etc.*, Mrs. M. N. Vijayalakshmi Devi.

Secretariat, Hyderabad 500004

Chief Secretary, S. R. Rama Murthy; *Secs.*, C. S. Shastry (*G.A.D.*); M. Gopala Krishnan (*Edn.*); B. P. R. Vittal (*Fin. & Plng.*); K. M. Ahmed (*Plng.*); P. K. Doraiswamy (*Fin. & Plng.*); T. N. Rao (*Food & Agri.*); B. K. Rao (*Devpt.*); Jayakar P. Johnson (*Home*); Mahmood Bin Mohammed (*Addl.*) *Home*: K. Madhava Rao (*Housing etc.*); B. Pratapa Reddy (*Ind. & Comm.*); S. Kasi Pandian (*Ind. & Comm.*); B. N. Raman (*Irri. & Power*); G. R. Nair (*Labour & Eng. Tech. Edn.*); M. N. Rao (*Law*); C. N. Shastry (*Medical & Health*); K. S. R. Murthy (*Panchayat Raj*); K. R. Venugopal (*Social Welfare*); R. K. Gonela (*Finance*); V. Narayana Rao (*Commr., Land Reform & Urban Land Ceilings*); P. L. Sivaram (*Commr., Survey Settlements & Land Records*).

Hyderabad Urban Development Authority, Sadana Bldgs., Hyderguda, Hyderabad 500029.

High Court, Hyderabad 500266.

Chief Justice, A. Kuppuswami; *Judges*, K. Madhava Reddy, K. Ramachandra Rao, K. A. Muktadar, P. Chennakesav Reddy, V. Madhava Rao, K. Punnayya, A. Raghuvir, A. Gangadhara Rao, K. Jayachandra Reddy, B. P. Jeevan Reddy, Smt. K. Amareswari, P. A. Choudhary, P. Ramachandra Raju, G. P. Naidu, A. Seetharama Reddy. *Registrars*, P. Srirama Raju (*Admn*), D. Surya Rao (*Judl.*).

---

* A new Ministry with B. Venkataram as *Chief Minister* and C. Jagannath Rao as *Deputy Chief Minister* has started functioning from February 28, 1982. The present Ministry consists of 24 Ministers of cabinet rank and 10 Ministers of State.

South Central Railway, Rail Nilayam, Secunderabad 500371.

General Manager, Shamsher Singh; *Addl. Genl. Manager*, E. Varadachari; *Senior Dy. Gen. Manager*, P. Krishnamurthy; *Chief Plng. Officer*, C. Satyanarayana; *Chief Optg. Supdt.*, Y. N. Trehan; *Chief Safety Supdt.*, J. Rajagopalachari; *Chief Commercial Supdt.*, K. K. R. Rao; *Chief Claims Officer*, K. V. Balakrishnan; *Chief Engr. (Open Line)*, R. Balasubramanian; *Chief Engr. (Construction-I)*, N. R. Anantharam; *Chief Engr. (Construction-II)*, Y. Krishnamurthy; *Chief Track Engr.*, S. H. R. Krishna Rao; *Chief Bridge Engr.*, N. Ananthanarayanan; *Chief Mechanical Engr.*, S. Abuzar; *Chief Workshop Engr.*, D. P. Joshi; *Chief Electrical Engr.*, A. J. Gurushankar; *Chief Electrical Engr. (Railway Electrification)*, K. P. Padiyar; *Chief Signal & Telecomm. Engr.*, K. S. John; *Chief Signal & Telecomm. Engr. (Construction)*, K. Kashyap; *Chief Security Officer*, A. Gopya Naick; *Chief Medical Officer*, Dr. S. C. Kapoor; *Controller of Stores*, B. C. Choudiah; *F.A. & C.A.Os.*, J. C. Srinivastava, G. V. Subrahmanyam, C. K. Ramachandra *(Constrn.)*; *Chief Personnel Officer*, S. N. Mahant; *Chief Pub. Relations Officer*, V. Rajagopal.

ARUNACHAL PRADESH, Itanagar & Shillong.

Lt. Governor: H. S. Dubey.

Ministers

Chief Minister, Gegong Apong; *Agriculture*, Khapriso Krong; *Finance*, Tengam Ngemu; *Supply*, Tadar Tang; *PWD*, Tshering Tashi; *Health*, Tadak Dulom.

Dy. Ministers

Rural Works, Kameng Dolo; *Forests*, Haijan Ponglaham.

Secretariat

Chief Secretary, R. K. Patir; *Secs.*, T. Dai *(Edn.)*; P. Ghosh *(Fin.)*; T. R. Das *(P&AR & GA)*; J. M. Syiem *(Supply & Transport)*; M. Dai *(Health & Boundary Affairs)*; Smt. Meenakshi Datta Ghosh *(Ind. & Appt.)*; J. M. Srivastava *(Law & Jud.)*; *Commissioner-cum-Secy., Home*, T. Ringu; *Devpt. Commr.*, P. P. Chauhan; *Dy. Commrs.* Smt. Anila Gupta *(Bomdila)*; G. S. Chima *(Ziro)*; B. Prasad *(Along)*; D. S. Negi *(Tezu)*; Ashok Kumar *(Khonsa)*; P. Chander *(Seppa)*; P. K. Tripathi *(Daporijo)*; K. C. Gogoi *(Anini)*; Rakesh Mehta *(Pasighat)*; *Dirs.*, S. K. Gupta *(Edn.)*; S. Pao *(Inf. & Pub. Relations)*; P. C. Dutta *(Research)*; Dr. S. M. Mukherjee *(Health)*; M. C. Joshi *(Agri.)*. E. S. Thangam *(Chief Conservator of Forests)*.

ASSAM, Dispur, Gauhati 781006.

Governor: P. C. Mehrotra.

Ministers

K. C. Gogoi *(Chief Minister)*, Mohamed Idris, Rabindranath Choudhury, Hiteswar Saikian, Altaf Hussain Mazumdar, Santi Ranjan Dasgupta, Jagannath Sinhan, Gotak Chandra Rajbanshi, Zehirul Islam, Sonaram Thousen, Dhaniram Rongpi

Ministers of State

A. M. Akram Hussain, Padam Bahadur Chouhan.

Deputy Minister

Fakrul Islam

Secretariat

Chief Secretary, Ramesh Chandra; *Financial Commr.* M. C. Narasimhan; *Commrs.*, S. D. Phene *(Hills Dn. & Spl. Secy., Hill Areas Devpt.)*; H. N. Das *(Lower Assam Dn.)*; V. S. Jafa *(Upper Assam Dn.)*; C. D. Tripathi *(Commr. & Secy., G.A.D., Home, Personnel & Political Deptts.)*; J. K. Bagchi *(Plng. & Devpt.)*; D. K. Gangopadhyay *(Agricultural Prodn.)*; Arif Ali *(Co-opn., Forests & Soil Conservation)*; Prabir Sengupta *(Inds.)*; *Secs.*, R. Dutta *(Agri. & Veterinary)*, S. K. Purkayastha *(Admve. Reforms, G.A.D., etc.)*, U. C. Sarania *(Edn.)*, C. P. Misra *(Excise, etc.)*, H. Gohain *(Flood Control)*, J. Hazarika *(Food & Civil Supplies, Transport, Tourism)*, T. K. Kamilla *(Health & Family Welfare, Mines & Minerals)*, A. B. S. I. Haque *(Irri.)*, D. C. Sarma *(Judl.)*, U. Tahbildar *(Legis.)*, C. R. Samaddar *(Labour)*, J. Changkakati *(Pub. Enterprises)*, H. Barua *(Pub. Works)*, P. K. Dutta *(Revenue)*.

Principal Officials

Inspector-Genl. of Police, P. C. Das; *Inspector-Genl. of Prisons*, P. K. Sarma; *Chief Conservator of Forests*, S. Rajkhowa; *Registrar of Co-op. Socs.*, G. N. Bhattacharyya; *Dirs.*, Dr. K. C. Mahanta *(Agriculture)*; M. M. Choudhury *(Inf. & Public Relations)*; D. D. Chaudhury *(Cult. Affairs)*; H. K. Barkakaty *(Emp. & Craftsman Trng.)*; G. Goswami *(Industries)*; J. N. Sarma *(Economics & Stats.)*; N. C. Gohain *(Social Welfare)*; S. K. Bhattacharjee *(Geology & Mining)*; T. C. Dowerah *(Sericulture & Weaving)*; K. K. Gogoi *(Inland Water Transport)*; M. Ahmed *(Fisheries)*; D. M. Bujarboruah *(Small Savings)*; L. R. Bora, Capt. T. M. Bujarboruah *(Animal Husb. & Veterinary)*; P. B. Dutta *(Supply)*; T. L. Barooah *(Sports & Youth Welfare)*; S. Dhar *(Tourism)*; A. Ali *(Pub. Instrn.)*.

Gauhati High Court (High Court of Assam, Nagaland, Meghalaya, Manipur & Tripura), Gauhati 781001.

Ag. Chief Justice, D. Pathak; *Judges:* Kiranmay Lahiri, N. Ibotombi Singh, K. N. Saikia, B. L. Hansaria, S. M. Ali, T. C. Das; *Registrars*, Nripen Das *(Judl.)*, M. Gurumoorthy *(Admn.)*; *Advocates-General:* A. M. Mazumdar *(Assam)*; J. P. Bhattacharjee *(Nagaland)*, R. K. Manisena Singh *(Manipur)*, D. P. Kundu *(Tripura)*, N. M. Lahiri *(Meghalaya)*.

North-East Frontier Railway, Maligaon, Gauhati 781011.

General Manager, K. T. V. Raghavan; *Sr. Dy. General Manager*, R. K. Sabharwal; *Dy. General Manager (G)*, K. Ananthanarayanan; *Chief Personnel Officer*, K. K Berry; *Chief Optg. Supdt.*, S. K. Suden; *Chief Comml. Supdt.*, D. P. Sharma; *Chief Safety Supdt.*, Vacant; *Chief Claims Officer*, J. K. Bali; *Chief Mechanical Engr.*, S. N. Chatterjee; *Chief Workshop Engr.*, D. Chatterjee; *Chief Signal & Tele-Comm. Engr.*, R. R. Ghosh; *F.A. & C.A.O.*, N. C. Mahapatra; *Chief Electrical Engr.*, P. Sathiapalan; *Chief Engr.*, G. S. Koppikar; *Chief Security Officer*, E. J. Thompson; *Chief Medical Officer*, Dr. R. N. Sharma; *Controller of Stores*, S. Vaidyalingam; *Chief Plng. Officer*, H. C. Srivastava; *Chief Pub. Relations Officer*, R. I. S. Siddhu.

BIHAR, Patna.

Governor: Dr. A. Kidwai.

Lok Ayukta: S. N. P. Sinha.

Ministers

Chief Minister in charge of Cabinet Secrtt., Home, Personnel, Finance, Irrigation, Dr. Jagannath Mishra; *Animal Husb., Fisheries Devpt., Handloom*, Abdul Sami Naduri; *Health & Family Welfare*, Dr. Umeshwar Prasad Verma; *Excise*, Karamchand Bhagat; *Co-opn.*, *Relief & Rehab.*, Ghanshyam Singh; *Rural Devpt. & Waqf*, Chaudhuri Salauddin; *Minor Irrigation, etc.*, Jagnarain Trivedi; *Forests, etc.*, Tira Molhi Rai Munda; *Edn.*, Nasruddin Haidur Khan; *Public Works*, Buddha Deo Singh; *Transport, etc.*, Mishri Sada; *Labour*, Jogeshwar Prasad 'Jogesh'; *Rural Devpt., Public Health, Engg., etc.*, Ramesh Jha; *Sugar, Mines, Geology*, Rajendra Pratap Singh; *Industry, Parl. Affairs*, Ramashraya Pd. Singh; *Agriculture*, Laliteshwar Prasad Sahi; *Revenue & Land Reform*, Lahtan Chaudhuri; *Food, Commerce, Housing*, Shankar Dayal Singh.

Ministers of State

Local Self-Govt., Tourism, Uma Pandeya; *Agriculture*, Dilkeshwar Rau; *Jail*, Pravawati Gupta; *Finance*, Dr. Prabhunath Singh; *Sugar*, Prem Narayan Garhwal; *Revenue & Land Reforms*, Madan Prasad Singh; *Pub. Health, Engg.*, Moidur Rahman; *Public Works*, Raghunath Jha; *Rural Devpt.*, Rajo Singh; *Food Supply & Commerce*, Lallan Shukla; *Health & Family Welfare*, Shamaile Nabbi; *Minor Irrigation & Religious Trust*, Shankar Pratap Deo; *Co-operation, Relief & Rehab.*, Shagir Ahmd; *Irrigation*, Saddanand Singh; *Industries, Parl. Affairs*, Ram Deo Rai.

Deputy Ministers

Forest, Tribal Welfare, Ishwari Ram Pashwan; *Animal Husb., Fisheries, etc.*, K. Singh; *Edn.*, Kumud Raiyan Jha; *Labour & Emp.*, Ranjit Sinha; *Science & Technology, Transport*, Shyamsunder Singh.

Secretariat

Chief Secretary, P. P. Naiyyar; *Devpt. Commr.*, S. K. Mukherjee; *Food Commr.*, R. K. Shrivastava; *Land Reforms Commr.*, S. K. Srivastav; *Ind. Devpt. Commr.*, S. P. Shukla; *Finance Commr.*, J. C. Kundra; *Public Works Commr.*, M. Singh; *Irrigation & Power Commr.*, C. R. Venkatraman; *Sales Tax Commr.*, R. K. Sinha; *Agri. Prodn. Commr.*, C. R. Vaidyanathan; *State Transport Commr.*, M. Singh; *Health Commr.*, K. P. Sinha; *Edn. Commr.*, K. N. Ardhanarishwaran; *Deptt. Enquiry Commr.*, R. R. Prasad; *Relief & Rehab. Commr.*, Arun Prasad; *Mines Commr.*, S. Prabhakaran; *Labour Commr.*, M. Jha; *Home Commr.*, Arun Pathar; *Secs.*, N. K. P. Sinha (*Home*); N. K. Sinha (*Irri. & Power*); M. K. Sinha (*Cooptve.*); P. K. Singh (*Agri.*); M. Prasad (*Plng. & Devpt. Plng.*); I. C. Kumar (*Labour & Emp.*); R. N. Sinha (*Revenue & Reforms*); L. Singh (*Village Devpt.*); A. Ahmad (*Spl. Home*); N. K. Singh (*Spl. Irri. & Power*); K. K. Ambasth (*Spl. Edn.*); S. M. Haidar (*Urban Devpt.*); Chandra Mohan Jha (*Spl. Agri. & Animal Husb.*); M. Singh (*Ind.*); M. P. Singh (*Spl. Finance*); *Dirs.*, P. Jha (*Stats. & Evaluation*); H. Sinha (*Ind.*); J. K. Das (*Tourism*); J. N. Jha (*Public Relations*); *Inspector-Gen. of Police*, S. Jha.

Bihar State Khadi & Village Industries Board, East Gandhi Maidan, Patna 800001.

Patna Industrial Area Devpt. Authority, Udyog Bhavan, Patna 800004.

High Court, Patna 800004.

Chief Justice: Vacant; *Judges:* Syed Sarwar Ali, Rameshwar Prasad Sinha, Bhagwati Prasad Jha, Hari Lal Agrawal, Lalit Mohan Sharma, Sushil Kumar Jha, Nagendra Prasad Singh, Sunil Kumar Choudhuri, Uday Sinha, Syed Ali Ahmad, Birendra Prasad Sinha, Medini Prasad Singh, Brishketu Saran Sinha, Shivanugarh Narain, Chaudhary Sia Saran Sinha, S. S. Hasan, Manoranjan Prasad, Satyeshwar Roy, Vishwanath Mishra, Umesh Chandra Sharma, Munishwar Prasad Varma, Rajeshwar Prasad Mandal; *Ad-hoc Judge*, C. N. Tiwary; *Registrar*, Binodanand Singh.

DELHI, Delhi

Lt. Governor: S. L. Khurana.

Secretariat

Chief Secretary, S. D. Srivastava; *Financial Commr.*, K. C. Joherey; *Devpt. Commr.*, S. K. Vajpayee; *Judl. Secy.*, Lokeshwar Prasad; *Finance Secy.*, Umesh Saigal; *Dy. Commr.*, R. K. Ahuja; *Commr. of Police*, Bajranglal; *Labour Commr. & Dir. of Emp.*, R. N. Puri; *Dt. & Sessions Judge*, Jagdish Chandra; *Secy. & Dir. of Edn.*, Baleshwar Rai; *Dirs.*, Y. P. Puri (*Inf. & Pub.*), M. K. Bezboruah (*Inds.*), Jagdish Sagar (*Technl. Edn.*).

Delhi Development Authority, D-1, Vikas Bhavan, Indraprastha Estate, New Delhi 110001.

High Court, New Delhi 110001.

Chief Justice, Prakash Narain; *Judges*, Rajindar Sachar, Dalip K. Kapur, T. P. S. Chawla, Avadh Behari Rohtagi, R. N. Aggarwal, H. L. Anand, Yogeshwar Dayal, S. S. Chadha, M. L. Jain, S. Ranganathan, Ms. Leila Seth; *Addl. Judges:* N. N. Goswamy, Sultan Singh, S. B. Wad, J. D. Jain, Charanjit Talwar, G. R. Luthra, D. R. Khanna, B. N. Kirpal, G. C. Jain; *Registrar:* P. P. Sharma.

Northern Railway, State Entry Rd., New Delhi 110001.

General Manager, Dilbagh Singh; *Addl. Gen. Manager* (*Operations*), Dilraj Singh; *Addl. Gen. Manager* (*Technical Services*), L. C. Vaswani; *F.A. & C.A.Os.*, P. C. Gupta, J. C. Singhal (*Constrn.*), K. S. Haravu (*Stores & Traffic*); *Chief Comml. Supdt.*, C. S. Christian; *Chief Mktg. Supdt.*, B. P. Singh; *Chief Claims Officer*, R. M. Sood; *Chief Engr.*, Vijay Singh; *Chief Engr.* (*General*), P. S. Dutta; *Chief Bridge Engr.*, M. P. Singhal; *Chief Engr.* (*Constrn.*), S. M. Kaul; *Chief Track Engr.*, J. S. Mundrey; *Chief Engr.* (*Plng. & Devpt.*), Ravinder Singh; *Chief Electrical Engr.*, C. P. Gupta; *Chief Engr.* (*Railway Electrification*), K. Ranga Chari; *Chief Mech. Engr.*, M. K. Modwal; *Chief Workshop Engr.*, Satish Bahl; *Chief Medical Officer*, Dr. M. C. Khorwal; *Chief Optg. Supdt.*, Arjun Krishna; *Chief Plng. Officer*, R. B. Mathur; *Chief Public Relations Officer*, Kulbir Singh; *Chief Personnel Officer*, B. R. Pahwa; *Chief Signal & Telecomm. Engrs.*, Swami Saran, Sirish Chandra (*Constrn.*), S. Sen (*Signal*), R. S. Sampat Kumaran (*Survey*).

GOA, DAMAN & DIU, Panaji.

Lt. Governor (*Concurrently Administrator of Dadra & Nagar Haveli*), Jagmohan.

Ministers

Chief Minister in charge of Home, Transport, Personnel & Admve. Reforms, etc., Pratapsingh Rane; *Inds. & Mines, Inland Waterways, Labour & Emp., etc.*, A. N. Naik; *Pub. Health, Tourism, Fisheries, etc.*, Dr. Wilfred de Souza; *Agri., Animal Husb., Panchayati Raj, Comm. Devpt., etc.*, Francis C. Sardinha; *Edn., Food & Civil Supplies, Social Welfare, etc.*, H. N. Prabhu Zantye; *Law & Judiciary, Leg. Affairs, Revenue, Co-opn.*, Hassan Haroon.

Secretariat

Chief Secretary, K. C. Jaubrey; *Devpt. Commr.*, Hari Datta Sharma; *Sec.* (*Finance*), Dharam Dutt; *Sec.* (*Revenue*), S. Raghunathan; *Addl. Judl. Commr.*, Dr. Gustav Filip Couto; *Secy.* (*I. & L.*), G. K. Bhattacharya; *Law Secy.*, Dr. U. D. Sharma; *Press & Cultural Adviser*, V. K. Naik.

Principal Officials

Dirs., S. S. Chana (*Agri.*); V. A. P. Mahajan (*Inf.*), G. S. Mander (*Tourism*); Vaman Sardesai (*Health Services*); Srimant Mali (*Edn.*); R. M. Dhawan (*Plng., Stats. & Evaluation*); S. C. Sinha (*Fisheries*); J. A. D'Souza (*Inds. & Mines*); V. G. Kakodkar (*Archives*); E. Noronha Rodrigues (*Animal Husb. & Vet. Services*); Capt. A. Rebello (*Social Welfare*), Dr. H. Y. Karapurkar (*Transport*). *Conservator of Forest*, D. R. Karnure; *Inspector-Gen. of Police*, Dr. Jacinto Estibeiro; *Commr. of Sales Tax & Entertainment*, Pukh Raj Bumb; *Registrar of Coop. Socs.*, S. S. Sukhtankar; *Commr., Labour & Emp.*, A. K. Mathur; *Civil Admr., Diu*, J. Emmanuel.

GUJARAT, Gandhinagar 382010.

Governor: Vacant.

Ministers

Chief Minister in charge of Gen. Adm., Industries, Mines & Power, Law and Justice, Information, Urban Devpt., Madhavsinh Fulsinh Solanki; *Finance, Plng., Labour Emp., Prohibition & Excise*, Sanatkumar Maganlal Mehta; *Home Deptt. (Excluding Inf. & Tourism) & Parl. Affairs*, Prabodhbhai Chimanlal Raval; *Panchayats & Municipalities*, Trambaklal Mohanlal Dave; *Irrigation, Tribal Welfare & Forests*, Amarsinh Bhilabhai Chaudhary; *Food & Civil Supplies, Health & Family Welfare, Sports, Physical Edn., etc.*, Manoharsinhji Pradyumansinhji Jadeja; *Agriculture, Ports and Animal Husb.*, Vijaydasji Virdasji Mahant; *Buildings & Communications, Housing*, Khodidan Bhimji Zula.

Ministers of State

Health & Family Welfare, Tourism, Smt. Kokilaben Hariprasad Vyas; *Transport*, Mohamedbhai Gulammohiyuddin Surti; *Social Welfare, including Harijan Welfare*, Devjibhai Bhikhabhai Vanvi: *Finance & Plng.*, Hariharbhai Umivashanker Khambholja; *Panchayats, Co-opn. & Irrigation*, Maganbhai Bhukhanbhai Solanki

Deputy Ministers

Transport & Inf., Kiritsinh Anopsinh Gohil: *Edn.*, Balvantray Bachulal Manvar; *Social Welfare*, Pursottambhai Ravjibhai Makwana; *Agriculture & Forests*, Khimjibhai Jesangbhai: *Tribal Welfare*, Lalitkumar Bhagwanbhai Patel; *Law & Justice and Fisheries*, Mohammedhusain Karimbhai Bloch: *Prohibition & Excise, Harijan Welfare & Small Savings*, Lalitbhai Dhanjibhai Parmar; *Labour & Emp.*, Chandrakant Nandlal Patel.

Secretariat

Chief Secretary, H. K. L. Capoor; *Principal Secretary*, K. Sivaraj (*Finance*); *Addl. Chief Secretaries*, M. G. Shah (*Agri., Forests & Co-opn.*), M. Shivgnanam (*Inds.*), *Secs.*, R. V. Chandramauli (*Home*), M. D. Patel (*Bldgs. & Communications*), P. A. Raj (*Irrigation*), K. M. Satwani (*Legal*), P. V. Bhatt (*Panchayats, Housing & Urban Devpt.*), K. V. Harihardas (*Revenue*), N. Vittal (*Food & Civil Supplies*), M. S. Dayal (*Health & Family Welfare*), R. Balkrishnan (*Plng.*), T. D. Soyantar (*Social Welfare & Tribal Devpt.*), T. R. Agnani (*Labour & Emp.*), H. A. Mistry (*Edn.*).

Principal Officials

Commrs., H. M. Joshi (*Co-opn.*), S. H. Jagad (*Sales Tax*), A. M. Amin (*Settlement*), C. C. Doctor (*Revenue Inspection*), B. T. Trivedi (*Devpt.*), T. K. Jayaraman (*Area Devpt.*), S. J. Munsha (*Housing*), S. O. Shelat (*Inds.*), K. Ramamoorthy (*Ahmedabad Muni. Corpn.*), K. V. Bhanujan (*Labour*) *Dirs.*, Dr. R. L. Pathak (*Agri.*), Dr. O. P. Gupta (*Health & Med. Services*), Prof. A. K. Kumta (*Tech. Edn.*), Manubhai Patel (*Drug Controller*), G. L. Bhagat (*Social Welfare*), B. P. Kukadiya (*Ports*), M. S. Trivedi (*Inf.*), P. N. Writer (*IGP*), M. M. Singh (*Commr. of Police, Ahmedabad*), G. S. Shah (*Bureau of Econ. & Stats.*), T. N. Vaishnav (*Animal Husb.*).

Gujarat Labour Welfare Board, Outside Raipur Gate, Ahmedabad 380022.

Gujarat Slum Clearance Board, Govt. Bungalow No. 30 Shahibaug, Ahmedabad 380004.

High Court, Navrangpura, Ahmedabad 380009.

Chief Justice, M. P. Thakkar; *Judges*, P. D. Desai, B. K. Mehta, A. N. Surti, N. H. Bhatt, A. M. Ahmadi, R. C. Mankad, G. T. Nanavati, S. B. Majumdar, V. V. Bedarkar, D. H. Shukla, S. L. Talati, D. C. Gheewala. *Registrar:* Vacant.

HARYANA, Chandigarh.

Chief Commissioner, Chandigarh, K. K. Banerjee.

Governor: G. D. Tapase.

Ministers

Chief Minister in charge of Gen. Admn., Industries, Edn., Home (C.I.D.), etc., etc., Bhajan Lal; *Home (excluding C.I.D.), Adm. of Justice, Cul. Affairs & Civil Aviation*, Kanhiya Lal; *Finance, Parl. Affairs, Legislative, Wakf & Fisheries*, Khurshid Ahmad; *Agriculture*, Shamsher Singh; *Public Health and Food & Supplies*, Lachhman Singh; *Excise & Taxation, Labour & Emp.*, Mehar Singh; *Co-opn. & Plng.*, Bir Singh; *Irri. & Power*, Tara Singh; *Pub. Works*, Ram Pal Singh; *Health, Ayurveda & Tourism*, Gajraj Nagar; *Transport & Sports*, Jagan Nath; *Animal Husb., Dairy Devpt. & Jails*, Shiv Ram; *Revenue, etc.*, Sher Singh; *Devpt., Panchayats, Housing*, Dalip Singh; *Local Govt., etc.*, Mange Ram; *Edn., Languages & Archaeology*, Desh Raj.

Ministers of State

Forests, Irri. & Power, Devinder Sharma; *Tech. Edn., Pub. Relations*, Smt. Shanti Devi; *Social Welfare, etc.*, Smt. Shakuntala.

Deputy Ministers

Pub. Works (Pub. Health), Labour & Emp., etc., Lall Singh; *Gen. Adm., Home, etc.*, Sardar Khan; *Agri., Tech. Edn.*, Prem Singh.

Chief Parliamentary Secretary, Ram Kishan.

Secretariat

Chief Secy., Ishwar Chandra; *Financial Commrs.*, P. P. Caprihan (*Revenue, etc.*), L. C. Gupta (*Home, Jails, etc.*), H. C. Khanna (*Power, Pub. Relations*), Kulwant Singh (*Co-opn., Dairy Devpt. & Animal Husb.*), B. S. Ojha (*Sports, Tourism, Cult. Affairs, Civil Aviation*); *Commrs. & Secs.*, V. K. Sibal (*Industries & Trg.*), G. V. Gupta (*Health & Medical Edn.*), L. D. Kataria (*Agriculture, Forests*), Sukhdev Prasad (*Devpt. & Panchayats*) H. D. Bansal (*Housing, Local Govt. & Transport*), K. K. Sharma (*PWD (B&R) & Tech. Edn.*), H. L. Gugnani (*Labour & Emp.*), J. D. Gupta (*Edn.*), Tirlochan Singh (*Plng., Social Welfare*), T. K. Banerjee (*Finance*), A. K. Sinha (*Food & Supplies, etc.*).

Principal Officials

Commr., Ambala Dn., M. Kuttappan; *Commr., Hissar Dn.*, Yogeshwar Sahni; *Inspector-Genl. of Police*, Manmohan Singh; *Inspector-Genl. of Prisons*, Dharam Singh; *Dirs.*, Anil Razdan (*Pub. Relations*), Manohar Singh

(*Animal Husb.*), Dr. D. K. Kaushik (*Fisheries*), Anil Razdan (*Cult. Affairs*): Harjit Singh Anand (*Sports*). R. L. Sudhir (*Tourism*), Direndra Kumar (*Industries*). Dr. S. K. Sharma (*Health Services*), Dr. R. Dayalu (*Ayurvedic*), A. C. Sharma (*Agriculture*), I. C. Gupta (*Tech. Edn.*), G. Madhavan (*Emp.*), L. M. Jain (*Languages & Higher Edn.*), S. P. Mittal (*School Edn.*); *Registrar, Co-op. Socs.*, K. R. Punia; *Chief Conservator of Forests*, Gurnam Singh; *State Transport Controller*, R. S. Verma.

High Court (*Given under Punjab*)

HIMACHAL PRADESH, Simla.

Governor: A. N. Banerjee.

Ministers

Chief Minister in charge of Gen. Admn., Home, Personnel, Finance, Plng., Tribal Devpt., Pub. Relations, Health & Family Welfare, Ayurveda & Law, etc., Ram Lal Thakur; *Edn.* (*including Univ. Edn., Arts, Language & Culture, Co-operation, Food & Supplies*, Shiv Kumar; *Forest, Farming, etc.*, Hardval; *M.P.P. & Power, Agriculture, Animal Husb., Fisheries*, Sukh Ram; *Transport, Horticulture, Excise, Taxation*, Guman Singh; *Revenue, Tourism, etc.*, Sat Mahajan; *Industries, Labour, Emp. & Trg., etc.*, Ranjit Singh Verma

Ministers of State

Rural Integrated Deptt. & Housing, Sant Ram; *Panchayats, Welfare* (*Social Welfare*) *& Horticulture*, Ishwar Dass.

Chief Parliamentary Secretary, Rangila Ram Rao.

Secretariat

Chief Secretary, Home, Personnel (*Vigilance, Admve. Reforms Unit*), *G.A.D., Parl. Affairs*, K. C. Pandeya, *Financial Commissioners*. P. P. Srivastava, Anupam Dhan; *Secs.*, B. C. Negi (*Agriculture, Horticulture, Animal Husb., Fisheries, R.I.D., Panchayati Raj*); Anang Pal (*Edn., Univ. Edn., Excise & Taxation, Tourism, Industries*); R. C. Gupta (*Forests and Health & Family Welfare*); M. S. Mukharjee (*Finance & Plng.*); S. M. Kanwar (*Food & Supplies, Co-opn., Pub. Relations*); A. N. Vidyarthi (*Tribal Devpt.*); Jai Chand Malhotra (*Law*); O. P. Yadava (*Div. Commr., Simla*); S. S. Sindhu (*Div. Commr., Kangra*).

Principal Officials

Commr. for Transport & Tourism: Hari Singh; *Chief Conservator of Forests:* S. C. Gaur; *Chief Conservator of Forests-Soil Conservation:* V. N. Raina; *Inspector-Gen. of Police:* L. J. S. Sodhi; *Registrar, Co-op. Socs.:* G. S. Chambial; *Dirs.*, Arvind Kaul (*Industries*); Miss V. Bhagat (*Emp. & Trg.*); R. C. Sharma (*Vigilance*); C. D. Parsheera (*Panchayati Raj & R.I.D.*); K. C. Chauhan (*Welfare*); I. S. Kingra (*Agri.*); R. S. Rana (*Horticulture*); B. L. Handa (*Edn.*); G. C. Negi (*Animal Husb.*); S. P. Kapoor (*Health & Family Welfare*); S. K. Sood (*Food & Supplies*); P. N. Chaturvedi (*Ayurveda*); R. S. Bhatnagar (*Economics & Stats.*); C. S. Panwar (*Pub. Relations*); *Chief Warden of Fisheries:* G. C. Negi; *Chmn., Pub. Service Commn.:* Maj.-Gen. I. C. Katoch.

High Court, 'Ravenswood', Simla 171001.

Chief Justice, V. D. Misra; *Judges:* Hira Singh Thakur, Tilak Raj Handa, Vyom Parkash Gupta.

JAMMU & KASHMIR, Srinagar.

Governor: B. K. Nehru.

Ministers

Chief Minister in Charge of Genl. Admn., Home, Edn. & Publicity, Anti-Corruption & Tourism, Sheikh Mohammad Abdullah; *Finance, Plng., Relief & Rehab.*, D. D. Thakur; *Public Works, Power Devpt. and Ladakh Affairs*, G. M. Shah; *Industry, etc.*, M. K. Tikoo; *Forests, Revenue, Employment & Parl. Affairs*, G. N. Kochak; *Food & Supplies, Transport*, G. M. Bhaderwahi; *Co-opn., Agri., Health & Labour*. Mohd. Ashraf Khan.

Ministers of State

Health, Dr. Harbajan Singh; *Edn.*, Mohd. Shafi; *Power & Pub. Health Engg.*, Parmanand; *Law & Parl Affairs*, T. R. Atri.

Deputy Ministers

Inds. & Commerce, A. R. Shaheen; *Power*, B. A. Kichloo; *Local Self Govt.*, G. A. Ganai; *Housing & Urban Devpt.*, Ghulam Din Shah; *Forests*, Munshi Habib Ullah; *Food & Supplies, Ladakh Affairs, etc.*, Hussam Din Banday; *Tourism*, Moh'd Dilawar Mir; *Co-opn., Relief & Rehab.*, Moh'd Hussain; *Tawaza*, Sonam Wanchok; *Animal Husb.*, Talib Hussain; *Irri. & Flood Control*, P. N. Raju.

Secretariat

Chief Secretary, Noor Mohd.; *Addl. Chief Secy.*, S. Teja Singh; *Secs.*, Ghulam Ahmed (*Inf.*), Ghulam Shah (*Home*), Mehmood-ur-Rehman (*Inds. & Comm.*), Noor-ud-Din Qureshi (*Edn.*), Aga Syed Altaf (*Emp.*), Moh'd Amin (*Finance*), S. Kulbeer Singh (*Food & Supplies*), I. S. Malni (*Transport & Tourism*), J. P. Kasar (*Forests*), B. N. Safaya (*Gen. Deptt.*), J. N. Kaul (*Health*), Sheikh Ghulam Rasool (*Agri.*), R. C. Bhat (*Law*), G. H. Vaidya (*Housing & Urban Devpt.*), M. M. Maqbool (*Plng.*), T. R. Gupta (*Power*), H. L. Kadalbujoo (*Revenue & Rehab.*).

Principal Officials

Divnl. Commrs., D. N. Kotwal (*Kashmir*), Hamid Ullah Khan (*Jammu*); *Commrs.*, D. N. Dhar (*Tourism*), M. Y. Naseem (*Excise*), Ghulam Hassan (*Sales Tax*); *Inspector-Genl. of Transport*, M. M. Wazir; *Inspector-Genl. of Police*, Ghulam Hassan Shah; *Vigilance Commr.*, M. S. Farooqi; *Registrar, Co-optves.*, G. M. Mir; *Chief Conservator of Forests*, A. R. Khan; *Chmn., Pub. Service Commn.*, Ch. Bharat Bhushan; *Dirs.*, Mohd. Shafi Pandit (*Inds.*), R. L. Dhar (*Food & Supplies*), Dr. K. L. Gupta (*Health Services*), Dr. S. Kulwant Singh (*Animal Husb.*), G. A. Bakshi (*Inf.*), K. C. Bhagat (*Social Welfare*), Hashmat Ullah Khan (*Agri.*), Moh'd Akbar Dar (*Horticulture*), Dr. Ghulam Nabi Wani (*Sheep Husb.*), Prof. Nisar Ahmed Jan (*Fisheries*); *Labour Commr.*, Raj Kumar Gupta.

High Court, Srinagar 190001.

Ag. Chief Justice, Mufti Bah-ud-in Farooqi; *Judges*, Dr. Adarsh S. Anand, Iqbal K. Kotwal, G. M. Mir; *Registrar*, S. M. Rizvi; *Advocate-General*, A. K. Malik.

KARNATAKA, Bangalore.

Governor: Govind Narain.

Ministers

Chief Minister, R. Gundu Rao; *Finance and Tourism*, M. Veerappa Moily; *Law & Parliamentary Affairs, Veterinary & Animal Husb.*, Y. Ramakrishna; *Edn.*, G. B. Shankar Rao; *Co-opn.*, H. C. Srikantaiah; *Revenue*, Mallikarjuna M. Kharge; *Labour*, A. B. Jakanur; *Health & Family Welfare*, A. K. Abdul Samad; *Housing & Urban Devpt.*, Dharam Singh Narayan Singh; *Rural*

Devpt. & Panchayati Raj, B. Ramaiah; *Transport & Minor Irrigation*, M. M. J. Sadyojatha; *Social Welfare & Backward Classes*, P. Venkataramana; *Public Works*, Kagodu Thimmappa; *Forest and Mines & Geology*, G. Madegowda; *Food & Civil Supplies*, Manikarao Shamarao Patil.

Ministers of State

Women & Children's Welfare, Smt. Manorama Madhwaraj; *Fisheries & Ports*, D. B. Pawar; *Horticulture & Prisons*, K. Yenkatappa; *Mktg. & Muzarai*, Sudhendra Rao Kasabe; *Power*, G. H. Aswatha Reddy; *Primary & Secondary Edn.*, Nagamma C. Keshavamurthy; *Inf. & Youth Services*, K. Gangadhar; *Irrigation*, B. B. Chimmanakatti.

Secretariat, Vidhana Soudha, Bangalore 560001.

Chief Secretary, N. Narasimha Rau; *Addl. Chief Secy.*, R. Anandakrishna; *Secs.*, G. V. Vishwanath (*Agriculture*), B. R. Prabhakara (*Commerce & Inds.*), T. S. Narayana Rao (*Edn.*), S. K. Warrior (*Finance*), A. S. Melkote (*Food & Forest*), A. Mohandas Moses (*Home*), N. K. Prabhakara Rao (*Health & Family Welfare*), N. Viswanathan (*Spl. Secy., Commerce & Inds.*), B. Balagopalan (*Housing & Urban Devpt.*), A. Venkat Rao (*Law*), Dr. D. M. Nanjundappa (*Plng.*), S. Venkatesh (*Pub. Works*), M. K. Venkateshan (*Revenue*), R. A. Naik (*Rural Devpt.*), J. Alexander (*Social Welfare*).

Principal Officials

Dirs., Dr. Y. Rudrappa (*Medical Edn.*), Dr. J. S. Saksena (*Health & Family Plng.*), T. P. Issar (*Tourism*), Vijay Sasnur (*Inf.*), G. V. Rao (*Inspector-Genl. of Police*), Smt. Phillipose Mathai (*Commr., Pub. Instruction*).

High Court, Atara Kacheri Bldgs., Bangalore 560001.

Chief Justice, D. M. Chandrasekhar; *Judges*, K. Bhimiah, V. S. Malimath, K. Jagannatha Shetty, M. S. Nesargi, M. K. Srinivasa Iyengar, M. N. Venkatachaliah, M. Rama Jois, K. S. Puttaswamy, P. P. Bopanna, N. Venkatachala, Narayan Rai Kudoor, G. N. Sabhait, N. D. Venkatesh, M. P. Chandrakantraj Urs, M. S. Patil, R. S. Mahendra, R. G. Desai, M. Nagappa, K. A. Swamy, D. R. Vithal Rao, P. A. Kulkarni; *Registrar*, C. M. Basavarya; *Advocate-General*, B. S. Keshava Iyengar.

Karnataka State Board for Prevention & Control of Water Pollution, Utility Bldg., M. Gandhi Rd., Bangalore 560001.

Karnataka State Khadi & Village Industries Board, 5, Sheshadri Rd., Bangalore 560009.

Karnataka State Social Welfare Advisory Board, 149/34, N. H. School Rd., Bangalore 560004.

Water Supply & Sewerage Board, Combined Adm. Bldg. Complex, Bangalore 560009.

KERALA, Trivandrum.

Governor: Mrs. Jothi Vencatachellum.

Ministers

Chief Minister in charge of G.A., Plng., Harijan Welfare, etc., K. Karunakaran; *Dy. Chief Minister in charge of Inds., Cement, Handloom, Coir, Haj Pilgrimage, etc.*, C. H. Mohammed Koya; *Edn., Land Revenue, etc.*, P. J. Joseph; *Finance, Lotteries, Law & Legn., Museums & Zoos, etc.*, K. M. Mani; *Home, Police, Jails, Agri., Animal Husb., etc.*, Oommen Chandy; *Health, Tourism, Devaswoms*, R. Sundaresan Nair; *Local Admn., Panchayats, etc.*, C. M. Sundaram; *Labour, Housing, Emp. & Trg.*, K. Sivadasan.

Chief Secretary, S. Ananthakrishnan, *Spl. Secy., Agri. Prodn.*, A. K. K. Nambiyar; *Secy., Animal Husbandry*, P. Shamugasundaram; *Spl. Secy. & Devpt. Commr.*, J. S. Badhan; *Spl. Secy., Finance*, S. Padmakumar; *Spl. Secy., Fisheries, Ports, Transport*, D. Babu Paul; *Spl. Secy., Food*, T. Madhava Menon; *Spl. Secy. (Tourism)*, M. S. K. Ramaswamy; *Spl. Secy. (Services)*, C. K. K. Panicker; *Spl. Secy., Gen. Edn.*, P. K. Umasankar; *Secy., Health*, K. Sreenivasan; *Spl. Secy., Higher Edn.*, M. Mohankumar; *Spl. Secy., Home & Vigilance*, K. V. Vidhyadharan; *Spl. Secy. & Commr. for Industries*, P. M. Abraham; *Spl. Secretary, Labour*, C. P. Nair; *Spl. Secy., Law*, K. Viswanathan Nair; *Spl. Secy., Housing*, K. C. Sankaranarayanan; *Spl. Secy., Local Admn. & Social Welfare*, M. Dandapani; *Spl. Secy., Personnel & Admve. Reforms*, S. Nagarajan; *Commr. for Plng. & Economic Devpt.*, V. Ramachandran; *Spl. Secy., Public Works*, J. S. Jesudasan; *Spl. Secy., Irri. & Rehab.*, G. Gopalakrishna Pillai.

Dirs., P. Mohandas (*Agriculture*); Dr. P. K. Nambiyar (*Animal Husb.*); K. Maheswaran Nair (*Archaeology*); K. S. Moni (*Coir Devpt.*); Smt. J. Lalithambika (*Collegiate Edn.*); M. S. Joseph (*Registrar of Co-op. Socs.*); Thomas N. Varghese (*Dairy Dept.*); V. J. Thomas (*Drugs Controller*); Dr. P. A. Nair (*Economics & Stats.*); P. Sreedhara Menon (*Emp. & Trg.*); P. S. Kumaradas (*Fisheries*); A. I. Iyppu (*Chief Conservator of Forests*); N. C. Natarajan (*Handlooms*); P. K. Sivanandan (*Harijan Welfare*); Dr. K. Balaraman (*Health Services*); Dr. M. S. Sankaranarayan (*Indigenous Medicine*); Capt. P. K. R. Nair, (*Ports & Marine Adviser to Govt. of Kerala*); Prithwisingh (*Inds. & Commerce*); M. A. Koshy (*Labour Commr.*); K. Madhavan Pillai (*Lotteries*); K. M. Sivadas (*Mining & Geology*); V. M. Augustine (*Municipalities*); S. Prabhakaran Potti (*Museums & Zoos*); J. A. S. Iyer (*Dir.-Genl. of Police*); R. Janardhana Pillai (*Inspector-Genl. of Prisons*); C. Ramachandran (*Pub. Instrn.*); K. M. Chacko (*Pub. Relations*); Smt. E. K. Santha (*Social Welfare*); K. K. Panicker (*Soil Conservation*); M. K. N. Chettiar (*State Insurance*); E. Balakrishna Pillai (*Stationery Controller*); V. K. Balakrishna Menon (*Survey & Land Records*); Dr. S. Vasudev (*Technical Edn.*); V. Thulasidas (*Tourism*); M. K. Josheph (*Vigilance Investigation*); A. K. Thampan (*Water Transport*).

Greater Cochin Development Authority, Cochin 682020.

Kerala Khadi & Village Industries Board, Perumthanni, Trivandrum 659008.

Kerala Livestock Devpt. & Milk Marketing Board, 9/963, 'Kailas', Sasthamangalam, Trivandrum 695010.

Kerala State Board for Prevention and Control of Water Pollution, Kawdiar, Trivandrum 695003.

High Court, Ernakulam, Cochin 682031.

Ag. Chief Justice, P. Subramonian Poti; *Judges*, G. Viswanatha Iyer, V. Khalid, K. Bhaksaran, George Abraham Vadakkol, T. Chandrasekhara Menon, Kumari P. Janaki Amma, K. K. Narendran, G. Balagangadharan Nair, S. K. Kader, Dr. T. Kochu Thommen, M. P. Menon; *Addl. Judges*, P. C. Balakrishna Menon, U. Lakshminarayan Bhat; *Registrar*, C. J. Abraham; *Advocate-General*, Vacant.

MADHYA PRADESH, Bhopal.

Governor: Dr. Bhagwat Dayal Sharma.

Ministers

Chief Minister in charge of Gen. Admn., Home, Energy, Plng., Economics & Stats., Publicity, Tribal & Harijan

Welfare, Culture, Science & Technology, Social Welfare, etc., Arjun Singh; *Deputy Chief Minister in charge of Finance, Major Irri., Medium and Minor Irri.*, Shivghanu Solanki; *Law & Leg. Affairs, Tourism*, Krishna Pal Singh; *Pub. Works, Narmada Valley Devpt.*, Kumar Vimla Verma; *Forests*, Vedram; *Commerce & Inds., Mineral Resources*, Jhumuklal Bhendia; *Revenue*, Dr. Tumanlal; *Food & Civil Supplies*, Madhavlal Dube; *Cooperation*, Muniprasad Shukla; *Agri., Animal Hus., Fisheries, Dairy, Ayacut*, Digvijay Singh; *Panchayat and Rural Devpt., Man Power Plng.*, Bhanwarsingh Porte; *Separate Revenue*, Mankuram Sodi; *Jails, Waqf, Urdu Academy*, Haji Inayat Mohammed; *Labour, Rehab.*, Tara Singh Niyogi; *Local Govt., Religious Trusts & Endowments*, Kanhiyalal Sharma.

Ministers of State

Housing & Environment, G.A.D., Finance, Chandra Prabhash Shekhar; *Pub. Health & Family Welfare, Pub. Health Engg.*, Revnath Chaure; *School Edn.*, Nathuram Ahirwar; *Home etc.*, Hajarilal Raghuwanshi; *Religious Trusts & Endowments*, Bhawanilal Verma; *Pub. Works & Narmada Valley Devpt.*, Durgadas Suryavanshi; *Collegiate Edn.*, Motilal Vora; *Agriculture*, B. R. Yadav; *Commerce & Inds., Mineral Resources, Law & Leg. Affairs*, Dr. Rajendra Kumar Jain; *Tribal & Harijan Welfare*, Banshilal Dhratlahare; *Sports & Physical Culture, Energy, Medium & Minor Irri.*, Ajay Narayan Mushran; *Transport & Social Welfare*, Smt. Kamla Devi.

Deputy Ministers

Co-opn., etc., Sardar Tanwant Singh Keer; *Tribal & Harijan Welfare*, Kumari Ganga Potayi; *Local Govt. (Urban), Forests*. Satyanarain Agrawal.

Secretariat

Chief Secretary, G. Jagatpathi; *Addl. Chief Secretaries*, R. K. Khanna (*Home, Transport*), M. S. Singhdee (*Agri., Ayacut, Cooperation*); *Principal Secy.*, S. K. S. Chib (*School & Collegiate Edn.*); *Secs.*, A. S. Das (*Tribal Welfare*); S. K. Sharma (*Housing & Environment*); Manish Behal (*Commerce & Industries, Labour, Mining*); S. Ramchandran (*PWD & PHE*); Manohar Keshav (*Finance/Economics, Statistics & Planning*); B. M. Date (*Revenue*); S. N. Joshi (*Law*); D. G. Bhave (*Panchayat & Social Welfare*); H. V. K. Iyengar (*Irrigation*); N. R. Krishnan (*Electricity & Secy. to C.M.*); Fakir Chand (*Labour*); O. P. Mehra (*Separate Revenue*); M. V. Gadre (*Jail, Rehabilitation, Religious Endowment*); Ranjeet Singh (*Forest & Tourism*); N. B. Lohani (*Food & Civil Supplies*).

Principal Officials

Commrs., B. S. Seth (*Bhopal Dn.*); K. K. Sathi (*Gwalior Dn.*); D. Y. Munabbar (*Indore Dn.*); S. C. Vyohar (*Ujjain Dn.*); D. S. Yadav (*Sagar Dn.*); Raghunath Prasad (*Raipur Dn.*); K. S. Sharma (*Bilaspur Dn.*); K. S. Bhatnagar (*Rewa Dn.*); Jagat Swaroop (*Jabalpur Dn.*); R. C. Jain (*Tawa Ayacut, Hoshangabad*); G. N. Buch (*Chambal Ayacut*); *Labour Commr.*, V. K. Majotra; *Registrar of Co-op. Socs.*, Pradeep Baijan; *Conservator-in-Chief of Forests*, V.K. Seth; *I.-G. of Police*, B.P. Dubey; *Dirs.*, Sampat Ram (*Tribal Welfare*); A. V. Singh (*Industries*); R. N. Vaidya (*Panchayat & Social Welfare*); Sudeep Banerjee (*Inf. & Publicity*); R. K. Gupta (*Pub. Instruction*); S. P. Singh Chouhan (*Econ. & Statistics*); Dr. S. Chandra (*Veterinary*); Satish Chandra Kaushal (*Food & Civil Supplies*); Dr. M. N. Nagu (*Health Services*); A. K. Murthy (*Tech. Edn.*); M. P. Khare (*Archaeology*); Dr. M. M. Gour (*Agri.*).

High Court, Jabalpur 482007.

Chief Justice: G. P. Singh; *Judges:* G. L. Oza; K. K. Dube; N. C. Dwivedi; J. S. Verma; M. L. Malik; U. N. Bhachawat; C. P. Sen; S. S. Sharma; B. C. Verma; S. K. Seth; Faizan Uddin; M. D. Bhatt. *Indore Bench:* G. G. Sohani; P. D. Mulye; H. G. Mishra; C. P. Singh; R. K. Vijayvargiya; K. N. Shukla. *Gwalior Bench:* R. L. Murab; A. R. Navkar; R. C. Shrivastava.

MAHARASHTRA, Bombay.

Governor: Air Chief Marshal I. H. Latif (Retd.).

Lok Ayukta of Maharashtra: Justice N. D. Kamat; **Upa Lok Ayukta,** S. V. Bhave. *Office:* Bungalow No. A-4, Madame Cama Rd., Bombay 400032.

Ministers

Chief Minister in charge of Gen. Adm., Home, Revenue, Rehab., Industry, etc., etc., Babasaheb Bhosale; *Housing, Energy, Waqf, Protocol*, Prof. Aseer; *Rural Devpt., Transport, Forests, etc.*, D. D. Chouhan; *Agriculture, Labour*, B. M. Gaikwad; *Pub. Health & Family Welfare, Tourism, etc.*, Dr. Baliram Hiray; *Pub. Works, Tribal Welfare, Social Welfare*, Swarupsingh Naik; *Edn., Sports, Emp., etc.*, Mrs. Sharadchandrika Patil; *Irrigation, Dairy Devpt., Leg. Affairs, Animal Husb., etc.*, Shivajirao P. Nilangekar; *Finance, Plng., Food & Civil Supplies*, Dr. V. Subramaniam.

Ministers of State

Irri., Forests, Housing & Emp., Manikrao Khambale; *Co-opn., Ind., Ports, Food & Civil Supplies, Urban Devpt., etc.*, S. N. Desai; *Edn., Sports, Transport, Agri., etc.*, Vilas Deshmukh; *Fisheries, Animal Husb., Dairy Devpt., etc.*, Ravindra Raut; *Plng., Home, Revenue, Rehab., Finance*, Dr. S. Jichkar.

Deputy Ministers

Finance, Irri., Urban Devpt., Food & Civil Supplies, Energy, Waqf, V. Ahmed; *Pub. Health, Social Welfare, Law & Judiciary, etc.*, Mrs. Rajani S. Satav; *Housing, Leg. Affairs, etc.*, Leeladhar Vyas; *Tribal Welfare, Social Welfare, Transport, etc.*, Shivraj S. Moghe; *Co-opn., Labour, Inds., Protocol, etc.*, Gangaram Sherekar.

Secretariat, Mantralaya, Bombay 400032.

Chief Secretary, Gen. Admn. Deptt., P. G. Gavai; *Secs.*, N. V. Sundaraman (*Gen. Admn.*); Venkat Chary (*Spl. Assignments, Gen. Admn. Deptt.*); M. S. Rajadhyaksha, (*Jt. Chief Protocol Officer, G.A.D.*); B. K. Chougule (*Home Deptt., C&O*); A. N. Batabyal (*Home Deptt. T*); P. V. Nayak (*Revenue & Forests Deptt.*); R. L. Pardeep (*Revenue & Forests Deptt. & Tribal Welfare*); V. Prabhakar (*Spl. Secy., Finance Deptt.*); John Innocent (*Finance Deptt., Accounts*); M. S. Palnitkar (*Planning Deptt.*); A. D. Tated (*Law & Judiciary Deptt.*); M. A. Dhotre (*Legislation, Law & Judiciary Deptt.*); V. S. Rane, R. T. Atre (*Public Works*); E. C. Saldhana, P. R. Gandhi (*Irrigation*); V. Shrinivasan, D. N. Kapoor (*Urban Devpt. & Pub. Health*); V. Venkateshan, K. G. Paranjape (*Agriculture & Co.-opn.*); M. Subramaniam (*A. & C.D.*); V. Sundaram (*Industries, Energy, Labour, Edn. & Emp.*); Anil Kumar (*Social Welfare, Cultl. Affairs, Sports & Tourism*); S. Rajgopal, M. R. Natarajan (*Industries & Labour*); R. D. Sinha (*Rural Devpt.*); V. T. Chari (*Food & Civil Supplies*); D. K. Afzulpurkar (*Housing*).

Bombay Metropolitan Regn. Devpt. Authority, Griha Nirman Bhavan, 5th Flr., Bandra (East), Bombay 400051.

Housing, Urban Renewal & Ecology Board, Bombay Metropolitan Regn. Development Authority, Griha Nirman Bhavan, 5th Flr., Bandra (East), Bombay 400051.

Maharashtra Prevention of Water Pollution Board, Army Navy Bldg., 149, M. Gandhi Rd., Bombay 400001.

Maharashtra State Khadi & Village Industries Board, 19/21, Manordas St., Bombay 400001.

Bombay Port Trust, Shoorji Vallabdas Marg, Bombay 400038. *Chmn.*, K. K. Uppal; *Dy. Chmn.*, K. B. Srinivasan.

High Court, Mayo Rd., Bombay 400032.

Chief Justice, B. N. Deshmukh; *Judges:* V. S. Deshpande, D. P. Madon, M. N. Chandurkar, M. H. Kania, S. K. Desai, B. A. Masodkar, C. S. Dharmadikari, P. S. Shah, D. M. Rege, R. L. Aggarwal, B. Lentin, P. B. Sawant, B. C. Gadgil, A. A. Ginwala, R. A. Jahagirdar, S. C. Pratap, M. P. Kanade, S. P. Bharucha, R. D. Tulpule, V. V. Joshi, Mrs. Sujata V. Manohar, M. L. Pendse, S. P. Kurdukar, D. N. Mehta, V. S. Kotwal, M. S. Jamdar, M. R. Waikar, S. G. Manohar, D. B. Deshpande, R. S. Padhye, V. A. Mohta, B. J. Rele, N. K. Parekh, S. W. Puranik; *Addl. Judges:* Shriram Janardanrao Deshpande, Qazi Mohd. Mujibuddin, D. B. Deshpande, R. S. Padhye, V. Mehta; *Prothonotary & Sr. Master*, D. B. Khade; *Registrar*, S. N. Khatri; *Advocate-General*, A. V. Sawant; *Sheriff of Bombay, Old Sectt. Bldg., Bombay* 400032, Sunil Dutt; *Dy. Sheriff of Bombay*, S. V. Kondaskar.

Office of the Inspector-General of Police, Old Secretariat Bldg., II Floor, Bombay 400032.

Inspector-General of Police, K. P. Medhekar; *Spl. Inspectors-Genl. of Police*, S. M. Paranjpe, M. G. Katre; *Dy. Inspectors-Genl. of Police*, P. C. R. Sudhakar Dev, Satish Sahney; *P.R.O.*, Vacant.

Office of the Director, Vigilance, Anti-Corruption & Prohibition Intelligence Bureau and Spl. Inspector-General of Police, M.S., Crescent House, 19, Walchand Hirachand Mrg., B. Estate, Bombay 400038.

Spl. Inspector-General of Police, S. M. Sahni; *Dir., V.A.C. & P.I. Bureau*, S. M. Paranjpe; *Addl. Commr. of Police/Dy. Inspector-Genl. of Police*, Vacant

Greater Bombay Police Force, Dr. D. Naoroji Rd., Opp. Jyotiba Phule Market, Bombay 400001.

Commissioner of Police, J. F. Ribeiro; *Addl Commrs. of Police*, S. T. Raman, D. Ramchandran, A. M. Mistry; *Dy. Commrs. of Police*, O. P. Bali, M. N. Singh, S. C. Malhotra, A. K. Ankola, R. K. Ghadge, P. T. Lohar, K. H. Gafoor, Gain Chand, M. K. Rathod, S. S. Suradkar, T. Singaravel, G. B. Mainkar.

Directorate-Genl. of Information & Public Relations, New Administrative Bldg., 13th Flr., West Wing, Opp. Mantralaya, Bombay 400020

Director-Genl. of Information & Pub. Relations, Binod Rao; *Chief Dir.*, M. I. R. Mathur; *Dir. (Films)*, Dilip Jamdar.

Maharashtra State Road Transport Corporation, Maharashtra Vahatuk Bhavan, Dr. A. Nair Rd., Bombay 400008.

Chmn., Suresh Jain; *Vice-Chmn. and Gen. Manager*, Ashok Desai; *Chief Accounts Officer*, L.G. Agashe; *Chief Security Officer*, S. P. C. Joshi; *Dy. Gen. Managers*, M G. Phadtare (*Traffic*); G. G. Phadke (*Mech. Engg.*); P. D. Raje (*Stores & Purchase*); S. L. Pradhan (*Civil Engg.*); V. S. Kanitkar (*I & O & M*); *Manager (Personnel)*, G. M. Chavan; *Indl. Relations Adviser*, B. L. Shelke; *Pub. Relations Officer*, Shashikant Gupte; *Chief Labour Officer*, M. H. Chari; *Secretary*, B. G. Wavikar; *Chief Statistician*, S. R. Gokhale; *Legal Adviser*, D. Y. Rane.

Directorate of Economics and Statistics, D. D. Bldg., Old Custom House, Bombay 400023.

Dir., S. M. Vidwans; *Addl. Dirs.*, V. D. Mahajan, D. S. Kulkarni, S. G. Moghe, U. K. Koundinya; *Jt. Dirs.*, R. P. Deshpande, G. K. Sangekar, M. B. Kulkarni.

Office of the Dairy Development Commissioner, Barracks, Opp. 'Yogakshema', Jeevan Bima Mrg., Bombay 400020.

Dairy Development Commissioner, Asoke Basak; *Addl. Dairy Devpt. Commr.*, N. N. Patil.

Office of the General Manager, Greater Bombay Milk Scheme, Worli Dairy, Bombay 400018.

General Manager, N. D. Kotnis; *Controller, Procurement & Distribution*, Vacant; *Dairy Manager, Worli*, S. K. Tinaikar; *Dairy Managers, Kurla*, M. M. Limaye and S. A. Sawant; *Dy. Dairy Manager, Aarey*, A. P. Desai.

Public Service Commission, Bank of India Bldg., Mahatma Gandhi Rd., Bombay 400023.

Chairman, Dr. K. G. Deshmukh; *Secretary*, W. G. Ranadive.

Govt. of India Tourist Office, 123, Maharshi Karve Rd., Bombay 400020.

Regional Director, Mrs. S. Jagannathan; *Asstt. Directors*, Mrs. S. Kothary, Mrs. N. Malvi, H. M. Kamble, S. S. Rao.

B.E.S. & T. Undertaking, BEST House, Bombay 400039.

General Manager, P. B. Kerkar; *Secy.*, Vacant; *Chief Engineer (Supply)*, M. L. Dongre; *Chief Traffic Manager*, K. C. Abdullah.

Central Railway, Hqrs. Office, Victoria Terminus, Bombay 400001.

General Manager, T. N. Ramachandran; *Sr. Dy. Genl. Manager*, K. Y. Ranade; *Addl. Genl. Managers*, C. N. Kapur (*Operations*), A. K. Ramayya (*Tech. Services*), S. R. Sharma; *Chief Plng. Officer*, I. K. Puri; *Chief Pub. Relations Officer*, H. K. Bakhru; *Dy. Genl. Manager (Gen.)*, G. V. Merani; *Chief Personnel Officer*, K. K. Berry; *Chief Engr.*, B. V. Rama Rao; *Chief Admn. Officer*, S. M. Joglekar; *Chief Engr. (Constrn.)*, G. K. Limaye; *F.A. & C.A.O.*, S. Ramaswamy; *Chief Optg. Supdt.*, Arjun Pershad; *Chief Comml. Supdt.*, Prem Sagar; *Chief Claims Officer*, K. A. Motwani; *Chief Workshop Engr.*, P. Nayyar; *Chief Electrl. Engr.*, S. Nagarajan; *Chief Signal & Telecomm. Engr.*, M. G. Israni; *Controller of Stores*, K. C. Thomas; *Chief Medical Officer*, Dr. R. K. Agrawal; *Chief Security Officer*, Ram Ratan; *Chief Mech. Engr.*, B. M. Lal; *Chief Bridge Engr.*, Vacant.

Western Railway, Hqrs. Office, Churchgate, Bombay 400020.

General Manager, S. Sarath; *Addl. Gen. Manager*, P. N. Mohile (*Operations*); *Sr. Dy. Gen. Manager*, Raghubir Singh; *Chief Plng. Officer*, Narendra Kishore;

Dy. Gen. Manager, B. K. Nagappa; *Chief Pub. Relations Officer*, V. N. Jaitley; *Chief Personnel Officer*, Vacant; *Officer on Spl. Duty (IR)*, P. S. Marathe; *F.A. & C.A.Os.*, M. N. Swaminathan, S. E. H. Shah, R. P. Oberoi; *Chief Optg. Supdt.*, Madan Singh; *Chief Comml. Supdt.*, R. K. Sharma; *Chief Traffic Safety Supdt.*, S. Krishnaswamy; *Chief Claims Officer*, T. D. Bhatia; *Chief Engr.*, H. S. Sinha; *Chief Bridge Engr.*, K. Ramakrishnan; *Chief Gen. Engr.*, A. S. Bhatnagar; *Chief Track Engr.*, R. B. Ajgaonkar; *Chief Engr. (Survey & Const.)*, M. H. Manwani; *Chief Engr. (Viramgam-Okha Project)*, R. N. Goil; *Chief Mech. Engr.*, M. L. Khanna; *Chief Prodn. Engr.*, I. D. Amin; *Chief Workshop Engr.*, K. N. Mathur; *Chief Rolling Stock Engr.*, Kuldip Narain; *Chief Medical Officer*, Dr. Braj Mohan; *Chief Electrl. Engr.*, R. H. Buch; *Chief Electrl. Services Engr.*, J. B. Tangri; *Chief Signal & Telecomm. Engr.*, M. S. Krishnan; *Chief Communication Engr.*, K. S. Kale; *Chief Signal & Telecomm. Engr. (Constrn.)*, M. N. Vasantharajan; *Controller of Stores*, Kanti Swaroop; *Chief Material Manager*, R. N. Ghate; *Chief Security Officer*, R. S. Roy.

Railway Service Commission, Churchgate Stn. Bldg., 1st Floor, Bombay 400020.

Chmn., P. C. Bhargava; *Mem.-Secy.*, S. R. Patil.

Metropolitan Transport Project (Railways), Churchgate Stn. Bldg., Bombay 400020. *Chief Adm. Officer*, S. T. Udeshie.

MANIPUR, Imphal.

Governor: S. M. H. Burney.

Ministers

Chief Minister, Rishang Keishing. *Ministers*, K. Radhabinod Singh, Chaoba Singh, Devendra Singh, Hokhomang Haokip, Ngurdinglen, Mahamad Helaluddin Khan. *Minister of State*, H. Lakhom Singh.

Secretariat

Chief Secretary, L. B. Thanga; *Director of Medical & Health Services*, Dr. P. K. Singh; *Registrar, Co-op. Socs.*, Gopal Singh; *Secy., Inf. & Pub. Relations*, S. B. K. Dev Verman; *Finance Secy.-cum-Commr.*, C. Doringer; *Dir., Inf. & Pub. Relations*, N. Luikham.

(*High Court:* Given under Assam).

MEGHALAYA, Shillong.

Governor: P. C. Mehrotra.

Ministers

Chief Minister, in charge of Gen. Admn., Political, Personnel & Admve. Reforms etc., W. A. Sangma; *Dy. Chief Minister in charge of Finance, Taxation, Plng. & Evaluation, Pub. Health, Engg., Home*, Standlington David Khongwir; *Food & Civil Supplies, Town & Country Plng., Trade, Law*, Maham Singh; *Comm. Devpt., Parl. Affairs, Mining & Geology*, Humphrey Haden; *Pub. Works (Roads & Bldgs.), Embankment*, Salseng C. Marak; *Edn., Pub. Relations*, Dr. Barrister Pakem; *Tourism, Relief & Rehab., Communication, etc.*, Peter Garnette Marbaniang; *Agriculture (including Irrigation), Fisheries*, Fuller Lyngdoh Mawnai; *Health & Family Welfare, Municipal Admn.*, D. Deythwelson Lapang; *Transport, Excise*, M Riedson Momin; *Forests, Sericulture & Weaving, etc.*, Endro Iawephniaw; *Co-opn., Power*, Grosswell Mylliemngap; *Soil Conservation, Border Areas Devpt.*, Albinstone M. Sangma; *Ind., Labour*, Upstar Kharbuli.

Ministers of State

Forests, H. Britainwar Dan; *Edn.*, Beninstand G. Momin.

Secretariat

Chief Secretary, J. C. Nampui; *Secs.*, R. V. Lyngdoh (*Home, Political, G.A.D.*); V. Ramakrishnan (*Plng., Evaluation, Finance, Cabinet Affairs*); J. M. Jala (*Mining & Geology*); M. D. Rapthap (*Tourism*); Dilip Singh (*Co-opn., Transport, Border Areas Devpt.*); S. Marwein (*Labour, Communications, etc.*); T. Cajee (*Comm. Devpt.*); T. Aonok (*Transport, Border Areas Devpt.*); *Dy. Commr., East Khasi Hills:* J. M. Phira; *Secs.*, V. S. Jafa (*Education etc.*); J. P. Singh (*Agriculture including Animal Husbandry, Vety.*); M. S. Pangety (*Revenue*); H. W. T. Syiem (*Forests, Comm. Devpt. etc.*); *Dy. Commr., Jaintia Hills Dist.:* D. Das; *Dy. Commr., West Garo Hills:* P. J. Bazeley; *Dy. Commr., West Khasi Hills Dist.:* Illipson Jyrwa; *Dy. Commr., East Garo Hills Dist.:* A. K. Arora; *Secs.*, F. Knarkongor (*Public Works Dept. (R&B), Town & Country Plng.*) S. N. Phukan (*Law & Legal Remembrancer*).

(High Court: Given under Assam).

MIZORAM, Aizawl.

Lt. Governor: S. N. Kohli.

Ministers

Chief Minister in charge of Home, G.A.D., Pol., etc., Brig. Thenphunga Sailo; *Edn., Inds., etc.*, F. Malsawma; *Devpt., Agri., etc.*, P. B. Rosanga; *Supply, Transport, etc.*, Zairemthanga; *Finance, Revenue, etc.*, Lalhmingthanga; *New Ministers*, Mrs. Thansiami, Biakchhunga, Lanunzira.

Secretariat

Chief Secretary, A. J. Kundan; *Secs.*, T. Gupta (*Health, Supply & Transport*); Gorak Ram (*Dev. Commr.*); Vanhela Panchuau (*GAD/ SAD*); Lalfakzuala (*P.W.D./Aptt.*); Lalchhuma (*Finance*); Wilson Sundaraj (*Law, Judicial*); Sailoa Sailo (*Agri., Edn., Soil, Social Welfare*); *Inspector-Genl. of Police*, C. A. Quinn; *Dirs.*, T. Gupta (*Supply & Transport*); Dr. L. N. Tluanga (*Edn.*); M. N. Malik (*Agri.*); Logancy (*Forest*); P. Lalnithanga (*Census Opn.*); Col. B D. Gohain (*Health*); Hauthuama (*C.D.*); Denghnuna (*D.I.P.R.&T.*); Dr. R. Kapthuama (*A.H.&Vety.*); Dengchhuana (*Registrar, Co-op. Socs.*); Ashok Nath (*Aizawl Dy. Commr.*); F. Pahnuna (*Dy. Commr., Lunglei*); Laithlamuana (*Dy. Commr., Chhimtuipui*); *Liaison Offices:* Mizoram House, 240, Old Ballygunge Rd., Calcutta 700019; Mizoram House, L-12, South Extn., Part II, New Delhi 110049; Mizoram House, Pachhunga Bldg., Silchar, Cachar (Assam).

NAGALAND, Kohima.

Governor: S. M. H. Burney.

Ministers

Chief Minister in Charge of Home, Police, Gen. Adm., Political etc., J. B. Jasokie; *Finance, Revenue, Rural Devpt., Comm., Block, Excise, etc.*, Vamuso; *Pub Health, Engg., Town & Country Plng.*, T. Kikin; *Plng. & Coordn.*, L. Lungalang; *Edn., Trng. & Youth Welfare*, Shurhozelie; *Works & Housing*, Tochi Hanso; *Forests, Coopn., Soil Conservation*, Noke Konyak; *Transport & Communication, Printing & Stationery*, Sentichuba; *Electricity, Social Security & Welfare*, K. Zungkum; *Industry*, K. L. Chishi; *Veterinary & Animal Husb.*, *Labour & Emp.*, Mhonshan Murry; *Medical, Pub. Health & Family Welfare*, Dr. Setu Liegise; *Agriculture*, Imchalemba; *Home, Local Self Govt.*, Dalle Namo.

Ministers of State

Excise, Ind., Yopikyu; *Jail, Edn. & Relief & Rehab.*, Chenlom; *Works & Housing, Fisheries*, Manlem Konyak; *Attached to Chief Minister*, Vejoi Vero.

High Court: (Given under Assam).

ORISSA, Bhubaneswar.

Governor: C. M. Poonacha.

Ministers

Chief Minister in charge of Gen. Adm., Home, Inf. & Pub. Relations, Plng. & Co-ordn., Industries & Irr. & Power (including Minor Irrigation), Janaki Ballav Patnaik; *Revenue & Transport*, Upendra Dixit; *Agri. & Co-opn.*, Basudev Mohapatra; *Edn. & Youth Services*, Gangadhar Mohapatra; *Commerce*, Dayanidhi Naik; *Finance & Law*, Raghunath Patnaik; *Harijan & Tribal Welfare*, Rama Chandra Ulaka.

Ministers of State

Health & Family Welfare, Harihar Karan; *Forests, Fisheries & Animal Husb.*, Kuanria Majhi; *Labour & Emp. & Tourism, Sports & Culture*, Jugal Kishore Patnaik; *Food & Civil Supplies*, Bhajman Behera; *Irr. & Power*, Niranjan Patnaik; *Housing, Urban Devpt., PWD, Mining & Geology*, Basant Kumar Biswal; *Excise*, Hab, Bulla Khan; *Comm. Devpt. & Rural Reconstruction*, Krushna Charan Patnaik.

Deputy Minister

Community Devpt. & Rural Reconstruction, Smt. Saraswati Hembram.

Secretariat

Chief Secy. & Devpt. Commr., S. M. Pattanayak; *Addl. Chief Secy.* B. K. Mishra; *Secs.*, R. N. Das (*Home*); Soyan Kanungo (*Finance*); R. Srinivasan (*Agri. & Co-opn.*); Premananda Tripaty (*Forests, Fisheries, etc.*); L. I. Parija (*Industries*); A. N. Tiwari (*Tourism, Sports & Culture*); P. C. Mishra (*Health & Family Welfare*); J. S. Baijal (*Irr. & Power*); A. C. Padhi (*Works*); S. K. Basu (*Commerce & Transport*); K. P. Mohapatra (*Law*); C. Venkatramani (*Food, Civil Supplies*); B. Gobardhan (*Labour Emp. & Housing*); L. I. Parija (*Mining & Geology*); S. K. Mohapatra (*Edn.*); R. K. Bhujabal (*H. & T.W.*); P. K. Patnaik (*Revenue & Excise*); S. N. Mishra (*Urban Devpt.*); A. L. Nair (*Resident Commr. at New Delhi*).

Principal Officials

Dirs., M. M. Mohanty (*C.D.&.R.R.*); R. M. Das (*H. & T.W.*); B. B. Mohanty (*Municipal Adm.*); B. K. Mohanty (*Mines*); B. Das (*Bureau of Stats. & Economics*); Dr. N. R. Panigrahi (*Agri. & Food Production*); A. C. Parida (*Horticulture*); P. C. Panda (*Tourism, Sports & Culture*); Mihir Kumar Rao (*Inf. & P.R.*); Dr. Srinivas Sahoo (*Pub. Instruction*); Dr. B. Rajguru (*Medical Edn. & Trg.*); S. R. Pal (*Inds.*); Dr. Basantabala Jena (*Family Welfare*); S. B. Mohapatra (*Export Promotion & Mktg.*); Srinibas Rath (*Textiles*); F. C. Panigrahi (*Emp.*); Dr. P. C. Rath (*Health Service*); N. Swain (*I.G. of Police*).

High Court, Cuttack 753002.

Chief Justice, R. N. Mishra; *Judges*, P. K. Mohanti, H. K. Das, J. K. Mohanty, B. N. Mishra; *Registrar*, B. N. Misra; *Advocate-General*, Gobinda Das.

PONDICHERRY, Pondicherry.

Lt.-Governor: R. N. Haldipur.

Ministers

Chief Minister in charge of Apptt., Gen. Admn., Finance, Plng., Town Plng., Housing & Slum Improvement, Comm. Devpt. etc., D. Ramachandran; *Home, Law & Labour, Industries, Electricity*, S. Savarirajan; *Public Works, Revenue, Transport etc.*, G. Perumal Raja; *Edn., Medical, Public Health & Family Welfare, etc.* Smt. Renuka Appadurai; *Agriculture, Fisheries, Animal Husb., Food, Rationing & Civil Supplies*, V. M. C. Sivakumar; *Co-opn., Admn. of Charitable & Religious Endowments, Inf., Publicity & Tourism*, V. Kadirvelu.

Secretariat

Chief Secretary, P. V. Jaikrishnan; *Collector-cum-Revenue Secretary*, P. L. Samy; *Finance & Local Admn. Secy.* R. S. Chari; *Edn. & Devpt. Secy.* Mohan Singh; *Secy.* (*Law & Labour*), A. Chandrasekara Menon.

Principal Officials

Inspector-Genl. of Police, R. K. Sharma; *Chief Judge*, David Annoussamy; *Directors:* J. Deivasigamani (*Public Works*); Dr. V. Sambasivam (*Health & Family Welfare*); P. R. Ramanathan (*Edn.*); K. Sivaramakrishnan (*Agriculture*); K. Raghunathan (*Animal Husb.*); P. S. Thirunavukkarasu (*Electricity*); R. Ramachandran (*Social Welfare*); G. Anandou (*Harijan Welfare*); E. Purushothaman (*Fisheries*); A. Gnanasambandam (*Industries*); V. Soupramanien (*Inf., Publicity & Tourism*); R. Ramanujam (*Transport Commr.*) M. S. Bakkiam (*Labour Commr.*); B. Douressamy (*Admr. Karaikal*); Murugaboopathy (*Addl. Charge*) (*Admr. Mahe*); M. Kannan (*Admr. Yanam*); *Administrator, Auroville*, L. P. Naigaum.

PUNJAB, Chandigarh.

(*Chief Commissioner, Chandigarh*, K. K. Banerjee).

Governor: Vacant.

Chief Minister in charge of G.A., Home Affairs, Vigilance, Inds., Irri. & Power, Inf. & Pub. Relations, Tourism & Cult. Affairs, Transport, Food & Supplies, etc., etc., Sardar Darbara Singh; *Finance, Plng., Local Govt.*, Dr. Kewal Krishan; *Rural Devpt., Animal Husb. & Fisheries*, S. Santokh Singh Randhawa; *Agri. & Forests, Elections*, Ch. Kanshi Ram; *Health & Family Welfare*, Sardari Lal Kapur; *Revenue & Rehab., etc.*, S. Beant Singh; *Welfare, Labour & Emp.*, Ch. Jagat Ram; *Edn., Leg. Affairs*, S. Harcharan Singh.

Secretariat

Chief Secretary, I. C. Puri; *Financial Commr.* (*Devpt.*), Sardar K. S. Narang; *Financial Commr. & Secy., Cult. Affairs, etc.*, N. Khosla; *Addl. Chief Secy.*, S. Paramjit Singh; *Financial Commrs.*, K. D. Vasudeva(*Revenue*), R. C. Kapila (*Appeals*), R. P. Ojha (*Excise & Taxation*); *Commrs. & Secs.*, J. P. Gupta (*Edn.*), K. S. Bains (*Plng.*), G. Balakrishnan (*Irri. & Power*), Sada Nand (*Labour & Emp.*), S. Manmohan Singh (*Pub. Works*), T. K. A. Nair (*Inds.*), C. D. Cheema (*Food & Supplies*), S. K. Sudhakar (*Health & Family Welfare*), Darshan Kumar (*Animal Husb. & Fisheries*).

High Court, Punjab & Haryana, Chandigarh.

Chief Justice, S. S. Sandhawalia; *Judges*, P. C. Jain, S. C. Mital, D. S. Tewatia, Mela Ram Sharma, R. N. Mittal, Ajit Singh Bains, Kulwant Singh Tiwana, Surinder Singh, S. P. Goyal, C. S. Tiwana, J. M. Tandon,

S. S. Dewan, J. V. Gupta, S. S. Kang, G. C. Mital, I. S. Tiwana, M. M. Punchhi; *Addl. Judges*, S. S. Kang, G. C. Mittal; *Registrar*, S. S. Sodhi.

RAJASTHAN, Jaipur.

Governor: Air Chief Marshal O. P. Mehra (Retd.).

Ministers

Chief Minister, S. C. Mathur; *Other Ministers*, Paras Ram Maderna, Chandan Mal Baid, Brij Sunder Sharma, Mrs. Kamla, C. L. Kawaria.

Ministers of State

Jaikrishna Sharma, N. S. Bhatt, Parduman Singh, Sis Ram Ola, Sri Ram Gotewala, Dinesh Raj Dangi, Ghasi Ram Yadav, Ram Pal Upadhyaya, Chet Ram Meena, Gobind Singh Gujjar, Narendra Singh Bhati, Sheesh Ram Ola.

Deputy Ministers

B. D. Kala, Gobind Rai Amelia, Mrs. Kamla Bheel.

Secretariat

Chief Secretary, M. M. K. Wali; *Principal Secy. & Devpt. Commr.*, B. N. Mathur; *Commrs. & Secs.*, K. N. Bhargava (*Removal of Pub. Grievances*); K. K. Bhatnagar (*Edn.*); R. K. Shastri (*Home Affairs*); L. N. Gupta, (*Finance*); Satish Kumar (*Irri. & Rajasthan Canal Project*); Tej Kumar (*Medical & Pub. Health & Family Welfare*); A. M. Lal (*Revenue*); Rajendra Jain (*Agrl. Prodn.*); Maya Ram (*L.S.G., Housing, Labour & Emp.*); Ashim Chatterji (*State Enterprises & Inds.*); Mangal Behari (*Rehab.*); M. N. Kohli (*Agri. & Spl. Scheme*); A. L. Roongta (*Election, Printing*); Chandra Prakash (*Mines*); Gopeshwar Bhatt (*Deptt. of Personnel*); Sudhir Verma (*GAD*); G. Ramchandra (*Civil Supplies & Famine Relief*); Satish Kumar (*Irri., Power & RCP*); Hanuman Prasad (*Plng*); Yeshodeve Sharma (*Agri.*); A. I. Roongta (*Social Welfare*); R. K. Sharma (*C.A.D. & Co-opn.*); G. K. Sharma (*Law & Judl.*).

Principal Officials

Chmn., Rajasthan Canal Board, Bhim Singh; *Inspector-Genl. of Police*, G. C. Singhve; *Inspector-Genl. of Prisons*, R. N. Sharma; *Chief Conservator of Forests*, K. K. Gupta; *Commr., Tribal Area Devpt.*, R. N. Bhandari; *Excise Commr.*, P. N. Bhandari; *Labour Commr.*, K. L. Kochar; *Registrar of Co-op. Socs.*, D. N. Upadhyaya; *Transport Commr.*, R. K. Agrawal; *Dirs.*, Dr. B. M. Sharma (*Medical & Health*); Dr. Hargovind Verma (*Animal Husb.*); Shiv Nath Singh (*Coll. Edn.*); S. N. Sharma (*Technl. Edn.*); M. L. Goyal (*Industries*); H. G. Joshi (*Agriculture*); R. N. Sharma (*Economics & Stats.*); Satya Narayan Singh (*Pub. Relations*); G. N. Haldia (*Social Welfare*); B. L. Shrivastava (*Mines & Geology*); Anand Prasad (*Tourism*).

High Court, Jodhpur 342001.

Chief Justice, Kalyan Dutt Sharma; *Judges*: Dwarka Prasad Gupta, Mohan Lal Shrimal, Purushottam Das Kudal, Guman Mal Lodha, Shrikrishna Mal Lodha, Narendra Mohan Kasliwal, Milap Chand Jain, Suresh Chandra Agrawal; *Addl. Judges*, Kashmir Singh Sidhu, Miss Kanta Kumari Bhatnagar, Mahendra Bhushan Sharma, Suraj Narain Deedwania; *Registrar*, Shyam Sunder Byas; *Additional Registrar*, R. C. Sood; *Registrar (Vigilance)*, Nandlal Chhangani; *Advocate-General*, Dr. Sushil Kumar Tiwari.

SIKKIM, Gangtok.

Governor: Homi J. H. Taleyarkhan.

Ministers

Chief Minister in charge of Home, Law & Leg., Planning & Development, Panchayat & Rural Works, etc., Nar Bahadur Bhandari; *Finance, Land Revenue, Excise & Survey, etc.*, Sherab Palden; *Edn., Health & Family Welfare & Industries*, Sanchaman Limboo; *Social Welfare & Scheduled Castes & Scheduled Tribes Welfare, etc.*, Lhachen Gomchen Rinpoche; *Inf. & Public Relations, Agriculture, Irrigation & Animal Husb., etc.*, Tulsi Ram Sharma; *Forests, Tourism, Local Self-Govt. & Housing, Mines & Geology, etc.*, Athup Lepcha; *Food & Civil Supplies, Co-opn., Sikkim Nationalised Transport, etc.*, Padam Bahadur Gurung; *Public Works, Power and Labour, etc.*, Samten Tshering.

Secretariat

Chief Secretary, M. P. Pradhan; *Secs.*, J. T. Densapa (*Home*); Tashi Chhophel (*Estab. & Mg. Dir., S.T.C.*); Jigme Dorjee (*Power & G.I.C.I.*); C. D. Rai (*Excise, Co-opn. & S.N.T.*); T. P. Sharma (*Heavy Inds.*); K. C. Pradhan (*Forests, Animal Husb. & Motor Vehicles, Information & Pub. Relations*); R. B. Mukhia (*Co-opn., Food & Civil Supplies*); G. P. Pradhan (*Mines & Geology and Dir., Survey & Settlement*); Karma Topden (*Tourism*); M. M. Rasaily (*Edn. & Health*); Passang Namgyal (*Cult., Ecclesiastical and Scheduled Castes & Scheduled Tribes*); K. Sherab (*Finance*); B. R. Pradhan (*Law & Legis.*).

Principal Officials

Chief Conservator of Forests & Ex-Officio in charge of Fisheries & Wild Life, P. O. Pazo; *I.G.P.*, M. N. Gadgil; *Div. Commr.*, D. K. Manavalen; *Devpt. Commr.*, R. Narayanan; *Dirs.*, P. Subbarao (*Industry*), A. T. Sanyal (*Animal Husb.*); Dr. B. S. Basnet (*Agriculture*); M. Singh (*Edn.*); Shankar Kapoor (*Spl. Secretary, Home*).

High Court, Gangtok 737101.

Chief Justice, Man Mohan Singh Gujral; *Judge*, Anandmoy Bhattacharjee; *Advocate-Genl.*, D. P. Chaudhury.

TAMIL NADU, Madras.

Governor: Vacant.

Ministers

Chief Minister in charge of G.A., I.A.S., Pub. Works, etc., M. G. Ramachandran; *Finance, Food, Fisheries, etc.*, V. R. Nedunchezhian; *Electricity, Iron & Steel Control*, S. Ramachandran; *Rural Inds., Dairy Devpt., etc.*, K. A. Krishnaswami; *Revenue, Excise & Census*, S. D. Somasundaram; *Edn., Tech. Edn., etc.*, C. Aranganayagam; *Inf. & Publicity, Forests, Hindu Religious & Charitable Endowments, etc.*, R. M. Veerappan; *Agriculture, etc.*, K. Kalimuthu; *Law, Courts, Prisons, etc.*, C. Ponnaiyan; *Mun. Admn., Panchayats, etc.*, P. Kolandaivelu; *Labour, Housing, Water Supply, etc.*, S. Raghavanandam; *Health*, Dr. H. V. Hande; *Agro Services, Co-op. Socs., Irrigation, Wakf Bd.*, K. Raja Mohammed; *Transport, Ports, etc.*, S. Muthuswamy; *Large Scale Inds., Textiles*, S. Thirunavukkarasu; *Handlooms, Prohibition*, S. N. Rajendran; *Harijan Welfare, Hill Tribes, Bonded Labour, Emp. & Trg.*, M. Vijayasarathy; *Social Welfare, Animal Husb., Orphanages, etc.*, Mrs. Gomathi Srinivasan.

Secretariat, Fort St. George, Madras 600009.

Chief Secretary, K. Diraviam; *Vigilance Comm* S. D. Srinivasan; *Secs.*, N. Krishnamurthy (*Food*); P Kandaswami (*Housing*); T. V. Venkataraman (*Revenu* C. Ramdass (*Edn.*); M. S. Ramesh (*Agriculture*); N Raghupathy (*Transport*); V. Madava Sarma (*P.W.D.*);

Ambrose (*Health & Family Welfare*); C. Ramachandran (*Industry*); V. Lakhsmikanth Bharathi (*Forests & Fisheries*); P. V. Venkatakrishnan (*Comml. Tax & HRE*); K. J. M. Shetty (*Finance*); T. V. Vasudevan (*Labour*); H. B. N. Shetty (*RDLA*); Vadivelu (*Law*).

Principal Officials

Dirs.: P. L. Ponnuswami (*Harijan Welfare*); D. Latikapadalakar (*Animal Husb.*); K. Venkatasubramanian (*School Edn.*); T. S. Sivaprakasam (*Rural Devpt. & Local Admnn.*); C. Chellappan (*Fisheries*); J. Ramachandran (*Collegiate Edn.*); C. Ramachandran (*Industry & Commerce*); Dr. Ganadesikan (*Medical Edn.*); S. Vaiyapuri (*Health & Family Welfare*); S. Varadarajulu (*Technical Edn.*); K. V. Sundaram (*Information & Public Relations*); M. K. Balasubramaniam (*Handlooms & Textiles*); T. A. Prakasam (*Backward Classes*); *Registrar of Co-op. Socs.*, S. Narasimhan; *Commr. of Labour*, V. Subramanian; *Commr. for Hindu Religious & Charitable Endowments*, U. Subramanyan; *Inspector-Genl. of Police*, Hande; *Commr. of Police*, Sripal; *Chairman, Pub. Service Commn.*, Maj. Gen. S. P. Mahadevan.

Madras Metropolitan Development Authority, 52, E. V. K. Sampath Rd., Madras 600007.

Madras Metropolitan Water Supply & Sewarage Board, 68, Greames Rd., Madras 600006.

State Planning Commission, Ezhilagam, Madras 600005.

Tamil Nadu Khadi & Village Industries Board, Kuralagam, Madras 600001.

Tamil Nadu Slum Clearance Board, Nandanam, Madras 600035.

High Court, Madras 600001.

Chief Justice, K. B. N. Singh; *Judges*, P. R. Gokulakrishnan; G. Ramanujam, V. Ramaswami, S. Natarajan. V. Sethuraman, S. Ratnavel Pandian, S. Mohan, S. Suryamurthy, V. Balasubrahmanyan, S. Padmanabhan, M. A. Sathar Sayeed, T. Sathia Dev, S. Nainar Sundaram, G. Maheswaran, P. Venugopal, S. Swamikkannu, V. Ratnam, R. Sengottuvelan, K. Shanmukham Narayana Moorthy, Fakkir Mohammed; *Registrar*, S. Janarthanam; *Advocate-General*, R. Krishnamurthy; *Sheriff of Madras*, Dr. P. M. Rex.

Railway Service Commission, Cathedral Rd., Madras 600086. *Chmn.*, M. P. K. Menon; *Member-Secy.*, V. R. Ramanathan.

Southern Railway (General Manager's Office, Park Town, Madras 600003).

General Manager, V. Anver; *Addl. Gen. Managers*, K. A. Jacob (*Techl.*), N. Ramamurthy (*Operations*); *Sr. Dy. Gen. Manager*, B. Madhavan; *Gen. Manager (Constrn.)*, T. N. Ramachandran; *F.A. & C.A.Os.*, R. Narasimhan, P. S. Sivaswamy (*Constrn. — Madras Egmore*); *Chief Comml. Supdt.*, M. Ramaswamy; *Chief Claims Officer*, L. N. Ramachandran; *Chief Electl. Engr.*, M. D. Rao; *Chief Engr.*, S. Ananthanarayanan; *Chief Track Engrs.*, K. Ramaswamy, N. S. Raghavan; *Chief Bridge Engr.*, N. K. Parthasarathy; *Chief Engrs. (Constrn.)*, E. Sreedharan (*Egmore*), S. N. Venkata Rao (*Bangalore*); *Chief Mech. Engr.*, K. Viswanathan; *Chief Workshop Engr.*, R. K. Thyagarajan; *Chief Motive Power Engr.*, M. A. Cherian; *Chief Medical Officer*, Dr. S. Singh; *Chief Optg. Supdt.*, R. Srinivasan; *Chief Personnel Officer*, A. V. Subramanian; *Chief Plng. Officer*, S. K. Nair; *Chief Pub. Relations Officer*, Thomas Verghese; *Chief Security Officer*, P. Dorai; *Chief Signal & Telecomm. Engr.*, S. Panchapakesan; *Controller of Stores*, V. Sathyamurthy.

TRIPURA, Agartala.

Governor: S. M. H. Burney.

Ministers

Chief Minister in charge of Home, Finance, Law, Political, Admve. Reforms, Plng., etc., etc., Nripen Chakraborty; *Edn., Tribal Welfare, Food & Civil Supplies*, Dasharath Deb; *Revenue, Labour, etc.*, Biren Datta; *Ind., Pub. Relations & Tourism, etc.*, Anil Sarkar; *Comm. Devpt., etc.* Dinesh Debbarma; *P.W.D., Transport*, Baidyanatha Majumdar; *Agri., Co-optve., Animal Husb.*, Abhiram Debbarma; *Forests*, Md. Araber Rahman; *Jail*, Jogesh Chakraborty; *Relief & Rehab., etc.*, Braja Gopal Roy; *Health & Family Welfare*, Vivekananda Bhowmik.

Secretariat

Chief Secretary, S. R. Sankaran; *Principal Secy.*, K. D. Menon; *Inspector-Genl. of Police*, Ramen Bhattacherjee; *Finance Secy.*, B. B. Deb Roy; *Edn. Secy.*, Haridas Mukherjee; *Revenue Secy.*, R. N. Gupta; *Secy., Animal Husb. & Agriculture*, D. P. Bagchi; *Secy., Inds.*, S. K. Ghoshal; *Secy., Food*, S. Sarkar; *Dirs.*, Haridas Mukherjee (*Edn.*); A. K. Roy (*School Edn.*); M. Chakraborty (*Physical Edn.*); Smt. Sova Bose (*Social Edn. & Welfare*); S. P. Choudhuri (*Agri.*); C. Banerjee (*Health Services*); B. K. Shyannal (*Animal Husb.*); S. Omen (*Industries*); Julius Sen (*Tribal Welfare*); K. Bhattacherjee (*Food & Civil Supplies*); *Chief Conservator of Forests*, A. K. Ghosh; *Registrar of Co-op. Socs.*, S. Banerjee; *Dir. of Pub. Relations & Tourism*, G. P. Sau; *Jt. Dir. of Fisheries*, K. Raha.

(High Court: Given under Assam).

UTTAR PRADESH, Lucknow.

Governor: C. P. N. Singh.

Chief Minister: V. P. Singh.

North-Eastern Railway, Gorakhpur 273001.

General Manager, C. K. Swaminathan; *Addl. Gen. Manager (O)*, A. K. Bhaduri; *Addl. Gen. Manager (T/S)*, R. M. Ogale; *Sr. Dy. Gen. Manager*, H. C. S. Jagati; *Chief Plng. Officer*, C. M. Mani; *Chief Commercial Supdt.*, Kranti Kumar; *Chief Claims Officer*, S. Kumar; *Chief Optg. Supdt.*, V. K. Chabbe; *Chief Passenger Traffic Supdt.*, K. B. Krishnamurty; *Chief Traffic Safety Supdt.*, Surjit Roy; *Chief Engr.*, Y. P. Anand; *Chief Engrs. (Constrn.)*, Virendra Kumar, D. N. Singh; *Chief Electrl. Engr.*, A. K. Ray; *Chief Bridge Engr.*, N. P. Vithal; *Chief Mech. Engr.*, R. C. Tandon; *Chief Workshop Engr.*, P. L. Rawal; *Chief Medical Officer*, B. D. Harbola; *Chief Security Officer*, S. P. Sharma; *F.A. & C.A.O.*, A. L. Sancheti; *Chief Signal & Tele-Comm. Engr.*, Dr. Y. P. Deodas; *Controller of Stores*, Shyamji Singhal; *Chief Pub. Relations Officer*, G. N. Srivastava; *Chief Personnel Officer*, P. N. Talwar.

Railway Service Commission, 19, Sardar Patel Marg, Allahabad 211001.

High Court, Allahabad 211001.

Chief Justice, Satish Chandra; *Judges*, Hari Swarup, M. N. Shukla, H. N. Seth, J. M. L. Sinha, K. N. Singh, C. S. P. Singh, Gopi Nath, T. S. Misra, N. D. Ojha, K. N. Seth, P. N. Bakshi, R. S. Singh, Prem Prakash, M. P. Mehrotra, D. N. Jha, Amitav Banerji, B. N. Katju, K. C. Agarwal, M. M. M. Hussain, K. S. Verma, B. N. Sapru, R. M. Sahai, P. N. Harkauli, D. N. Agarwal, P. S. Gupta, R. R. Rastogi, U. C. Shrivastava, K. P. Singhi, P. N. Goel, S. D. Agarwala, M. M. Gupta, Mahabir Singh, S. J. Hyder, V. N. Misra, I N. Goyal, V. K. Mehrotra, S. C. Mathur; *Addl. Judges*,

A. N. Varma, N. N. Mithal, V. K. Khanna, K. M. Dayal, R. B. Lal, K. N. Misra, M. Wahejuddin, S. Zaheer Hasan, B. C. Jankari, R. C. Deo Sharma, V. K. Khanna, K. M. Dayal; *Ad-Hoc Judges*, S. K. Kaul, S. B. Malik; *Advocate-General*, V. B. Upadhya; *Registrar*, S. B. L. Kacker.

WEST BENGAL, Calcutta.

Governor: B. D. Pande.

Ministers

Chief Minister in charge of Home (Police & Gen.), Sports, Power, etc., Jyoti Basu; *Land & Land Revenue*. Benoy Krishna Choudhury; *Home (Transport)*, Md. Amin; *Food & Supplies*, Sudhin Kumar; *Finance, Devpt., Plng. & Excise*, Dr. Ashok Mitra; *Agri. & Comm. Devpt.*, Kamal Guha; *Commerce & Inds.*, Dr. Kanai Bhattacharyya; *Labour*, Krishna Pada Ghosh; *Primary & Secondary Edn.*, Partha Dey: *Judl. & Legis. Deptt.*, Hashim Abdul Halim; *Fisheries & Co-optves.*, Bhakti Bhusan Mondal; *P.W.D. & Housing*, Jatin Chakravorty; *Animal Husb. & Dairy Devpt.*, Amritendu Mukherjee; *Health & Family Welfare*, Nani Bhattacharya; *Home (Jails) & Panchayat*, Debabrata Bandyapadhya; *Irr., Waterways & Devpt. of Sunderban Area*, Provash Ray; *Forests & Tourism*, Parimal Mitra; *Edn.*, Prof. Sambhu Ghoshe; *Mun. Services*, Prasanta Kumar Sur; *Refugees, Relief & Rehab.*, Radhika Ranjan Banerjee; *Cottage & Small Scale Inds.*, Chittabrata Mazumdar; *Inf. & Pub. Relations*, Buddadev Bhattacharya; *Parl. Affairs Branch of Home Deptt.*, Bhabani Mukharjee.

Ministers of State

Welfare, Smt. Nirupama Chatterjee; *Scheduled Castes & Tribes*, Sambhunath Mandi; *Transport*, Sibendranarayan Chowdhury; *Primary & Secondary Edn., etc.*, Md. Abdul Bari; *Youth Services, etc.*, Kanti Chandra Biswas; *Civil Branch of Home Deptt.*, Ram Chatterjee; *Youth Services & Home (Passport)*, Kanti Biswas; *Hill Affairs, Deptt. of Devpt. & Plng.*, Tamang Dawa Lama.

Secretariat, Writers' Bldgs., Calcutta 700001.

Chief Secretary, A. K. Sen; *Secs.*. T. C. Dutt (*Agriculture*); V. P. Ramachandran (*Animal Husb. & Vet. Services*); M. Bhattacharya (*Commerce & Inds.*); K. Biswas (*Closed & Sick Inds.*); A. K. Chatterjee (*Co-opn.,*); A. K. Majumdar (*Cottage & Small Scale Inds.*); S. L. Bose (*Excise*); G. S. Banerjee (*Edn.*); G. Venkataramanan (*Finance*); B. C. Sarma (*Fisheries*); D. K. Guha (*Forests*); S. V. Krishnan (*Health & Family Welfare*); C. N. Penn-Anthony (*Personnel & Admve. Reforms*); R. N. Sengupta (*Home Affairs*); D. Rudra (*Home Transport*); P. Chowdhury (*Inf. & Cult. Affairs*); S. P. Sen (*Irrg. & Waterways*); A. Datta (*Judl. Affairs*); N. Krishnamurthy (*Labour*); A. K. Sen (*Local Govt. & Urban Devpt.*); S. B. Majumdar (*Power*); V. Misra (*Public Works*); B. R. Chakraborty *Refugee Relief & Rehab.*).

(Principal Officials

I.G. of Police, Satyabrata Basu; *Commr. of Police, Calcutta*, N. Sen; *Inspector-Genl. of Prisons*, D. M. Kanwar; *Labour Commr.*, S. K. Bhattacharyya; *Registrar of Co-op. Soc.*, A. Dev; *Chief Conservator of Forests*, P. K. Dey; *Dirs.*, B. Mondal (*Agri.*); D. N. Mukherjee (*Inds.*); S. C. Dasgupta (*Pub. Instruction*); K. M. Mondal (*Fisheries*); S. K. Sengupta (*Inf. & Cult. Affairs*); P. B. Chakraborty (*Health Services*); S. K. Mukherjee (*Tourism*); *Milk Commr.*, J. P. Pal.

Calcutta Metropolitan Devpt. Authority, 3A, Auckland Place, Calcutta 700017.

West Bengal Board of Secondary Education, 77/2, Park St., Calcutta 700016.

West Bengal Khadi & Village Industries Board, 12, BBD Baug, Calcutta 700001.

Eastern Railway, 17, Netaji Subhas Rd., Calcutta 700001.

General Manager, R. P. Singh; *Addl. Gen. Managers*, N. Dutt (*Operation*), P. Varadachari (*Technl.*); *Sr. Dy. Gen. Manager & Chief Vigilance Officer*, S. K. Mitra; *Chief Personnel Officer*, A. K. Srivastav; *Chief Engr.*, N. K. Sikka; *Chief Bridge Engr.*, S. Gupta; *Chief Track Engr.*, Y. V. Aswathanarayana; *Chief Optg. Supdt.*, Ranjit Mathur; *Chief Mech. Engr.*, R. D. Kitsan; *Chief Workshop Engr.*, S. A. H. Abedi; *Chief Signal & Telecommunications Engrs.*, K. Subrahmanyan, O. P. Jain (*Constrn.*); *F.A. & C. A. O.*, K. C. Bose; *Chief Plng. Officer*, A. R. S. Rao; *Chief Controller of Stores*, N. Viswanathan; *Chief Material Manager*, S. B. L. Agarwala; *Chief Electl. Engr.*, V. C. V. Chenulu; *Chief Pub. Relations Officer*, P. Chaudhuri; *Chief Engr.*, M. R. Ranganath (*Constrn.*); *Chief Medical Officer*, Dr. J. M. Ghosh; *Chief Security Officer*, B. B. Sanyal; *Chief Comml. Supdt.*, O. E. Oommen.

South Eastern Railway, 11, Garden Reach Rd., Calcutta 700043.

General Manager, P. A. Pai; *Addl. Gen. Manager (Operations)*, Y. R. Puri; *Addl. Gen. Manager (Tech. Services)*; A. R. Raychowdhuri; *Chief Engr. (O/L)*, P. K. Srinivasan; *Chief Track Engrs.*, M. Vishnumoorty, M. Seshagiri Rao; *Chief Bridge Engr.*, K. S. Swaminathan; *Chief Engr. (Construction) GRC*, D. N. Singh; *Chief. Plng. Officer*, R. K. Vir; *Chief Engr. (Con.) /BSP*, B. S. Sreekantaiah; *Chief Comml. Supdt.*, R. K. Basu; *Chief Claims Officer*, N. R. K. Krishnan; *Chief Electrical Engr.*, K. C. Priyadarshee; *Chief Electrical Distribution Engr.*, S. Sengupta; *Chief Electrical Service Engr.*, V. Venugopalan; *F.A. & C.A.O.s*, S. K. Mitra, A. Venugopalan; *Chief Mechanical Engr.*, P. S. Chaudhuri; *Chief Workshop Engr.*, K. A. Tikku; *Chief Rolling Stock Engr.*, A. K. Mukherjee; *Chief Medical Officer*, Dr. A. L. Goswami; *Chief Operating Supdt.*, R. K. Dang; *Chief Traffic Supdt. (Safety)*, M. K. Gangopadhyay; *Chief Freight Traffic Supdt.*, C. M. Khosla; *Chief Personnel Officer*, A. Sen; *Chief Security Officer*, S. N. Mishra; *Chief Singal & Telecom Engr. (O/L)*, N. K. Ghosh; *Chief Signal & Telecom. Engr. (Con.)*, N. L. Braganza; *Controller of Stores*, P. K. Dutta; *Chief Materials Manager*, P. K. Govindarajan; *Chief Pub. Relations Officer*, G. S. Ganguly.

Railway Service Commission, Mackinnon Mackenzie Bldg., 16, Strand Rd., Calcutta 700001.

Chmn., P. K. Patnaik; *Member-Secy.*, R. C. Lal.

Metropolitan Transport Project (Railways), 14, Strand Rd., Calcutta 700001.

High Court, Calcutta 700001.

Chief Justice, S. C. Ghose; *Judges*, R. M. Datta. S. C. Deb, S. Mukharji, T. K. Basu, S. K. Datta, P. K. Banerjee, A. K. Sen, Chittatosh Mookerjee, M. M. Dutt, Purna Chandra Barooah, S. K. Roy Chowdhury, A. K. Janah, N. C. Mukherji, A. K. Sarkar, D. K. Sen, R. N. Pyne, Bankim Chandra Ray, Manasnath Roy, Bimal Chandra Basak, R. K. Sharma, Ganendra Narayan Roy, Chandan Kumar Banerjee, Monoj Kumar Mukherjee, Mrs. Padma Khastagir, Mrs. Monjula Bose, Bimalendra Nath Maitra, B. C. Chakrabarti. Mrs. Jyotirmoyee Nag; Mrs. Partiva Bonnerjea and Sudhindra Mohan Guha; *Addl. Judges*, N. G. Choudhuri, Amitabha Datta, S. C. Sen, S. N. Sanyal; *Advocate-General*, S. K. Acharya; *Sheriff*, S. Ghosh; *Registrar (Appellate Side)*, K. C. Mukherjee; *Registrar (Original Side)*, Sovendra Kumar Mitra.

INDIAN DIPLOMATIC REPRESENTATIVES ABROAD

(Corrected upto Feb. 1, 1982. Further changes, if any, appear in "Late Particulars" at the end of the book.)

EMBASSIES & CONSULAR OFFICES

AFGHANISTAN (DEMOCRATIC REPUBLIC OF): *Ambassador :* J. N. Dixit. *Address :* Embassy of India, Malali Wat, Shahr-e-Nau, Kabul.

Consul : K. C. Bhardwaj. *Address :* Consulate of India, 146, Nahiya Sahr-e-Nau, Jalalabad.

Consul : P. K. Thakkar. *Address :* Consulate of India, Kandhar.

ALGERIA : *Ambassador :* K. M. Lal. *Address :* Embassy of India, 119 ter, Rue Didouche Mourad, Algiers.

ANGOLA : *Ambassador* (also High Commr. to Botswana & Zambia) : Amarnath Ram. Resident in Lusaka.

ARGENTINA : *Ambassador* (also Amb. to Paraguay & Uruguay) : Vacant. *Address :* Embassy of India, Paraguay 580 (3rd [illegible] Buenos Aires.

AUSTRIA : *Ambassador* [illegible] Permanent Rep. of India to the Intnl. Organisations in Vienna) : K. R. P. Singh. *Address :* Embassy of India, 1, Opernring StiegeR/VIII 1, A1010, Vienna 1.

BAHRAIN : *Ambassador :* Prem Singh. *Address :* Embassy of India, 2299/7, Al Adlia Area, Jufair, Bahrain.

BELGIUM : *Ambassador* (also Amb. to Grand Duchy of Luxembourg) : Eric Gonsalves.* *Address :* Embassy of India, Avenue Moliere, 121, 1180, Brussels.

Consul-General : Robert Desprechins. (*Hony.*). *Address :* Consulate-General of India, Lt. Willemootlaan 5, 9910 Mariakerke, Ghent.

Consul-General : F. L. C. Betrand. *Address :* Consulate-General of India, Antwerp.

BENIN, REPUBLIC OF : *Ambassador* (also Amb. to Cameroun and High Commr. to Nigeria) : K. Srinivasan. Resident in Lagos. (Embassy of India, Cotonou).

BHUTAN : *Ambassador :* Salman Haidar. *Address :* Embassy of India, Lungtenzempa, Thimphu.

BOLIVIA : *Ambassador* (also Amb. to Peru) : S. K. Kathpalia. Resident in Lima. (Embassy of India, La Paz).

BRAZIL : *Ambassador :* S. S. Nath. *Address :* Embassy of India, Edicicio Venancio VI, Block 'O' 5th Floor, Rooms No. 501 to 508 & 515 to 527, Sector de Diversoes Sul, Brasilia—D.F.

BULGARIA : *Ambassador :* S. H. Desai. *Address :* Embassy of India, 31 Blvd. Patriarch Eftimii, Sofia.

BURMA : *Ambassador :* Prof. G. G. Swell. *Address :* Embassy of India, Oriental Assurance Bldgs., 545–47, Merchant St., Rangoon.

BURUNDI : *Ambassador* (also Amb. to Rwanda & High Commr. to Uganda) : A. K. Das. Resident in Kampala. (Embassy of India, Bujumbura).

CAMEROUN : *Ambassador* (also Amb. to Republic of Benin & High Commr. to Nigeria) : K. Srinivasan. Resident in Lagos. (Embassy of India, Yaounde).

CANARY ISLANDS (Spain) : *Consul :* C. Bulchand. *Address :* Consulate of India, 35, Triana, Las Palmas.

CAPE VERDE ISLANDS : *Ambassador* (also Amb. to Guinea Bissau, Mali & Senegal and High Commr. to Gambia) : R. K. Anand. Resident in Dakar.

CENTRAL AFRICAN REPUBLIC : *Ambassador* (also Amb. to Zaire Republic, Equatorial Guinea, Brazzaville, Congo & Gabon) : R. K. Rai. Resident in Kinshasa.

CHAD : *Ambassador* (also Amb. to Sudan) : L. N. Rangarajan. Resident in Khartoum.

CHILE : *Ambassador :* M. K. Kisha. *Address :* Embassy of India, 871, Tríana, Santiago.

CHINA (PEOPLE'S REPUBLIC OF) : *Ambassador :* Vacant. *Address :* Embassy of India, 1, Jih Tan Tung Lu, Beijing.

COLOMBIA : *Ambassador* (also Amb. to Ecuador) : A. B. W. Vaz. *Address :* Embassy of India, Carrera 7, No. 87-20, Apartment No. 104, Bogota.

COMORES : *Ambassador* (also Amb. to Malagasy Republic) : S. N. Puri. Resident in Antananarivo.

CONGO (BRAZZAVILLE) : *Ambassador* (also Amb. to Central African Republic, Equatorial Guinea, Zaire Republic & Gabon) : R. K. Rai. Resident in Kinshasa.

COSTA RICA : *Ambassador* (also Amb. to Nicaragua & Panama) : M. L. Suri. Resident in Panama City. (Embassy of India, San Jose).

CUBA : *Ambassador :* V. C. Khanna. *Address :* Embassy of India, Calle 21 NRO. 202, esquina a K, Vedado, Havana.

CZECHOSLOVAKIA : *Ambassador :* K. K. S. Rana. *Address :* Embassy of India, Valdstejnska 6, Malastrana, Prague 1.

DENMARK : *Ambassador :* Prem Shunker. *Address :* Embassy of India, Vengehusvej 15, Copenhagen.

Consul-General : Victor B. Strand. *Address :* Consulate-General of India, Kronprinsessegade 36, DK 1306, Copenhagen K.

DJIBOUTI (REPUBLIC OF) : *Ambassador* (also Amb. to People's Democratic Republic of Yemen) : Satinder Kumar Uppal. Resident in Aden.

Consul : S. J. Kothari. *Address :* Consulate of India, Post Box No. 171, Djibouti.

DUBAI : *Consul-General :* M. Venkataraman. *Address :* Consulate-General of India, Post Box 737, Dubai.

ECUADOR : *Ambassador* (also Amb. to Colombia) : A. B. W. Vaz. Resident in Bogota.

Consul-General : Jack Bermes Cevallo. *Address :* Consulate-General of India, Banco Central Ecuador, Quito.

EGYPT (ARAB REPUBLIC OF) : *Ambassador :* Vacant. *Address :* Embassy of India, 5, El Shaer Aziz Abaza St., Zamalek, P.O. Box 718, Cairo.

Consul-General : Vacant. *Address :* Consulate-General of India, 12, El Shahid El Ghayyar St., Port Said.

EQUATORIAL GUINEA : *Ambassador :* (also Amb. to Zaire Republic, Brazzaville-Congo, Central African Republic and Gabon) : R. K. Rai. Resident in Kinshasa.

ETHIOPIA : *Ambassador :* P. K. Budhwar. *Address :* Embassy of India, P.O. 528, Addis Ababa.

FINLAND : *Ambassador :* S. S. Nath. *Address :* Embassy of India, Annankatu, 15B 14, 5th Flr., 00120, Helsinki 12.

FRANCE : *Ambassador :* Narendra Singh. *Address :* Embassy of India, 15, Rue Alfred Dehodencq., Paris 16.

---

* Concurrently accredited to the European Economic Community and the European Coal & Steel Community.

GABON : *Ambassador* (also Amb. to Central African Republic, Equatorial Guinea, Zaire Republic & Brazzaville-Congo) : R. K. Rai. Resident in Kinshasa.

GERMAN DEMOCRATIC REPUBLIC : *Ambassador :* K. Raghunath. *Address :* Embassy of India, Clara-Zetkin, Strasse 89/06, 108-Berlin (GDR).

GERMANY (FEDERAL REPUBLIC OF) : *Ambassador :* Dr. A. M. Khusro. *Address :* Embassy of India, 262, Adenauerallee, 5300, Bonn.

Consul-General (Consular jurisdiction includes the States of Hessen, Rheinlandpfalz & Saarland) : Ranjit Gupta. *Address :* Wilhelm-Leuschner Strasse, 93 (2nd floor), 6, Frankfurt Main.

Consul-General (Consular jurisdiction includes the States of Hamburg, Bremen, Schleswig Holstein and Lower-Saxony) : Aftab Seth. *Address :* Z14VI, 2 Burchardstrasse, Sprinkenhof, Hamburg 1.

Consul-General : Robert Gedon. *Address :* Consulate-General of India, Leopold str. 87, Munich 2.

Consul-General : Dr. R. Kissel. *Address :* Consulate-General of India, 7, Stuttgart-Degerlok Waldstr. 5, 7, Stuttgart.

Consul-General : P. C. Govil. *Address :* Consulate-General of India, Joachimstaler strasse 28 (1st Floor), West Berlin-15.

GREECE : *Ambassador :* Romesh Arora. Embassy of India, 10 Merlin St., Athens.

Consul-General : L. E. Vafiadis. *Address :* Consulate-General of India, 1, Valaoritou St., Athens 134.

GUATEMALA : *Ambassador* (also Amb. to Mexico) : D. S. Kamtekar. Resident in Mexico City. (Embassy of India, Guatemala).

Consul : Ulrich W. Rasch. *Address :* Consulate of India, Post Box No. 886, Guatemala.

GUINEA : *Ambassador* (also High Commr. to Sierra Leone) : V. P. Singh. *Address :* Embassy of India, Kebe Bldg., 3rd Flr., B.P. 186/Bis. Conakry 1.

GUINEA BISSAU : *Ambassador* (also Amb. to Cape Verde Islands, Senegal, Mali and High Commr. to Gambia): R. K. Anand. Resident in Dakar.

HOLY SEE : *Ambassador* (also Amb. to Switzerland): Vacant. Resident in Berne.

HUNGARY : *Ambassador :* V. K. Varma. *Address :* Embassy of India, Buzavirag Utca 14, Budapest II.

ICELAND : *Ambassador* (also Amb. to Norway) : Vacant. Resident in Oslo. (Embassy of India, Reykjavik).

INDONESIA : *Ambassador :* S. K. Bhutani. *Address :* Embassy of India, 44 Kebon Sirih, Jakarta.

Consul-General : R. S. Garg. *Address :* Consulate-General of India, 19, Djalan, Uskup Agung A. Sagiopranoto, Medan.

IRAN (ISLAMIC REPUBLIC OF) : *Ambassador :* A. M. Khaleeli. *Address :* Embassy of India, 166, Avenue Saba Shomali, Off Takhte Jamshid, P. Box No. 2473, Tehran.

Consul : K. T. Subbiah. *Address :* Consulate of India, 610, Ferdousi Ave., Khorramshahr.

Consul : S. S. Sarkaria. *Address :* Consulate of India, Avenue Speah, Zahidan.

IRAQ : *Ambassador :* P. L. Sinai. *Address :* Embassy of India, Taha St., Najeeb Pasha, Adhamiya, Baghdad.

Consul : Y. Singh. *Address :* Consulate of India, Palestine Rd., Basrah.

IRELAND : *Ambassador :* Manabendra Shah. *Address :* Embassy of India, 3, Leeson Park, Dublin 6.

ITALY : *Ambassador :* Vacant. *Address :* Embassy of India, Via Venti Settembre 5, Rome.

Consul : Jack Clerici. *Address :* Consulate of India, via Martin Piaggio-15, Genoa.

Consul-General : Dr. Nino Trapani. *Address :* Consulate-General of India, Via Goito 11-20151, Milan.

IVORY COAST : *Ambassador* (also Amb. to Niger) : Harcharan Singh Dhody. *Address :* Embassy of India, Abidjan.

JAPAN : *Ambassador :* K. P. S. Menon. *Address :* Embassy of India, 2-Chome, 2-11, Kudan Minami Chiyodaku, Tokyo.

Consul-General : A. L. Srivastava. *Address :* Consulate General of India, Shanti Bldg., 30, Nakayamate-dori-1-Chome, lkuta-JKu, Kobe.

JORDAN : *Ambassador :* Vacant. *Address :* Embassy of India, 1st Circle, Jabel, Amman.

KAMPUCHEA : *Charge d'Affairs :* Naigaum Prakash. *Address :* Embassy of India, Phnom Penh.

KOREA (DEMOCRATIC PEOPLE'S REPUBLIC OF) : *Ambassador :* R. K. Manacha. *Address :* Embassy of India, Block 66, Munsu-dong District, Daedong Yong, Pyongyang.

KOREA (REPUBLIC OF) : *Ambassador :* V. V. Paranjpe. *Address :* Embassy of India, San 2-1, Bokwang Dong, Yongsan-ku (Behid Bowlinn Centre), Seoul.

KUWAIT : *Ambassador :* S. J. S. Chhatwal. *Address :* Embassy of India, 34, Share Istiqlal, P. Box 1450 (Safat), Kuwait.

LAO PEOPLE'S DEMOCRATIC REPUBLIC : *Ambassador :* P. R. Sood. *Address :* Embassy of India, P.O. Box No. 225, Rue Pangkham, Vientiane.

LEBANON : *Ambassador :* B. P. Aggarwal. *Address :* Embassy of India, Sahmarani Bldg., 31, Iantari St., Beirut.

LIBERIA : *Ambassador* (also Amb. to Togo, Upper Volta and High Commr. to Ghana) : P. A. Nazareth. Resident in Accra. (Embassy of India, Monrovia).

LIBYA : *Ambassador* (also High Commr. to Malta) : A. G. Asrani. *Address :* Embassy of India, 16/18, Sh. Armondi Garden City, P. P. Box 3150, Tripoli.

LUXEMBOURG : *Ambassador* (also Amb. to Belgium) : Eric Gonsalves. Resident in Brussels.

MALAGASY REPUBLIC : *Ambassador* (also Amb. to Comores) : S. N. Puri. *Address :* Embassy of India, 4, Lalana Rajaonson Emile, Antananarivo.

MALDIVES REPUBLIC : *Ambassador :* Brij Kumar. Embassy of India, Male.

MALI : *Ambassador* (also Amb. to Senegal, Cape Verde Islands, Guinea Bissau and High Commr. to Gambia) : R. K. Anand. Resident in Dakar. (Embassy of India, Bamako).

MAURITANIA : *Ambassador* (also Amb. to Morocco) : O. N. Sheopuri. Resident in Rabat. (Embassy of India, Nouackchott).

MEXICO : *Ambassador* (also Amb. to Guatemala) : D. S. Kamtekar. *Address :* Embassy of India, Masset 325 Colonia Anzures, Mexico 5, D.F.

MONGOLIAN PEOPLE'S REPUBLIC : *Ambassador :* G. Narayana Rao. *Address :* Embassy of India, 26 Peace St., Ulan Bator.

MOROCCO : *Ambassador* (also Amb. to Mauritania) : O. N. Sheopuri. *Address :* 10, Avenue de Champagne (Agdal), Rabat.

MOZAMBIQUE : *Ambassador* (also High Commr. to Lesotho & Swaziland): Gurdip Singh Bedi. *Address :* Embassy of India, Avonida Kenneth Kaunda Fatima, Maputo.

NEPAL : *Ambassador :* N. P. Jain. *Address :* Embassy of India, G.P.O. Box 292, Kathmandu.

NETHERLANDS : *Ambassador :* Kum. C. B. Muthamma. *Address :* Embassy of India, Buitenrustweg 2, The Hague.

NETHERLANDS ANTILLES : *Consul-General* (also Amb. to Venezuela) : Shiv Kumar. Resident in Caracas.

Consul : D. B. Nandwani. *Address :* Consulate of India, C/o Boolchand N. V. Heerenstroat 4, B, Curacao.

NICARAGUA : *Ambassador* (also Amb. to Costa Rica & Panama) : M. L. Suri. Resident in Panama City.

NIGER : *Ambassador* (also Amb. to Ivory Coast) : Harcharan Singh Dhody. Resident in Abidjan.

NORWAY : *Ambassador* (also Ambassador to Iceland) : Vacant. *Address :* Embassy of India, Skovvien 12, 2nd Flr., Oslo 2.

OMAN (SULTANATE OF) : *Ambassador :* K. C. Lalvunga. *Address :* Embassy of India, P. Box 77, Muscat.

PAKISTAN : *Ambassador :* Vacant. *Address :* Embassy of India, 482-F, Sector G-6/4, Islamabad.

Consul-General : Vacant. *Address :* Consulate-General of India, 3, Fatima Jinnah Rd., Karachi 4.

PANAMA : *Ambassador* (also Amb. to Costa Rica & Nicaragua) : M. L. Suri. *Address :* Embassy of India, P. Box 8400, Panama City.

PARAGUAY : *Ambassador* (also Amb. to Argentina & Uruguay) : Vacant. Resident in Buenos Aires. (Embassy of India, Asuncion).

Consul-General : Antonio Rodolfo Zuccolillo. *Address :* Consulate-General of India, Cerro Coray Paraguari, Asuncion.

PERU : *Ambassador* (also Amb. to Bolivia) : S. K. Kathpalia. *Address :* Embassy of India, San Ignacio De Loyola, 150, Miraflores, Lima.

PHILIPPINES : *Ambassador :* R. K. Jerath. *Address :* Embassy of India, Casmer Bldg., Salcedo St., Legaspi Village, Makati Metro, Manila.

POLAND : *Ambassador :* M. R. Sivarama Krishnan. *Address :* Embassy of India, No. Rejtana 15 (Flats 2 to 7), Mokotow, Warsaw–02–516.

Consul : S. K. Verma. *Address :* Consulate of India, Gydnia.

PORTUGAL : *Ambassador :* A. R. Kakodkar. *Address :* Embassy of India, Rua das Amoreiras 72, D-60, Lisbon-1.

QATAR : *Ambassador :* Jagannath S. Doddamani. *Address :* Embassy of India, Sreika Stheim Villa No. 5. El Sheikh Suheim St., P. Box No. 2788, Doha.

ROMANIA : *Ambassador :* K. Gajendra Singh. *Address :* Embassy of India, 16, Str. Stefan Gheorghiu, Bucharest.

RWANDA : *Ambassador* (also Amb. to Burundi & High Commr. to Uganda) : A. K. Das. Resident in Kampala.

SAN MARINO (REPUBLIC OF) : *Consul-General :* Vacant. Resident in Rome (Indian Embassy).

SAUDI ARABIA : *Ambassador :* T. P. P. Abdullah. *Address :* Embassy of India, Ibrahim Masoud Bldg., Medina Rd., Baghdhadia, P.O. Box 952, Jeddah.

SENEGAL : *Ambassador :* (also Amb. to Cape Verde Islands, Guinea Bissau, Mali & High Commr. to Gambia): R. K. Anand. *Address :* Embassy of India, Immeuble Daniel Sorano Avenue de la Republique. 9th Flr., P.B. 398, Dakar.

SOMALIA : *Ambassador :* G. M. Jambholkar. *Address :* Embassy of India, P.B. No. 955, Mogadishu.

SPAIN : *Ambassador:* Dr. I. P. Singh. *Address:* Embassy of India, Velazquez, 93, Madrid 6.

Consul-General : Louis Valeriano Gonzalez Perez. *Address :* Consulate-General of India, Paseo de Sanro Gervazis 57, Barcelona 22.

SUDAN : *Ambassador* (also Amb. to Chad) : L. N. Rangarajan. *Address :* Embassy of India. No. 2, El Mek Nimir St., P. Box No. 707, Khartoum.

Consul : S. J. Mithane. *Address :* Consulate of India, Jadavjee Bldg., St. No. 11, Port Sudan.

SURINAM : *Ambassador :* R. N. Gupta. Embassy of India, Paramaribo.

SWEDEN : *Ambassador :* K. Bakshi. *Address :* Embassy of India, Adolf Fredriks Kyrokoata 12 II, Box 1340 S-11183, Stockholm.

SWITZERLAND : *Ambassador* (also Amb. to the Holy See) : Vacant. *Address :* Embassy of India, Weltpoststrosse 17, Berne 3015.

Consul-General : Vacant. *Address :* Consulate-General of India, Rue Du Valais (6th Flr.), 1202, Geneva.

SYRIAN ARAB REPUBLIC : *Ambassador :* A. K. Ray. *Address :* Embassy of India, 40/46, Adhan Malki St., Yassin Nouwelati, Damascus.

THAILAND : *Ambassador* (also Permanent Rep. of India to ECAFE) : A. B. Gokhale. *Address :* Embassy of India, 139, Pan Rd., Bangkok.

Consul : K. S. Sastry. *Address :* Consulate of India, No. 88/2, Keo Navarth Rd., Chiangmai.

TOGO : *Ambassador* (also Amb. to Liberia & Upper Volta and High Commr. to Ghana) : P. A. Nazareth. Resident in Accra. (Embassy of India, Lome).

TUNISIA : *Ambassador :* S. R. Chaudhury. *Address :* Embassy of India, 6, Rue Felician Challaye, Belvedere, Tunis.

TURKEY : *Ambassador :* Parimal Ghosh. *Address :* Embassy of India, No. 24, Kibris Sokak, Cankaya, Ankara.

U.S.S.R. : *Ambassador :* V. K. Ahuja. *Address :* Embassy of India, No. 6-8, Ulitsa Obukha, Moscow.

Consul-General : D. S. Khosla. *Address :* Consulate-General of India, 31, Kirova St., Odessa.

UNITED ARAB EMIRATES : *Ambassador :* Lalit Mansinh. *Address :* Embassy of India, Said Muharbi Bldg., P. Box 4090, Abu Dhabi.

UNITED STATES OF AMERICA : *Ambassador :* (also High Commr. to the Commonwealth of Bahamas) : K. R. Narayanan. *Address :* Embassy of India, 2107 Massachusetts Avenue, N. W. Washington D.C. 20008.

Consul-General : S. K. Bhatnagar. *Address :* Consulate-General of India, 230, North Michigan Ave., Chicago, Illinois 60601.

Consul : Col. George P. Bickford. *Address :* Consulate of India, 1144, Union Commerce Bldg., Cleveland (Ohio).

Consul : David Watumull. *Address :* Consulate of India, 2227-A, Kalakaua Avenue, Honolulu (Hawaii).

Consul : Dr. H. S. Hayre. *Address :* Consulate of India, C/o Univ. of Houston. Engg. Deptt., Houston (Texas).

Consul-General : George Denegre. *Address :* Consulate-General of India, 225, Baronne St., New Orleans, Louisiana 70112.

Consul-General : P. P. D'Souza. *Address :* Consulate-General of India, 3-East, 64th Street, New York, N.Y. 10021.

Consul-General : Ishrat Aziz. *Address :* Consulate-General of India, 215, Market St., San Francisco, Calif. 94105.

Consul : Frederick J. Orth. *Address :* Consulate of India, Clinton, Fleck, Glein & Brown, 500, 3rd Leuora, Seattle (Washington).

UPPER VOLTA : *Ambassador* (also Amb. to Togo, Liberia & High Commr. to Ghana) : P. A. Nazareth. Resident in Accra. (Embassy of India, Ouagadougou).

URUGUAY : *Ambassador* (also Amb. to Argentina & Paraguay) : Vacant. Resident in Buenos Aires. (Embassy of India, Montevideo).

Consul : Adolf Vegh. *Address :* Consulate of India, Plaza Zabala 324, Montevideo.

VENEZUELA : *Ambassador* (also Consul-General to Netherlands Antilles) : Shiv Kumar. *Address :* Embassy of India, Edificio Nuevo Centro Piso 7, Officina "B", Avenida, Libertador Apartado de Correos del Este. 61585, Chacao, Caracas—106.

VIETNAM (SOCIALIST REPUBLIC OF VIETNAM): *Ambassador :* G. Raj. *Address :* Embassy of India, 58, Tran Hung Dao St., Hanoi.

YEMEN ARAB REPUBLIC : *Ambassador :* D. P. Pasricha. *Address :* Embassy of India, Al Jawahar Area, Off Zuberi Road, Sanaa.

YEMEN (PEOPLE'S DEMOCRATIC REPUBLIC OF): *Ambassador* (also Amb. to the Republic of Djibouti) : Satinder Kumar Uppal. *Address :* Embassy of India, Premjee Chambers, Steamer Point, Aden.

YUGOSLAVIA (SOCIALIST FEDERAL REPUBLIC OF) : *Ambassador :* A. S. Chib. *Address :* Embassy of India, Dositejeva 26, Belgrade.

ZAIRE REPUBLIC : *Ambassador* (also Amb. to Brazzaville Cong., Equatorial Guinea, Central African Republic & Gabon) ; R. K. Rai. *Address :* Embassy of India, 18B, Avenue des Batetela, Kinshasa.

HIGH COMMISSIONS

AUSTRALIA : *High Commissioner :* J. C. Ajmani. *Address :* 135, Monaro Crescent, Red Hills, Canberra, A.C.T. 2603.

Consul-General : Indrajit Singh. *Address :* Consulate-General of India, Caltex House, 567-187, Kent St., Sydney N.S.W. 2000.

BAHAMAS (COMMONWEALTH OF) : *High Commissioner* (also Amb. to U.S.A.) : K. R. Narayanan. Resident in Washington.

BANGLADESH : *High Commissioner :* M. Dubey. *Address :* Indian High Commission, Road No. 2, Dhanmondi Residential Area, Dacca 2. Asstt. High Commissions of India :—(1) 1/B, Baizid Bostami Rd., Nasirabad, Chittagong ; (2) Beldarpara, P.O. Ghoramara, Rajshahi.

BARBADOS & GRENADA : *High Commissioner* (also High Commr. to Trinidad & Tobago) : R. C. Shukla. Resident in Port of Spain (Trinidad). *Address :* High Commission of India, Bridgetown.

BOTSWANA : *High Commissioner* (also High Commr. to Zambia & Amb. to Angola) : Amarnath Ram. Resident in Lusaka.

CANADA : *High Commissioner :* Dr. G. S. Dhillon. *Address :* High Commission of India, 200, McLaren St., Ottawa K 2P 0L6.

Consul-General : P. N. Soni. *Address :* Consulate-General of India, Suite 2900, Hudson's Bay Centre, II, Floor East St., Toronto (Ontario).

Consul-General : B. K. Mitra. *Address :* Consulate-General of India, 325, Howe St., Vancouver 1 (B.C.).

CAYMAN ISLANDS : *High Commissioner* (also High Commr. to Jamaica): D. C. Manners. Resident in Kingston.

CYPRUS : *High Commissioner :* Hari Krishan Mahajan. *Address :* High Commission of India, Nicosia.

Consul-General : Felix Cirilli de Nores. *Address :* Consulate-General of India, 4-A, Rupel St., Nicosia.

FIJI : *High Commissioner* (also High Commr. to Nauru, Papua New Guinea & Kingdom of Tonga): Smt. S. Kochar. *Address :* High Commission of India, Suit No. 202, Fiji Dev. Bank Bldg., Victoria Parade, Suva. Jurisdiction extends to the UN Trust Territory of Caroline & Marshal Island ; Solomon Island ; New Hebrides ; Gillbert & Elice Islands ; New Caledonia & Society Islands.

GAMBIA : *High Commissioner* (also Amb. to Senegal, Cape Verde Islands, Mali, Guinea Bissau) : R. K. Anand. Resident in Dakar. (High Commission of India, Bathurst).

GHANA : *High Commissioner* (also Amb. to Togo, Liberia & Upper Volta) : P. A. Nazareth. *Address :* High Commission of India, 5, Monkata Ave., Airport Residential Area, P. Box 3040, Accra.

GUYANA : *High Commissioner :* J. N. Bhat. *Address :* High Commission of India, No. 10, Avenue of the Republic, P. Box 872, Georgetown.

JAMAICA : *High Commissioner* (also High Commr. to Cayman Islands) : D. C. Manners. *Address ;* High Commission of India, No. 4, Retreat Avenue, Kingston.

KENYA : *High Commissioner* (also High Commr. to Seychelles) : V. K. Grover. *Address :* Jeevan Bharati Bldg., Harambee Avenue, Nairobi.

Asstt. Commissioner : B. P. S. Kapoor. *Address :* Commission of India, LIC Bldg., Nkrumaha Rd., Mombasa (Kenya).

LESOTHO : *High Commissioner* (also High Commr. to Swaziland & Amb. to Mozambique) : Gurdip Singh Bedi. Resident in Maputo. (High Commission of India, Maseru).

MALAWI : *High Commissioner :* G. D. Atuk. *Address :* High Commission of India, P. Box No. 681, Lillongwe.

MALAYSIA : *High Commissioner :* V. B. Soni. *Address :* High Commission of India, P. Box No. 59, 19, Jalan Melaka, United Commercial Bank Bldg., Kuala Lumpur.

MALTA : *High Commissioner* (also Amb. to Libya) : A. G. Asrani. Resident in Tripoli. (High Commission of India, Valletta).

MAURITIUS : *High Commissioner :* Dr. B. S. Upadhyaya. *Address :* High Commission of India, Bank of Baroda Bldg., Sir William Newton St., Port Louis.

NAURU : *High Commissioner* (also High Commr. to Fiji, Papua New Guinea and Kingdom of Tonga) : Smt. S. Kochar. Resident in Suva.

NEW ZEALAND : *High Commissioner* (also High Commr. to Western Samoa) : B. Deva Rao. *Address :* High Commission of India, 49, Willis Street, Wellington.

NIGERIA : *High Commissioner* (also Amb. to Cameroun & Republic of Benin) : K. Srinivasan. *Address :* High

Commission of India, 107, Awolowo Rd., Lagos. Information Service of India, Swijkoyi, P.O. Box 2322, Lagos.

PAPUA NEW GUINEA : *High Commissioner* (also High Commr. to Fiji, Nauru and Kingdom of Tonga) ; Smt. S. Kochar. Resident in Suva.

SEYCHELLES : *High Commissioner* (also High Commr. to Kenya) : V. K. Grover. Resident in Nairobi.

SIERRA LEONE : *High Commissioner* (also Amb. to Guinea) : V. P. Singh. Resident in Conakry. *Address :* High Commission of India, Freetown.

Consul : R. D. Rajwani. *Address :* Consulate of India, P. Box 26, Freetown.

SINGAPORE : *High Commissioner :* C. Das Gupta. *Address :* High Commission of India, India House, 31, Grange Rd., Singapore.

SRI LANKA : *High Commissioner :* T. S. Mani. *Address :* High Commission of India, State Bank of India Bldg., Sir B. Jayantilleke Mawatha Fort, Colombo 1. *Asst. High Commissioner,* B. Srinivasan. *Address :* 31, Rajapihilla Mawatha, Kandy.

SWAZILAND : *High Commissioner* (also Amb. to Mozambique & High Commr. to Lesotho) : Gurdip Singh Bedi. Resident in Maputo.

TANZANIA : *High Commissioner:* P. M. S. Mallik. *Address :* High Commission of India, 11th Flr., 'A' Wing NIC Investment House, Mirambo St., Dar-es-Salaam.

Consul-General :. J. Banerjee. *Address:* Consulate-General of India, Magombani, P. Box 871, Zanzibar.

TONGA, KINGDOM OF : *High Commissioner* (also High Commr. to Papua New Guinea. Nauru & Fiji) : Smt. S. Kochar. Resident in Suva.

TRINIDAD & TOBAGO : *High Commissioner:* (also High Commr. to Barbados & Grenada. Commr. to the Associated States — Antigua, Dominico, St. Kitts — Nevi — Anguilla, St. Lucia ; also Commr. to St. Vincent, Monteserrat. Turks & Caicos) : R. C. Shukla. *Address :* High Commission of India, Cipriani Boulevard, P. Box No. 530. Port of Spain (Trinidad).

UGANDA : *High Commissioner* (also Amb. to Burundi & Rwanda) : A. K. Das. *Address :* High Commission of India, Bank of India Bldg., Kampala Rd., Kampala.

UNITED KINGDOM : *High Commissioner :* Dr. V. A. Seyid Mohammad. *Dy. High Commr.*, I. P. Singh. *Address :* India House, Aldwych, London, W.C. 2. NA. *Asst. High Commissions of India :*—(1) 86, New St., Birmingham ; (2) Jeager House, 62 Buchanan St., Glasgow GI 3 JE ; (3) 4, Rodney St., Liverpool L 12 TE.

WESTERN SAMOA : *High Commissioner* (also High Commr. to New Zealand) : B. Deva Rao. Resident in Wellington.

ZAMBIA : *High Commissioner* (also High Commr. to Botswana & Amb. to Angola) : Amarnath Ram. *Address :* High Commission of India, Lusaka House, Cairo Rd., P.O. Box 2111, Lusaka.

ZIMBABWE : *High Commissioner :* Arif Tamarian. *Address :* High Commission of India, Ambassador Hotel, Room No. 311, Union Avenue, Salisbury.

SPECIAL MISSIONS

KENYA : *Permanent Representative of India to the U.N. Environment Programme,* P.B. No. 30074, Nairobi, V. K. Grover.

UNITED NATIONS : *Ambassador/Permanent Representative :* N. Krishnan. *Address :* Permanent Mission of India to the United Nations, 750, 3rd Avenue, 21st Flr., New York. N.Y. 10017. Geneva Office : 7-9, Rue Du Valais (6th Flr.), 1202, Geneva, *Ambassador/Permanent Rep.,* A. P. Venkateswaran.* Permanent Mission of India to the Internal Orgns. in Vienna, Opernring, Vienna 1. *Amb./Permanent Rep.* (Also Governor for India on the Board of Governors of the Intnl. Atomic Energy Agency) : K. R. P. Singh.

COMMISSION

HONG KONG : *Commissioner for the Govt. of India :* C. V. Ranganathan. *Address :* Commission of India, 304, A.I.A. Bldg., 1, Stubbs Rd., Hong Kong.

---

* Also Resident Representative to UNCTAD & GATT.

FOREIGN DIPLOMATIC REPRESENTATIVES IN INDIA

EMBASSIES, CONSULAR AND TRADE OFFICES

AFGHANISTAN (DEMOCRATIC REPUBLIC OF) : *Ambassador :* Dr. Mohd. Hasan Sahrq. *Address :* B-54, Greater Kailash Part I, New Delhi 110043.

Consul-General : Sharif Agier. *Address :* 115, Walkeshwar Rd., Bombay 400006.

ALGERIA : *Ambassador :* Raouf Boudjakdji. *Address :* 13, Sunder Nagar, New Delhi 110003.

ARGENTINA : *Ambassador :* Fernando Fernandez Escalante. *Address :* 3/11, Shanti Niketan, New Delhi 110021

AUSTRIA : *Ambassador :* Dr. George Hennig. (Also Amb. to Bangladesh, Nepal & Sri Lanka). *Address :* 18, Jor Bagh, New Delhi 110003.

Hon. Consul-General : Jasu Shah. *Address :* Taj Bldg., 3rd Flr., 210, Dr. D. N. Rd., Bombay 400001.

Hon. Consul : Mrs. Anne Mukherji. *Address :* 96/1, Sarat Bose Rd., Calcutta 700026.

Hon. Consul-General a.p. : H. C. Kothari. *Address :* Kothari Bldg. (4th Flr.), 20, Nungambakkam High Rd., Madras 600034.

Trade Commr., Dr. B. Koch, 12-A, Amrita Shergill Mrg., New Delhi 110003. (Also handles Austrian trade affairs in Nepal, Bangladesh and Sri Lanka).

BAHRAIN (STATE OF) : *Consul :* Fahad Al Wazzan. *Address :* Raj Mahal, 84, Veer Nariman Rd., Bombay 400020.

BELGIUM : *Ambassador :* Jan Hollants Van Loocke (Also Amb. to Bhutan, Nepal, Maldives & Sri Lanka). *Address :* 7, Golf Links. New Delhi 110003. (Embassy also looks after the economic & consular affairs of the Grand Duchy of Luxembourg).

Consul-General : Baron Thierry de Gruben. *Address :* " Morena ", 11, M. L. Dahanukar Mrg., Bombay 400026. *Consul-General (Hon.) :* Sunil Singh Roy. *Address :* 5/1A, Hungerford St., Calcutta 700017. *Consul (Hon.) :* M. Nevens. *Address :* 23, Spurtank Rd., Chetput, Madras 600031.

BHUTAN : *Ambassador :* Dr. Tashi Tobgyel. *Address :* Chandra Gupta Mrg., Chanakyapuri, New Delhi 110021.

BOLIVIA : *Hon. Consul-General :* A. D. Khan. *Address:* 20, Loudon St., Calcutta 700016.

BRAZIL : *Ambassador :* Roberto Luiz Assumpcao de Araujo. (Also Amb. to Sri Lanka & Nepal). *Address :* 8, Aurangzeb Rd., New Delhi 110011.

BULGARIA : *Ambassador :* Tocho Tochev. (Also Amb. to Nepal & Sri Lanka). *Address :* 16/17, Chandragupta Mrg., Chanakyapuri, New Delhi 110021.

Counsellor for Trade & Economic Affairs : 16/17, Chandragupta Mrg., Chanakyapuri, New Delhi 110021. *Trade Rep. at Bombay :* 11, Peacock Palace, 69, Bhulabhai Desai Rd., Bombay 400026. *Trade Rep. at Calcutta :* 6-A, Middleton St., Calcutta 700016.

BURMA : *Ambassador :* U Maung Maung Shin. *Address :* Burma House, 3/50-F, Shanti Path, Chanakyapuri, New Delhi 110021.

CENTRAL AFRICAN REPUBLIC : *Ambassador :* Vacant. *Address :* 59, M. Gandhi Mrg., Lajpatnagar III, New Delhi 110024.

CHILE : *Ambassador :* Tomas Vasquez. *Address :* 1/13, Shantiniketan, New Delhi 110021.

CHINA (PEOPLE'S REPUBLIC OF) : *Ambassador :* Shen Jian. *Address :* 50-D, Shanti Path, Chanakyapuri, New Delhi 110021.

COLOMBIA: *Ambassador :* Mrs. Nelly Turbay de Munoz. *Address :* D-82, Malcha Marg, Chanakyapuri, New Delhi 110021.

COSTA RICA : *Consul-General :* A. K. Makani. *Address :* Standard Bldg., 346, Dr. D. Naoroji Rd., Bombay 400001.

CUBA : *Ambassador :* Goze Perez Novoa. *Address :* D-5, N.D.S.E. Part II, New Delhi 110049.

CZECHOSLOVAKIA : *Ambassador :* Pavel Kanka. (Also Amb. to Nepal). *Address :* 50-M, Niti Mrg., Chanakyapuri, New Delhi 110021.

Ag. Consul-General : Antonin Sys. *Address :* "Marcopia", 5, Deshmukh Marg, Cumbala Hill, Bombay 400026. *Ag. Consul :* J. Mader. *Address :* 24B, Park St., Calcutta 700016.

Economic & Commercial Counsellor & Trade Representative : V. Kirsbaum, 50-M, Niti Mrg., Chanakyapuri, New Delhi 110021. *Trade Commr. :* Kasturi Bldg., Jamshedji Tata Rd., Bombay 400020. *Trade Commr. :* 24-B, Park St., Calcutta 700016. *Trade Commr. :* 31-A, Haddows Rd., Madras 600006.

DENMARK : *Ambassador :* Bjφrn Harry Olsen. (Also Amb. to Sri Lanka, Bangladesh & Nepal). *Address :* 2, Golf Links Area, New Delhi 110003.

Hon. Consul-General : N. M. Desai. *Address :* L. & T. House, Ballard Estate, Bombay 400038. *Hon. Consul :* Svein Elstad. *Address :* 18-G, Park St., Calcutta 700016. *Hon. Consul :* K. S. Narayanan. *Address :* 175/1, Mount Rd., Madras 600002.

DOMINICAN REPUBLIC : *Consul-General (Hon.) :* H. H. Ismail. *Address :* Mistry Court, 208, D. Vachha Rd., Bombay 400020.

ECUADOR : *Consul :* Kalyan Sen. *Address :* 13, Camac St., Calcutta 700017. *In Charge of Consular Affairs*, H. H. Ismail, Mistry Court, 208, D. Vachha Rd., Bombay 400020.

EGYPT (ARAB REPUBLIC OF) : *Ambassador :* Dr. Nabil E. Elaraby. *Address :* 55-57, Sunder Nagar, New Delhi 110003. *Press Bureau Office :* D-7, South Extn. II, New Delhi 110049.

Consul-General : Attia Mahmoud Attia. *Address :* Maker Tower " B ", Flat No. 41, 4th Flr., Cuffe Parade, Colaba, Bombay 400005.

EL SALVADOR : *Consul :* Karanjaksha Bonerjee. *Address :* 12, P. K. Tagore St., Calcutta 700006 & 186, Sarat Bose Rd., Calcutta 700029.

ETHIOPIA : *Ambassador :* Brig. Gen. A. Belachew. *Address :* 7/50-G, Satya Mrg., Chanakyapuri, New Delhi 110021.

FINLAND : *Ambassador :* Dr. Risto Hyvarinen. *Address :* 25, Golf Links, New Delhi 110003.

Hon. Consul : Sam F. Joshi. *Address :* Chartered Bank Bldg., M. Gandhi Rd., Bombay 400023. *Hon. Consul :* S. K. Mehera. *Address :* 1, Bishop Lefroy Rd., Calcutta 700001. *Hon. Consul :* Cyril Cayley. *Address :* 377, N.S.C. Bose Rd., Madras 600001.

FRANCE : *Ambassador :* Andre Ross. *Address :* 2, Aurangzeb Rd., New Delhi 110011. *Office of the Counsellor for Economic & Commercial Affairs :* 130, Jorbagh, New Delhi 110003. *Office of the Counsellor for Cultural, Scientific & Technical Co-operation :* K-76, Haus Khas, New Delhi 110016.

Consul-General : Michel Posselle. *Address :* Mercantile Bank Bldg., 52/60, M. Gandhi Rd., Bombay 400023. *Consul-General :* Georges Fremont. *Address :* 26, Park Mansions, Park St., Calcutta 700016. *Consul-General :* Reginald Austin. *Address :* 2, Rue de la Marine, Pondicherry 605001. *Consular Agent :* Ram Das. *Address :* 7/75, Calvethy Rd., Cochin 682002.

Commercial Counsellor & Sr. Trade Commr., 130, Jor Bagh, New Delhi 110003 ; Trade Commr., " Beacon, " Foreshore Rd., Bombay 400021 ; Trade Commr., 13, Park Mansions, Park St., Calcutta 700016.

GABON : *Ambassador :* Barthelemy Monapa-Beotsa. Resident in Paris.

GERMAN DEMOCRATIC REPUBLIC : *Ambassador :* Dr. Karl Fischer. *Address :* 2, Nyaya Marg, Chanakyapuri, New Delhi 110021.

Ag. Consul-General : Dr. Erhard Schaller. *Address :* 122, Dinshaw Vachha Rd., Bombay 400020.

GERMANY (FEDERAL REPUBLIC OF): *Ambassador :* Rolf Ramisch. *Address :* No. 6, Block 50-G, Shanti Path, Chanakyapuri, New Delhi 110021.

Consul-General : Dr. (Mrs.) Eva Lindemann. *Address :* Hoechst House, 10th Flr., Nariman Point, Bombay 400021. *Consul-General :* Werner Handke. *Address :* 1, Hastings Park Rd., Alipore, Calcutta 700027. *Consul-General :* Dr. Christian Hubener. *Address :* Mico Bldg., 22, Commander-in-Chief Rd., Egmore, Madras 600105.

GREECE : *Ambassador :* Dimitri Manolatos. *Address :* 16, Sunder Nagar, New Delhi 110024.

Consul-General : Anthony D. Mango. *Address :* Ralli House, 21, Raveline St., Bombay 400001. *Consul-General.* A. Bir. *Address :* C/o Indian Tube Co. Ltd., Tata Centre, 15th Flr., 43, Chowringhee Rd., Calcutta 700071. *Consul :*

N. N. Langrana. *Address :* 9, Harleys Rd., Kilpauk, Madras 600010.

GUATEMALA : *Ambassador accredited to India is stationed at Tokyo.*

GUINEA : *Ambassador :* Pierre Basemba Camara.

HAITI : *Consul :* Ranbir Singh. *Address :* Vellard View, Peddar Rd., Bombay 400026.

HOLY SEE : *Apostolic Pronuncio :* Vacant. *Address :* 50-C, Niti Marg, Chanakyapuri, New Delhi 110021.

HONDURAS REPUBLIC : *In Charge of Consular Affairs :* A. R. H. Ismail. *Address :* Mistry Court, 208, D. Vachha Rd., Bombay 400020.

HUNGARY : *Ambassador :* Dr. Ferenc Turi. (Also Amb. to Nepal, Burma, Sri Lanka & Singapore). *Address :* 2/50-M, Niti Mrg., Chanakyapuri, New Delhi 110021.

Commercial Counsellor & Trade Representative : Laszlo Szebeni, 30, Golf Links Area, New Delhi 110003. *Trade Commr. :* Tivadar Kapocsi, 11-A, Wodehouse Rd., Bombay 400039. *Trade Commr. :* Janos Rozsahegyi, 6/2, Gurusaday Rd., Calcutta 700019.

* ICELAND : *Hon. Consul-General :* D. K. Hirlekar. *Address :* 38, Western India House, Sir P. Mehta Rd., Bombay 400001.

INDONESIA : *Ambassador :* Vice-Admiral Syamsul Bahri. *Address :* 50-A, Chanakyapuri, New Delhi 110021.

Consul : Sirajuddin Arsad. *Address :* 17, Altamount Rd., Cumballa Hill, Bombay 400026. *Hony. Consul :* D. K. Nag. *Address :* Rajkamal Bhawan, 128, Rash Behari Avenue, Calcutta 700029.

IRAN (ISLAMIC REPUBLIC OF) : *Ambassador :* Vacant. *Address :* 5, Barakhamba Rd., New Delhi 110001. *Ag. Consul-General :* Ali Salehizadeh Monshadi. *Address :* Baldota Bhavan, 117, Maharshi Karve Rd., Bombay 400020. *Consul-General :* Azizollah Zand. *Address :* 8-2-502/1, Road No. 7, Jubilee Hills, Hyderabad 500034.

IRAQ : *Ambassador :* Fadhil Al-Azzawi. *Address :* 169-171, Jorbagh, New Delhi 110003.

Consul-General : H. Al-Aloose. *Address :* " Panorama ", 203, Walkeshwar Rd., Bombay 400006.

IRELAND : *Ambassador :* Bernard K. McHugh. *Address :* 13, Jor Bagh, New Delhi 110003.

ISRAEL : *Consul :* Y. Hasseen. *Address :* 50, Pedder Rd., Bombay 400026.

ITALY : *Ambassador :* Emilio Paolo Bassi. *Address :* 13, Golf Links, New Delhi 110003.

Consul-General : Dr. Salvatore Corsini. *Address :* 3, Raja Santosh Rd., Alipore, Calcutta 700027. *Consul-General :* Dr. Gianluigi Paquinelli. *Address :* Vaswani Mansions, D. Vachha Rd., Bombay 400020. *Hony. Consul :* G. K. Devarajulu. *Address :* " Shell House ", 58-A, Avanashi Rd., Coimbatore 641037. *Hon. Consular Agent :* T. M. Naganath. *Address :* 150/A, Mount Rd., Madras 600002. *Trade Commr. :* Dr. G. Fiorentino, Nirmal, 21st Flr., Nariman Point, Bombay 400021.

JAPAN : *Ambassador :* Eikichi Hara. *Address :* Plot Nos. 4 & 5, Block 50-G, Shanti Path, Chanakyapuri, New Delhi 110021.

Consul-General : K. Murono. *Address :* 12, Pretoria St., Calcutta 700071. *Consul-General :* Kikuo Yoshida. *Address :* 1, M. L. Dahanukar Marg, Bombay 400026. *Consul-General :* M. Ozaki. *Address :* 60, Spur Tank Rd., Madras 600031.

JORDAN : *Ambassador :* Walid S. Durra. (Also Amb. to Nepal, Thailand & Sri Lanka). *Address :* 35, Malcha Marg, Chanakyapuri, New Delhi 110021.

Consul : Fakirmohamed K. Mistry. *Address :* Mistry Court, D. Vachha Rd., Bombay 400020.

KAMPUCHEA : *Ambassador :* Dith Munty. *Address :* Embassy of Kampuchea, Hotel Claridges, 12, Aurangzeb Rd., New Delhi 110011.

KOREA (DEMOCRATIC PEOPLE'S REPUBLIC OF) : *Ambassador :* Ryu Tae Sop. *Address :* 42-44, Sundar Nagar, New Delhi 110003.

KOREA (REPUBLIC OF) : *Ambassador :* Chung-Tai Kim. *Address :* 9, Chandragupta Mrg., Chanakyapuri Extn., New Delhi 110021.

KUWAIT : *Ambassador :* Essa A. Al-Essa. *Address :* 5-A, Shantipath, Chanakyapuri, New Delhi 110021.

Consul-General : Faisal Essa Yousuf. *Address :* Vaswani Mansion, D. Vachha Rd., Bombay 400020.

LAO PEOPLE'S DEMOCRATIC REPUBLIC : *Ambassador :* Dr. Kithong Vongsay (Also Amb. to Sri Lanka, Burma & Nepal). *Address :* 20, Jor Bagh, New Delhi 110003.

LEBANON : *Ambassador :* Rabia Haidar. (Also Amb. to Nepal, Sri Lanka, Indonesia & Thailand). *Address :* 10, Sardar Patel Mrg., Chanakyapuri, New Delhi 110021.

LIBERIA : *Ambassador :* C. Ansumana Cooper. (Stationed at Tokyo).

Consul-General : P. K. Bonerjee. *Address :* 186, Sarat Bose Rd., Calcutta 700029.

LIBYA : *Ambassador :* Vacant. *Address :* 22, Golf Links, New Delhi 110003.

MEXICO : *Ambassador :* Prof. (Mrs.) Graceila De La Lama. *Address :* N-88, Panch Sheela Park, New Delhi 110017.

MONACO : *Consul-General (Hony.) :* R. Chattaram. *Address :* 114, Sunder Nagar, New Delhi 110003.

MONGOLIAN PEOPLE'S REPUBLIC : *Ambassador :* Bayaryn Jargalsaikhan. (Also Amb. to Nepal, Sri Lanka, and Bangladesh). *Address :* 34, Golf Links, New Delhi 110003.

MOROCCO : *Ambassador :* Vacant. *Address :* 33, Golf Links, New Delhi 110003.

NEPAL : *Ambassador :* Vedanand Jha. *Address :* Barakhamba Rd., New Delhi 110001.

Consul-General : Dr. Madhusudan P. Lohani. *Address :* 19, Woodlands, Sterndale Rd., Alipore, Calcutta 700027.

NETHERLANDS : *Ambassador :* Hendricus Leopold. (Also Amb. to Nepal, Sri Lanka and Maldives). *Address :* 6/50F, Shanti Path, Chanakyapuri, New Delhi 110021. (Embassy looks after the diplomatic affairs of the Grand Duchy of Luxembourg).

Consul-General : J. W. Jansen. *Address :* 3rd Flr., ''International'', 16, Maharshi Karve Rd., Bombay 400020. *Consul :* Vacant. *Address :* 18-A, Brabourne Rd., Calcutta 700001. *Consul :* A. Steward. *Address :* Chordia Mansion, 150/A-2, Anna Salai, Madras 600002.

---

* Peter Thorsteinsson is the first non-resident Ambassador of Iceland to India.

NICARAGUA: *Hon. Consul:* S. J. Rege. *Address:* 8/83, Poornand Saraswati Co-op. Housing Society, Banganga Rd., Walkeshwar, Bombay 400026.

NORWAY: *Ambassador:* Per Anders Jahn Gulowsen. (Also Amb. to Sri Lanka, Bangladesh & Nepal). *Address:* Kautilya Marg, Chanakyapuri, New Delhi 110021.

Consul-General: Carsten Gylseth. *Address:* Nowroji Mansion, 31, Nathalal Parekh Mrg., Bombay 400039. *Consul:* Svein Elstad. *Address:* 18G Park St., Calcutta 700016. *Consul:* P. J. Weavers. *Address:* Harrissons & Crossfield Ltd., P. Box 502, Cochin 682003. *Consul:* C. D. Gopinath. *Address:* Parry House, 43, Moore St., Madras 600001.

OMAN (SULTANATE OF): *Ambassador:* Ahmed Hamould Al-Maamiry. *Address:* 16, Palam Mrg., Vasant Vihar, New Delhi 110057.

Consul-General: Rashid Nasir Al-Lakmi. *Address:* 21, Jolly Maker Apartments III, Backbay Reclamation, Cuffe Parade, Bombay 400005.

PAKISTAN: *Ambassador:* Abdul Sattar. *Address:* 2/50-G, Shantipath, Chanakyapuri, New Delhi 110021.

PANAMA: *Ambassador:* Miss Irma Ritter.

Consul-General: Vacant. *Address:* C/o South Asia Shipping Co. Ltd., Himalaya House, Dr. D. N. Rd., Bombay 400001.

PARAGUAY: *Ambassador accredited to India is stationed at Tokyo.*

PERU: *Ambassador:* Dr. Juan Vargas Quintanilla. *Address:* 3/5, Shantiniketan, 1st Flr., New Delhi 110021.

Incharge of Consular Affairs in New Delhi and Bombay: Pablo C. Ontaneda. Embassy of Peru, 3/5, Shantiniketan, New Delhi 110021. Ardeshir B. K. Dubash (Hon. Consul), 6, K. Dubash Mrg., Bombay 400023.

PHILIPPINES: *Ambassador:* Vacant. (Also Amb. to Nepal & Afghanistan). *Address:* 50-N, Nyaya Marg, Chanakyapuri, New Delhi 110021.

Hon. Consul-General: K. R. Patel. *Address:* 10, Lall Bazar St., Calcutta 700001. *Hon. Consul-General:* M. A. Chidambaram. *Address:* SPIC Bldg., 38-39, Mount Rd., Madras 600032. *Hon. Consul-General:* A. V. Birla. *Address:* 159, Churchgate Reclamation, Bombay 400020.

POLAND: *Ambassador:* Ryszard Fijalkowski. *Address:* 50-M, Shantipath, Chanakyapuri, New Delhi 110021.

Consul: Henryk Nawrocki. *Address:* Manavi Apartments, 36, Ridge Rd., Malabar Hill, Bombay 400006. *Consul:* Alojzy Melich. *Address:* 3B, Albert Rd., Calcutta 700017.

Commercial Counsellor: Slawian Krzywinski. *Address:* Polish Commercial Counsellor's Office, 50-M, Shantipath, Chanakyapuri, New Delhi 110021.

PORTUGAL: *Ambassador:* Dr. Joao Eduardo Monteverde Pereira Bastos. *Address:* A-24, West End Colony, New Delhi 110021.

Hon. Consul: Surendra Dempo. *Address:* Moti Mahal, 3rd Flr., 195, J. Tata Rd., Bombay 400020.

QATAR: *Ambassador:* Dr. Hassan Ali Hussain al-Nimah. *Address:* A-3, West End Colony, New Delhi 110021.

ROMANIA (SOCIALIST REPUBLIC OF): *Ambassador:* Dr. Dumitru Niculescu. *Address:* 9, Tees January Marg, New Delhi 110011.

Trade Representation of Socialist Republic of Romania in India, 17, Kautilya Mrg., New Delhi 110021; Steelcrete House, Dinshaw Vachha Rd., Bombay 400020; Nilhat House, 11, Rajendra Nath Mukherjee Rd., Calcutta 700001; 27, Khader Nawaz Khan Rd., Madras 600006.

SAN MARINO: *Consul-General (Hony.):* Gr. Uff. Bhai Mohan Singh. *Address:* 15, Aurangzeb Rd., New Delhi 110011.

SAUDI ARABIA: *Ambassador:* Saleh A. Al-Sugair. *Address:* 1, Ring Rd., Kilokri, New Delhi 110014.

Consulate: Maker Tower F., 4th Flr., Cuffe Parade, Colaba, Bombay 400005.

SOMALI DEMOCRATIC REPUBLIC: *Ambassador:* Abdullahi Egal Nur. *Address:* B-23, Greater Kailash 1, New Delhi 110048.

SPAIN: *Ambassador:* Vacant. *Address:* 12, Prithviraj Rd., New Delhi 110011.

Vice-Consul: Mrs. Kulsum Ardeshir Dubash. *Address:* "Ador House", 6, K. Dubash Mrg., Bombay 400023. *Vice-Consul:* Avijit Mazumdar. *Address:* P.O. Box 323, Calcutta 700024. *Vice-Consul:* Chevalier George P. J. Lobo. *Address:* "Lawdale", 5, Nimmo Rd., San Thome, Mylapore, Madras 600004.

SUDAN: *Ambassador:* Ibrahim Taha Ayoub. (Also Amb. to Sri Lanka, Indonesia & Malaysia). *Address:* 6, Jor Bagh, New Delhi 110003.

Ag. Consul-General: El Mugira Ali Omer. *Address:* Flat No. 5, Mistry Court, D. Vachha Rd., Bombay 400020.

SWEDEN: *Ambassador:* Lennart Finnmark. (Also Ambassador to Nepal and Sri Lanka). *Address:* Nyaya Marg, Chanakyapuri, New Delhi 110021. *Development Co-opn. Office:* A10/7, Vasant Vihar, New Delhi 110057. *Commercial Section:* Swedish Embassy, Chanakyapuri, New Delhi 110021.

Consul-General: Akbar Hydari. *Consul:* A. F. Mody. *Address:* Indian Mercantile Chambers, Nicol Rd., B. Estate, Bombay 400038. *Consul:* Vacant. *Address:* 18-G, Park St., Calcutta 700016. *Consul:* G. Rundberg. *Address:* 71, First Main Rd., Raja Annamalaipuram, Madras 600028.

SWITZERLAND: *Ambassador:* Peter S. Erni. (Also Amb. to Nepal & Bangladesh). *Address:* Nyaya Marg, Chanakyapuri, New Delhi 110021.

Consul-General: Vacant. *Address:* Manek Mahal, 90, Veer Nariman Rd., Bombay 400020.

SYRIAN ARAB REPUBLIC: *Ambassador:* Mohamad Khodor. *Address:* 28, Vasant Mrg., Vasant Vihar, New Delhi 110057.

Consul-General: Sobhi Elejel. *Address:* Cambatta Bldg., 3rd Flr., J. Tata Rd., Bombay 400020.

THAILAND: *Ambassador:* Somboon Rochanakorn. *Address:* 56-N, Nyaya Marg, Chanakyapuri, New Delhi 110021.

Consul-General: Chuan Sirikit. *Address:* 18-B, Mandeville Gardens, Ballygunge, Calcutta 700019; *Consul-General:* P. Sunthraraks. *Address:* Krishnabad, 43, Bhulabhai Desai Rd., Bombay 400026.

TUNISIA: *Ambassador:* Abderraouf Ounaies. *Address:* 9, Palam Mrg., Vasant Vihar, New Delhi 110057.

TURKEY: *Ambassador :* Ali Hikmet Alp. *Address :* Plot No. 4, Block "N-50", Chanakyapuri, New Delhi 110021.

Hon. Consul-General : Dr. Shiraz Mistry. *Address :* 208, D. Vachha Rd., Bombay 400020. *Hon. Consul-General:* Mrs. Gulden Bose. *Address :* 2, Nazarali Lane, Ballygunge, Calcutta 700019.

U.S.S.R.: *Ambassador :* Yuli Mikhailovich Vorontsov. *Address :* Shanti Path, Chanakyapuri, New Delhi 110021.

Consul-General : Alexei G. Kashirin. *Address :* "Palm Beach", 42, L. Jagmohandas Mrg., Bombay 400036. *Consul-General :* Y. Sepelev. *Address :* 31, Shakespeare Sarani, Calcutta 700016. *Consul-General :* M. Belkov. *Address :* 9, Santhome High Rd., Madras 600004.

Trade Representation of U.S.S.R. in India, Plots Nos. 6 & 7, Block 50-E, Nyaya Mrg., Chanakyapuri, New Delhi 110021; Felan, Alipur Avenue 7, Calcutta 700027; "Avantika", 46, Dr. G. Deshmukh Mrg., Bombay 400026; 50-A, St. Mary's Rd., Alwarpet, Madras 600001. *Showrooms of Soviet Books and Periodicals :* G-56, Connaught Place, New Delhi 110001; 75/C, Park Street, Calcutta 700016; Vasundhara House, Bhulabhai Desai Rd., Bombay 400026.

UNITED ARAB EMIRATES: *Ambassador :* Abdul Aziz Bin Nasser Al-Owais. *Address:* A-7, West End, Rao Tula Ram Mrg., New Delhi 110021.

Consul-General : Ebrahim Jawad Al Ridha. *Address :* Bungalow No. 7, Jolly Maker Apartments, Cuffe Parade, Colaba, Bombay 400005.

UNITED STATES OF AMERICA: *Ambassador :* Harry G. Barnes. *Address:* Shanti Path, Chanakyapuri, New Delhi 110021.

Consul-General: J. Bruce Amstutz. *Address :* "Lincoln House", 78, B. Desai Rd., Bombay 400026. *Consul-General :* Raymond L. Perkins Jr. *Address :* 5/1, Ho Chi Minh Sarani, Calcutta 700071. *Consul-General :* Douglas M. Cochran. *Address :* Mount Rd., Madras 600006.

UPPER VOLTA: *Consul-General :* P. K. Bonerjee. *Address :* 186, Sarat Bose Rd., Calcutta 700029.

VENEZUELA: *Ambassador :* Tulio Cardozo Faria. *Address :* N-114, Panchshila Park, New Delhi 110017.

VIETNAM (SOCIALIST REPUBLIC OF VIETNAM): *Ambassador :* Nguyan Van Sinh. *Address :* 35, Prithviraj Rd., New Delhi 110011.

YEMEN (PEOPLE'S DEMOCRATIC REPUBLIC OF): *Charge d'Affaires ad interim :* Abubaker Saeed Ba-Abbad. *Address :* B-80, Greater Kailash I, New Delhi 110048.

Consul : Fadhle Abdulla Awadh. *Address:* 22, Hassan Mahal, Dalamal Parks, Cuffe Parade, Bombay 400005.

YUGOSLAVIA (SOCIALIST FEDERAL REPUBLIC OF): *Ambassador :* Danilo Vilanovic. *Address :* 3/50G, Niti Mrg., Chanakyapuri, New Delhi 110021.

Consul-General, Milenko Ristic. *Address :* Vaswani Mansions, 120/4, D. Vachha Rd., Bombay 400020. *Consul-General :* Vacant. *Address :* 6, Ballygunge Park Rd., Calcutta 700019.

Trade Commr. : Miran Heric, Vaswani Mansions, 120/4, D. Vachha Rd., Bombay 400020. Madras Office, 9. Venus Colony, Madras 600018.

ZAIRE REPUBLIC: *Ambassador :* Bokingi Embeyolo. *Address :* 160, Jorbagh, New Delhi 110003.

HIGH COMMISSIONS

AUSTRALIA: *High Commissioner :* Gordon Upton. *Address :* 1/50G, Shanti Path, Chanakyapuri, New Delhi 110021.

Commercial Counsellor, P. B. Horne, 1/50G, Shantipath, Chanakyapuri, New Delhi 110021.

Consul-General : Vacant. *Address :* 16th Flr., 'E' Block, Maker Towers, Cuffe Parade, Colaba, Bombay 400005.

BANGLADESH: *High Commissioner :* Abul Ehsan (Also High Commr. to Mauritius). *Address:* 56, Ring Rd., Lajpatnagar, New Delhi 110024.

BRITAIN: *High Commissioner :* Sir John Thomson, K.C.M.G. *Address :* Shanti Path, Chanakyapuri, New Delhi 110021. *British Council Divn. :* 21, Jorbagh, New Delhi 110003. *Deputy High Commr. :* A. V. Hayday. *Address* . 1, Ho Chi Minh Sarani, Calcutta 700016. *Deputy High Commr. :* Colin Imray. *Address :* Mercantile Bank Bldg., Mahatma Gandhi Rd., Bombay 400023. *Deputy High Commr. :* Arthur Marshall. *Address:* 24, Anderson Rd., Madras 600006.

T. C. Wood, *Counsellor* (*Economic & Commercial*), British High Commn., Shantipath, Chanakyapuri, New Delhi 110021. First Secretary (Comml.), Dy. High Commn., 1, Ho Chi Minh Sarani, Calcutta 700016. First Secretary (Comml.), Dy. High Commn., Mercantile Bank Bldg., M. Gandhi Rd., Bombay 400023. A. S. Marshall, Second Secretary (Comml.), Dy. High Commn., 24, Anderson Rd., Madras 600006.

CANADA: *High Commissioner :* J. G. Hadwen. (Also Amb. to Nepal). *Address :* 7/8, Shantipath, Chanakyapuri, New Delhi 110021.

Counsellor (Commercial), Canadian High Commission, Shantipath, Chanakyapuri, New Delhi 110021.

CYPRUS: *High Commissioner :* Andros A. Nicolaides. *Address:* 52, Jor Bagh, New Delhi 110003.

GHANA: *High Commissioner :* Dr. S. K. Ankama. *Address :* A-42, Vasant Mrg., Vasant Vihar, New Delhi 110057.

GUYANA: *High Commissioner :* Edward Victor Luckho. (Also High Commr. to Sri Lanka). *Address :* F-6/4, Vasant Vihar, New Delhi 110057.

KENYA: *High Commissioner :* P. G. Gitonga. (Also High Commr. to Sri Lanka). *Address :* E-66, Vasant Mrg., Vasant Vihar, New Delhi 110057.

MALAYSIA: *High Commissioner :* Mon Jamaluddin. *Address :* 50-M, Satya Mrg., Chanakyapuri, New Delhi 110021. *Asstt. High Commr. :* Marzuki Mohammad Noor. *Address :* 110/I, Mount Rd., Teynampet, Madras 600018.

Hon.-Consul: Dr. J. N. Banerjee. *Address :* Sandoz (India) Ltd., Sandoz House, Dr. A. Besant Rd., Bombay 400018.

MALTA: *High Commissioner :* Alfred Falzon.

MAURITIUS: *High Commissioner :* Rajmohunsing Jomadar. *Address :* 5, Kautilya Marg, Chanakyapuri, New Delhi 110021.

Hon. Consul-General (Hon.) : A. S. Kably. *Address :* Corinthian, Near Strand Cinema, Colaba, Bombay 400005.

*NEW ZEALAND : *High Commissioner :* D. G. Harper (Also High Commr. to Bangladesh & Amb. to Nepal). *Address :* 39, Golf Links, New Delhi 110003.

NIGERIA : *High Commissioner :* A. O. Asiwaju. (Also Amb. to Thailand & Burma and High Commr. to Bangladesh & Sri Lanka). *Address :* 30, Sardar Patel Mrg., New Delhi 110021.

SINGAPORE : *High Commissioner :* Tuan Haji Ya'acob Bin [illegible]ohamed. *Address :* B-70, Greater Kailash I, New Delhi 110048.

SRI LANKA (DEMOCRATIC SOCIALIST REPUBLIC OF) : *High Commissioner :* T. B. Panabokke. *Address :* 27, Kautilya Marg, Chanakyapuri, New Delhi 110021. *Dy. High Commissioner*, K. N. Samarasinghe. *Address :* 16, Shafee Mohd. Rd., Rutland Gate, Madras 600006.

Trade Commissioner : Sri Lanka House, 34, Homi Mody St., Bombay 400023

TANZANIA : *High Commissioner :* Muhammed Ali Foum. *Address :* 27, Golf Links, New Delhi 110003.

TRINIDAD & TOBAGO: *High Commissioner :* Nathan Hazel. *Address :* 131, Jor Bagh, New Delhi 110003.

UGANDA : *High Commissioner :* Gurdial Singh. *Address :* 19A, Rajdoot Mrg., Chanakyapuri, New Delhi 110021.

ZAMBIA : *High Commissioner :* A. C. Chalikulima. *Address :* 14, Jorbagh, New Delhi 110003.

U.N. & OTHER BODIES IN INDIA

UNITED NATIONS, 55, Lodi Estate, New Delhi 110003.

United Nations Development Programme (UNDP)

It is the world's largest multi-national source of pre-investment assistance and technical co-operation. It makes available to the developing nations the combined knowledge, expertise & experience of the United Nations family of agencies. *Resident Rep. :* Jan P. Huyser.

United Nations Information Centre, 55, Lodi Estate, New Delhi 110003.

The Centre maintains a close working relationship with national and local information media, institutions, govtl. information services & non-govtl. organisations on matters relating to the dissemination of information about the U.N. and the specialized agencies.

U. N. Children's Fund (UNICEF)

Regnl. Office for Afghanistan, Sri Lanka, India, Bhutan, Maldives, Nepal & Mongolia, UNICEF House, 73-74, Lodi Estate, New Delhi 110003.

Zone Offices : Mid-North India Office, L-18, Green Park, New Delhi 110016 ; *East India Office*, 26, Lee Rd., Calcutta 700020 ; *South India Office*, Ex-Legislators' Hostel Annexe, Government House Estate, Mount Rd., Madras 600002 ; *South East India Office*, 16, Uma Nagar, Begumpet, Hyderabad 500016 : *Upper India Office*, 3, Fawn Brake Ave., G. H. Sarojini Naidu Mrg., Lucknow 226001 ; *West India Office*, Ravindra Mansion, D. Vachha Rd., Bombay 400020.

UNICEF is currently assisting programmes in the fields of child health, nutrition, edn. & welfare in 111 countries by putting voluntary contributions from 125 governments, donations from the public-at-large and the sale proceeds of UNICEF greeting cards to practical use.

UNICEF also provides emergency and rehabilitation assistance to countries as and when need arises.

UNICEF's primary concern in India is the strengthening of national services for children and women through long-range programmes covering child nutrition, health, water supply and environmental sanitation, food and village technology ; edn. & integrated area development programmes. *Regional Dir. of South Central Asia :* David P. Haxton.

International Bank for Reconstruction and Development (World Bank): 55, Lodi Estate, New Delhi 110003.

International Committee of the Red Cross, Indian Red Cross Society Bldg., 1, Red Cross Rd., New Delhi 110001.

International Labour Organisation (Area Office), 7, Sardar Patel Marg, New Delhi 110021. Estd. in 1928. Covers India, Sri Lanka, Bhutan, Nepal & the Maldive Islands. The ILO maintains contacts and relations with Govtl. agencies, organisations and insttns. in the regn. and workers' and employers' organisations. It assists in the promotion of Internal. Labour Standards. It explores the needs for technical assistance and assists in the preparation of projects within the ILO's fields of competency and in their implementation. It collects and disseminates information that is of interest to the regn. and/or to Hqrs. and relevant to ILO activities. The office also prospects candidates for ILO assignments abroad. It has a good reference library and undertakes the sale of ILO publications. *Director :* D. S. Raj.

United Nations Educational, Scientific and Cultural Organisation (UNESCO) : Regnl. Office for Science & Technology for South & Central Asia, and Office of the UNESCO Rep. to India, 17, Jor Bagh, New Delhi 110003. *Dir. & UNESCO Rep.*, Dr. V. G. Podoinitsin.

Food & Agriculture Organization of the United Nations (FAO): 55, Lodi Estate, New Delhi 110003. *Rep.*, Dr. Abdul Sahib Alwan.

World Health Organisation, Regnl. Office for South-East Asia : World Health House, Indraprastha Estate, Ring Rd., New Delhi 110002. *Regnl. Dir.*, Dr. U. Ko Ko.

U.N. Military Observers Group in India & Pakistan, I/AB, Purana Qila Rd., New Delhi 110001.

Afro-Asian Rural Reconstruction Organisation, C/117-118, Defence Colony, New Delhi 110024.

To restructure the economy of the rural masses in Africa and Asia, and to explore collectively opportunities for co-ordination of efforts for promoting welfare and eradication of thirst, hunger, disease and poverty amongst the rural people. Activities include launching of Integrated Rural Devpt. Pilot Projects ; organising Intnl. seminars at AARRO's own trg. centres — RECA (Japan) and AATC (Egypt) and in other member-countries ; award of individual fellowships for trg. at SIET Instt. (India), EICA (Egypt), CITC (R.O. China) etc. *Members :* 12 African & 15 Asian countries & the Central Union of Agricultural Cooperatives, Japan. *Pres. :* Arab Republic of Egypt ; *Vice-Press. :* Republic of Korea, State of Mauritius ; *Secy. Genl. :* Dr. B. S. Minhas ; *Dir. :* M. R. Kaushal. *Pubn. :* " Rural Reconstruction ".

Asian-African Legal Consultative Committee, 27, Ring Rd., Lajpatnagar IV, New Delhi 110024.

League of Arab States Mission, 62, Golf Links, New Delhi 110003.

Palestine Liberation Organisation, 3/22, Shantiniketan, New Delhi 110021.

---

* Wound up.

WHO'S WHO IN INDIA

ABDULLAH, Sheikh Mohamed, M.Sc. (Aligarh Univ.), Chief Minister, Jammu & Kashmir State, since Feb. 1975. *b.* Dec. 5, 1905. Spearheaded movement against the Maharaja and suffered imprisonment ; Pres., Muslim Confce., 1932 ; took leading part in converting Muslim Confce. into National Confce.; launched 'Quit Kashmir' Movement ; arrested and tried for sedition, 1946 ; released, 1947 ; Pres., All India States People's Confce., 1947 ; appointed Head of Admn. in the State, 1947–48 ; P.M., J. & K. State, 1948–53 ; arrested again and released, Jan., 1958 ; rearrested Apr., 1958 ; externed from Kashmir, Jan., 1971 ; allowed to re-enter State, June, 1972. *Address :* Secretariat, Srinagar.

ABRAHAM, Kochakkan Chacko, B.A., L.T., Governor of Andhra Pradesh, since Aug. 14, 1978. *b.* Jan. 20, 1899. Elected to T.C. Assembly, 1954 ; Kerala Assembly, 1957, 1960, 1965 ; KPCC Pres., 1964-67 ; Mem., A.I.C.C. Wkg. Cttee. (1967–69) ; remained with Congress (O), after 1969 split ; Mem., State Janata Executive. *Address :* Raj Bhavan, Hyderabad 500041.

ADVANI, Lal Kishinchand, Minister for Information & Broadcasting, Govt. of India, Mar. 26, 1977 to July 1979. *b.* Nov. 8, 1927. Mem., R.S.S., since 1942 ; Jt. Secy., Rajasthan State Jana Sangh, 1952–57 ; Secy., Delhi State Jana Sangh, 1958–63 ; Vice-Pres., 1965–67 ; Pres., 1970–72 ; Pres., Bharatiya Jana Sangh, 1973–77 ; Chairman, Delhi Metropolitan Council, April 1967–April 1970 ; elected to Rajya Sabha, April 1970 and re-elected from Gujarat, 1976 ; Leader, Jana Sangh Group in Rajya Sabha, since April 1974 ; Elected Gen. Secy., Janata Party when it was formed in Jan., 1977 ; Leader of Janata group in Rajya Sabha, 1977–80 ; Gen. Secy., Bharatiya Janata Party and Leader, B.J.P. group in Rajya Sabha, since April, 1980. *Address :* C–1/6, Pandara Park, New Delhi 110003.

AL-ESSA, H.E. Mr. Essa Abdul Rehman, Ambassador of Kuwait to India, since 1968. *b.* 1930. Min. of Finance & Kuwait Currency Board, 1953–62 ; Mem. : Kuwait Embassy, Washington, 1962–65 ; Kuwait delegation to U.N. & also Consul-Genl. in Washington, 1963 ; Charge d' Affaires, Algiers, 1965–66 ; Tunisia, 1966–68. *Address :* Embassy of the State of Kuwait, 5-A, Shantipath, Chanakyapuri, New Delhi 110021.

ALI, Mr. Justice Syed Murtaza Fazl, B.A. (Hons.), B.L., Judge, Supreme Court of India, since April, 1975. *b.* Dec. 20, 1920. Advocate, Patna High Court, Nov. 7, 1944, and Federal Court, Dec. 1949 ; worked on the panel of lawyers for the State of Bihar in the Patna High Court from 1950 ; Judge, Jammu and Kashmir High Court, 1958–67 ; Chief Justice, Jammu & Kashmir High Court, Dec. 1967–Mar. 1975 ; Chmn., Unlawful Activities (Prevention) Tribunal, 1971 ; Mem., Panel of Jurors for Nehru Award, 1972–75 ; Chairman, Adv. Bd. constituted by J. & K. Govt. under MISA ; Vice-Pres., Amar Singh Club, Srinagar. *Address :* Supreme Court of India, Tilak Marg, New Delhi 110001.

AMIN, Nanubhai Bhailalbhai, S.B. (Elec. Engg.), MIT-USA, M.S. (Elec. Engg.), Cornell-USA. Industrialist ; Chmn. & Mg. Dir.: Jyoti Limited, Vadodara ; Chmn.: Gujarat Energy Devpt. Agency. *b.* Oct. 2, 1919. Ex-Mem.: Society of Council for Scientific and Industrial Research, Govt. of India ; Adv. Cttee. on Renewable sources of energy of World Bank ; Semi-Govt. & Institutional Adv. Cttees.; Leader, Indian Industrialists' Goodwill Delegation to W. Asian countries ; Pres.: Central Gujarat Chamber of Commerce, Vadodara ; Indian Council of Agri. Dvpt. (Gujarat) ; Citizens' Blood Donation Socy., Vadodara ; actively associated with M.S. Univ. of Vadodara & Sardar Patel Univ., Vallabh Vidyanagar ; leading philanthropist interested in propagation of edn. & Community Welfare. *Address :* Jyoti Ltd., P.O. Chemical Industries, Vadodara 390003.

AMIN, Ramanbhai Bhailalbhai, Industrialist. *b.* May 19, 1913. Chmn.: Alembic Chem. Works Co. Ltd., Alembic Glass Industries Ltd., Shreno Ltd., Neomer Ltd., Aavaran Ltd., Dharak Ltd. ; Dir.: Gujarat State Fertilizers Co. Ltd., Gujarat Narmada Valley Fertilizer Co. Ltd., Paushak Ltd., Central Pulp Mills Ltd., Lakhanpal National Ltd. ; Ex-Pres., F.I.C.C. & I.; Central Gujarat Chamber of Commerce ; Fedn. of Gujarat Mills and Industries ; American Management Assn., etc. *Address :* Alembic Chemical Works Co. Ltd., Alembic Rd., Vadodara 390003.

ANAND, Dev, B.A. (Hons.), Motion Picture Actor-Producer-Director. *b.* Sept. 26, 1923. Leading role in Prabhat's *Hum Ek Hain* (1946) ; Important Films : *Ziddi* (1948) ; *Baazi* (1951) ; *Taxi Driver* (1954) ; *Munimji* (Film Critics' Best Actor Award, 1955) ; *Kala Pani* ("Filmfare" Best Actor Award, 1958) ; *Hum Dono* (1961) ; *Guide* (Multi-award winner , 1965) ; *Johny Mera Naam* (1970) ; *Tere Mere Sapne* (1971) ; *Amir Garib* (1974) ; *Warrant* (1976) ; completed more than 90 films ; produced about 20 films under the banner of *Navketan* ; directed *Prem Pujari, Hare Rama Hare Krishna, Heera Panna* and *Ishk Ishk Ishk, Des Pardes, Loot Maar. Address :* 2, Iris Park, Juhu, Bombay 400054.

ANAND, Mulk Raj, B.A. (Hons.), Ph.D., Padma Bhushan (1967). Author, Novelist and Critic. *b.* Dec. 12, 1905. Sometime Tagore Prof. of Literature, Punjab Univ., Chandigarh, 1973–74 ; author of various novels ; Fellow, Lalit Kala Akademi. *Address :* 25, Cuffe Parade, Colaba, Bombay 400005.

ANNAMALAI, Sathappa Annamalai Palaniappa, M.A., B.L., Editor, *Kumudam* (Tamil Weekly). *b.* Dec. 12, 1924. *Address :* 151, Purasawalkam High Road, P.B. No. 1008, Madras 600010.

ANSARI, KHALID, B.A. (Eng. Litt.), M.A. (Pol. Sci.), LL.B. (Bombay Univ.), M.A. (Journalism, Advtg. & Mass Communication) Stanford Univ., Calif.; Mg. Dir., The Inquilab Publications Pvt. Ltd. ; publishers of : *Mid-Day, Sunday Mid-Day, Sportsweek, Sportsweek's World of Cricket, Sportsweek Annual, The Inquilab Daily* and *Kahkashan* (Urdu Film Fortnightly) ; Exec. Mem., All India Council of Sports, N. Delhi ; V. Chmn., Maharashtra Press Con. Cttee. ; Trustee, Indo-Arab Students Welfare League ; Pres., Sports Journalists Assn. of Bombay ; Bombay Urdu Newspapers Assn., All India Sports Journalists' Assn. ; Mem. : Central Board of Film Censors, Maharashtra State Sports Council. *Address : Sportsweek*, 156-D, J. Dadajee Road, Bombay 400034.

APTE, Madhav Laxman, B.A., Industrialist. *b.* Oct. 5, 1932. Mg. Dir., Phaltan Sugar Works Ltd., Laxmi Vishnu Textile Mills Ltd.; Dir.: Thomas Cook (India) Ltd., May & Baker (India) Ltd., Hico Products Ltd., Hindustan Sugar Mills Ltd., Indian Dyestuffs Inds. Ltd., Voltas Ltd., Syarikat Gula N.S. (Sdn.), Berhad, Malaysia, etc.; Ex-Pres.: Bombay Chamber of Commerce and Industry, Deccan Sugar Factories Assocn., Indian Sugar Mills Assocn., Maharashtra Chamber of Commerce, Maharashtra Economic Devpt. Council, etc. ; Ex Vice-Pres., Bombay Chamber of Commerce and Industry (1977–78) ; played against M.C.C., 1951 ; First Test against Pakistan, 1952 ; West, 1953 ; played Ranji Trophy Tournaments for a number of years. *Address :* 199, Churchgate Reclamation, Bombay 400020.

ARUNACHALAM, A. M. M., Industrialist. *b.* March 1, 1918. Chmn.: Carborundum Universal Ltd., Bundy Tubing of India Ltd., Tube Investments of India Ltd.; Dy. Chmn.: Ashok Leyland Ltd. ; Dir.: Univ. Cables Ltd., Union Carbide India Ltd., Oriental Carbons Ltd., Alkali & Chemical Corpn. of India Ltd., Bhadrachalam Paperboards Ltd., Facit Asia Ltd., Cholamandalam Investment & Finance Co. Ltd., Deccan Fibre Glass Ltd. ; Ex-Chmn.: Madras Chamber of Comm. & Ind., 1969, Madras Productivity Council, 1963–64, Tamil Nadu Indl. Investment Corpn. Ltd., 1971–73, Cycle Manufacturers' Assocn., 1967 ; Bd. of Governors, I.I.T., Madras ; Hon. Consul-General for Japan in Madras, 1962–65 ; Leader : Indian delegation to the 23rd Cong. of the Fedn. of Commonwealth Chambers of Commerce, London, 1968. *Address :* ' The Laurels ', 4, Chittaranjan Rd., Madras 600018.

ARUNACHALAM, M. V., B.Sc. (Hons.) (Madras), Industrialist. *b.* July 1927. Mg. Dir.: Carborundum Universal Ltd., Tube Investments of India Ltd.; Dir.: Straw Products Ltd., Shriram Fibres Ltd., Industrial Credit & Investment Corpn. of India Ltd., Hindustan Motors Ltd., Reserve Bank of India (Central Board & Local Board); Pres.: Madras Instt. of Management, Southern India Chamber of Commerce, 1964, F.I.C.C. & I., 1976–77 ; Chmn.: Madras Fertilizers Ltd., 1977–78. *Address :* 1, Bishops Garden, off Greenways Road, Madras 600028.

ASSUMPCAO DE ARAUJO, H.E. Mr. Roberto Luiz, Ambassador of Brazil in India, since 1972 and Sri Lanka, since 1973 and Kathmandu, since 1977. Joined Foreign Service and worked in various capacities in Brazilian Embassies in Paris and Vienna ; Consul in Milan, 1959–61 ; Minister Counsellor, Embassy in Paris, 1961–62 ; Charge d'Affairs, Moscow, 1962 ; Amb. to Argel, 1963–66 and to Prague, 1966–68 ; Amb. to Damascus and Baghdad, 1969–72. *Address :* Embassy of Brazil, 8, Aurangzeb Road, New Delhi 110011.

BAHARUL ISLAM, Mr. Justice, B.A. (Hons.) (Cal.), M.A., LL.B. (Alig.), Judge, Supreme Court of India, since Dec. 4, 1980. *b.* Mar. 1. 1918. Practised in the Assam High Court and Supreme Court ; was in the Socialist Party and attended the Asian Socialist Confce., Rangoon, Jan. 1963 ; joined Indian Nat. Congress, 1956 ; Mem., Rajya Sabha, 1962 to Jan. 1972 ; Judge, Assam High Court, 1972 ; retired as Chief Justice. *Address :* 10, Tughlak Rd., New Delhi 110011.

BAHRI, H.E. Vice-Admiral Syamsul, Ambassador of the Republic of Indonesia to India. *b.* July 5, 1926. Commander, National Strategic Command ; Mem., Peoples' Council of Indonesia ; foreign assignments to Italy, Malaysia, U.S.A., Australia, U.S.S.R., etc.; Amb. to Pakistan, 1971. *Address :* Embassy of the Republic of Indonesia, 50-A, Chanakyapuri, New Delhi 110021.

BAJAJ, Ramkrishna, Chmn. & Mg. Dir., Bajaj International Pvt. Ltd. *b.* Sept. 22, 1923. Chmn. : Hindustan Sugar Mills Ltd., Hercules Hoists Ltd., etc. ; Vice-Chmn. : Mukand Iron & Steel Works Ltd. ; Dir., Andhra Valley & Power Supply Co. Ltd., etc.; Mem.: Exec. Cttee., F.I.C.C.I., Council for Fair Business Practices ; Pres., Maharashtra Chamber of Commerce, 1964–68 & Fair Trade Practices Assn. (1969–71) ; Chmn. : Development Corpn. of Vidarbha Ltd. (1972–76) : Indian National Cttee. of Intnl. Chamber of Comm. (1978–79) ; Indian Merchants Chamber (1979–80). *Address :* Bajaj Bhawan, 226, Nariman Point, Bombay 400021.

BALA MURALI KRISHNA, Mangalampalli, Kalaprapoorna by Andhra Univ. (1974), Gana Sudhakara, Gayaka Sikhamani, Gandharva Kalanidhi, Hon. Doctorate by J. Nehru Tech. Univ., Hyderabad, " Best Male Playback Singer " Award (Govt. of India), etc., Musician. *b.* July 6, 1930. Music Producer, A.I.R., Vijayawada, Hyderabad & Madras ; Principal, Govt. Coll., Vijayawada ; composed Telugu, Sanskrit & Tamil songs with unique style & popularised neglected ragas ; also proficient in violin, mridangam & kanjeera ; stage & screen actor ; play-back singer ; Asthana Vidwan, Tirupathi Devasthanam ; Vice-Pres., Guild of Karnatak Musicians ; Mem., Music Academy, Madras. *Address :* Mahati, 11, Kanakasringar, Madras 600086.

BALAKRISHNAN NAIR, Prof. N., B.Sc. (Hons.), M.A., Ph.D., D.Sc., F.Z.S., F.Z.S.I., F.A.Sc., F.N.A. ; Caithness Gold Medal, Univ. of Madras, 1949 ; Royal Socy. & Nuffield Foundn. Bursary, 1967 ; S. S. Bhatnagar Award, 1971 ; All India Congress of Zoology Gold Medal, 1980 ; Fellow, Indian National Science Academy, 1974 ; Indian Academy of Science, 1975 ; Visiting Professor, Institute Oceanografico, Venezuela, 1973–75 ; Fellow, Zoological Socy. of Lond. and India ; UNESCO Fellowship for advanced studies in Norway, 1957 ; Dean, Faculty of Sci., Univ. of Kerala ; Mem. Sec.: State Cttee. of Sci. & Tech.; National Fellow, U.G.C.; Prof. of Marine Biology & Fisheries and Head, Deptt. of Aquatic Biology & Fisheries & Aquarium, Trivandrum. *b.* July 6, 1927. Distinguished in marine biology & oceanography with emphasis on malacology, littoral ecology & invertebrate physiology ; Pres., Kerala Academy of Biology ; Mem.: Senate, Academic Council & Faculty of Sci., Kerala Univ., Faculty of Sci., Calicut & Annamalai Univs.; Editor, " Aquatic Biology ", Marine Biological Assn. of India, etc. *Address :* Deptt. of Aquatic Biology & Fisheries, Aquarium, Trivandrum 695007.

BANERJEE, Dr. Jayanta Nath, Chairman, Wander Ltd. and Mg. Director, Sandoz (India) Ltd., Spl. Exec. Magistrate. *b.* July 10, 1927. Mem. : Governing Body of Bombay College of Pharmacy ; Vice-Pres., Commonwealth Pharmaceutical Assocn. ; Hon. Mem.: Pharmaceutical Socy. of Gr. Britain. *Address :* 1, Rushilla, Carmichael Rd., Bombay 400026.

BAPPU, Manali Kallat Vainu, A.M. (Harv.), M.Sc. (Madras), Ph.D. (Harv.) ; Fellow, Indian National Sci. Academy ; Indian Academy of Scs.; Hon. Fellow, Royal Socy. of Scs. of Liege ; Foreign Associate, Royal Astronomical Socy. of London ; Dir., Indian Instt. of Astrophysics, Combatore, since 1960.; Chmn., Indian National Cttee. for Astronomy, since 1972 ; *b.* Aug. 10, 1927. Co-discoverer. Comet Bappu-Bok-Newkirk, July 1949 & was awarded Donohoe medal of Astronomical Socy. of Pacific, Carnegie Post-doctoral Fellow, Hale observatories 1951–52 ; Sr. Research Fellow, National Instt. of Scs. of India, 1954 ; Dir., U.P. State Observatory, Naini Tal, 1954–60 ; & its Pres., 1979–82 ; Mem., Intnl. Astronomical Union & its Vice-Pres., 1967–73 ; Pres., Commission on Solar Atmosphere (1976–79) ; Astronomical Socy. of India, 1973–74 ; Chmn.: Indian National Cttee. for Astronomy, 1972–78, Indian National Cttee. for Solar Terrestrial Physics 1968–72 ; awarded Shanti Swarup Bhatnagar Prize, 1970 for contribution to Physical Sciences ; Padma Bhushan, 1981. *Address :* Indian Instt. of Astrophysics, Bangalore 560034.

BARNES, Dr. Leo, B.A., LL.M., Ph.D. (Bombay), General Secretary, National Union of Seafarers of India. *b.* Nov. 6, 1932. Was a seaman ; joined seamen's movement, 1960 ; Mem., Merchant Navy Trng. Board since

1965 ; Board of Trustees of Seamen's Prov. Fund since 1967 ; Seamen's Employment Board (Foreign-going) since 1967 ; National Welfare Board for Seafarers since 1967 ; National Shipping Board since 1974 ; Expert Cttee. on Unemployment among Indian Seamen (G.O.I.), 1969 and 1981 ; Wkg. Cttee., Hind Mazdoor Sabha. Trade Union Course at Harvard Univ., U.S.A. (1973) ; *Address :* A 59-1212, Azad Nagar, V. Desai Rd., Andheri (West), Bombay 400058

BASU, Jyoti, B.A., Bar-at-Law, Chief Minister, West Bengal ; Member : Polit. Bureau, Central Cttee. & W. Bengal State Cttee. of C.P.I. (M), since 1964. *b.* July 8, 1914. Was actively associated with Indian League (headed by late V. K. Krishna Menon), Fdn. of Indian Students in England and London Majlis during student days; elected to Bengal Legislative Council in 1946. Went underground when Communist Party was banned in 1948. M.L.A., West Bengal, 1952–72 ; elected M.L.A. in 1977 elections. Was Mem.: Communist Party of India, 1940 to 1967 ; Central Exec. Cttee. and National Council, C.P.I.; West Bengal Cttee., C.P.I.; detained without trial on several occasions since 1948 ; was Leader of the Opp., West Bengal Assembly; Dy. Ch. Min., W. Bengal, March-Nov. 1967 ; and Feb. 1969-Mar. 1970. *Address :* 55-B, Hindustan Park, Calcutta 700029.

BASU, Dr. K. S., Vice-Chancellor, International Academy of Management. *b.* Feb. 8, 1915. Dir., Jamnalal Bajaj Institute of Management Studies, Bombay Univ., (1965–77) ; Pres., Asian Assn. of Management Orgn. (1968–71) ; Personnel Dir. and Mem. of the Board, Hindustan Lever Ltd., 1956–65 ; Pres.: All India Management Assn., 1963–66 ; Bombay Management Assn., 1961–64 ; Bombay Productivity Council, 1960–63 ; Indian Institute of Personnel Management, 1964 ; Hon. Pres., Asian Assn. of Management Orgn. ; Vice-Pres., C.I.O.S. (International Assn. of Scientific Management) ; Visiting Prof., Univ. of Western Australia, 1970. *Address :* 13, Rajat Aptts., Mt. Pleasant Rd., Bombay 400006.

BHABHA, C. H., M.A., B.Com., Hon. Magistrate, Chairman : United Carbon India Ltd. ; Spencer & Co. Ltd.; Dir., E. Merck (India) Private Ltd. *b.* July 22, 1910. Commerce Member, Interim Govt. of India, Sept. 1946 ; Mem., Works, Mines and Power, Govt. of India, Nov. 1946 ; Commerce Min., Govt. of India, 1947 ; Leader, Indian Delegation to and elected Vice-Pres., World Trade Cfce., Havana, Nov. 1947 ; Vice-Chmn., Rural Banking Enquiry Cttee.; Chmn., Indian Banks Assn. (1955–61) ; Ex-Chmn., National Shipping Board. *Address :* 49, Cuffe Parade, Colaba, Bombay 400005.

BHABHA, Jamshed Jehangir, B.A. (Hons.), (Cantab.) ; Company Director. Knight Commander of order of Merit of Republic of Italy (1976) ; Commander's cross of the order of Merit of the Federal Republic of Germany (1978) ; Commander's cross of the order of the Crown, Belgium (1979). *b.* Aug. 21, 1914, Bombay ; Dir.: Tata Sons Ltd.; Tata Industries Ltd.; Central India Spg., Wvg. & Mfg. Co. Ltd.; Indian Hotels Co. Ltd.; Stewarts & Lloyds of India Ltd., etc.; Chmn.: Tata Press Ltd., Tata Services Ltd., Tata McGraw-Hill Publishing Co. Ltd.; Chmn.: Marg Publications ; V.-Chmn.: Associated Building Co. Ltd. ; V.-Chmn. & Founder Trustee-in-Charge : National Centre for the Performing Arts ; Trustee : Sir Dorabji Tata Trust, J. N. Tata Endowment for the Higher Educ. of Indians, Lady Tata Memorial Trust, J. R. D. Tata Trust, Prince of Wales Museum, Homi Bhabha Memorial Trust ; Chmn.: Governing Board, Tata Institute of Social Sciences, Bombay ; Mem.: Exec. Cttee., Indian Council for Cultural Relations, Court of Governors, Adm. Staff Coll. of India, Indian Institute of Science, Governing Council, Natl. Instt. of Design ; Pres. : Friends of the Trees ; Mem.: Administrative Council of the Intnl. Fund for the Promotion of Culture, UNESCO ; Mem.: Gen. Council & Exec. Board, Sangeet Natak Academy. *Address : Res.:* 12, Little Gibbs Rd., Malabar Hill, Bombay 400006. *Office :* Bombay House, Bombay 400023.

BHAGWATI, Mr. Justice Prafullachandra Natvarlal, B.A. (Hons.) (Maths.), L.L.B., Judge, Supreme Court of India, since July 1973. *b.* Dec. 21, 1921. While doing M.A. (Maths.) joined National Struggle and was imprisoned, 1942 ; took his Law degree and started practice at Bombay High Court ; Judge, Gujarat High Court, July 1960-Sept. 1967; Actg. Governor, Gujarat State, Dec. 7—25, 1967; Chief Justice, Gujarat High Court, Sept. '67—July '73 ; became a judge of the Supreme Court on 17th July 1973 ; was Chmn.: Legal Aid Cttee., and Judicial Reforms Cttee., Govt. of Gujarat ; Chmn. of the Delhi Centre and Exec. Chmn. of the different centres of Bharatiya Vidya Bhavan ; Chmn. of the Res. Cttee. of the Indian Law Institute ; Mem.: Law Faculty of Delhi Univ. and the M. S. Univ. of Baroda ; Exec. Cttee. of the Indian section of the International Law Assn.; Cttee. of Experts of the ILO ; V. Chmn., Permanent Standing Legal Aid Cttee. set up by LAWASIA., Cttee. for Implementing Legal Aid Schemes. *Address :* Supreme Court of India, New Delhi 110001.

BHARATI, Dr. Dharam Vir, M.A., Ph.D., Editor, *Dharmayug*, Bombay, since 1960. *b.* Dec. 25, 1926. ; Lecturer, Allahabad Univ. upto 1959 ; joined Times of India as Editor of *Dharmayug*, 1960. *Address :* 6, Shakuntal, Sahitya Sahawas, Bandra East, Bombay 400051.

BHAVE, Acharya Vinoba, Social Worker. *b.* Sept. 11, 1895, in Gagoda, Kolaba Dist., Maharashtra. At the age of 10, took a vow of celibacy and dedicated his life to the service of the country ; joined the Sabarmati Ashram, 1916 ; was made the head of the new Ashram at Wardha ; started another hermitage at Paunar, near Wardha ; was named by Gandhiji as his first rep. in the individual C. D. movement, 1940 ; imprisoned in the Freedom movement ; originator of the Bhoodan Yagna Movement ; successfully persuaded the landlords to donate land for the landless poor ; distributed more than 15 lakh acres among landless peasants ; has travelled on foot over 40,000 miles since Sept. 1951 to promote the cause of Bhoodan which has now reached the phase of Gramdan and Gram Rajya ; undertook peace mission in dacoit infested areas of Bhind and Morena Dts. of M.P., 1960, where 20 dacoits have surrendered ; toured Rangpur and Dinajpur Dist. of E. Pak. in connection with Bhoodan Movement, 1962 ; has studied all religions ; is a linguist, knows all Indian languages. *Address :* Sarva Seva Sangh, Rajghat, Varanasi P.O. (U.P.).

BHOGILAL, Pratap, M.A., Industrialist. *b.* Oct. 25, 1916 ; Mem., Govg. Council, Bombay Textile Research Assn. and its past Pres.; Cttee. Mem., Indian Merchants' Chamber ; was its Pres., 1968 ; Cttee. Mem., Millowners' Assn.; its Chmn. for three terms ; Pres., Shree Ram Mills Ltd.; Chmn.: Batliboi & Co. Ltd.; Director of many leading investment, engineering, textile, chemical and manufg. cos. *Address :* 26-A, B. G. Kher Marg, Malabar Hill, Bombay 400006.

BHOOTHALINGAM, Subramanya, M.A. (Cantab.), I.C.S. (Retd.), Chairman : Glaxo Laboratories (India) Ltd., Tribeni Tissues Ltd. *b.* Feb. 22, 1909. Joined Indian Civil Service—1931 ; Secy., Min. of Steel, Mines & Fuel, 1955–61 ; Min. of Fin., 1963–64 ; Dept. of Econ. Affairs, 1964–66 ; Chairman, Cttee. on Rationalisation and Simplification of Tax Structure, Min. of Fin., 1966–67 ; Dir., Gen., National Council of Applied Eco. Res., N. Delhi (1967–74); Chmn.: Study Group on Wages, Incomes and Prices, 1977–78. *Address :* 5, Vasant Marg, Vasant Vihar, New Delhi 110057.

BHRANY, Dr. Upendranath, B.Sc. (Hons.) (Chem.), DIISc. (Chem. Engg.), AIISc, Sc.D. (Met. & Mineral Engg.), Columbia, New York. Awarded William Campbell Fellowship, 1955–57; National Metallurgists Award for outstanding contribution in Ferrous Metallurgy, 1966. Mg. Dir., Modella Steels & Alloys Ltd., Bombay, since 1974. *b.* July 19, 1929. Head of Raw Materials Technology Secn., Applied Research Lab., US Steel Corpn., Monroeville, 1959–64; Chief Metallurgist, Indian Iron & Steel Co., 1964–68: Dy. Gen. Mgr. (Tech.), Burnpur, 1968–72; Dy. Gen. Mgr., 1972–73, Gen. Mgr., 1973–74; Dir., Unitech Indl. & Management Consultants (P.) Ltd., U. N. Indl. Devptt. Orgn., Expert in Mexico, 1980; Mem., Council, Ind. Instt. of Metals, Exec. Council, Steel Furnace Assn. of India; Fellow: Instt. of Engineers (India), ISI; Chmn., SMDC 5, Wrought Steel Products Sectional Cttee. on Standardisation of Steel Products, Steel Furnace Assn. of India, M.P. Branch; designed and holds US patent for screening device for dry solids; received National Metallurgist Day Award, 1966. *Address : Off. :* Resham Bhavan, V. N. Rd., Bombay 400020; *Res. :* 16A, Lands End, Dongersi Rd., Bombay 400006.

BIKANER, Dr. Karnisingh of, B.A. (Hons.), Ph.D., Ex-Ruler of Bikaner. *b.* April 21, 1924. Elected to Lok Sabha five times as an independent from 1952 to 1977; represented India in Clay Pigeon Shooting in Olympics at Rome, Tokyo, Mexico, Munich, Moscow; World Championships at Oslo, 1961, Cairo 1962 (won World Silver Medal after tie for Gold), Wiesbaden 1966, Bologna 1967, San Sebastian 1969; Asian Shooting—Tokyo 1967, Korea 1971 (won Gold Medal in Clay Pigeon), Kuala Lumpur 1975 (Silver Medal), Asian Games—Teheran 1974 (Silver Medal in Clay Pigeon & Bronze Medal in Skeet); awarded Arjuna Award in 1962 for shooting. National Champion in Clay Pigeon Trap & Skeet for many times. *Address :* Lallgarh Palace, Bikaner 334 001, Rajasthan.

BILLIMORIA, Smt. Gulestan Rustom, M.A., Licentiate, Trinity Coll. of Music, London; Special Executive Magistrate; Sheriff of Bombay (1957); Social Worker; closely connected with a large number of local, national and international organisations in the field of social welfare. Padma Bhushan, 1972; *Address :* 4, Mereweather Road, Apollo Bunder, Bombay 400039.

BIRLA, Ganga Prasad, B.Sc., Industrialist; Chmn.: Orient Paper Mills Ltd., Panafrican Paper Mills (E.A.) Ltd., & Nigeria Engg. Works Ltd. *b.* Aug. 2, 1922. Vice-Chmn.: Hindustan Motors Ltd.; Ex-Pres., Indian Paper Mills Assn., & Employers' Assn., Calcutta. *Address :* Birla House, 8/9, Alipore Rd., Calcutta 700027; *Office :* Birla Bldg., 9/1, R. N. Mukherjee Rd., Calcutta 700001.

BIRLA, Ghanshyamdas, Hon. Doctor of Laws (B.H.U.) (1967). *b.* 1894. Mg. Dir. of Birla Gwalior Pvt. Ltd.; Mem., 2nd Indian Leg. Assembly; Pres.: Indian Chamber of Commerce, Calcutta, 1924; F.I.C.C. & I., 1929; founder of a number of ednl. and other public insttns. in India; Mem.: Indian Fiscal Commn.; 2nd R.T.C., 1930; Royal Commn. on Labour, Delegate, Labour Cttee. at Geneva, 1927; Unofficial Adv. to Govt. of India for Indo-British Trade Negotiations, 1936–37. *Address :* 16A, Il Palazzo, Little Gibbs Rd., Malabar Hill, Bombay 400006; Birla House, New Delhi 110001.

BIRLA, Lakshminiwas, Industrialist. *b.* 1909, at Pilani, Rajasthan; Dir. of various Industries, Mg. Dir., Birla Brothers Pvt. Ltd.; Pres., F.I.C.C. & I., 1967–68; Founder of a number of ednl. Instts. *Address : Residence :* Birla Niket, Raja Santosh Road, Calcutta 700027; *Office :* 9/1, R. N. Mukerjee Rd., Calcutta 700001.

BIRLA, Sudarshan Kumar, Industrialist. *b.* 1934. Dir., Mysore Cements Ltd., Birla Bombay Pvt. Ltd., Universal Electrics Ltd., Century Spg. & Mfg. Co. Ltd., etc.; Mem., Fedn. of Indian Chambers of Commerce & Ind. and Intl. Chamber; Former Pres., Indian Chamber of Commerce; delegate to the CAFEA, 1966 and UNCTAD '72. *Address :* Birla Bldg., 9/1, R. N. Mukherjee Rd., Calcutta 700001.

BOSE, Sunil Kumar, Scholar-musician, retd. Exec. Dir., Bharatiya Kala Kendra & Dir., A.I.R., New Delhi; Mem.: Univ. Grants Commn., Music Review Cttee.; Radio and gramophone artist since 1928; gave many performances and delivered lectures on music in India and abroad; long-playing vocal classical music record released in U.S.A. (1978); Examiner (Ph.D.), Music, Delhi Univ. *Address :* D-3/D, Munirka, New Delhi 110067.

CARIAPPA, General K. M., O.B.E. (1945); Former High Commr. in Australia and New Zealand and Former Commander-in-Chief, Indian Army. *b.* Jan. 28, 1899, in Kodagu (Coorg), South India. Commissioned from Daly Coll., Indore, Dec. 1919; saw service in Mesopotamia, 1920–22; N.W.F.P., 1923–25, 1928–30 and 1946, Staff College, Quetta, 1933–34; Iraq, Syria and Iran, 1941–42 and in Burma (Arakan), 1943–44; Imperial Defence Coll., Lond., 1947; Dy. Chief of the Gen. Staff for some time as Major-General, Aug. '47–Dec. '47; G.O.C.-in-Chief, Eastern Command, Dec. 1947 to 12th Jan. 1948 as Lt. Gen.; G.O.C.-in-Chief, Western Command, Jan. 1948 to Jan. 1949; Commander-in-Chief, Army, 1949–53; conferred "Legion of Merit" Degree of Chief Commander by Pres. Truman, U.S.A., May 1950; Hon. rank of a full Gen. in the Nepalese army, 1952; Hon. Degree of Doctor of Sci., Agra Univ., 1953; Mysore Univ., 1977; Indian High Commr. in Australia and in New Zealand, 1953–56; presently, 'Father', Indian Ex-services League, New Delhi. *Address :* The Roshanara, Madikeri, Kodagu, Karnataka State.

CHANDRACHUD, Yeshwant Vishnu, B.A., LL.B., Chief Justice of India, since Feb. 22, 1978. *b.* July 12, 1920. Joined the Bombay Bar in '43 and practised till '61; Asstt. Govt. Pleader, 1952–58; Govt. Pleader, Bombay High Court, 1958–61; Judge, Bombay High Court, Mar. '61–Aug. '72; Judge, Supreme Court of India, Aug. '72–Feb. '78; Pres., Intnl. Law Asscn. (India Br.) since Feb. 1978; Pres., Indian Law Inst. since Feb. 1978. *Address :* Supreme Court, Tilak Marg, New Delhi 110001.

CHANDRASHEKHAR, Deshmudre Mallappa, M.A., LL.B., Chief Justice, Karnataka High Court, since March 22, 1978. *b.* Sept. 26, 1920. Enrolled as Advocate, Mysore High Court, Jan. 24, 1946; Govt. Pleader, Nov. 1957–Mar. 1963; Asstt. Advocate-Genl., Mar.–Sept. 1963; Addl. Judge, Mysore High Court, Sept. 20, 1963; Permanent Judge, Mar. 15, 1965; Chief Justice, Allahabad High Court, May 1977–March '78. *Address :* Shanti Gruha, No. 1, Palace Rd., Bangalore 560001.

CHANDRASEKHAR, Sivaramakrishna, M.Sc., D.Sc., Ph.D. (Cantab.); Fellow, Indian Acad. of Sciences & Indian National Science Academy; R. K. Chandorkar Gold Medal & Prakya Ganpatrao Gold Medal (Nagpur Univ.), 1950; CSIR Silver Jubilee Award, 1972; S. S. Bhatnagar Prize, 1972; FICCI Award for Science, 1979; Scientist and Prof., Raman Research Instt., Bangalore, since 1971. *b.* Aug. 6, 1930. Research Scholar, Raman Research Instt., 1950–54; 1851 Exhibition Scholar, Cavendish Lab., Cambridge, 1954–57; DSIR Fellow &

Mem., Acad. Staff, Univ. Coll., Lond., 1957–69 ; Research Fellow, Faraday Research Lab., Royal Insttn., Lond., 1959–61 ; Prof. of Physics, Univ. of Mysore, 1961–71 ; UGC National Lecturer, 1974 ; Malaviya Memorial Lecturer, Banaras Hindu Univ., 1975 ; Princess Leelavathi Memorial Lecturer, Mysore Univ., 1976 ; Ex-Chmn., Indian National Cttee. for Crystallography ; attended important confces. abroad ; has published several research papers & monographs. *Address :* Raman Research Instt., Bangalore 560006.

CHARAT RAM, Industrialist. *b.* Jan. 1, 1918. Mg. Dir. : Jay Engg. Works Ltd., Shriram Refrigeration Industries Ltd., Shriram Pistons and Rings Ltd., Delhi Cloth & Gen. Mills Co. Ltd.; Pres.: FICC & I, 1973–74 ; Mem.: Advy. Cttee. for Company Law Board (GOI) ; Govng. Body : Administrative Staff Coll., Hyderabad ; Shriram College of Commerce, New Delhi, etc. *Address :* 26, Sardar Patel Rd., New Delhi 110021.

CHATTOPADHYAY, Smt. Kamladevi, Author and Social Worker. Chmn., Sangeet Natak Akademi, National Academy of Performing Arts, Children's Books Trust & Dolls Museum ; Vice-Pres., Indian Council for Cultl. Relations, Ex-Chmn., All India Handicrafts Bd. *b.* 1903. Mem., AICC and Wkg. Cttee., Orgg. Secy., then Pres. ; Patron, All India Women's Confce. ; Pres., Indian Co-op. Union ; Vice-Pres., World Crafts Council, India International Centre ; Founder, Indian National Theatre Centre of the Intnl. Theatre Instt., Fellow, Indian Council for Cultural Relations ; Sangeet Natak Akademi, 1974 ; Awards : Watumal, Magsaysay for Community Leadership, 1966, "Deshikottama" awarded by Vishwa Bharati Univ. at Shantiniketan for outstanding achievements, 1970 ; award for Dramatics by Maharashtra Natya Parishad, 1976. *Address :* 20, Canning Lane, New Delhi.

CHAVAN, Shankarrao B., Minister for Planning, Govt. of India. *b.* July 14, 1920. Dy. Min. & Min., Bombay State, 1956-62 ; M.L.A., Maharashtra, 1967 & 1972 ; Ex-Chief Min., Maharashtra State ; was Min. for Edn. & Social Welfare, Govt. of India. *Address :* Yojana Bhavan, Parliament St., New Delhi 110001.

CHAVAN, Yeshwantrao Balwantrao. *b.* March 12, 1913, at Devrashtre, Sangli Dist. Started legal practice at Karad ; Pres., D.C.C., 1941 ; Mem., Maharashtra P.C.C., since 1940 ; was its Secy., 1948, 1949 and 1950 ; elected M.L.A., Bombay, 1946 ; apptd. Parly. Secy., 1946 ; Min. for Civil Supplies, Bombay, 1952 ; was Min. for Local Self-Govt., Forests, Community Projects, Bombay ; elected leader, Cong. Leg. Party, Bilingual Bombay State, Oct. 1956 ; unanimously re-elected leader, 1957 ; Chief Min.: Bombay State, 1956–60 ; Maharashtra, May 1960-Nov. 1962 ; elected leader, Maharashtra Leg. Cong. Party, 1962 ; elected unopposed to the Lok Sabha in Nasik by-election, 1964 ; Min. for Defence, Govt. of India, 1962–66 ; Min. for Home, Govt. of India, 1966–70 ; Min. for Finance, 1970–74 ; Min. for External Affairs, Oct. 1974–Mar. 1977 ; was Governor on the Board of : Intnl. Monetary Fund, World Bank, Asian Devpt. Bank, July 1970–Oct. 1974 ; Leader, Cong. Parly. Party, 1977 ; Leader of Opposition 24th March, 1977 to 11th April, 1978 and from 10th July, 1978 to 27th July, 1979 ; Dy. P.M. and Minister of Home Affairs, 28th July, 1979 ; elected to Lok Sabha, 1980 ; elected leader of Congress (U) Parly. Party, 1980 ; resigned May 25, 1981 ; joined Cong. (I.), Nov. 1981 ; participated in the Indo-Pakistan peace talks at Tashkent, Jan. 1966 ; was Pres., Instt. for Defence Studies and Analysis. *Address :* 1, Race Course Rd., New Delhi 110011.

CHIDAMBARAM, Muthia Annamalai, Industrialist. *b.* Oct. 12, 1918. Chmn., South India Corpn. (Agencies) P. Ltd., Southern Petrochemical Industries Corpn. Ltd., Automobile Products of India Ltd., Bombay ; was Dir., Indian Aluminium Co. Ltd. ; Hon. Consul-General for Philippines in Madras ; Hon. Secy., Tamil Isai Sangam ; Pres., Southern India Chamber of Commerce & Industry, 1951–57 ; was Pres., Board of Control for Cricket in India & All India Lawn Tennis Assn.; Hon. Treasurer, Board of Control for Cricket in India ; Ex-Mayor, Madras ; Ex-Chmn. & Senior Steward, Madras Race Club ; Hon. Col., Indian Territorial Army. *Address :* South India House, 99, Armenian St., P.B. 113, Madras 600001.

CHINNAPPA, Kuppanda Muthayya, B.E., Industrialist. *b.* Feb. 5, 1914. Chmn.: National Radio & Electronics Co. Ltd., Yashmun Engineers Ltd., Chemical Terminal Trombay Ltd.; Vice-Chmn. and Mg. Dir.: Tata Hydro-Electric Power Supply Co. Ltd., Andhra Valley Power Supply Co. Ltd., Tata Power Co. Ltd.; Dir.: Tata Industries Ltd.; Elpro Intnl. Ltd.; Karnataka State Electronics Devpt. Corpn. Ltd.; Exec. Cttee. Mem. : Tata Consulting Engineers, Tata-Dilworth, Secord, Meagher & Associates ; Mem.: Society of Power Engineers ; Board of Consultants (Power), Damodar Valley Corpn., Cttee., on Power, Govt. of India ; Fellow : Institution of Engineers (India) ; won National Design & Res. Forum Award (1972). *Address :* Bombay House, Homi Mody St., Bombay 400023.

CHOWGULE, Vishwasrao Dattaji, Industrialist-cum-Businessman ; Chmn. & Mg. Dir., Chowgule & Co. P. Ltd. *b.* Aug. 25, 1915. Entered business of exporting tiles, timber, etc. and shipping agency ; organised mining & export of iron ore from Goa in the late '40s besides pelletization of ore from second half of '60s ; actively associated with diversified fields such as shipowning, textiles, brewery, cement manufacture, explosives (industrial) manufacture, construction of self-propelled barges/crafts, tugs, dredgers, trawlers etc., processing & export of marine products, mfg. of engg. equipment & machine tools, etc.; Trustee, Mormugao Port Trust ; Mem.: Mineral Devpt. Board ; I.C.C. International Maritime Bureau, London ; Underwriting Member of Lloyds, London, All India Shippers' Council, Intl. Bureau of Transport Users of Intl. Chamber of Commerce ; V. Chmn., Sea Transport Commission and Working Party, Sea Transport Users of I.C.C. *Address :* Chowgule & Co. P. Ltd., Mormugao Harbour 403803 (Goa).

CORREA, Charles Mark, B. Arch. (Michigan) ; M. Arch. (M.I.T.), Architect in pvt. practice ; Chairman, Housing, Urban Renewal & Ecology Board, BMRDA. *b.* Sep. 1, 1930. Director, CIDCO : executed Gandhi Memorial Museum, Sabarmati Ashram, Ahmedabad, Townships at Bombay, Bangalore and Misurata in Libya, Beach resorts at Kovalam, Dona Paula and Andaman Islands, U. N. Housing Project at Lima for Govt. of Peru ; Mem., Steering Cttee., Aga Khan Award for Architecture ; Fellow of Indian Institute of Architects ; Hon. Fellow of American Institute of Architects ; Hon. Doctorate, Univ of Michigan. *Address :* Engineering Centre, 9, Mathew Rd., Bombay 400004.

DAHANUKAR, Dattatraya Mahadeo, Chairman and Mg. Director, Maharashtra Sugar Mills Ltd. ; Chmn., Tilaknagar Distilleries & Ind. Ltd.; Dir.: Schrader-Scovill Duncan Ltd., Ceekay Automotive Products Ltd., International Electronic Speciality Gases P. Ltd., etc.; Mg. Dir., M. L. Dahanukar and Co. P. Ltd. *b.* Dec. 21, 1911. Mem.: Indian Merchants' Chamber, Bombay ; Maharashtra Chamber of Commerce, Bombay ; Bombay Management Assn., Bombay ; F.I.C.C. & I., New Delhi. Advy. Council, SIES Inst. of Management Studies. *Address :*

Office : Industrial Assurance Bldg., Churchgate, Bombay 400020. *Res.* . ' Ratnakar ', 26, Dr. B. Indrajit Rd., Malabar Hill, Bombay 400006.

DAHANUKAR, Shantaram Mahadeo, B.E., M.I.E., S.M. (U.S.A.). Industrialist. *b.* Sept. 30, 1913. Chairman : Universal Can & Containers Ltd., Deccan Merchants' Co-op. Bank Ltd.; Dir.: Bharat Commerce & Industries Ltd., The East India Hotels Ltd., Indian Organic Chemicals Ltd., Plastic Resins & Chemicals Ltd.; Exec. V. Pres.: Planwell Consultants Pvt. Ltd., New United Construction & Engg. Co. Pvt. Ltd., etc.; Pres.: Property Owners' Assn., 1956–58, Maharashtra Chamber of Commerce, 1967–68 ; Sheriff of Bombay, 1968–69 ; All India Manufrs. Orgn., 1970 ; Treasurer, B.P.C.C., 1971–72. *Address :* Industrial Assurance Bldg., Churchgate, Bombay 400020 ; *Res. :* Shree Sadan, 4-A, M. L. Dahanukar Marg, Bombay 400026.

DALMIA, S. N., S.E.M., Industrialist. *b.* April 10, 1927. Chairman, Director and/or Partner, Ramkumar Beniprasad, Hind Enterprises, Dalmia Industries P. Ltd., North Bengal Sugar Mills Co. P. Ltd., Shri Gaurishanker Jute Mills Co. P. Ltd., Gunny Exporters P. Ltd., General Produce Co. P. Ltd., Hindustan Malleables and Forgings Ltd., Ashoka Rubber Co., etc.; Ex-Commr., Port of Calcutta ; Chmn.: National Alliance of Young Entrepreneurs (W. Bengal) ; Former Pres.: Merchants Chamber of Commerce, Calcutta, Machinery Dealers Asscn., ; Cttee. Mem.: FICCI. *Address :* 21, R. N. Mukherjee Rd., Calcutta 700001.

DALMIA, Vishnu Hari, Industrialist. *b.* May 1924. Chmn.: Dalmia Dairy Industries Ltd.; Pres.: Dalmia Cement (Bharat) Ltd.; Dir.: Dalton Property Co. Ltd., Manchester (U.K.) ; Vice-Pres., Indian Federation of United Nations Assocn., N. Delhi ; Ex-Pres.: Cement Manufrs.' Assn., Indian Sugar Mills Assn., All India Distillers' Assn., Indian National Cttee. of Intl. Chamber of Commerce ; Ex-Vice-Pres.; World Fedn. of U.N. Assocns. Geneva Founder : Vishnu Hari Dalmia Award for best book in Rajasthani language ; Mem., Main Cttee. of F.I.C.C. & I.; travelled extensively in Europe, Far East & USA. *Address : (Office) :* ' Hansalaya ', 11th Fl., 15, Barakhamba Rd., New Delhi 110001.

DAMANI, Surajratan Fatehchand, Industrialist ; Chmn. & Mg. Dir., Simplex Mills Co. Ltd., Bombay and several other concerns ; Chmn., Maharashtra State Financial Corpn. *b.* July 14, 1912. Ex-Chmn., Millowners' Assocn., Bombay (1971 and 1972) ; Mem., Executive Cttee. and Treasurer, Congress Party in Parl., 1969–71 ; life mem., Indian Parl. Assn. *Address :* 11, Cuffe Parade, Colaba, Bombay 400005.

DARBARA SINGH, Sardar, Chief Minister, Punjab State. *b.* Mar. 2, 1916. M.L.A., Punjab, 1952 ; elected to Lok Sabha, 1971 ; was Pres. and Secy. of Punjab P.C.C. for 10 years ; Dy. Leader of the Congress Parly. Party, 1971-73 ; Home Minister, Punjab, for 5 years. *Address :* Secretariat, Chandigarh 160001.

DATEY, Keshavrao Krishnarao, S.E.M., B.A., M.D., F.R.C.P. (Lond.), F.P.C.C. (Hon.), F.A.C.C. (U.S.A.), F.A.M.S. (Ind.), F.N.A. (Ind.), F.R.S.A. (Lond.), D.C.H. (Eng.), F.A.C.P. (Hon., U.S.A.), F.A.A.B.S. (U.S.A.), F.R.C.P. (Edin.), D.T.M. & H. (Lond.), F.I.C.A. (U.S.A.), F.C.C.H. (Can.), F.C.C.P. (U.S.A.), F.I.C. P.M. (Hol.), F.M.A.S. (Mah.), Padma Bhushan ; B. C. Roy National Award (1971) ; Dhanvantari Award (1974) ; Chaturvedi Kalawati Jagmohandas Award for Cardio-Vascular Research (1977-78) by the Indian Council of Medical Research; B. C. Roy National Award for Oration (1979-80); Dir., Dept. of Cardiology, Medical Res. Centre, Bombay Hospital ; Prof. Emeritus, St. George's Hospital ; Hon. Brigadier Consultant in Cardiology to the Armed Forces ; Prof. & Director of Cardiology, K.E.M. Hospital & G. S. Medical College, Bombay ; Consultant in Cardiology, C. Rly. H. Q. Hospital, Bombay ; Dir., Research Centre & Yoga Hospital, Sivananda Dhanwantari Ashram, Trivandrum. *b.* Aug. 7, 1912. Pres. World Congress of Cardiology (1966) ; Pres., XI Intnl. Cong. of Internal Medicine, 1970 ; Mem., WHO Expert Advy. Panel on Cardiovascular Disease, since 1963. *Address :* Windsor House, Opp. Oval, Churchgate, Bombay 400020.

DATTA, Vice-Admiral N. P., Chmn. & Mg. Dir., Mazagon Dock Ltd., Bombay, since Nov. 4, 1977. Commissioned in the Indian Navy, 1944 ; held operational appointments including command of the cruiser *Mysore*, destroyer *Ganga* and the frigate *Talwar ;* commanded Western Fleet, 1974–75 ; Graduate of the Imperial Defence Coll., London and Defence Services Staff Coll., Wellington ; was Dir. of Naval Plans, Asstt. Chief of Naval Staff (Policy & Plans) and Dy. Chief of Naval Staff ; Rear Admiral, 1973 ; Vice-Admiral, Sept. 1977. *Address :* Mazagon Dock Ltd., Dockyard Rd., Mazagon, Bombay 400010.

DAVE, R. M., Industrialist. *b.* Jan. 7, 1918. Sheriff of Madras, 1962–63 ; Pres., Hindustan Chamber of Commerce, 1958–59 ; Cttee. Mem., F.I.C.C. & I., 1963–64 ; Dir. : Sovereign Spg. & Wvg. Mills Ltd., Madras ; Bharat Earth Movers Ltd., Bangalore ; Garden Reach Shipbuilders & Engrs. Ltd., Calcutta, etc. *Address : Office :* Broadway, Madras 600001 ; *Res. :* 9-A, Venkatanarayana Rd., Madras 600017.

DEMPO, Vasantrao Srinivasa, Industrialist ; Chmn. : Dempo Group of Companies ; Goa Carbon Ltd. ; Dempo Dairy Industries Ltd.; Chmn. & Mg. Dir., Dempo Steamships Ltd. & V. S. Dempo & Co. P. Ltd. *b.* Mar. 4, 1916. Dir.: Goa Shipyard Ltd.; Chmn.: West Coast Hotels Ltd., Dempo Mining Corpn. Ltd., Navhind Papers & Pubns. P. Ltd., Dempo Engg. Works Ltd., Dempo Engg. Services, Dempo Sons Pvt. Ltd., Dempo Brothers Pvt. Ltd., etc. ; Mem., India Cttees., Lloyds Register of Shipping and American Bureau of Shipping ; Pres., Goa Chamber of Commerce, 1947–48, 1973–74 & 1975–76 ; Goa Mineral Ore Exporters' Assn., 1967–69 and 1978–80 ; Trustee, Mormugao Port Trust ; Mem., Industrial Advy. Cttee. of the Govt. of Goa, Daman & Diu ; Chmn., Advy. Cttee. for Coll. of Engg., Goa, Farmagudi and Pres. of Goa Edu. Society. *Address :* Dempo House, Campal, Panaji 403001 (Goa).

DEO, Madhav Gajanan, M.B.B.S., M.D., Ph.D., F.N.A., F.A.Sc., F.A.M.S., Shakuntala Amir Chand Prize, I.C.M.R. (1960), Khanolkar Prize, Indian Assn. of Pathologists (1966) ; Amrit Mody Award (1972) ; B. C. Guha Lecturer, INSA (1978) ; Fellow : Indian Sci. Academy (1974) ; Indian Academy of Sciences (1976) ; Secy., (Biology) National Aca. of Medical Sciences (1977) ; Scientist ; Professor of Pathology, All India Instt. of Medical Sciences, New Delhi (1974–78) ; Research Dir., Cancer Res. Inst., Bombay, since 1978. *b.* Apr. 6, 1932. Assoc. Prof. of A.I.I.M.S., 1968–74 ; invited speaker at several national and international symposia on biology of nutrition. *Address :* 2-B, Atomic Energy Apatt., B. G. Kher Marg, Bombay 400006.

DESAI, Mr. Justice Dhirajlal Ambalal, B.A. (Bom.), LL.B. (Bom.), Judge, Supreme Court of India, since Sept. 30, 1977. *b.* May 9, 1920. Hony. Prof. of Law, Sarvajanik Law Coll., Surat, 1949–60 ; Dist. & Sessions Judge, Vadodara, Bhavnagar & Nadiad, 1960 ; Judge, Gujarat High

Court, Feb. 1968 ; Vice-Chmn., Legal Aid Cttee. & Chmn., High Court Legal Aid Cttee., 1973–77 ; Ex-Chmn., Labour Law Enquiry Cttee., Gujarat ; Mem., Judicial Reforms Ctte., Senate of M. S. University of Baroda ; Vice-Chancellor, Brihad Gujarat Sanskrit Parishad. *Address :* Supreme Court of India, Tilak Mrg., New Delhi 110001.

DESAI, Morarji Ranchhodji, B.A. *b.* Feb. 29, 1896. Entered Provincial Civil Service of the Govt. of Bombay, 1918 ; resigned to join the C. D. Movement, 1930 ; Secy., Gujarat P. C. C., 1931–37 and 1939–46 ; Min. for Revenue, Co-op., Agr. and Forests, Bombay, 1937–39 ; Min. for Home and Revenue, Bombay, 1946–52 ; Chief Min. of Bombay, 1952–56 ; Min. for Commerce and Industry, Govt. of India, 1956–58 ; Treasurer : A.I.C.C., 1950–58 ; Hon. Fellow, Coll. of Physicians and Surgeons, Bombay, 1956 ; Hon. Doctor of Laws, Karnatak Univ., 1957 ; Union Fin. Min., 1958–63 ; resigned the Ministership to do party work, Aug. 1963 ; Chmn., Adm. Reforms Commn., Govt. of India, 1966–67 ; Chancellor, Gujarat Vidyapeeth, Ahmedabad ; Chmn.: Navjivan Trust ; All-India Prohibition Council ; Adv. Board of Hindustani Prachar Sabha ; The Collected Works of Mahatma Gandhi ; Trustee : Gandhi Smarak Nidhi ; Gandhi Peace Foundation, ; Kasturba Trust ; elected to the Lok Sabha from Surat in 1957, 1962, 1967, 1971 and 1977 ; Dy. Prime Minister & Min. for Finance, Govt. of India, 1967–69 ; imprisoned during the emergency, June 1975–Jan. 1977 ; sworn in as Prime Minister, March 24, 1977 ; resigned on 15th July, 1979. *Address :* Oceana, Marine Drive, Bombay 400020.

DESAI, Narotam Mangaldas, LL.B., Industrialist. Chmn., Larsen & Toubro Ltd., since 1978. *b.* Mar. 25, 1924. Associated with Larsen & Toubro Ltd., since 1946 ; co-optd. as a Dir. ; became Vice-Chmn. and Jt. Mg. Dir., 1969 ; Pres. and Chief Executive, 1977 ; also Chmn., Engg. Construction Corpn. and Utkal Machinery ; Dir., EWAC Alloys, L & T McNeil, Audco India and Tengl (subsidiary/associate cos. of L & T) ; Mem., Bd. of Governors of I.I.M., Ahmedabad, NITIE and IIT, Bombay ; Govg. Council of Indian Instt. for Foremen Trg. ; Chmn., Bd. of Apprenticeship Trg., W. Regn. ; was Pres., A.I.M.O., 1980–81. *Address :* Larsen & Toubro Ltd., L & T House. Ballard Estate, Bombay 400038.

DESHPANDE, Purushottam Laxman, M.A., LL.B., D.Litt. (Honoris Causa), Ravindra Bharati Univ., D.Litt. (Honoris Causa), Poona Univ., Sangeet Natak Akademi Award (1967), writer, actor & producer of plays in Marathi and a distinguished speaker. *b.* Nov. 8, 1919. Wrote scripts, acted & directed music in Marathi films ; was the first Chief Producer, A.I.R. Television, Delhi ; was trained in the B.B.C.; did one-man shows on the Marathi stage namely *Batatyachi Chawl*, etc.; estd. Pu. La. Deshpande Foundation, to promote cultural & national activities ; *Vyakti Ani Valli*, won the Sahitya Akademi award, 1966. *Address :* 1, Roopali, 777, Shivaji Nagar, Pune 411004.

DESHPANDE, Venkat Shrinivas, B.A., LL.B., Chief Justice, Bombay High Court, since Jan. 12, 1981. *b.* Aug. 11, 1920. Advocate, Hyderabad High Court, Oct. 1952 ; Bombay High Court, 1957 ; Asstt. Govt. Pleader, Bombay High Court, Mar. 1961 ; Addl. Judge, June 11, 1967 ; Permanent Judge, Jan. 8, 1968 ; Ag. Chief Justice, Nov. 19, 1980. *Address :* High Court, Mayo Rd., Bombay 400032.

DEVARAJULU, G. K., Industrialist. *b.* Oct. 26, 1911. Chmn. : Lakshmi Machine Works Ltd., Lakshmi Automatic Loom Works Ltd., Lakshmi Card Clothing Mfg. Co. Pvt. Ltd., Lakshmi Textile Exporters Pvt. Ltd., Chmn. & Mg. Dir., Lakshmi Mills Co. Ltd. ; Dir., Baroda Rayon Corpn. Ltd., Indian Dyestuff Inds. Ltd., Volrho Ltd., Bhadrachalam Paper Boards Ltd. ; was Chmn., S. I. Millowners' Assocn., 1960 ; Indian Cotton Mills' Fedn., Bombay, 1966 & 1967 ; S. I. Textile Research Assocn., Coimbatore, from its inception till 1969 ; Assocn. of Man-Made Fibre Ind., Bombay ; Devpt. Council for Man-Made Fibres set up by the Govt. of India ; Devpt. Council for Textile Machinery Ind. ; was Cttee. Mem., F.I.C.C.I., New Delhi and Cotton Textiles Export Promotion Council, Bombay ; C.S.I.R., Indo-Japanese Business Co-opn., etc. etc. ; Hon.-Consul for Italy for Kerala. *Address :* Shell House, 58, Avanashi Rd., Coimbatore 641037.

DHAWAN, Dr. Satish, B.A., M.A. (Eng. Litt.), B.Sc. (Engg.), M.S., Ae.E., Ph.D., D.Sc. (Honoris Causa), Roorkee, 1972, Cranfield Instt. of Tech. (U.K.), 1975, LL.D. (Honoris Causa), Bombay, 1976, F.A.Sc., M.Ae.S.I., Foreign Hon. Mem. of the American Acad. of Arts & Scs., Foreign Associate, National Academy of Engg., U.S.A. ; Ex-Director, Indian Instt. of Science, Bangalore ; Secy. to the Govt. of India, Deptt. of Space ; Chmn. : Space Commission, since June 1972 ; Indian Space Res. Orgn., since Sept. 1972. *b.* Sept. 25, 1920. Sr. Scientific Officer, Deptt. of Aeronautics, Ind. Instt. of Science, 1951 ; Asstt. Prof. & Prof. and Head of Deptt. of Aeronautics, 1953–63 ; One-man Cttee. for the Evaluation of AVRO HS-748 aircraft, 1973–75 ; Exec. Delegate for India, Commonwealth Advisory Aeronautical Research Council, 1964–71 ; Mem., Board of Directors, Hindustan Aeronautics Ltd., 1964–72 ; U.G.C., 1966–71 ; Scientific Advisory Cttee. to the Cabinet, 1965–68. *Address :* Indian Instt. of Science, Bangalore 560012.

DINESH MOHAN, Prof., C.E. (Hons.), Roorkee (1943), F.I.E., F.N.A. Dir., Central Bldg. Research Instt., Roorkee since Oct. 1961. *b.* July 14, 1922. Associated with Central Bldg. Research Instt., since inception in 1948 ; specialised in Soil Mechanics & Foundation Engg.; V. Pres. (Asia) ; Int. Socy. of Soil, Mech. and Found. Engg. ; Chmn., Coordinating Engg. Divn. Bd., Instt. of Engg. (India). *Address :* CBRI, Roorkee 247667.

DOSHI, Maganlal Harilal, Chmn.: Silk & Art Silk Mills' Assn. Ltd., since Oct. 1973 ; Art Silk Co-operative Ltd., since 1976. Dir.: Nehal Textile Processors Pvt. Ltd., Echjay Textile Ind. Pvt. Ltd., Vaishali Bleaching Co. Ltd., Manufacturer & Exporter of Rayon/Synthetic Fabrics, Steel Forging, Automobile Parts, etc. *b.* Nov. 8, 1925. Joined Sharda Dyeing & Printing Works, Bombay, 1949 ; Partner : Neeru Silk Mills, Mansukh Dyg. and Ptg. Mills, B. Nagindas & Co., Jaypee Dyg. House, Shree Neminath Enterprises ; Dir., Echjay Electronics P. Ltd., Bombay, Echjay Industries P. Ltd. ; Mem.: Mg. Cttee., Fedn. of Indian Art Silk Wvg. Industry ; Cttee. of Admn. of Silk & Rayon Textile Export Promotion Council ; Mem. Chmn., Dvpt. Council for Man-made Textiles ; Council of SASMIRA & Dir., Rayex (India) Ltd. Trustee & Vice. Pres., Mumbai Pradesh Arya Vidya Sabha ; Harilal Jaychand Doshi Vishwa Vatsalaya Trust ; Trustee, Harilal Jechand Doshi Hospital Trust, Rajkot. *Address :* Echjay Overseas Trades, 83, Bajaj Bhavan, Nariman Pt., Bombay 400021.

DWARKA, His Holiness the Jagadguru Shankaracharya Swami Shri Abhinava Sachchidananda Tirthji Maharaj of Sharda Peeth, of, Spiritual Head of W. India ; Scholar & Linguist. *b.* Sept. 25, 1919. Took Holy orders, 1934 ; installed at Dwarka on the Holy seat of Shri Shankaracharya of W. India, June 20, 1945 ; Pres., All India Dharma Sangh Cfce.; recognised by the Govt. as the Shankaracharya of Dwarka and a Primate of Hinduism ; Founder & Pres., Shri Sharada Peeth Vidya

Sabha; inaugurated Intnl. Yoga Conventions, 1967 & 1968; installed present Shankaracharyas on Govardhanpeeth (Puri) and Jyotirpeeth (Badrikedar); Patron, Vishva Hindu Parishad, etc. *Address :* Dwarka 361335.

ERADI, Vettath Balakrishna, B.A., B.L., Judge, Supreme Court of India, since Jan. 30, 1981. *b.* June 19, 1922. Enrolled as Advocate, Madras High Court, Jan. 15, 1945; shifted practice to Kerala High Court at Ernakulam, Nov. 1956; Sr. Govt. Pleader. 1961; Judge, Kerala High Court, April 5, 1967; Chief Justice, Jan. 19, 1980. *Address :* 15, Safdarjang Rd., New Delhi 110011.

ESCALANTE, H. E. Mr. Fernando Maria Fernandez, Amb. of Argentina to India. *b.* 1920. Joined Min. of Foreign Relations, 1937; served in Argentine Missions in Uruguay, Belgium, Spain and Colombia, 1945–54; Counsellor, Permanent Mission to U.N., 1955; Gen. Manager, Ford Motor Co., Argentina, 1963–68; First Vice-Pres., Indl. Bank and Dir., National Devpt., Bank, 1968–73; Deptt. of Intnl. Orgn., Foreign Office, 1974–75; Pres.: Argentine delegation to Colombo Non-Aligned Summit Conference (August 1976). Dir. & Prof. of Postgraduate Courses on business administration of Argentine Univs. of Buenos Aires, Mar del Plata & Bahia Blanca (1963–75). *Address :* Embassy of Argentina, 3/11, Shantiniketan, New Delhi 110021.

FINNMARK, H. E. Tor Lennart, Ambassador of Sweden to India. *b.* 1917. Entered Foreign Service, 1940; Personal Asstt. to D. Hammarskjold, 1956–58; Counsellor, Paris, 1959; Minister, Moscow, 1961; Amb. to: Pakistan, 1964: Yugoslavia, 1969. *Address :* Royal Swedish Embassy, Nyaya Mrg., Chanakyapuri, New Delhi 110021.

GADGIL, Gangadhar, M.A., Marathi Writer; Economic Advisor, Premier Construction Co. Ltd., Bombay; Mem.: Governing Council, Maharashtra Chamber of Comm.; Eco. Sub-Cttee., Bombay Chamber of Comm. Plng. & Eco. Affairs Sub-Cttee., Indian Merchants' Chamber. *b.* Aug. 25, 1923. Has written short stories, novels, literary criticism, one-act plays, travelogues etc. (Marathi & English); awarded first prize in the Marathi short story competition held under the auspices of the *New York Herald Tribune;* awarded prizes for his books *Talavatalen Chandane, Ole Unha* and *Sata Samudra Palikade* by the Bombay Govt., 1956, 1958, 1960; recipient of Rockefeller Foundation Fellowship in 1957; Ex-Vice-Pres., Marathi Sahitya Mahamandal; Hon. Professor of Marathi, Univ. of Bombay. *Address :* 4, 'Abhang', Sahitya Sahawas, Bandra (E), Bombay 400051.

GANDHI, Smt. Indira, Bharat Ratna (1972); Mexican Acad. Award for Liberation of Bangladesh (1972); 2nd Annual Medal, FAO (1973): Sahitya Vachaspati (Hindi) by Nagari Pracharini Sabha (1976); Mothers' Award, U.S.A. (1953). Prime Minister of India, Min. for Defence, Jan. 14, 1980–Jan. 14, 1982. Chairman, Planning Commn. *b.* Nov. 19, 1917. Min. for Inf. & Broadcasting, Govt. of India, 1964-66; Prime Minister of India, Jan. 1966-Mar. 1977; concurrently Min. for Atomic Energy, Sept. 1967-Mar. 1977; Space, June 1972-Mar. 1977; Chmn., Plng. Commn., 1966-77; Pres., Council of Scientific and Indl. Research; held addl. charge of Min. of External Affairs, Sept. 5, 1967-Feb. 14, 1969; Finance, July 16, 1969-June 26, 1970; Home Affairs, June 1970-Nov. 1973; Inf. & Broadcasting, Mar. 1971: Mem., Congress Wkg. Cttee. and Central Election Cttee. of the Party, 1955; Central Parly. Bd. of Congress, 1958; Chmn., National Integration Council of A.I.C.C.: Pres., All India Youth Congress, 1956; Indian National Congress, 1959-60 and Indian National Congress (I), since Jan. 1978; Mem., Rajya Sabha, Aug. 1964-Feb. 1967; Fourth Lok Sabha, 1967-71; Fifth Lok Sabha, 1971-77; Sixth Lok Sabha, Nov.-Dec., 1978; elected to Seventh Lok Sabha, Jan. 1980; Leader, Congress Parly. Party, 1967-77; Congress (I) Parly. Party, since Jan. 1980; Pres., Bd. of Trustees of Kamala Nehru Memorial Hosp.; Trustee, Gandhi Smarak Nidhi, Kasturba Gandhi Memorial Trust; Chmn., Swaraj Bhavan Trust; Founder & Chmn., Bal Sahyog, New Delhi, since 1954; Founder & Pres., Kamala Nehru Vidyalaya, Allahabad; Vice-Chmn., Central Social Welfare Bd., 1953-57; Life Patron, Indian Council for Child Welfare; Vice-Pres., Intnl. Council of Child Welfare. Patron-in-Chief, Indian Council for Africa, 1960; Chancellor, Visva Bharati Univ.; Jawaharlal Nehru Univ. & North-Eastern Univ., 1966-'77; Mem., Indian Delegation to UNESCO, 1960-64; National Defence Council, 1962; Chmn., Sangeet Natak Akademi, 1965-74; Mem., National Integration Council; Pres., Himalayan Mountaineering Instt.; Dakshina Bharat Hindi Prachar Sabha; Nehru Memorial Museum & Library Socy. & Jawaharlal Nehru Memorial Fund; Patron, Indian Socy. of Intnl. Law; has travelled widely in India and all over the world. *Address :* 1, Safdarjang Rd., New Delhi 110011

GANESAN, Ramaswamy (Gemini Ganesh), Padma Shri, Film Artiste, director, writer and producer; Mg. Dir., Vijay Spg. Mills, Vijayawada. *b.* Nov. 17, 1925. Started as Prodn. Exec., Gemini Studios, Madras, and became a top All India Star; has acted in several Tamil, Telugu, Malayalam, Kannada and Hindi films; bagged the best actor's *Filmfare* Award in Tamil prodn., 1974; First Indian film star to lead a cultural troupe to perform in South Africa in 1973; has visited foreign countries for film festivals, etc. *Address :* 6, Nungambakkam High Rd., Madras 600034.

GANESAN, Sivaji, a leading Cine Artiste; Member, Rajya Sabha since Feb. 1982. *b.* Oct. 1, 1928. Joined a Drama Troupe at the age of six; Best Actor Award at the Afro-Asian Film Festival, Cairo, 1960, for the picture, *Veera Pandiya Kattabomman;* winner of Best Actor Award from Tamil Nadu Govt. and many Film Journals; has acted in 198 films so far. *Address :* 16, Boag Rd., T. Nagar, Madras 600017.

GANGOLY, Ashok Kumar, B.Sc., (Nagpur); Film Artiste. *b.* Oct. 13, 1911. Asstt. Cameraman and Laboratory-in-charge, 1935; appeared as Hero for first time in *Jeevan Naiya.* Has starred in more than 200 films, prominent of which are: *Achhut Kanya, Bandhan, Jhoola, Naya Sansar, Kismat, Sangram, Parineeta, Afsana, Bandish, Ek Hi Rasta, Bhai Bhai, Chalti Ka Nam Gadi, Kanoon, Yeh Rastey Hain Pyarke, Gumrah, Karigar, Aaj Aur Kal, Mahal, Ashirvad, Victoria* 203, *Chhoti si Baat, Khatta Meetha,* etc. Also produced films: *Samaj, Ragini;* Received Sangeet Natak Academy Award 1959; Padma Shri 1962; National Award for Acting 1968. *Address :* 47, Union Park, Chembur, Bombay 400071.

GARWARE, Bhalchandra Digamber, Padma Bhushan; Sp. Executive Magistrate; Industrialist; Ex-Sheriff of Bombay: *b.* 21st December, 1903. Founded Garware Group of Industries comprising of Garware Nylons Ltd., Garware Plastics and Polyester Pvt. Ltd., Garware Synthetics Pvt. Ltd., Garware Filament Corpn. Pvt. Ltd., Garware Paints Ltd., Garware Wall-Ropes Ltd., Garware Shipping Corpn. Ltd., Modern Nets Ltd., Garware Finance Corpn. Ltd., Hon. Dir., Wall Industries Inc., Beverly, New Jersey (U.S.A.): Chmn., Export/Import Adv. Cttee., Govt. of India; held Presidentship of Maharashtra Chamber of Commerce and All India Plastics Mfrs. Orgn.; Chmn., Maharashtra Economic Devpt.

Council 1956-64 & its Pres., 1965; is connected with State, Central and Intnl. Orgns.; Ex-Chmn., Maharashtra State Financial Corpn.; Ex Vice-Chmn., State Bank of India; Ex-Dir., Central Board of State Bank of India; Ex-Pres., Local Board of State Bank of India, Ex-Dir., Sutlej Cotton Mills Ltd.; Tata Electric Co.; Bajaj Electricals Ltd., Ex-Pres., Assocn. of Synthetic Fibre Industry; Trustee, Maharashtra Chamber of Commerce; Founder of several charity trusts giving large donations in the field of education, health, sports and public activities; widely travelled. *Address:* 'Kapur Mahal', Netaji Subhash Rd., Bombay 400 020.

GEORGE, Manapurathu Verghese, B.Sc. (Madras), M.Sc., Ph.D. (Agra), F.A.Sc. (1974), Bhatnagar Prize (1973), F.N.A. (1975); Scientist. *b.* Oct. 3, 1928. Lecturer, St. John's Coll., Agra, 1954–55; Assoc. Prof. of Chemistry, I.I.T., Kanpur, 1963–65, Prof. of Chemistry, 1965–72; Head, Deptt. of Chemistry, 1967–70; Prof. since 1972; conducted research in organic reaction mechanisms, photochemistry, organometallic chemistry and heterocyclic chemistry. *Address:* Prof. of Chemistry, I.I.T., Kanpur 208016.

GHANI KHAN CHOUDHURY, A.B.A., Minister of Energy & Irrigation, Govt. of India, since 1980. *b.* Nov. 1, 1927. M.L.A., West Bengal, 1952, 1967, 1969, 1971, 1972 & 1977; Min. for Irrigation, West Bengal, 1971 and later Min. for Irrigation & Power; Pres., W. Bengal Congress (I), 1978; elected to Lok Sabha, 1980. *Address:* Shram Shakti Bhavan, New Delhi 110 001.

GHATAGE, Dr. Vishnu Madhav, M.Sc., D.Phil., FIE, FASC, FNI, MAESI, C.E.; Padma Shri; Scientist; Mg. Director, Product Designers Private Ltd., Bangalore. *b.* Oct. 24, 1908. Prof. of Aeronautical Engg., Indian Instt. of Sc., 1942–47; Chief Designer, HAL; indigenously designed, developed and produced (i) HT-2 — Trainer Aircraft, (ii) Pushpak — Light Trainer Aircraft, (iii) Krishak and (iv) "Kiran"; also designed and developed a Turbo jet Engine (HJE-2500) for the Jet Trainer. Gen. Manager, HAL, 1967–69. *Address: Office & Res.:* 7, Bore Bank Rd., Bangalore 560046.

GHOSH, Tushar Kanti, Editor and Chmn., *Amrita Bazar Patrika*, Calcutta; Editor, *Jugantar*. *b.* Sept. 21: 1898. Founded: *Jugantar* (Calcutta), Bengali daily; *Allahabad Patrika*, English daily and *Amrita*, a Bengali Weekly at Calcutta. Pres.: A.I.N.E.C., 1946–47; I.E.N.S., 1948–49; Chief Edit.: *Amrita Prabhat* (Hindi daily) 1977; Chief Edit., *Northern India Patrika* (Lucknow) 1977; Ex-Chmn., P.T.I.: U.N.I.; Chmn., A.B.C.; Trustee, Press Instt. of India; Vice-Pres. and Mem.: Exce. Cttee., Intnl. Press Instt.; Hony. Life Mem. & Chmn., Indian Sect., Commonwealth Press Union. *Address:* Editor, *Amrita Bazar Patrika*, Calcutta; Chief Editor, *Northern India Patrika*, Allahabad 211001.

GODREJ, Sohrab Pirojsha, B.Sc., Industrialist: Chmn., Godrej Cos. in India. *b.* June 3, 1912. Dir., Godrej (Indonesia); Ex-Chairman and Member, Indian National Cttee., Intnl. Chamber of Commerce; Ex-Chmn., Indian Society of Advertisers; Ex-Pres.: Indian Merchants Chamber; Rotary Club of Bombay, Alliance; Francaise de Bombay, Council for Fair Business Practices; Vice-Pres., Indian Council of World Affairs; Mem.: Governing Body, Indo-French Chamber of Commerce and Industry; Governing Body, Indian Instt. of Foreign Trade; Family Plng. Assn. of India; Bombay University Senate; Pres.: Belgo-Indian Chamber of Commerce, Indo-French Technical Assocn., Ex-Pres., Indo-Japanese Assocn., Pres., India-Iran Cultural Soc.; Trustee, World Wildlife Fund — India; The 1001: A Nature Trust. *Address:* 40-D, B. G. Kher Marg, Bombay 400006.

GOPAL, Dr. Sarvepalli, M.A., B.L. (Madras), M.A. (Oxon.), D. Phil. (Oxon.), D. Litt. (Oxon.), Hon. D. Litt. (Andhra). Sahitya Akademy Award, 1976; Fellow of St. Anthony's Coll. Oxford: Hon. Historical Adv., Ext. Affairs Min.: Prof. of Contemporary History, Jawaharlal Nehru University; Hony. Prof.: Shri Venkateswara Univ.: Pres., Indian History Congress, 1978; Chmn., National Book Trust of India, 1973-76; Mem., U.G.C., 1973-79; UNESCO Executive Board, 1976-80; Gen. Editor, Selected Works of Jawaharlal Nehru. *b.* April 23, 1923. Lecturer and Reader in History, Andhra Univ., Waltair (1948-52); Asstt. Dir., National Archives of India (1952-54); Dir., Historical Divn., Ext. Affairs Min., 1954-66; Reader, South Asian History, Oxford Univ., 1966-71. *Address:* 97, Radhakrishna Salai, Mylapore, Madras 600004.

GORE, Madhav Sadashiv, M.A. (1948), Dip. in S.S.A. (1945), Ph.D. (1960), Director, Tata Institute of Social Sciences, since July 1962 and Chmn., Ind. Council of Soc. Sci. Res., 1971-77, Cttee. on Police Trng. (1972-73); Co-Chmn., Indo-U.S. Sub-Commission on Education, 1977-79. *b.* Aug. 15, 1921. Sr. Lecturer, Delhi School of Social Work, Delhi, 1948-53; its Principal, 1953-62. *Address:* Tata Institute of Social Sciences, Sion Trombay Rd., Deonar, Bombay 400088.

GULOWSEN, H.E. Mr. Per Anders Jahn, Amb. of Norway to India since Apr. 5, 1977. *b.* Jan. 28, 1920. Joined Foreign Service, 1945; Attache, Embassy in Moscow, 1945–47; Secy., Min. of Foreign Affairs, 1947–48; Embassy in Paris, Apr.–Dec. 1948; Min. of Foreign Affairs, 1948–53; Legation in Bonn, 1953–56; Chief of Divns., Min. of Foreign Affairs, 1956–57: 1959–62: Counsellor, Embassy in Moscow, 1957–59; Embassy in Stockholm, 1962–67; Charge d'Affaires a.i., Athens, 1967–71; Spl. Adviser, Min. of Foreign Affairs, Deptt. of Economic & Social Devpt., 1971–73; Dy. Dir.-Genl., 1973–77. *Address:* Kautilya Marg, Chanakyapuri, New Delhi 110021.

GURAYA, Prof. Sardul S., B.Sc., M.Sc., Ph.D., D.Sc., Scientist; Prof. & Head, Deptt. of Zoology, Coll. of Basic Sciences & Humanities, Punjab Agri. Univ., Ludhiana. *b.* Oct. 12, 1930. Specialized in reproductive physiology including endocrinology, cell biology, histochemistry, cytochemistry & developmental biology; won S. Bhatnagar Prize for outstanding contributions to biological sciences, 1973. *Address:* Punjab Agri. Univ., Ludhiana 141001.

HADWEN, H.E. Mr. J. D., B.A., M.A. (Toronto). High Commr. for Canada to India, since Nov. 1979. *b.* Apr. 18, 1923. Joined Deptt. of External Affairs, Ottawa, 1950. First Secy., Canadian Permanent Mission to U.N., 1956-59: Mem., Canadian Delegation to 11th, 12th, 13th & 14th sessions of the Gen. Assembly; External Aid Office, Ottawa, 1959-61; Spl. Asstt. to the Secy. of State for External Affairs, 1964-67; High Commr. in Malaysia, 1967-71; Amb. to Pakistan & Afghanistan, 1972-74; Dir.-Genl., Bureau of Consular Services, Deptt. of External Affairs, 1974-76; Dir.-Genl., Bureau for Defence Liaison, July 1976-Oct. 1977: Bureau of Personnel, 1977-79. *Address:* Canadian High Commission, Shantipath, Chanakyapuri, New Delhi 110 021

HAKSAR, A. N., Chmn., I.T.C. Ltd., (Formerly India Tobacco Co. Ltd.) since 1969; *b.* Jan. 11, 1925. Served J. Walter Thompson Co., N.Y., 1945-46; joined India Tobacco Co. Ltd., 1948, became its Marketing Dir., 1966, Dy. Chmn., 1968; Dir., Reserve Bank of India; Indian

Airlines Corpn. ; I.D.B.I. ; Coates of India Ltd. ; Nehru Centre, Mem., Exec. Cttee. of All India Council for Tech. Edn. ; Ind. Adv. Cttee., Industries and Commerce Dept., Govt. of Jammu & Kashmir ; Indian Council for Cultural Relations etc. Ex. Pres., Associated Chambers of Comm. & Ind., Bengal Chamber of Comm. & Ind. *Address* . Virginia House, 37, Chowringhee, Calcutta 700 071.

HARIVALLABHDAS, Balkrishna, Mg. Dir., Shri Ambica Mills Ltd., Ahmedabad. *b*. Aug. 27, 1921. Dir., The Aruna Mills Ltd., Polyolefins Inds. Ltd., Gokak-Patel-Volkart Ltd., etc. ; Chmn., Indian Cotton Mills Fedn. (1975-77) ; Pres., Ahmedabad Millowners Assn., 1967-68 ; Gujarat Chamber of Commerce & Ind., 1971 ; Chmn., Gujarat State Fin. Corpn., 1967-69 ; Mem., Senate of Gujarat Univ., 1955–60 ; Board of Governors of the Indian Instt. of Management, Ahmedabad, 1966-68. *Address :* Camp Rd., Shahibaug, Ahmedabad 380004.

HARIVALLABHDAS, Jaykrishna, Industrialist ; Chmn. : Gujarat State Fertilizers Co. Ltd. ; Shri Ambica Mills Ltd. ; Nirlon Synthetic Fibres & Chemicals Ltd. ; Bharat Vijay Mills Ltd. ; S. L. M. Maneklal Industries Ltd. *b*. Oct. 31, 1919. Dir. : Indian Dyestuff Industries, Saurashtra Cement and Chem. Inds. Ltd., Bayer (India) Ltd., Investment Corpn. of India Ltd. and several other Cos. ; Congress M.L.A., Bombay from Ahmedabad City, 1952 ; Pres. : Gujarat Chamber of Commerce, 1961–62 ; Ahmedabad Millowners Assn., 1956-57, 1960-61 ; Exec. Chmn., Gujarat Cancer and Research Instt. ; Mayor, Ahmedabad, 1961-64. *Address :* Gokul, Camp Rd., Ahmedabad 380004.

HASAN, S. Nurul, M.A., D.Phil., Vice-Pres., Council of Scientific & Industrial Research. *b*. Dec. 26, 1921. Prof. & Head, History Deptt. & Centre of Advanced Study in History, Aligarh Muslim Univ., 1954–75 ; Prof. of History, Delhi Univ., since 1975 ; Visiting Fellow, Acad. of Sciences of U.S.S.R. ; Mem., Rajya Sabha, 1968–78 ; Min. of State for Edn., Govt. of India, 1971 ; Minister of Edn. & Social Welfare and Culture, 1972–77 ; Mem., Indian delegation to U.N. Gen. Assembly, 1967 & 1971 ; led Indian delegation to UNESCO Gen. Confce., 1971, 1972, 1974 & 1976 ; Pres., Medieval Indian History Secn. of Indian History Congress, 1961 ; Secy., Indian History Congress, 1965–68 ; Gen. Pres., 1973 ; Pres., Medieval Secn., Indian Congress of Historical Sciences, 1980 ; Fellow, Royal Historical Socy., Lond., Royal Asiatic Socy., Lond. *Address :* 4, Teen Murti Mrg., New Delhi 110011.

HEMA MALINI, Cine Artiste and Bharata Natyam dancer. *b*. Oct. 16, 1948. Has given many public performances before Indian and world dignitaries ; has received many titles for her classical art of *Bharata Natyam* and is also thorough with *Kuchipudi*, *Mohini Attam* and *Kathak* style of dance ; introduced to films with *Sapnon Ka Saudagar* in 1969 ; has completed more than fifty films, many of which had been jubilee hits : runs ' Natya Vihar Kalakendram ' — Popular school of classical dance and music — in Madras, since 1970. *Address :* 17, Jai Hind Society, 12th Rd., J. V. P. D. Scheme, Bombay 400056 : 24, Kasturi Ranga Iyengar Rd., Madras 600018.

HIDAYATULLAH, M., B.A., M.A. (Cambridge), LL.D., Barrister-at-Law, Bencher, Lincoln's Inn, Vice-President of India, since Aug. 31, 1979. *b*. Dec. 17, 1905. Advocate-General, Nagpur High Court, 1943-46 ; Puisne Judge, 1946-54; Chief Justice, 1954-56 ; Chief Justice, M.P. High Court, 1956-58; Puisne Judge, Supreme Court of India, 1958-68 ; Chief Justice, 1968-70; Pres., Intnl. Law Assocn. (Indian Br.), Indian Socy. of Intnl. Law, 1968-70; represented India at Intnl. Confcs. at Bangkok, Helsinki, Geneva, etc.; Chancellor, Muslim Nat. Univ., New Delhi; Pro-Chancellor, Delhi Univ., 1968-70 ; Chancellor, Delhi and Punjab Univs. *Address :* New Delhi.

HIMATSINGKA, B., Industrialist ; Chmn. & Mg. Director, Indian Carbon Ltd.; Chmn., Amines & Plasticizers Ltd. *b*. Sept. 18, 1926. Founded Bharat Plastics Ltd.; Dir., several indl. orgns. both in private and public sectors; Ex-Pres., Indian Assn. for Productivity, Quality and Reliability, Bengal Table Tennis Assn. ; V. Chmn. : Indian Cancer Soc. (Assam Branch) ; Ex-Pres. : National Alliance of Young Entrepreneurs ; Indian Chemical Manufrs.' Assn. *Address :* 6, Old Post Office St., Calcutta 700001.

HINGE, Kamalakar Sadashiv, M.Sc., M.S. (Chem. Engg.) (Cincinnati Univ., U.S.A.), Industrialist. Mg. Dir., Tata Oil Mills Co. Ltd. *b*. Sept. 16, 1919 ; Dir., Tata Inds. Ltd., Tata Exports Ltd., IVP Ltd., Af-Taab Investment Co. Ltd., Unitata Sdn. Bhd., Malaysia; Mem. : Gov. Council, Tata Energy Research Instt.; Mg. Cttee., Tata Mgmt. Trg. Centre. *Address :* Bombay House, Homi Mody St., Bombay 400023.

HYDARI, Akbar, M.A. (Hons.) Oxford, Royal Order of Vasa (1st Class) from Swedish Govt. for services to Indo-Swedish Industrial Co-opn. (1967) ; Chmn., WIMCO Ltd. since 1964 ; Consul-Genl. for Sweden in Bombay. *b*. Sept. 15, 1919. Joined Wimco, 1942; Dy. Mg. Dir., 1951 ; Mg. Dir., 1956–73 ; Chmn. : Atlas Copco (India) Ltd., Associated Bearing Co. Ltd., Bombay Burmah Trdg. Corpn. Ltd., Voltas Ltd. ; Dir. : Central Board, Res. Bank of India, Mahindra & Mahindra Ltd., Metal Box Co. of India Ltd., Citurgia Biochemicals Ltd., Tata Iron & Steel Co. Ltd., Gokak Patel Volkart Ltd., Facit Asia Ltd., Chemicals & Fibres of India Ltd., Crescent Dyes and Chemicals Ltd. etc. ; Pres. : Bombay Chamber of Commerce & Ind., 1963–64 ; Associated Chambers of Commerce and Industry of India, 1975; has served on the Exec. Cttee. of the Employers' Fedn., Gen. Council of Mayo Coll., Govng. Body of Admve. Staff Coll., Central Bd. of L.I.C., Council of the National Socy. for Clean Cities, etc. *Address :* Indian Mercantile Chambers, Nicol Rd., B. Estate, Bombay 400038.

HYVARINEN, H. E. Dr. Risto, Ph.D. (Pol. Sci.), Ambassador of Finland to India, since Oct. 1, 1979. *b*. Apr. 23, 1926. Chief of Section, Min. for Foreign Affairs, 1965 ; Dir. for Political Affairs, 1967 ; Amb. to Yugoslavia and Greece, 1972 ; Spl. Rep. of the U.N. Secy.-Genl. to the Confce. of the Cttee. on Disarmament, Geneva, 1975. *Address :* Embassy of Finland, 25, Golf Links, New Delhi 110003.

IRANI, Cushrow Russy, F.C.II., F.I.Arb. Lond., F.F.II. (Bom.), Mg. Dir., *The Statesman*, since Sept. 1968. *b*. Oct. 29, 1930. Career in Insurance (1949–July 1968) ; Past Pres., I.E.N.S. ; Past Chairman, A.B.C. and P.T.I. ; Dir. : Press Foundation of Asia, Manila ; Freedom Award (1977) ; Astor Award (1977) ; Mem. of the Wkg. Cttee. and Exec. Bd. of the Intnl. Press Instt. from June 1977; became its Chmn. in May 1980 and was re-elected in March 1981. *Address :* Statesman House, 4, Chowringhee Square, Calcutta 700001.

ISMAIL, H. H., B.Com., S.E.M., Hony. Consul-General for the Dominican Republic, since 1947 ; Dir., Pushpak Airlines Pvt. Ltd., Memon Co-operative Bank Ltd. ; Pres. : Indian Academy of Art & Culture ; Bombay Hospitality Cttee. ; Bureau of Information and Cultural Relations ; India-Afghanistan Friendship Socy. ; Indo

Spanish Socy.; Indo-Iran Socy.; Memon Chamber of Commerce; Memons Intnl. etc.; Chmn.: Indo Australian Socy.; Indo German Cultural Socy.; Maharashtra Coll. of Arts & Science; Maharashtra Friendship Assn.; Maharashtra U.N. Assn.; Saboo Siddiq Musafirkhana Trust. etc.; Pres.: Indian Folk Art Foundation; V. Pres., Indo-Arab Socy.; Intnl. Club of India; was sheriff of Bombay, 1967; awarded the "Order of Heraldica Cristobal Colon" by Dominican Rep., June 1970; recipient of the title and collar of the Corradia Del Arroz (Spain). *Address:* 702, Prabhu Kunj, 5, Pedder Rd., Bombay 400026.

IYA, Vasudeva Kilara, B.Sc., B.Sc. (Hons.), M.S., Docteur-es-Scis. with honours, Paris, 1955, Research Administr. *b.* Sept. 16, 1927. Sci. Officer, Bhabha Atomic Research Centre, Trombay, 1955–65; Head, Isotope Div., 1965–76; Dir., Isotope Group, 1975; Project Dir., ISOMED, 1972–75; Adv., Indian Del. Gen. Confce., 1957, '60, '79; Delegate, Geneva Confce. for Peaceful Uses of Atomic Energy, 1971; recipient, Indian Chem. Mfrs. Assn. Award, 1976; Homi Bhabha Meml. Oration Award, Soc. Nuclear Medicine India, 1975; Fellow, Maharashtra Acd. Sci., Econ. Devpt. Inst., World Bank; Mem., Nat. Assn. for Applications Radioisotopes in Radiation in Industry (founding Pres., 1976–79); Chief Sci. Editor, Radioisotopes, Production and Control, IAEA, 1971; Regnl. Editor, Intnl. Journal Radiation. *Address: Res.:* 21, Saras Baug, Sion-Trombay Rd., Deonar, Bombay 400085. *Office:* Isotope Group, Bhabha Atomic Research Centre, Trombay, Bombay 400085.

IYENGAR, Mrs. Sultana Zulfiqar Ali, M.Sc., Ph.D. (Leeds), F.Instt.P. (1972); Scientist & Asstt. Dir., National Physical Laboratory, New Delhi, since 1964. *b.* Aug. 19, 1922. Hudson Scholar (1939); Aladin Gold medallist (1941), Akbar Hydari Gold medallist (1943). Overseas Scholar, Govt. of India, for X-Ray Crystallographic Research; Regnl. Research Lab., Hyderabad, 1949–54; Central Fuel Research Instt., Bihar, 1954–62; Solid State Physics Lab., Delhi, 1962–64; conducted research on the study of crystal structure, phase transformations, thermal expansion and optical examination of semi-conductor materials, minerals, ores, etc.; Fellow, Instt. of Physics, Lond., 1972; Mem.: Indian Sci. Congress Assocn., Assocn. of Scientific Workers of India. *Address:* National Physical Laboratory, New Delhi 110012.

JAIN, A. K., B.Sc. (Hons.), Industrialist. *b.* 1934. Exec. Chmn., Bennett, Coleman & Co. Ltd.; Chmn., New Central Jute Mills Co. Ltd., PNB Finance Ltd., Rohtas Industries Ltd., Bharat Nidhi Ltd., Sahu Jain Ltd.; Dir.: Oriental Gas Co. Ltd.; Ex-Pres.: Cement Mfrs. Assn., All India Orgn. of Employers, Indian Chamber of Commerce, Calcutta, Bihar Chamber of Commerce and Bihar Industries Assn.; Exec. Cttee. Mem.: F.I.C.C. & I.; Ex-Cttee. Member of the Indian National Cttee. of the Intnl. Chamber of Commerce; Mg. Trustee, Bharatiya Jnanpith. *Address:* 8, Camac St., Calcutta 700017; Times House, 7, Bahadur Shah Zafar Marg, New Delhi 110002; *Res.:* 9, Alipore Park Place, Calcutta 700027; 6, Sardar Patel Marg, New Delhi 110021.

JAIN, Alok P., B.A., Sahitya Visharad, Industrialist. *b.* Oct. 26, 1935. Chmn., Alok Udyog Ltd.; Trustee, Sahu Jain Trust; Mem.: Bharatiya Jnanpith Sanchalak Samiti. *Address:* P. N. B. House, 5, Parliament St., New Delhi 110001.

JAIN, Girilal, B.A. (Hons.), Editor, *The Times of India*, since Sept. 2, 1976. *b.* July 26, 1922. Sub-Editor, *The Times of India*, July 1950; Reporter, July 1951; Chief Reporter, May 1958–Jan. 1961; Spl. Corepdt. in Karachi, Jan. 1961–Jan. 1962; London, Feb. 1962–Mar. 1964; Asstt. Editor, May 1964–Oct. 1970; Resident Editor, *The Times of India*, New Delhi, 1970–76. *Address:* C/o Times of India, P. Box No. 213, Bombay 400001.

JAIN, Hari Krishan, B.Sc. (Hons.), Assoc., I.A.R.I., Ph.D. (Wales), Scientist; Dir., I.A.R.I., New Delhi, since Jan. 1977. *b.* May 28, 1930. Distinguished for contributions in the field of induced mutation, genetic recombination and crop improvement; awarded Shanti Swarup Bhatnagar Memorial Prize for biological sciences; Rafi Ahmed Kidwai Award and Jawaharlal Nehru Fellowships; Fellow, Indian National Science Academy and Indian Academy of Sciences; Associate Editor, *Journal of Plant Breeding*, Berlin; Chmn: Regn. Cttee. of the Central Insecticides Bd.; "Indian National Man & Biosphere" Cttee.; Food & Agriculture Cttee., BARC, Bombay; Mem.: Bd. of Trustees, CIMMYT, Mexico, and Intnl. Bd. for Plant Genetic Resources (FAO), Rome; Awarded "Padma Shri". *Address:* Dir., Indian Agri. Research Instt., New Delhi 110012.

JAIN, Sahu Shriyans Prasad, S.E.M., Industrialist; ex-M.P. (Rajya Sabha), 1952–58. *b.* 1908. Pres., Educ. Cttee. of the District Board, Bijnor; and Vice-Chmn., Municipal Board, Najibabad, for many years; Chmn.: Dhrangadhra Chemical Works Ltd.; Carona Sahu Co. Ltd.; Bhagwan Bahubali Pratishtapana Mahamastakabhisheka Celebrations Wkg. Cttee.; Dir.: Podar Mills Ltd.; Bajaj Electricals Ltd.; Premier Automobiles Ltd.; Gwalior Rayon Silk Mfg. (Wvg.) Co. Ltd.; Bombay Oxygen Corpn. Ltd.; Simplex Mills Co. Ltd.; Hindustan Polymers Ltd.; Pres.: Digamber Jain Mahasamiti, Delhi; Bhartiya Jnanpith, Delhi; Ex-Pres.: Alkali Manufacturers' Assn. of India; F.I.C.C. & I.; All India Digamber Jain Parishad; Bharat Jain Mahamandal; Pres. for two years of Afro-Asian Econ. Cfce. and presided over the Cfce. held at Karachi in Dec. 1963; Mem.: Indian Merchants' Chamber, Bombay; Chmn. and Trustee: Bombay Hospital Trust; Ex-Trustee: Bombay Port Trust; Founder: Shriyans Prasad Charitable Trust, Bombay; Dhrangadhra Chemicals Charitable Trust, Bombay; Sahu Shriyans Prasad Jain Arts and Commerce College, Dhrangadhra. *Address:* Shikhar Kunj, 29-A, Carmichael Rd., Bombay 400026.

JAIN, Sudhanshu Kumar, M.Sc., Ph.D., Scientist; Dir., Botanical Survey of India, Calcutta, since Jan. 1978. *b.* June 30, 1926. Distinguished for contributions in taxonomy, ethnobotany & conservation of flora; awarded gold medal of Nat. Acad. of Sciences; Fellow, Botanical Socy., Nat. Acad. of Sciences, Linnean Socy., Intnl. Socy. of Tropical Ecology. *Address:* Botanical Survey of India, P.O. Botanical Gardens, Howrah 711103.

JESUDAS, K. Joseph, Ganagandharvan (1968), Playback Singer. *b.* Jan. 10, 1940. Received National Award for the Best Singer, 1973 and 1974; Kerala State Govt. Award from the date of its inception; Ex-Chmn., Sangeeta Nataka Academy. *Address:* 13, 3rd St., Abhiramapuram, Madras 600018.

JOSHI, Jayant Ramchandra, M.Sc. (Bombay Univ.); Fellow, Instt. of Actuaries, Lond., Fedn. of Insurance Instts., Bombay. Chmn., Life Insurance Corpn. of India. *b.* Oct. 24, 1925. Joined Oriental Unit and worked in various capacities, Jan. 1948–May 1968; Secy. for Investments, Central Office, L.I.C., Bombay, May 1968–Sept. 1972; Incharge: Corporate Plng., Sept. 1972–Dec. 1973; Personnel Deptt. as Chief/Dir., Dec. 1973–April 1976; Zonal Manager, Madras, Apr. 1976–Apr. 1978; Exec. Dir. (Investment), Central Office, Apr. 1978–Nov. 1978; Mg. Dir., Nov. 1978–

July 24, 1980. *Address :* 6-B, Jeevan Jyot, Setalvad Rd., Off Nepean Sea Rd., Bombay 400006.

JOSHI, Ram, M.A., Vice-Chancellor, Univ. of Bombay, since June 1, 1977. *b.* June 8, 1924. Lecturer in Economics and Politics, Ramnarain Ruia Coll., Bombay, 1951–59 ; Prof. of Pol. Sci., 1950–60 ; Prof. of Pol. Sci. & Vice-Principal, S.I.E.S. Coll. of Arts & Sci., Bombay, 1960–63 ; Prof. of Pol. Sci. and Principal, 1963–77. *Address :* Univ. of Bombay, Fort, Bombay 400032.

JOSHI, Shri Krishna, M.Sc., D.Phil., F.N.A. F.A.Sc. ; Watumull Memorial Award (1965), CSIR Silver Jubilee Award (1973), S. S. Bhatnagar Prize (1972), Meghnad Saha Award (1974) ; Scientist ; Prof., Physics Deptt., Roorkee Univ. *b.* June 6, 1935. Lecturer, Allahabad Univ., 1957–65 ; Visiting Lecturer, Univ. of California, 1965–67 ; short-term visits to Argonne National Laboratory, U.S.A., 1966 & Intnl. Centre for Theoretical Physics, Trieste, Italy, 1969, 1971 & 1974, U.K. & U.S.A., 1973 ; have conducted & guided research in Solid State Physics, Atomic & Molecular Physics. *Address :* Physics Deptt., Roorkee Univ., Roorkee 247672 (U.P.).

JOSHI, Shridhar Mahadev, B.A., LL.B., Politician ; Mem., Exec. Council, Univ. of Poona since 1972 ; Ex-Chmn., Samyukta Socialist Party ; Social Worker. *b.* Nov. 21, 1904. Joined Congress, 1930 ; Founder Mem., Cong. Socialist Party ; Mem., Bombay Assembly, 1952–62 ; M.P., 1967–72; Gen. Secy. : Samyukta Maharashtra Samiti; Vice-Pres., All India Defence Employees' Fedn.; Participated in J.P.'s Bihar Movement in 1974-75 ; Founder Mem., Janata Party ; Pres. : Maharashtra Janata Party. *Address :* 1170, Sadashiv, Pune 411002.

JUSSAWALLA, Dr. Darab Jehangir, M.B.B.S., M.S., F.R.C.S., F.I.C.S., F.A.C.S., F.A.M.S., F.A.Sc., Hon. Surgeon to the President of India ; Prof. of Oncology & Chmn. : Plng. & Devpt., Tata Memorial Hosp. ; Head, Deptt. of Oncology, Jaslok & Breach Candy Hospitals, Bombay ; Hon. Founder Secy. & Mg. Trustee, Indian Cancer Socy. ; established Chemotherapy & Cancer Cytology Units, 1960 ; Social Rehabilitation Services & Workshop for indigent cancer patients, 1961 ; Population-based Cancer Registry, Bombay, 1963, Aurangabad & Pune, 1973 ; Fellow, American Coll. of Surgeons, 1962 ; Fellow, Academy of Medical Sciences, India, 1966 ; Fellow : Royal Socy. of Medicine, London ; Assn. of Surgeons of India ; Mem., WHO Expert Cttee. on Cancer ; Pres., "SOCLEEN", Bombay ; Chmn., Asian Fedn. of Cancer Socs. ; Mem., UICC Council (Geneva) ; American Society of Clinical Oncology ; Corresponding Mem., American Assocn. for Cancer Res. ; Founder Mem., American Socy. for Preventive Oncology ; Founder-Secy., Interni. Assn. of Cancer Registries ; Corresponding Fellow, Assn. of Surgeons of Gr. Britain & Ireland. *Address:* Tata Memorial Centre, Dr. E. Borges Mrg., Parel, Bombay 400012.

KALYANI, Dr. Neelkanth A., Industrialist. *b.* Aug. 20, 1928. Promoter and Mg. Dir., Bharat Forge Co. Ltd. ; Dir., Kirloskar Engg. Ltd., Kirloskar Pneumatic Co. Ltd., Ugar Sugar Works Ltd., Premier Construction Co. Ltd., Deepak Fertilizers & Petrochemicals Corpn. Ltd., etc. ; Dir. and Chmn., State Indl. & Investment Corpn. of Maharashtra Ltd., Maharashtra Electrosmelt Ltd., Indian Bank, etc.; Ex-Chmn., Maharashtra State Co-operative Land Development Bank Ltd. ; State Indl. & Investment Corpn. of Maharashtra Ltd., Maharashtra Electrosmelt Ltd., Mem., State Bank of India (Local Bd.), A.I.M.O. ; Ex-Mem., M.S.E.B. ; former Dir., Rural Electrification Corpn. Ltd. ; Mem., Mg. Cttee., Assocn. of Indian Drop Forging and Stamping Inds. ; was conferred Hony. Degree of Doctor of Sci. by the Karnataka Univ. in recognition of yeoman service to agri. & ind., Mar. 29, 1976. *Address :* Bharat Forge Co. Ltd., Mundhwa, Pune 411036.

KANKA, H.E. Mr. Pavel, Amb. of Czechoslovakia to India. *b.* Aug. 29, 1922. Assigned to Czechoslovak Embassy, New Delhi, 1954–56 ; Djakarta, 1956-57 ; Baghdad, 1958-59 ; New Delhi, 1959-63 ; Min. of Foreign Affairs, 1963-66 ; Amb. to Turkey, 1966-70 ; Head, Intnl. Economy Deptt. of the Min. of Foreign Affairs. *Address :* Embassy of Czechoslovakia, 50-M, Niti Mrg., Chanakyapuri, New Delhi 110021.

KANORIA, Shyam Sunder, Mg. Dir., Kanoria Chemicals & Ind. Ltd. *b.* Jan. 28, 1928. Dir. : U.P. State Ind. Dev. Corpn. Ltd., Pradeshiya Indl. and Inv. Corpn. of U.P. Ltd., Ratnakar Shipping Co. Ltd., India Jute Co. Ltd., Kamarhatty Co. Ltd., Naihati Jute Mills Co. Ltd., Hindustan Sanitaryware & Inds. Ltd., Indian Aluminium Cables Ltd., Amines & Plasticizers Ltd., Aditya Chemicals Ltd., Vam Organic Chemicals Ltd., etc. ; Ex-Pres. : F.I.C.C. & I., N. Delhi; Indian Chamber of Commerce, Calcutta ; Indian Sugar Mills Assocn. ; Indian Council of Arbitration, Alkali Mfrs. Assocn., Bombay ; Mem. : Governing Body of Econ. & Sci. Res. Foundn., New Delhi ; Regnl. Customs Adv. Cttee., Calcutta, etc., visited several countries as member and leader of indl. and trade delegations. *Address : Off. :* 16A, Brabourne Rd., Calcutta 700001 ; *Resi. :* 23C, Ashutosh Chowdhury Ave., Calcutta 700019.

KAPOOR, Ranbir Raj, Producer, Dir., Actor and Editor. *b.* Dec. 14, 1924. Mem. : Jury on Intnl. Film Festivals, Berlin, Karlovy Vary, Moscow, 1966-69 ; Chmn. of the Jury, 4th Intnl. Film Festival, New Delhi, Dec. 1960 ; won the Grand Prix at the Intnl. Film Festival, Karlovy Vary, Czechoslovakia, for his film *Jagte Raho,* 1958. *Address :* Devnar Cottage, Devnar Farm, Trombay Rd., Chembur, Bombay 400071.

KAPOOR, Shashi, Producer & Film Actor. *b.* Mar. 18, 1938. Worked with the Prithvi Theatres and Shakespeareana Theatrical Co., 1955-60 ; joined films, 1960 ; first film *Char Diwari ;* has acted in five intnl. films ; became film producer with *Junoon* winner of National Award, 1978. *Address :* 112, Atlas Apartments, Harkness Rd., Bombay 400006.

KARANJIA, Russy K., B.A. (Hons.), **Publisher & Journalist.** Editor-in-Chief, *Blitz News Magazine & The Daily. b.* Sept. 15, 1912. Started *Blitz* in Feb. 1941 ; Editor & Dir., *Blitz* Publications. *Address:* Framroz Court, N. Subhas Rd., Bombay 400002.

KASTURI, G., B.A. (Hons.), Editor, *The Hindu. b.* Dec. 17, 1924. *Address :* Kasturi Bldgs., Mount Rd., Madras 600002.

KAULA, Prithvi Nath, M.A. (Pb.), B.Lib. Sci. (Delhi), Dip. L.Sc. (B.H.U.), Prof. and Head of the Deptt. of Library Sci., Dean, Faculty of Arts, Banaras Hindu Univ. ; Editor, *Intnl. Inf. & Communication,* since 1980 ; Granthalaya Vijnana, since 1971 ; Rapporteur, UNESCO Intl. Bibliographical Survey, 1949-51 ; Expert Mem., UNESCO Advy. Cttee., Comparability & Higher Educ Studies in Library Sci., since 1973 ; Chmn. : Nat. Council of Indian Library Assns., since 1974 ; Pres., Fedn. of Indian Library Assn., since 1975. *b.* Mar. 13, 1924. Mg. Editor, *Abgila* (I.L.A.), 1950-53 ; Editor, *Sharda,* 1952-55 ; Founder-Gen. Secy., Delhi Library Assn., 1953-55, 1958-60, and its V. Pres., 1956-58 ; Founder Editor, *Herald of Library Sci.,* since 1962 ; Dir., All India Seminar on Edn. for Librarianship, 1965 ; Dir., UNESCO Library Trg.

Programme, Havana, 1967 ; Visiting Prof., American Library Schools, 1968 ; UNESCO Expert, UNESCO Regional Centre in Western Hemisphere, 1967-68 ; Chmn., Council of Literacy & Adult Edn. since 1969 ; Hebru Univ., Jerusalem, 1971 ; Founder Gen. Secy., Indian Assn. of Teachers of Library Sci., 1968-73 ; its Pres., since 1973 ; delivered lectures in GDR, Hungary, USSR and Yugoslavia, 1974 ; Indian Library Movement Award ; "Pro Mundi Beneficio" Medal and Diploma by Brazilian Academy of Humanities (1975) ; Mem. : U.G.C. Review Cttee. on Lib. Sci. (1961-63) ; Governing Council, National Lib. of India (1966-69), Specialist Panel for Lib. Sci., U.G.C. (1976) ; Panel Mem., World Congress of Librarians, Brussels (1977) ; Chmn. : Regional Working Group on Lib. Sci. Edn. in Asia since 1977, Lib. Sci. Edn. Cong. of S.E. Asian Librarians, Bangkok (1978) ; is author of many books, papers etc. *Address :* C1, Banaras Hindu Univ., Varanasi 221005.

KERKAR, Ajit Baburao, Hotelier and Industrialist. *b.* June 12, 1932. Mg. Dir. : Indian Hotels Company Ltd., Dir. : Tata Industries Ltd., Oriental Hotels Ltd., Indian Resort Hotels Ltd., Banaras Hotel Ltd., Maharashtra Tourism Dev. Corpn. Ltd., Taj Investment and Finance Co. Ltd., Taj Trade and Transport Co. Ltd. ; Mem. : Exec. Cttee., Fed. of Hotel & Restaurant Assocs. of India ; Pres. : Hotels & Restaurant Assocs. (W. India) ; Board of Governors, Inst. of Catering Tech. & Applied Nutrition, Bombay ; Cttee. Mem., Indian Merchants' Chamber ; Exec. Cttee. Mem., Pacific Area Travel Association (India) Chapter; Mem.: Adv. Cttee. (Hotels), Industrial Fin. Corpn. of India, Tourism Devpt. Council, Regional Tourist Cttee (W. India) ; Mem. : Tourism Devpt. Council, Regl. Tourist Cttee. *Address :* Indian Hotels Company Limited, Mandlik House, Mandlik Rd., Apollo Bunder, Bombay 400039.

KHAITAN, Matadin, Businessman. *b.* May 1913. Life-member, Indian Red Cross Socy. ; Cttee. Mem. : Indian Sugar Mills Assn. Dir. : Matadin Khaitan & Co. (P) Ltd. ; Vegetable Products Ltd. ; Tulsipur Sugar Co. Ltd. ; Trustee : Matadin Khaitan Charitable Trust ; Gyan Bharati, etc. *Address :* Khaitan House, 27, Vivekanand Rd., Calcutta 700007.

KHAN, Ustad Bismillah, Padma Shri (1961), Padma Bhushan (1968), Padma Vibhushan (1980), Musician. *b.* March 21, 1916 at Dumraon, Shahabad Dist., Bihar, Gave his first public performance at the age of 14 at the All India Music Conference at Allahabad, 1930 ; Academy Award for Hindustani Instrumental Music, 1956 ; participated in the Edinburgh International and the Commonwealth Arts Festival, London & Liverpool, 1965 ; gave musical concerts at the Expo 1967 at Montreal, Canada, including the Lincoln, Centre, New York, U.S.S.R., and all the countries of the Middle East, 1967 ; participated : Intnl. Music Council, Cannes, Jan. 1970 ; Expo 1970 in Japan ; gave musical concerts in South America, West Indies, Guyana, Venezuela, Surinam, Trinidad & Tobago, Mexico, Syria, Belgium, France etc. during 1972, 1973 and 1974 ; took part in International Music Council programme in West Berlin in March, 1977. *Address :* C. K. 46/62, Sarai Harhar, Banaras.

KHANNA, Kumud Chandra, LL.B., Editor, *The Illustrated Weekly of India*, since Sept. 8, 1981. *b.* Dec. 5, 1926. Joined *The Times of India*, 1946 ; Spl. Corspdt., New Delhi, 1947 ; Corspdt., Burma, 1953 ; Egypt. 1954 ; Spl. Corspdt., New Delhi, 1955–58 ; covered Middle East and Congo, 1958–63 ; London Corspdt., 1964–67 ; Sr. Asstt. Editor, 1968 to April 4, 1978 ; Res. Editor, *The Times of India*, Bombay 1978 to Sept. 7, 1981. *Address :* Flat No 1, Bakhtawar, Narayan Dabholkar Rd., Bombay 400006.

KHATAU, Dharamsey Mulraj, B.Sc. (Hons.), Industrialist & Businessman. *b.* Aug. 26, 1901. Chmn. : Khatau Mills, Cable Corpn. of India Ltd., Dir. : ACC — Vickers Babcock Ltd., Scindia Steam Nav. Co. Ltd., A.C.C., Atul Products Ltd., etc. ; has contributed greatly in the development of shipping, cement, engineering & cotton textile inds. ; Pres., Bharatiya Vidya Bhavan, Bombay. *Address :* Laxmi Bldg., 6, Shoorji Vallabhdas Mrg., Bombay 400038.

KHOSLA (Maj.-Genl), Kishori Lal, B.Sc., B.E., Surveyor-General of India, since 1976. *b.* Dec. 1, 1923, Extra Asstt. Dir., Central Waterways, Irri. and Navigation Commn., New Delhi, 1946–48 ; commissioned as Lt., Corps of Engrs., 1948 ; Dy. Supdtg. Surveyor and later Suptdg. Surveyor, Survey of India, 1950-55 ; Dy. Dir. and Head, Geodetic & Research Branch, 1961 ; Dy. Surveyor-Gen., 1964 ; Dean, Indian Photo Interpretation Instt., 1975 ; Sr. Dir., Centre for Survey Trg. and Map Prodn., 1976 ; Corspdt. to Intnl. Assocn. of Geodesy ; Fellow, Indian Geophysical Union ; Instt. of Engrs. (India) ; Pres., Instt. of Surveyors ; V.-Pres. : Intnl. Cartographic Assocn. ; Pres.: Indian National Cartographic Assocn. ; Mem., Instt. of Military Engrs. ; American Socy. of Civil Engrs. *Address :* Surveyor General's Office, P. Box 37, Hathibarkala, Dehra Dun 248001.

KHOSLA, K. G., B.Sc., Industrialist ; Chmn. & Mg. Dir., K. G. Khosla Compressors Ltd., New Delhi. Dir. of several other Public limited companies ; also controls Khosla Foundry Pvt. Ltd., Deepak Pneumatic Pvt. Ltd. ; and Prashant Khosla Pneumatics (Pvt.) Ltd., Dir., Bd. of Indl. Credit & Investment Corpn. of India ; Hon. Gen. Secy., A.I.M.O. (Delhi), 1946-57 ; Vice-Pres., 1957-58. 1958-59, Sr. Vice-Pres., 1977-78 ; Pres., 1978-79 ; Pres., Engg. Assocn. of India, 1974-75 ; Assocn. of Indian Engg. Ind., 1975-76 ; Pres., Punjab, Haryana & Delhi Chamber of Comm. & Ind., 1980-81 ; Dy. Pres., Associated Chamber of Comm. & Ind., 1980-81 ; travelled abroad as leader of comml. and indl. teams of EEPC and AIEI and on business. *Address :* 11, Prithvi Raj Rd., New Delhi 110011.

KIDWAI, Dr. Akhlaq-ur-Rahman, B. A. (Jamia), M.S. (Illinois), Ph.D. (Cornell), Governor of Bihar, since Sept. 20, 1979. Ex-Chmn., Union Public Service Commn., Govt. of India. *b.* July 1, 1920. Fellow, Chemical Socy., London ; Indian Chemical Socy., Prof. & Head, Chemistry Dept. and Dean, Faculty of Sce., Aligarh Univ., 1951–67 ; Mem. : National Cttee. on Sce. & Tech., 1968–73 ; Central Adv. Bd. of Educ., and U.P. S.C. Sept. 1967-Feb. 1973 ; American Chemical Socy. ; Chmn., Spl. Bd. for the Selection of Scientists (Scientists pool) ; Chmn., Assessment Bd. of Educational & Tech. Qualification ; author of many res. papers on Organic Chemistry and Bio-Chemistry. *Address :* Governor's Camp, Patna 800022.

KILACHAND, Ambalal, Vice-Chairman, Polychem Ltd. *b.* July 23, 1912. Dir., Kilachand Devchand & Co. Pvt. Ltd., Kesar Sugar Works Ltd., Bombay Suburban Electric Supply Ltd., Citric India Ltd., Eastern Bunkerers Ltd. etc. ; Rotary Dist. Governor, 1976-77 of R.I. Dist. 314 ; former Trustee, B.P.T. ; Mem. : Bombay Customs Adv. Cttee. ; Pres., Indian Merchants' Chamber, 1953-54 ; Mem., Import Adv. Council, Govt. of India till 1956 ; Pres. : All India Plastic Manufrs. Assn., 1963 and 1964 ; Rotary Club of Bombay, 1965-66. *Address : Office :* 7, Jamshedji Tata Rd., Churchgate Reclamation, Bombay

400020 ; *Res.* : 95, Laxmibai, Jagmohandas Marg, Bombay 400006.

KILACHAND, Ramdas, Businessman. *b.* Sept. 18, 1909. Joined Kilachand Devchand & Co. Pvt. Ltd., 1926 ; Pres. : East India Cotton Assn. Ltd., Bombay Oilseeds & Oils Exchange Ltd., North Gujarat Edn. Socy. ; Chmn. : Polychem Ltd. ; Kilachand Devchand & Co. Pvt. Ltd. ; Distillers Trading Corpn. ; Dir. : Kesar Sugar Works, Ltd. ; Synthetics & Chemicals Ltd., etc. ; Ex-Trustee, Bombay Port Trust ; Pres., Indian Merchants' Chamber, 1948–49 ; Mem. : Indian Oilseeds Devpt. Council ; Export Promotion Council for Oilseeds, Oils, Oilcakes ; Chmn. : Adv. Cttee., K. D. Polytechnic, Patan ; Trustee : Kilachand Devchand Foundation ; Kilachand Devchand Charity Trust ; Kesarbai Charity Trust, Bombay Panjrapole, etc. ; elected M.L.A., Bombay, 1952. *Address : Office :* 7, Jamshedji Tata Rd., Churchgate Reclamation, Bombay 400020 ; *Res.* : 95, Laxmibai Jagmohandas Marg, Bombay 400006.

KIRLOSKAR, Shantanu Laxman, B.Sc., "Sir Walter Puckey Prize" (1968), awarded 'Karma Virottama' by Engg. Assn. of India, Calcutta (1972), 'Vanijya Ratna' (1976), Karnataka Chamber of Comm., Bombay ; National Institution of Quality Assurance award for 1976–77, Madras ; Life Mem., Instt. of Engineers (India), Industrialist ; Chmn. and Mg. Dir., Kirloskar Oil Engines Ltd., Pune. *b.* May 28, 1903. Pres., F.I.C.C. & I., 1965–66 ; First Pres., Indo-American Chamber of Commerce ; Chmn. : Bd. of Dirs., Kirloskar Pneumatic Ltd., Pune ; Kirloskar Consultants Ltd., Pune ; Kirloskar Cummins Ltd., Pune ; Kirloskar Bros. Ltd. ; Chmn., Indian Instt. of Management, Ahmedabad, 1972–74 ; Swastik Rubber Products Ltd., Pune, etc. ; Mem. : Executive Board, International Chamber of Comm., Paris ; Maharatta Chamber of Commerce, Pune ; Dir. : Reserve Bank of India, Ind. Devpt., Bank of India ; Dir. of several other Companies. *Address : Office :* Kirloskar Oil Engines Ltd., Corporate Office, 11, Koregaon Rd., Pune 411001. *Residence :* "Lakaki", Shivajinagar, Pune 411016.

KOHLI, F. C., B.A., B.Sc. (Hons.), B.Sc. (Hons.), Elec. Engg. (Queen's Univ., Canada), S.M., Elec. Engg. (MIT, USA). Dir.: Tata Inds., Tata Hydro Elec. Power Supply Co., Tata Burroughs, J. R. Kraft Board Pvt. Ltd. *b.* Feb. 28, 1924. Worked with Canadian General Elec. Co. and New England Power System ; Tata Elec. Cos., 1951–69 ; responsible for introducing computer-aided power systems design and advanced analytical techniques and consultant in computer-aided process control system and extra high voltage net works ; Gen. Manager, Tata Consultancy Services and later as Dir.-in-Charge ; Ex-Dir., Insttn. of Elec. & Electronics Engrs. Inc., New York ; Ex-Pres., Computer Socy. of India ; Fellow, IEEE (New York) ; Computer Society of India ; Insttn. of Electl. Engrs., Lond. ; Insttn. of Engrs., India. *Address :* Tata Consultancy Services, Air India Bldg., Nariman Point, Bombay 400021.

***KOSHAL, Mr. Justice Anand Dev,** B.A., LL.B., Judge, Supreme Court of India, since July, 1978. *b.* Mar. 7, 1917. Practised Law, 1936–60 ; Addl. Dist. & Sessions Judge, Ferozepur and Dt. & Sessions Judge, Amritsar, Feb. 1960 — July 1966 ; Legal Remembrancer and Secy. to Govt., Law Deptt., Punjab and Haryana, July 1966 — June 1967 ; Registrar, High Court of Punjab and Haryana June, 1967—May 1968 ; Judge, High Court of Punjab and Haryana, May 1968—June 1976 ; High Court, Madras, July 1976—July 1977 ; re-transferred to Punjab and Haryana High Court, Aug. 8, 1977 ; Chief Justice, High Court of Punjab and Haryana, Nov. 1, 1977–July 1978. *Address :* Supreme Court of India, New Delhi 110001.

KOTHARI, Dayanand Chandulal, M.A. (Madras), Industrialist, Share & Stockbroker. *b.* Feb. 28, 1914. Chmn. & Mg. Dir. : Kothari (Madras) Ltd. ; V. Chmn., Kothari Sugars & Chemicals Ltd., etc. ; Chairman, Nilhat Shipping Co. Ltd. ; Dir. : Brooke Bond (I) Ltd. ; South India Viscose Ltd. ; Vijayanagar Textiles Ltd. ; Kothari (Madras) Intl. Ltd. ; Shriram Bearings Ltd. ; English Electric Co. of India Ltd. ; Tamil Nadu Indl. Investment Corpn. Ltd., Tata Oil Mills Co. Ltd. ; was Dir., Central Board, Reserve Bank of India, etc. ; Mem. : Adv. Council on Trade, Govt. of India. Natl. Savings Cttee. : Court of Governors, Administrative Staff Coll. of India etc. ; was Chmn. : Southern India Mill Owners' Assn., S. Indian Sugar Mills Assn., Yarn Cttee. of Cotton Textiles Export Promotion Council ; was Pres. : All India Orgn. of Employers ; Hindustan Chamber of Commerce etc. *Address : Office :* 'Kothari' Buildings, 114/117, Nungambakkam High Rd., Madras 600034. *Res. :* Kothari House, 29, Kothari Rd., Nungambakkam, Madras 600034.

KOTHARI, Harshad Chandulal, Industrialist ; Share & Stock Exchange Broker. *b.* April 18, 1918. Vice-Chmn. & Mg. Dir., Kothari (Madras) Ltd. : Chmn.: Investment Trust of India Ltd., Kothari (Madras) Intl. Ltd., Madras Safe Deposit Ltd., Kothari Sugars & Chemicals Ltd. ; Pres. : Madras Exchange Brokers Assocn.; V. Pres.: Indian Sugar Mills Asscn. ; V. Chmn. : Kothari Consultant and Engrs. Ltd. ; S. I. Sugar Mills Assen., Madras and Bangalore ; Dir. : Amrutanjan Ltd., Coonoor Tea Estates Co. Ltd., W. S. Insulators of India Ltd., Madras Aluminium Co. Ltd., Mysore Acetate Chemicals Ltd. ; Sheriff of Madras (1964) ; was Chmn., Hindustan Photo Films Manufg. Co. Ltd. ; Cttee. Mem. : Indian Sugar Mills Assn., S. Indian Sugar Mills Assn., S. Indian Millowners' Assen. ; Hon. Consul for Austria in S. India. *Address :* Kothari Bldg., 14, N. H. Rd., Nungambakkam, Madras 600034.

KOTHARI, Swatantra Singh, Chartered Accountant and Ex-M.P. (Lok Sabha). *b.* 1930. Dir. : Auckland Jute Co. Ltd., North Bihar ; Pratappur Sugar Mills Ltd., Kothari Mgmt. & Indl. Consits. Ltd., etc. ; Mem. : Lok Sabha, 1967-70 ; Pub. Undertakings Cttee., 1967-69 ; National Central Savings Advisory Bd., 1968-69 ; Calcutta Productivity Council, 1974-75 ; Bd. of Govrns., Instt. of S.W. & Bus. Mgmt. 1966-68 & 1974-75 ; Central Council, Instt. of Chartered Accountants of India, 1964-67; Vice-Chmn., Taxation Cttee. ; Fedn. of Indian Chambers of Commerce & Ind., 1975-76 ; Banking & Finance Cttee., Indian Chamber of Commerce, 1973-75 ; Mem., Mg. Cttee. ; Exec. Pres., Centre for Econ. and Social Studies ; Fellow, Royal Economic Socy. (U.K.) ; Pub. Rep. on Cttee., Cal. Stock Exchange. *Address :* India Steamship House, 21, Old Court House St., Calcutta 700001.

†KRIPALANI, Acharya J. B., M.A. (History and Economics), Dir., Shri Gandhi Ashram, Village and Khadi Orgn., Lucknow. *b.* 1888. General Secy. of Indian National Congress, 1934–46 ; Pres., Indian National Congress, Oct. 1946 ; resigned Nov. 1947 ; organised Gandhi Ashram ; started Khadi and Village work, 1920, through the Gandhi Ashram, Banaras ; Mem., Constituent Assembly of India, 1946–51 ; formed the Congress Democratic Front, 1951 ; resigned from Congress and formed Kisan Mazdoor Praja Party, 1951 ; merged K.M.P.P. with the Socialist Party, Oct. 1951 ; was Chairman, P.S.P. till Dec. 1954 ; elected to Lok Sabha, 1952, 1957, 1963 & 1967. *Address :* A-4, Sarvodaya Enclave, New Delhi 110017.

---

* Since retired. † Died on March 19, 1982.

KULKARNI, S. R., Pres., All-India Port & Dock Workers' Federation. *b.* March 25, 1928. Has been connected with the dockers' movement for the last 32 years; is associated with a number of other trade union orgns.; Trustee, Bombay Port Trust, since 1958; Gen. Secy., Hind Mazdoor Sabha since April, 1981. *Address :* Block No. 58, Chanchal Smriti, Katrak Rd., Wadala, Bombay 400031.

KUMAR, Naresh, B.Com., Arjuna Award (1962), a leading tennis player, tennis commentator, sports writer & industrialist. *b.* Dec. 22, 1928. National Junior Tennis Champion, 1945, 1946; ranked India's No. 1, 1951–52; Mem. of Indian Davis Cup Team, 1952-53-54-55-56-57-58-59-60-61; Captain, Indian Davis Cup Team, 1955-56-57-58-59-60; winner of several Championships; ranked India's No. 2, 1955–56, 1958–59; reached mixed doubles quarter-finals at Wimbledon with Miss E. Buding (Germany), 1957; reached men's doubles quarter-finals at Wimbledon with N. Nath and R. Krishnan, 3 times; won doubles championships of Moscow with A. Huber (Austria), 1957; won Irish and Welsh Singles Championships, 1957, 1958; Asian Doubles Champion with Krishnan, 1962–63 & 1963–64. *Address :* Tata Centre, 43, Chowringhee Rd., Calcutta 700071.

KUPPUSWAMI, Alladi, M.A., B.L., Chief Justice, Andhra Pradesh High Court, since Nov. 23, 1980. *b.* Mar. 23, 1920. Advocate, Madras High Court, 1942–54; A. P. High Court, Guntur, 1954–56; A. P. High Court, Hyderabad, 1956–67; Judge, A. P. High Court, Aug. 21, 1967; Ag. Chief Justice, Oct. 30, 1979-Nov. 17, 1979; June 23, 1980-Nov. 23, 1980; represented India at Intnl. & Comparative Law Confce. at Barcelona, Spain, 1956. *Address :* 3-6-226/1, Himayatnagar, Hyderabad 500029.

KURIEN, Verghese, B.Sc., B.E. (Hons.) (Mech.), M.Sc (Mech. Engg.), F.I.E. (India), D.Sc., LL.D., Chmn.: National Dairy Devpt. Board, Anand; Indian Dairy Corpn., Vadodara Kadana Devpt. Assocn. (Vadodara), Gujarat State Co-operative Cotton Mktg. Fedn. (Ahmedabad), Instt. of Rural Management, Anand; Chmn. & Mg. Dir., Gujarat Co-operative Milk Mktg. Fedn. Ltd., Anand. *b.* Nov. 26, 1921. Dir.: Gujarat Dairy Devpt. Corpn.; Kaira Dist. Co-operative Milk Producers' Union Ltd.; Reserve Bank of India (Central Board), Bombay; Mem., Institute of Co-op. Management, Ahmedabad; Bd. of Govrns., Instt. of Rural Mgmt., Anand; Chmn., XIX Intnl. Dairy Cong., 1974; was Mem.: Intnl. Dairy Fedn., Brussels; Board of Management, Gujarat Agri. Univ.; Fellow. Insttn. of Engineers (India): Life Mem., Indian Dairy Sci. Assn.; awarded Ramon Magsaysay Award for Comm. Leadership '63; Hony. Degree of D.Sc. (Michigan State Univ.), '65; Hon. Degree of Doctor of Laws by Glasgow Univ., '74; awarded NIF Escorts Man of the Year, 1974; Business Leadership Award — Madras Management Assocn. Madras (1978); Vishwa Gurjari Award, 1980. *Address :* National Dairy Devpt. Board, Anand 388001.

KUSHE, Madhusudan Dattaram, Mg. Dir., P. V. S. Beedies P. Ltd., Mangalore. *b.* Nov. 16, 1935. Dir., P. V. S. Printers and Publishers Pvt. Ltd.: P. V. S. Exports Pvt. Ltd.; Pres., All India Beedi Ind. Fedn., Karnataka Beedi Ind. Assocn., South Kanara Amateur Athletics Assn.; Karnataka State Vishwa Hindu Parishad; Ex-Pres., Kanara Chamber of Comm. & Ind., Mangalore; Ex-Chmn.: Sub-Group Cttee. on "Consumer Industries" of the National Cttee. on Science & Tech., New Delhi, 1972; Mem.: Minimum Wages Adv. Board, Govt. of Karnataka; Central Excise, Regional Adv. Cttee., State Level Adv. Cttee. under Beedi Workers Welfare Act, 1976; Indo American Chamber of Commerce, Indo-Japanese Assocn., Exec. Mem., Mangalore Port Trust Board; office-bearer of many cultl., ednl., religious & commercial orgns. *Address :* P. Box No. 707, Mangalore 575003.

LALBHAI, Arvind N., B.Sc. (Bombay Univ.), Industrialist; Chmn.: Asoka Mills Ltd., Digvijay Woollen Mills Ltd., Suessen Bearings, Lalbhai Exports Ltd.; Anil Starch Products Ltd., Anup Engg. Ltd.; Dy. Chmn., I.C.M.F., Bombay; Mg. Dir.: Arvind Mills Ltd., Ahmedabad. *b.* April 3, 1918. Dir., SLM-Maneklal, Kothari (Madras) Ltd.; Ex-Dir., SBI; Pres., Ahmedabad Millowners' Assn., 1957–58, 1961–62 and 1976–77; Gujarat Chamber of Commerce, 1969–70; F.I.C.C. & I.; Mem.: Indian National Cttee. of Intnl. Chamber of Commerce; Mg. Cttee. of FICC & I, New Delhi. *Address:* "Shalimar", Shahibaug, Ahmedabad 380004.

LALCHAND HIRACHAND, B.A., Industrialist; Chmn.: Premier Automobiles Ltd.; Walchandnagar Ind. Ltd.; Premier Construction Co. Ltd.; Kesar Sugar Works Ltd.; Tiwac Ind. Ltd.; Chmn. & Mg. Dir. of Hindustan Construction Co. Ltd.; Dir., Scindia Steam Nav. Co. Ltd. and Indian Hume Pipe Co. Ltd. *b.* Oct. 24, 1904. Pres.: Indian Merchants Chamber, 1959; Maharashtra Chamber of Commerce, 1960–64; Automotive Manufrs.' Assn. of India, 1954–58; Assn. of Indian Automobile Manufrs., 1960–61; Mem.: Bombay Leg. Council, 1939; Rajya Sabha, 1952–58; was Mem.: Import Adv. Council of the Govt. of India; Pres., Swatantra Party, Bombay Region, 1968–71. *Address : Office :* Construction House, Walchand Hirachand Marg, Ballard Estate, Bombay 400038; *Res. :* Neela House, M. L. Dahanukar Marg, Bombay 400026.

MAFATLAL, Arvind Navinchandra, Industrialist; Chmn.: National Organic Chemical Industries Ltd.; Polyolefins Industries Ltd.; National Machinery Mfrs. Ltd.; Prayag-Chitrakoot Krishi Evam Godhan Vikas Nigam Ltd., Lucknow; Orissa Agro Industries Corpn. Ltd., Cuttack. *b.* Oct. 27, 1923. Dir.: Tata Eng. & Locomotive Co. Ltd., etc. *Address :* Mafatlal House, Backbay Reclamation, Bombay 400020.

MAFATLAL, Rasesh Navinchandra, B.A. (Hons.), Industrialist; Chmn. & Mg. Dir., Standard Mills Co. Ltd. *b.* March 6, 1934. Dir.: Mafatlal Inds. Ltd., Indian Dyestuff Inds. Ltd., Mihir Textiles Ltd.; Mysore Plywoods Ltd., Shri Ambuja Petrochemicals Ltd., ICICI Ltd., National Organic Chemical Ind. Ltd., Hoechst Dyes & Chemicals Ltd., Automobile Products of India Ltd., Hindustan Motors Ltd., Indian Hotels Co. Ltd., SLM-Maneklal Industries Ltd., Rexroth Maneklal Ltd., Mafatlal Ltd., Poynton, U.K., Mafatlal AG. Zurich, Switzerland, Milee Corporation Pty. Ltd., Singapore etc. Chmn.: Cotton Textiles Export Promotion Council, Ahmedabad Education Soc.; Cttee. Mem., Indian Merchants' Chamber, Associated Chambers of Comm. and Ind. of India. *Address :* Mafatlal House, Backbay Reclamation, Bombay 400020.

MAHESHWARI, Satish, B.Sc. (Hons.), M.Sc., Ph.D., Scientist and Prof. of Botany, Univ. of Delhi, since 1967. *b.* Oct. 4, 1933. Lecturer in Botany, Delhi Univ., 1954–61; Reader, 1961–66; Smith-Mundt-Fulbright Fellow for Post Doctoral Research, Yale Univ., 1959–60; Post Doctoral Research Fellow, California Instt. of Tech., 1960–61; Commonwealth Exch. Programme, Oxford Univ., 1966–67; Homi Bhabha Fellow (1973–74). Harvard Univ.; Fellow, Indian Acad. of Sciences and National Acad. of Sciences; awarded Bhatnagar Prize, 1973, Jawaharlal Nehru Fellowship, 1980–81. *Address :* Deptt. of Botany, Delhi Univ., Delhi 110007.

MAHINDRA, Harish, B.Sc. (Pol. Science) (Harvard Univ.), M.A. (Fletcher School of Law & Diplomacy), Chmn., and Mg. Dir., Mahindra Ugine Steel Co. Ltd. *b.* March 19, 1923. Chmn. : Mapa Tools P. Ltd., Maharashtra Electronics Corpn. Ltd., Welcats Steels Ltd.., Meltron Semi-conductors Ltd., Ceekay Automotive Products Ltd., Indian & Eastern Engineer Co. Ltd. ; Dir., Mahindra & Mahindra Ltd., Standard Mills Co. Ltd., Gramophone Co. of India Ltd. ; Amar Dye-Chem. Ltd., Ceat Tyres of India Ltd., Maharashtra Electro-Smelt Ltd., etc. ; Pres. : Council for Fair Business Practices, Indo Korean Socy., Indo-French Chamber of Commerce and Industry ; Vice-Pres. : Indian Standards Institution ; Chmn., K. C. Mahindra Educ. Trust, National Safety Council, Indian Socy. of Advertisers Ltd., Y.M.C.A., Home for Vagrant Boys, etc. ; Past Pres. : FICCI, Indian Merchants Chamber, Maharashtra Economic Devpt. Council etc. *Address :* Bakhtawar, Nariman Point, Bombay 400021.

MAHINDRA, Keshub, B.Sc., Chmn. : Mahindra & Mahindra Ltd., Mahindra Spicer Ltd., Union Carbide India Ltd., Indian Aluminium Co. Ltd., Otis Elevator Co. (India) Ltd. *b.* Oct. 9, 1923. Dir. : Tata Chemicals Ltd., Tata Iron & Steel Co. Ltd., Bombay Burmah Trdg. Corpn. Ltd., Bombay Dyeing & Manufg. Co. Ltd., Indian Hotels Co. Ltd., Metal Box Co. of India Ltd., WIMCO Ltd., Kaiser Jeep Intnl. Corpn. and several other companies ; was Pres., Bombay Chamber of Commerce & Industry, 1966–67 ; Assn. of Indian Automobile Manufrs., 1964–65 ; Associated Chambers of Commerce & Industry (1969–70) ; Maharashtra Economic Devpt. Council (1969–70) ; Vice-Pres., Indian Standards Institution ; Chmn. : Indian Inst. of Management, Ahmedabad, etc. ; Mem. : National Council of Applied Economic Research, All India Board of Technical Studies in Management, M. Visveswariya Indl. Res. & Devpt. Centre etc. *Address :* Gateway Bldg., Apollo Bunder, Bombay 400039.

MAMMEN MAPPILLAI, K. M., B.Sc., Industrialist ; Chmn. & Mg. Dir., M.R.F. Ltd. *b.* Nov. 28, 1922. Trg. in Rubber Technology in U.K. and from major plantations in India & Malaysia as well as industries in U.K., U.S.A., Japan & W. Germany ; associated with the M.R.F. Ltd. since its inception in 1946 and several rubber plantation cos. and rubber goods mfg. cos. in Kerala & Mysore ; Pres. : Local Board of the State Bank of India, Madras, Dir. of Central Board, State Bank of India, Indo-American Chamber of Commerce (S. Regn.), 1971–72 & Hindustan Chamber of Commerce, Madras, 1972–73 ; Dir., Chemicals and Plastics India, Ltd., Kothari Consultants & Engineers Ltd. *Address :* M.R.F. Ltd., 827, Anna Rd., Madras 600002.

MANDELIA, Durga Prasad, Industrialist & Businessman. *b.* Oct. 12, 1907. Chmn., Kerala Spinners Ltd., Hindustan Everest Tools Ltd., Central India Machinery Mfg. Co. Ltd. ; Dir., Mysore Cements Ltd., Zuari Agro Chemicals Ltd., etc. ; Spl. Adviser, Hindustan Aluminium Corpn. Ltd., Jiyajeerao Cotton Mills Ltd., Century Spg. & Mfg. Co. Ltd., Gwalior Rayons, etc.; Pres., M.P. Chamber of Comm. & Ind. and Fedn. of M.P. Chambers of Comm. & Ind. *Address :* Century Bhavan, Dr. A. Besant Rd., Bombay 400025.

MANDELIA, Surya Prakash, B.A. (Econ.), Pol. Sci. & English Literature (Agra Univ.). Pres. : Century Rayon, Century Tyre Cord, Century Chemicals, Cenray Minerals & Chemicals, Jamnagar ; Century Cement, Raipur ; Maihar Cement, Maihar ; Cenray Engg. & Management Services (All Divns. of Century Spg. & Mfg. Co. Ltd.). *b.* Sept. 16, 1929. Mgmt. Trainee, Gwalior Rayon, 1948-50 ; Dy. Secy. and Dy. Gen. Manager, Gwalior Rayon, Staple Fibre Divn., Nagda, 1950–54 ; Finance Manager, Century Rayon, Kalyan, Bombay, 1954–57 ; Dy. Gen. Manager, 1957–62 ; Gen. Manager, Century Rayon, Century Tyre Cord and Century Chemicals, 1962–68 ; Pres., Council of Indl. Safety, etc.; Chmn., Indian Council of Foreign Trade (Indo-Canadian Trade Group). Bombay Mgmt. Assocn. (Conceptual Forum) ; Mem. : All India Mgmt. Assocn., Indo-German Chamber of Commerce, Birla Instt. of Tech. & Sci., Cement Mfrs. Assocn., Indian Merchants Chamber, Bombay Chamber of Commerce & Ind., All India Telephone Assocn. Ltd., etc. ; V.-Pres., Socy. of Goodwill & Cult., Sangeet Kala Sahayak Kendra, etc.,; Ex-Pres., Assocn. of Man-made Fibre Ind., etc. *Address :* Century Rayon, Industry House, Churchgate Reclamation, Bombay 400020.

MANEKSHAW, Field Marshal Sam Hormuzji Framji Jamshedji, promoted to the rank of Field Marshal, 1973 ; was Chief of the Army Staff, Indian Army, June 1969–Jan. 1973. *b.* April 3, 1914. Commissioned, Feb. 4, 1934 ; awarded Military Cross, 1942 ; Brigade Major, Razmak Brigade in Waziristan, 1943–44 ; Instructor, Staff Coll., Quetta, 1945–46 ; General Staff Officer Grade 1, Military Operations Directorate, A.H.Q., 1946-47 ; promoted Brig., 1947 ; Dir. of Military Operations, 1948–52 ; commanded 167 Infantry Brigade, 1952–54 ; Dir. of Military Trg. until Jan. 1955 ; Commandant of the Infantry School, 1956-57; Major Gen., 1957 ; Graduate of the Imperial Defence College, London ; Commander, 26 Infantry Divn., J. & K. State, 1957-59 ; Commandant, Defence Services Staff College, Nilgiris, 1959-62 ; G.O.C. IV Corps, 1962-63 ; G.O.C.-in-C., Western Command, 1963-64 ; Eastern Command, 1964-69 ; Colonel, 8th Gorkha Rifles; Hon. Gen. of the Nepalese Army ; awarded Legion of Merit, U.S.A., 1970 ; Chmn. : All India Council of Sports ; Dir. : Bombay Burmah Trading Corpn., Indian Aluminium Ltd., Escorts Ltd., Malayalam Plantations Ltd., Steelage Inds. Ltd., Goodlass Nerolac Paints Ltd., Air India, etc.; decorated with Trishakti-Patta, 1st class by H.M. King of Nepal, 1977. *Address :* C/o National and Grindlays Bank, Bombay & New Delhi; 'Stavica', Coonoor (S.I.) 643101.

MANGALDAS, Madanmohan, B.A. (Bom.), Industrialist and Businessman, Ahmedabad. *b.* Oct. 5, 1917. Chmn. : Victoria Mills Ltd. ; Pres. : Ahmedabad Millowners' Assn., 1955 and 1958 ; Ahmedabad Management Assoc., 1959 ; elected M.L.A., Bombay from Ahmedabad, 1951 ; rep. of employers on E.S.I. Corpn. ; Vice-Pres., F.I.C.C. & I., 1971–72 ; Pres., F.I.C.C. & I., 1972–73 ; Chmn. : Gujarat Housing Board, 1960–67 ; Indian Cotton Mills Fedn., Bombay, 1967–69. *Address :* Mangal Bag., Ellis Bridge, Ahmedabad 380006.

MARZBAN, Adi Pherozeshah, B.A., Padma Shri (1964), Editor, *Jame Jamshed*, Bombay, since '36. *b.* Apr. 17, 1914. Graduate in Drama & Radio (Pasadena Playhouse, U.S.A.). Producer of English & Gujarati Plays, A.I.R., Bombay, '46 ; received Intnl. Theatre Instt. Scholarship (UNESCO), '52 ; Sangeet Natak Akademi Award for best Director, '70 ; Originator of Bombay T.V.'s game "What's The Good Word?"; Hony. Mem.: Indian Socy. of Magicians. *Address :* Jame Jamshed, Ballard House, Mangalore St., Bombay 400038.

MASANI, Minocher Rustom, Author and Management Consultant. *b.* Nov. 20, 1905 in Bombay. Founder and Jt. Secy., Congress Socialist Party, 1934-39 ; Mem., Bombay Municipal Corpn., 1935–45 ; Mayor, 1943-44 ; Mem. : Indian Leg. Assembly, 1945–47 ; Constituent Assembly of India, 1947–48 ; Amb. of India in Brazil, 1948–49 ; M.P., 1949–52 ; Chmn., U.N. Sub-Commn. on Discrimination and Minorities, 1950–52 ; Member of Parliament, 1957–70 ; Gen. Secy., Swatantra Party.

1960–67 and Pres., 1970–71 ; Chmn. : Minorities Commission, Feb.–May 1978 ; Patron, Liberal Intnl. ; Chief Advisor, Personnel and Productivity Services, Management Consultants. *Address :* 148, M. Gandhi Rd., Bombay 400023.

MEHAN, Kewal Krishna, B.Com., M.A., MBIM (Lond.), MIIE (India), AMT (Harvard), CSBMTC (Tokyo), Mg. Dir., Mehan & Associates, Mgmt. Consultants & Trainers, since 1976. *b.* May 11, 1929. Univ. Teaching of Mgmt., 1951–57 ; Mg. Consultancy & Trg., 1957–71 ; Sr. Prof. of Mgmt. & Chmn. (Consultancy), NITIE, Bombay, 1971–76 ; Fellow, Asian Productivity Orgn. ; decorated by the Central Japan Instt. of Indl. Mgmt. for notable contribution to productivity movement ; has done consultancy assignments for Indian Railways, Ford Foundation, Central & State Govts., etc. *Address :* Mehan & Associates, "The Garib", Fifth North South Rd., Juhu Vile Parle Scheme, Bombay 400049.

MEHRA, Kamlesh Chander, B.A. (Hons.), Business Executive. *b.* Sept. 20, 1939. Dir. : Tata Inds. Ltd., Tata Services Ltd. *Address : Office :* Tata Inds. Ltd., Jeevan Tara Bldg., Parliament St., New Delhi 110001 ; *Res. :* 23A, Prithviraj Rd.. New Delhi 110011.

[*]**MEHRA, Om Prakash,** Air Chief Marshal (Retd.), M.A., Governor of Maharashtra, since Nov. 3, 1980. *b.* Jan. 19, 1919. Joined I.A.F., 1940, and was on active service during World War II ; held various field and command appointments in the air force ; Chief of the Air Staff, Jan. 1973-Jan. 1976 ; was Head, Instt. of Armament Technology ; Chmn., Hindustan Aeronautics Ltd.; Ex-Pres., Indian Olympic Assocn., Asian Games Fedn. and Aeronautical Socy. of India. *Address :* Raj Bhavan, Malabar Hill, Bombay 400035.

MEHTA, Fredie Ardeshir, M.A. (Bombay), M.Sc. and Ph.D. (London School of Economics) ; Business Economist. *b.* July 31, 1928. Master of Science Thesis on "Economic Co-operation Between India and South-East Asia ", 1953 ; Doctoral Thesis on " Terms of Trade as a Factor of Economic Growth ", 1955 ; joined the Tata Admve. Service, 1956 ; Economic Adv. to Tata Inds., 1966 ; Dir.: Tata Inds. Ltd., Tata Sons Ltd., Burroughs Wellcome & Co. (India) Pvt. Ltd., Tata Oil Mills Co. Ltd., Tata Precision Inds., Pvt. Ltd., Singapore, Ewart Investments Ltd., Rallis India Ltd., Standard Mills Co. Ltd., Tata Cope-Allman Inds. Pvt. Ltd., (Singapore), Indl. Devpt. Bank of India, Bayer (India) Ltd. Siemens India Ltd., Gujarat State Petro-Chemicals Corpn. Ltd., and Associated Bearing Co. Ltd.; Vice-Chmn. and Mg. Dir., Ahmedabad Advance Mills Ltd.; in charge of Tata Economic Consultancy Services, Tata Sons Ltd.; Mem: Govng. Body of the Indian Investment Centre ; Chmn.: Local Adv. Bd. of Banque Nationale de Paris ; Mem.: Indo-German Cham. of Commerce. *Address :* Bombay House, Homi Mody St., Bombay 400023.

MENON, K. P. S., M.A. (Oxon.), C.I.E., I.C.S. (Retd.), Ex-Chmn.: Sangeet Natak Akademi ; Pres., Indo-Soviet Cultural Socy. ; Fellow, Indian Council for Cultural Relations ; Ex-Indian Amb. to Russia. *b.* Oct. 18. 1898 ; I.C.S., 1921. Addl. Dy. Secy. to the Govt. of India, Foreign and Political Dept. ; Under-Secy. to the Hon. Resident at Hyderabad ; also on the Frontier for 3 years ; Agent to the Govt. of India in Ceylon, 1929–33 ; deputed by Govt. of India on Spl. Mission to Zanzibar, Kenya and Uganda, to enquire into the position of Indians there, 1934 ; Dewan of Bharatpur State for about 3 years ; attended ; San Francisco Cfce., 1945 ; Gen. Assembly of the U.N., 1946 ; Agent-Gen. of the Govt. of India in China, 1943–47 ; Amb. in China, March 1947 ; Chmn., U.N. Commn. on Korea, 1948 ; Foreign Secy., Govt. of India, 1948–52 ; Amb. to U.S.S.R., Hungary & Poland, 1952–61. *Address :* Palat House, Ottapalam. 679101, Kerala State.

MENON, Dr. Mambillikalathil Govind Kumar, M.Sc. (Bombay), Ph.D. (Bristol), F.A.Sc., F.N.A., D.Sc., (h.c.), Jodhpur Univ., Delhi Univ., Allahabad Univ., Sardar Patel Univ., Roorkee Univ., Banaras Hindu Univ., Jadavpur Univ., S. S. Bhatnagar Award for Physical Sciences (1960), F.R.S. ; Khaitan Medal, RAS 1973 ; Padma Shri (1961) ; Padma Bhushan (1968) ; Secy., Dept. of Science and Technology, Govt. of India, since Oct. 9, 1978. *b.* Aug. 28. 1928. Held Senior Award of the Royal Commn. for the Exhibition of 1851 (1953–55) ; at the Tata Instt. of Fundamental Res., Bombay — as Reader, 1955–58 ; Associate Prof., 1958–60 ; Prof. 1960–64 ; Senior Prof. and Dy. Dir. (Physics), 1964–66 ; Dir., Tata Institute of Fundamental Research, Bombay, 1966–75 ; Chmn., Electronics Commission and Secy. to Govt. of India, Deptt. of Electronics (Feb., 1971 to Dec. 1978) ; Scientific Adv. to Minister of Defence ; Dir.-Gen., DRDO and Secy. in the Ministry of Defence for Defence Res. (Aug., 1974 to July, 1978) ; Mem.: U.N. Sec.-Genl.'s Adv. Cttee. on Application of Sci. & Tech. to Devpt. (1972–79) ; Spl. Advisor, Int. Federation of Institutes for Advanced Study, Stockholm ; Fellow, Ind. Academy of Sciences (Pres., 1974–76), Indian Natl. Sc. Acad. (Pres., 1981–82) ; Pres. Indian Sci. Cong. Assocn. (1981–82) ; Hon. Member, American Acad. of Arts and Sciences ; Hon. Fellow, Institution of Electronics and Telecommunications Engineers. *Address :* Technology Bhavan, Mehrauli Rd., New Delhi 110029.

MENON, Dr. V. K. Narayana, M.A., Ph.D., Padma Bhushan (1969), Executive Director, National Centre for the Performing Arts since Oct. 1968 ; Hon. Exec. Dir., Homi Bhabha Fellowships Council. *b.* June 27, 1911. BBC Eastern Services. 1942-47 ; All India Radio — various positions including Dir. of Calcutta, Madras and Delhi Stations, External Services ; Dy. Dir.-Gen. etc., 1948-63 ; Secy., Sangeet Natak Akademi, 1963-65 ; Dir.-Gen., A.I.R., 1965-68 ; Rockefeller Travel Grantee, 1957 ; Pres., Intnl. Music Council (UNESCO), 1966-68 ; Trustee, Intnl. Broadcast Instt., 1968-76 ; Mem. : UNESCO Adv. Panel on Space Communication, 1965–68 ; Exec. Board, Sangeet Natak Akademi ; Scholar-in-Residence, Aspen Instt. for Humanistic Studies — Summer 1973 ; re-elected Pres., International Music Council, 1976. *Address :* Executive Director. National Centre for the Performing Arts, Nariman Point, Bombay 400021.

MERCHANT, Vijay Madhowji, B.Com. (Bombay). Veteran Cricketer : Managing Director, Sirdar Carbonic Gas Co. Ltd. ; Pres. : National Assn. for the Blind, 3-R Society (Society for Re-constructive Surgery, Rehabilitation & Research). NASEOH (National Society for Equal Opportunities for the Handicapped), Cricket Club of India Ltd. *b.* Oct. 12, 1911. Joined Thackersey Group, 1932 ; actively associated with blood donation and donation of eyes ; played for India in intnl. cricket, 1933–34 ; figured in 10 Test matches for India — all against England ; retd. from first-class cricket, 1951 ; average in first-class cricket, 72·23, only next to that of Don Bradman ; Sheriff of Bombay, 1969–70. *Address :* Sir Vithaldas Chambers, 16, Bombay Samachar Marg, Bombay 400023.

MISRA, R. N., M.A., LL.M., Chief Justice, Orissa High Court, since Jan. 16, 1981. *b.* Nov. 26, 1926. Called to the Bar, 1950 ; worked as Stg. Counsel of Income Tax & Commercial Taxes Deptts. of Orissa ; Judge, Orissa High Court. 1969. *Address :* High Court, Cuttack 753002.

---

[*] Appointed Governor of Rajasthan.

MISRA, Ram Briksh, B.A., LL.B., Judge, Supreme Court of India, since Jan. 30, 1981. *b.* June 15, 1921. Started practice, 1945 ; elevated to the Bench, 1968. *Address :* 3, Tyagraj Mrg., New Delhi.

MITTER, Bhaskar, Businessman ; Chmn., Calcutta Electric Supply Corpn. Ltd. *b.* Oct. 11, 1919. Joined Andrew Yule & Co. Ltd. & became Mg. Dir. ; its Chmn., 1968–72 ; Dir.: Chloride India Ltd., Dunlop India Ltd., Union Carbide India Ltd., Alkali & Chemical Corpn. of India Ltd., Indian Oxygen Ltd., Mahindra Ugine Steel Co. Ltd., Graphite India Ltd., Housing Dev. Fin. Corpn. Ltd., Upper Ganges Sugar Mills Ltd., Metal Box Co. of India Ltd., Tinplate Co. of India Ltd., Tata Robins Fraser Ltd., Assam Co. (India) Ltd., Bhadrachalam Paper Boards Ltd., etc. Pres., Associated Chambers of Comm. & Ind. of India, 1971–72 ; Ex-Pres., Bengal Chamber of Commerce & Ind. ; Ex-Chmn., Calcutta Management Assn. *Address :* 7/1, Queen's Park, Calcutta 700019.

MODI, Kedar Nath, Industrialist ; Chairman, Modipon Ltd., Modi Ind. Ltd., Modi Spg. & Wvg. Mills Co. Ltd., Modi Rubber Ltd. and Modi Carpets Ltd. *b.* May 2, 1922. Director of several companies including Govt. undertakings such as U.P. State Ind. Devpt. Corpn. Ltd. ; Pradeshiya Ind. Investment Corpn. of U.P. Ltd., etc. ; Ex-Chmn., Devpt. Council for Man-made Textiles ; All India Manufrs. Orgn. ; Chmn. : Northern India Textile Mills Assen. ; All India Orgn. of Employers ; Pres., F.I.C.C. & I. ; Mem. : I.C.A.R., U.P. State Planning Board, etc. ; initiated the formation of Northern India Textile Research Assoc. *Address :* Modi Bhawan, Modinagar 201201.

MODI, Suresh Kumar, Businessman. *b.* June 6, 1939. Dir.-in-Charge, Modi Flour Mills, since 1959 ; Chairman, Patiala Flour Mills Co. Ltd. ; Mg. Dir., Modi Industries Ltd., Modinagar ; looks after Modi Gas & Chemicals, Modi Paints & Modi Soap ; Mem. : All India Toiletries Mfrs.' Assocn. ; Adv. Board of Employees State Insce. ; Ex-Vice-Pres., A.I.M.O. (N. Regn.) ; Ex-Chmn., All India Paints Assocn. (N. Zone) ; Ex-Pres. : A.I.M.O., Delhi State Board ; Lions Club of Delhi United, etc. *Address :* Modi Flour Mills, Okhla Ind. Estate, New Delhi 110020.

MODY, Minoo Hormusji, B.Com., F.C.A. (Eng. & Wales). *b.* June 11, 1932. Joined A. F. Ferguson & Co. and became partner, Nov. 1961 ; Chief Executive Officer, Tata Sons Ltd., Nov. 1973 ; Vice-Chmn. : Tata Services Ltd., Tata Press Ltd. ; Dir. : Tata Inds. Ltd., Tata Burroughs Ltd., Forbes Forbes Campbell & Co. Ltd., Ewart Investments Ltd., Maharashtra Elektrosmelt Ltd., Indian Standard Metal Co. Ltd., Tata Aircraft Ltd., Precision Fasteners Ltd., etc. ; Pres, : Bombay Chamber of Commerce & Ind., 1974-75, Associated Chambers of Comm. & Ind. of India, 1980-81, Maharashtra Economic Devpt. Council ; V. Pres., Indo-Australian Socy. ; Mem. : HRH The Duke of Edinburgh's Study Confce., 1974, Indian National Cttee. of Intnl. Cham. of Comm., Council of Mgmt. & Exec. Cttee. of the Forum of Free Enterprise, Faculty of Commerce, Bombay Univ. ; Trustee, JRD Tata Trust. *Address :* Bombay House, Homi Mody Street, Bombay 400023.

MODY, Rustomji Hormusji, Industrialist ; V. Chmn., Mg. Dir. : Tata Iron & Steel Co. Ltd. *b.* Jan. 17, 1918 in Bombay. Chmn., Indian Tube Co. Ltd., Bd. of Govrns. X.L.R.I. ; Dir. : Tata Sons Ltd., Indian Oxygen Ltd. ; was Pres., All India Orgn. of Employers ; Ex-Pres., Indian Chamber of Commerce ; Mem., Ind. Affairs Sub-Cttee. of the Bengal Chamber of Commerce ; was Mem., Govng. Body, National Council of Applied Econ. Res. ; National Joint Consultative Cttee. for Steel Ind., Jt. Bipartite Cttee. for Coal Ind., Iron & Steel Advisory Council, National Safety Council ; former Commr., Port of Calcutta ; Delegate to XVIII Congress of Intnl. Chamber of Commerce, Copenhagen, 1961 ; attended Intnl. Coal Cfce., Tokyo, 1963. *Address : Residence :* 5, C. Rd., Jamshedpur ; *Office :* The Tata Iron & Steel Co., Ltd., Jamshedpur 831001.

MOOLGAOKAR, Smt. Leela Sumant, Social Worker ; Chmn., Central Social Welfare Board, 1977-80. *b.* October 10, 1916 ; Hon. Organiser for the Blood Bank Scheme, 1954-1970, 1975 ; Spl. Officer on Duty for Blood Transfusion Service, Govt. of India, 1964-65 ; Patron, Indian Socy. of Blood Transfusion and Immunohaematology, Bombay Haematology Group ; Chmn., Tata Relief Cttee. ; Fedn. of Bombay Blood Banks ; Vice Chmn. and Secy. Blood Bank Assocn. ; Vice Chmn., Trustee and Member, Mg. Cttee., Anand Kendra ; Mem., Govng. Bd., Tata Blood Bank and Transfusion Service, Bd. of Mgmt. Acworth Leprosy Hospital, Govng. Council, Children's Aid Socy., Senate of the S.N.D.T. Women's Univ., Govng. Bd., Hind Kusht Navaran Sangh etc. ; Social Worker, Gandhi Kushta Punarnivarna Seva Socy. ; Acharya Atre Foundn. Award, 1976 ; Hon. Life Membership, Giants Intnl., 1980. *Address :* ' Mayfair ', B. G. Kher Marg, Bombay 400006.

MOOLGAOKAR, Sumant, B.Sc. (Hons.) (Lond.), SEM., Industrialist. *b.* March 5, 1906. Started career with the A.C.C. Ltd., 1930–48 ; Mg. Dir., TELCO Ltd., 1949 ; was Chmn. : Engg. Capacity Survey Cttee., Machine Tools Devpt. Cttee. ; Mem. : Indian Defence Delegation to Washington, 1963, National Plng. Council, Plng. Commn., Adv. Bd., Coll. of Mily. Engg., Pune ; Chmn. : TELCO Ltd. ; Dir. : Tata Sons Ltd., A.C.C. Ltd., Cement Agencies Ltd., etc. *Address :* Bombay House, Homi Mody St., Bombay 400023; *Res. :* Mayfair, Little Gibbs Rd., Malabar Hill, Bombay 400006.

MOTHER TERESA, Bojaxhiu, Missionary of Charity, giving whole-hearted and free service to the poorest of the poor. Bharat Ratna (1980). *b.* Aug. 27, 1910 at Skopje, Yugoslavia. Founded Society of the Missionaries of Charity on Oct. 7, 1950 to spread love and compassion throughout the world. Was awarded the 1969 Nehru International Award in 1972. Magsaysay Award (1962), Kennedy Award (1971), Nobel (Peace) Prize (1979) ; has also founded the Missionary Brothers of Charity with its Hq. at 7, Mansatala Row, Calcutta 700031, the Intl. Assen. of Co-Workers of Mother Teresa with Mrs. Ann Blaikie of England as the Intnl. Link each country having its own National Link. *Address :* 54A, Lower Circular Rd., Calcutta 700016.

MUDALIAR, Arcot Lakshmanaswami Ananthakrishnan, B.Sc. (Hons.), M.A. (Chem.), Chairman, I.C.I. (India) Pvt. Ltd., Alkali & Chemical Corpn. of India Ltd., Indian Explosives Ltd., Crescent Dyes & Chemicals Ltd., & Chemical & Fibres of India Ltd., since 1976. *b.* Sept. 7, 1925. Joined I.C.I. (India) in England as Comml. Asstt., 1949 ; Dy. Regnl. Manager, 1960 ; Regnl. Manager, Calcutta, 1961 ; Group Comml. Dir. of I.C.I. Cos. in India, 1964 ; Chmn., Imkemex I. Ltd., 1965 ; Mg. Dir., Alkali & Chemical Corpn. of India Ltd., 1969 ; Dy. Chmn., 1974 ; Pres., Bengal Chamber of Comm. & Ind., 1975 ; Dy. Pres., Associated Chambers of Comm. & Ind. of India, 1979–80 ; Mem. : Customs Advisory Cttee. (E. Zone), Export Import Advisory Cttee. (E. Zone), Court of Governors, Adm. Staff Coll., Hyderabad, etc. *Address :* I.C.I. House, 34, Chowringhee Rd., Calcutta 700071 ; *Res. :* 5, White House Gardens, 17, Alipore Rd., Calcutta 700027.

MUKERJEE Hirendra Nath, M.A. (Calcutta, et Oxon.). B.Litt. (Oxon.), Barrister-at-Law, Communist leader and Educationist. *b.* Nov. 23, 1907. Mem. : A.I.C.C., 1938-39; Bengal Provincial Cttee., C.P.I., 1947-49; M.P., since 1952 ; Dy. Leader, Communist Party Group since 1952 and after secession of the Left, Leader, 1964-67; Mem. : National Council, C.P.I. ; Calcutta Univ. Senate, 1953 and 1957 ; Central Adv. Board of Archaeology, since 1952 ; Mem., Exec. Cttee.: Jawaharlal Memorial Trust ; Shastri National Memorial Trust ; Mem. : National Cttee. for Gandhi Centenary ; Emotional Integration Cttee. : Cttee. on Small Newspapers ; National Library Reviewing Cttee., etc. ; Chmn.: Pub. Accts. Cttee. of the Parliament, 1975–77 ; author of Portrait of Parliament and 30 other books in English and Bengali. *Address :* 14, Indian Mirror St., Calcutta 700013.

MUKHERJEE, Pranab Kumar, M.A. (His. & Pol. Sc.), Minister for Finance. Govt. of India, since Jan. 15, 1982. Was Min. for Commerce and Steel & Mines, Jan. 14, 1980–Jan. 14, 1982. *b.* Dec. 11, 1935. Mem. : Exec. Cttee., Congress Parl. Party, 1972-73 ; Dy. Min., Min. of Indl. Devpt., Feb. 1973 ; Min. of Shipping & Transport, Jan. 1974 ; Min. of State for Finance, Oct. 1974–Dec. 1975. *Address :* North Block, New Delhi 110001.

MURTY, Kuchimanchi Satyanarayana, B.Sc. (Ag.), M.Sc. (Ag.), Ph.D. ; Head, Divn. of Physiology, Central Rice Research Instt., Cuttack, since 1972. *b.* Nov. 9, 1928. Research Asstt., 1954-62 ; Asstt. Physiologist, 1962-63 ; Plant Physiologist, 1963-72 ; spl. trg. on the use of Isotopes, I.A.R.I., New Delhi, 1963 ; Plant Nutrition, National Instt. of Agri. Sciences, Tokyo, 1968 ; Mem. : Indian Socy. of Plant Physiology ; Assn. of Rice Research Workers & Indian Socy. of Nuclear Techniques & Plant Biochem. Soc. ; Indian Sci. Cong. Assoc. *Address :* Divn. of Physiology, Central Rice Research Instt., Cuttack 753006.

MUTHIAH, M.Ct. (Muthiah Chidambaram Muthiah), Banker and Industrialist. *b.* Oct. 19. 1929 ; Chmn. : Premier Fertilisers Ltd., Chemoleums Pvt. Ltd. ; Reliance Motor Co. Pvt. Ltd.; Mg. Dir.: Cigfil Ltd.; Trustee, Sir M.Ct. Muthiah Chettiar High School, Madras ; Dir. : V.S.T. Tillers Tractors Ltd., Lakshmi Machine Works, Ltd., Polychem Ltd. ; Travancore Rayons Ltd. ; Thiru Arooran Sugars Ltd., etc. ; Exec. Cttee. Mem., Southern India Chamber of Commerce and Industry; Council Mem. : Fedn. of Automobile Dealers Assn. : Mem., Mg. Cttee. : Motor Vehicles & Allied Inds. Assn. *Address :* Bedford House, Purasawalkam, Madras 600084.

MUTHIAH CHETTIAR OF CHETTINAD, Dr. Rajah Sir Muthiah Annamalai, Kt. B.A., D.Litt., Padma Bhushan, Educationist and Industrialist : Chmn. : Madurai Coats Ltd., Madurai ; Chettinad Cement Corporation Ltd., Madras ; Pro-Chancellor. Annamalai Univ. *b.* 1905. First Mayor of Madras. 1932-35 ; Min. for Educ. and Public Health. Madras and Pro-Chancellor. Madras Univ., 1936–37 : Mem. : Madras Leg. Council, 1930–70 ; Madras Univ. Syndicate, 1940–46 ; National Defence Council, Delhi. 1941-46 ; Indian Constituent Assembly, Delhi, 1946-50 : Pres. : Southern Indian Chamber of Commerce & Industry, Madras, 1941 ; F.I.C.C. & I., New Delhi, 1943-44 ; Formerly Dir. & Chmn. of Imperial Bank of India, Madras. 1932-56 ; Dir., Indian Bank Ltd., 1928-32 ; 1956-69 and its Chmn., 1964-69: Dir., Consolidated Coffee Ltd., Pollibetta, Coorg (Nilgiris) ; Coonoor Tea Estates Co. Ltd., Coonoor (Nilgiris) : E.I.D. Parry (India) Ltd., Madras. *Address :* Chettinad House. Rajah Annamalaipuram, Madras 600028

NAMBIAR, K. P. P., M.Sc. (Lond.), D.I.C. (Lond.), F.I.E.E. (Lond.), F.I.E.T.E., S.M.I.E.E.E. (U.S.A.). Chairman & Mg. Dir., Kerala State Electronics Development Corpn. Ltd., Keltron Component Complex Ltd. ; Secy. to the Govt. of Kerala, Industries Deptt. *b.* April 15, 1929. Chmn., Keltron Crystals Ltd., Keltron Magnetics Ltd., Keltron Projectors Ltd., Keltron Entertainment Systems Ltd., Dielectro Magnetics Ltd., Keltron Resistors Ltd., Keltron Power Devices Ltd., Keltron Rectifiers Ltd. ; Bd. of Governors, Electronics Research & Devpt. Centre ; Mem., Governing Body, Insttn. of Electronics & Telecommunication Engrs., Small Industry Extn. Trg. Instt., Sree Chitra Tirunal Medical Centre, Centre for Earth Science Studies ; Exec. Cttee., CSIR, Trivandrum Complex. *Address : Off :* Keltron House, Vellayambalam, Trivandrum 695001. *Res. :* Chandragiri, Vikramapuram Hills, Kuravankonam, Trivandrum 695003.

NAMBIAR, Patuvilayi Chandroth Damodaran, M.A. (Econ.) (First Class), C.A.I.I.B., Chairman, State Bank of India and its seven subsidiaries, since May 23, 1977. *b.* Dec. 14, 1922. Probationary Asstt., Imperial Bank of India, 1944 ; Manager, London Office ; Foreign Deptt., Calcutta ; Rep., New York Office ; Secy. & Treasurer, Bengal Circle ; Dy. Mg. Dir. and Mg. Dir. ; Chmn., Indian Banks Assocn. ; V. Pres., Indian Institute of Bankers ; Dir. : Agri. Refinance & Devpt. Corpn. ; Indl. Finance Corpn. of India ; Agricultural Finance Corp. Ltd., IDBI; Housing Devpt. Fin. Corpn. Ltd., Indl. Reconstruction Corpn. of India ; Mem. : Gvg. Bd., National Instt. of Bank Mgmt. ; Steering Cttee. on Regnl. Rural Banks ; Agri. Credit Bd., Reserve Bank of India ; Bankers Training College (RBI) ; Bd. of Governors ; IIM (Ahmedabad) ; Court of Governors, Admive. Staff College of India, Hyderabad. *Address :* State Bank of India, Central Office, Madame Cama Rd., Bombay 400021.

NANDA, Harparshad, B.Sc., Industrialist. *b.* Jan. 9, 1918. Mg. Dir., Escorts Ltd., Goetze (India) Ltd. ; Chmn. : Escorts Tractors Ltd. ; Sharpedge Ltd. ; Lintas India Ltd. ; GGR India Ltd. : Escorts JCB Ltd. ; Thomson Press (India) Ltd. ; Indo-German Chamber of Comm. (Northern Region) ; Pres. : Indo-Polish Chamber of Commerce & Industry ; Vice-Pres. : Fedn. of Indo-German Socs. in India ; Mem. Exec. Cttee. : Asso. Chambers of Commerce and Industry of India : V.-Chmn., Governing Body, Indian Institute of Foreign Trade (Ministry of Commerce). *Address : Off. :* 11, Scindia House, New Delhi 110001 ; *Res. :* 12, Jor Bagh. New Delhi 110003.

NARAIN, Govind, B.Sc. (Hons.), M.Sc., I.C.S. (Retd.), Governor of Karnataka, since Aug. 2, 1977. *b.* May 5, 1917. Home Secy., U.P., 1948-51 ; Adviser-cum-Secy. to the King of Nepal, 1951-54 ; Secy., P.W.D., Power & Inf., U.P., 1954-55 ; Devpt. Commr. and Secy., Plng., Eco., Stats. & Inf., 1955-58 ; also Commr., Uttarkhand Dn. ; Ch. Secy., U.P. Govt., 1958–61 ; Mg. Dir., S.T.C., 1961–63 ; Chmn., S.T.C., May–Oct. 1963 ; Minerals & Metal Trdg. Corpn. of India Ltd., 1963-66 · Adviser to the Governor of Kerala, Jan.–Apr. 1965 ; Secy., Deptt. of Family Plng., Min. of Health & Family Plng., Govt. of India, Mar.–Dec. 1966 ; Secy., Min. of Health, Family Plng. and Urban Devpt., 1966-68 ; Min. of Defence, Deptt. of Defence Prodn., Nov. 1968–Dec. 1970 ; Min. of Home Affairs, Jan. 1971–May 1973 ; Defence Secy., 1973–75 ; Mem., A. P. Administrative Tribunal, 1976–77. *Address :* Raj Bhavan, Bangalore 560001.

NARAIN, Prakash, B.A., LL.B., Chief Justice, Delhi High Court, since Jan. 8, 1981. *b.* Aug. 6, 1923. Addl. Standing Counsel for Central Govt. & Delhi Admn. for Dist. Courts and later Standing Counsel, 1956-58 ; Addl. Central Govt. Counsel for High Court Bench at Delhi, March 1963 ; Central Govt. Counsel for Delhi High Court, May 1967 ; Judge, Delhi High Court, May 1967 ; Ag.

Chief Justice, June 27, 1980. *Address :* A-37, Aurangzeb Rd., New Delhi.

NARAYANAN, Kocheril Raman, M.A. (Eng. Litt.), B.Sc. (Econ.) (Hons.), Amb. of India to U.S.A. since Oct. 1980 ; *b.* Feb. 4, 1921. Joined I.F.S., 1949 ; served in Indian Missions at Rangoon, Tokyo, London, Canberra, Hanoi ; Dir. of China Divn., Min. of Ext. Affairs, 1963–67 ; Amb. to Bangkok, 1967–69 ; Jt. Secy. (Policy Plng.), 1969–70 ; Amb. to Ankara, 1973–74 ; awarded J. L. Nehru Fellowship for 1970–72 ; Hony. Fellow, London School of Economics ; Addl. Secy., Min. of Ext. Affairs, April 5, 1975 to March 31, 1976 ; Amb. to Peoples Republic of China, 1976–78 ; Vice-Chancellor, J. N. Univ., Jan. 1979 to Sept. 1980. *Address :* 2107 Massachusetts Avenue, N.W., Washington, I.C. 20008.

NARAYANASWAMY, S., Chmn. : Aluminium Inds. Ltd., Central Scientific Supplies Co. Ltd., India Forge & Drop Stampings Ltd., Mettur Chemical & Ind. Corp. Ltd., Seshasayee Inds. Ltd., Simco Meters Ltd., etc. *b.* Apr. 12. 1905. Dir. : Chemicals & Plastics India Ltd., Tecalemit (Hind) Ltd., etc. ; was Pres., S. India Chamber of Commerce & Ind., Madras ; Pres., Brahma Gana Sahba, Madras ; V. Pres., Bharatiya Vidya Bhavan, Madras Kendra ; Cttee. Mem. : Madras Shareholders' Assn., Kalakshetra, Adyar ; Vice-Pres., Besant Centenary Trust ; M.L.C., 1971–76. *Address :* " Seshadri ", 8, Chittaranjan Rd., Teynampet, Madras 600018.

NARIELWALA, Phirozeshah Ardeshir, Industrialist. *b.* June 6, 1900. Chmn. : Ceat Tyres of India Ltd. ; Vice-Pres., Indian Cancer Socy., Bombay ; Trustee, Prime Minister's National Relief Fund, New Delhi ; Secy., Jawaharlal Nehru Memorial Fund. New Delhi. *Address :* Breach Candy Gardens, B. Desai Rd., Bombay 400026.

NARLIKAR, Dr. Jayant Vishnu, M.A., Adams Prize of Cambridge Univ., May 5, 1967, Sc.D. (Cantab.), Staff Member, Instt. of Theoretical Astronomy, Univ. of Cambridge, 1967–72 ; Fellow, King's Coll., Cambridge, 1963–72 ; Jawaharlal Nehru Fellow, 1973–75 ; Prof., Tata Instt. of Fundamental Research, Bombay ; Scientist. *b.* July 19, 1938. Admitted to Fitzwilliam House, Cambridge, 1957 ; elected Berry-Ramsey Fellow of King's Coll., Jan. 1963 ; awarded the Tyson Medal, 1960 and the Smith's Prize, 1962 by Cambridge Univ.; Bhatnagar Award for Physical Sciences, 1978 ; Tata Scholar, 1957–63 ; elected Fellow of the Royal Astronomical Socy., 1963 ; Fellow : Senior Research, King's Coll., Cambridge, 1969 ; Indian National Sci. Academy (1977). *Address :* Tata Instt. of Fundamental Research, Bombay 400005.

NAYUDAMMA, Dr. Yelavarthy, (Indl. Chem.) (Banaras), M.Sc., Ph.D. (Chem.) (Lehigh), F.I.C. (India) ; Fellow, Indian Acad. of Scs. ; Indian Stds. Instn. Vice-Chancellor, Jawaharlal Nehru Univ. *b.* Sept. 10, 1922. Was Dir.-Genl., Council of Scientific and Indl. Research and Secy. to the Govt. of India, Deptt. of Science & Technology, until recently. *Address :* J. L. Nehru Univ., New Mehrauli Rd., New Delhi 110067.

NEHRU, Braj Kumar, B.Sc., B.Sc. (Econ.), Bar-at-Law, I.C.S. (Retd.), Governor of Jammu & Kashmir State. *b.* Sept. 4, 1909. Exec. Dir., World Bank, 1949-53 & 1958-62 ; Jt. Secy., Deptt. of Econ. Affairs, 1954-57 ; Secy., 1957-58 ; Commr. Gen. for Econ. Affairs, Washington, 1958-61 ; Amb. to U.S.A., 1961-68 ; Governor of Assam & Nagaland, 1968-73 and of Manipur, Meghalaya & Tripura, Jan. 1972 to Sept. 1973 ; Indian Rep. at : Commonwealth Fin. Ministers' Confce., 1949-50 ; 1955-56 ; U. N. Gen. Assembly, 1949-52, 1960 ; F.A.O., 1949-50, etc. ; High Commr. to U.K., 1973-77. *Address :* Raj Bhavan, Srinagar 190001.

NEHRU, Brijendra, Export Executive. *b.* Oct. 15, 1934. Dir. : Tata Industries Ltd. ; Tata Zambia Ltd. ; Mg. Dir. : Tata Exports Ltd. ; Mem. : Adv. Council on Trade, Govt. of India ; Dev. Council for Leather & Leather Goods Inds., Govt. of India ; Reconstituted Export-Import Adv. Comm. (WZ), Bombay; Cttee. on Export Strategy (1980). *Address : Res. :* Questend, 47, Cuffe Parade, Colaba, Bombay 400005 ; *Office :* Block A, Shivsagar Estates, Annie Besant Rd., Bombay 400018.

NICULESCU, Dr. H. E., Ambassador of Socialist Republic of Romania to India. *b.* Nov. 1, 1921. Engr., Chief Engr., Dir., Dy. Min., Min. of Electl. Energy, 1945-56 ; Counsellor, Head of the Romanian Trade Representation in India, 1956–61 ; Gen. Secy., Min. of Home Trade, 1962–69 ; Min., Inspector-Genl. of the State Genl. Inspectorate for Product Quality Control, 1969–77. *Address :* Embassy of the Socialist Republic of Romania, 9, Tees January Mrg., New Delhi 110011.

NIHAL SINGH, Surendra, B.A. (Hons.), Editor-in-Chief, *The Indian Express*. *b.* Apr. 30, 1929. Joined *The Times of India*, 1951 ; Staff Reporter, *The Statesman*, 1954 ; Spl. Corspdt., 1958-61 ; Foreign Corspdt., Singapore, Rawalpindi, Moscow & London, 1962-73 ; Resident Editor in Delhi, 1974-75 ; Editor, 1975-79 ; after resigning from the editorship, ran a fortnightly column in ' India Today ' for 15 months. *Address :* C-1, Dewan Shree Apartments, 30, Ferozeshah Rd., New Delhi 110001.

PALKHIVALA, Nani Ardeshir, M.A. (1942), LL.B. (1944), Hon. LL.D. (Princeton & Lawrence Univs.), Sr. Advocate, Supreme Court of India. *b.* Jan. 16, 1920. Chmn. : Associated Cement Cos. Ltd., Tata Exports Ltd. ; Dy. Chmn.: Tata Iron & Steel Co. Ltd.; V. Chmn.: TELCO ; Dir. : Tata Sons Ltd., Tata Energy Res. Inst., Tata Inc. (U.S.A.), Tata Ltd. (U.K.), Tata International AG (Switzerland), Associated Bearing Co. Ltd., NOCIL ; Hon. Mem., The Academy of Political Sci., N. York ; Indian Ambassador to the U.S.A., 1977–79 ; V. Chmn. : Blood Bank Assocn., Bombay ; Trustee : Sir Ratan Tata Trust, Sir Dorabji Tata Trust ; Chmn. : A. D. Shroff Memorial Trust, Lotus Trust ; Pres., Forum of Free Enterprise. *Address :* C/o Bombay House, 24, Homi Mody St., Bombay 400023.

PANDAY, Kedar, M.Sc., LL.B., Minister for Irrigation, Govt. of India, since Jan. 15, 1982. Was Minister for Railways, Govt. of India. *b.* June 14, 1920. Agriculturist & Political Worker ; Dy. Min., Bihar State, 1957–62 ; Min. for Industry, Agriculture, etc., 1970–71 ; Chief Minister, 1972–73 ; Pres., Bihar P.C.C. (I), since Aug. 1977 ; Union Min. for Irrigation, June 8, 1980 ; Mem., A.I.C.C., since last 25 years. *Address :* Shram Shakti Bhavan, New Delhi 110001.

PATEL, Kanubhai Raojibhai, *b.* June 9, 1910. Chmn. and Mg. Director, Acicorp Pvt. Ltd., Calcutta ; Mem. : Socy. of Automotive Engrs., Warrandale, P.A., U.S.A., Assocn. of Diesel Specialists, U.S.A., Overseas Automotive Club Inc., New York, American Socy. for Testing and Materials ; Hon. Consul-General for Philippines, Calcutta, since March 1963 and Hon. Secy., Consular Corps of Calcutta, since Sept. 1965. *Address :* (*Office*) 10, Lall Bazar St., Calcutta 700001 : (*Res.*) 13, Loudon St., Calcutta 700017.

PATHAK, Mr. Justice Raghunandan Swarup, B.Sc. (1945), LL.B. (1947), M.A. (1948), Judge, Supreme Court of India, since Feb. 20, 1978. *b.* Nov. 25, 1924. Advocate, Allahabad High Court, Nov. 8, 1948 and of Supreme Court, 1957 ; Addl. Judge, Allahabad High Court, Oct. 1, 1962 ; Permanent Judge, July 23, 1963 ; Chief Justice, Himachal Pradesh High Court, Mar. 18, 1972; Mem.: Indian Law Instt., Intnl. Law Assocn. (London); Exec. Cttee., Intnl. Law Assocn. (Indian Branch); Vice-Pres., Indian Socy. of Intnl. Law. *Address:* 4, Moti Lal Nehru Mrg., New Delhi 110011.

PATNAIK, Janaki Ballav, M.A. (Pol. Sc.), Chief Minister, Orissa, since June 9, 1980. Editor, *Eastern Times,* Cuttack, 1952–66; *Prajatantra* (Oriya), 1952–67; Mem.: Standing Cttee., All India Newspaper Editors Confce., 1956–60; Orissa Sahitya Akademi, 1956–67; A.I.C.C.; Fellow, Utkal Univ. Senate, 1957–67; Dy. Min. of Defence, Govt. of India, Feb. 1973; Min. of State for Defence, Govt. of India, 1976; elected to Lok Sabha, 1980; Min. for Labour and Tourism and Civil Aviation, Govt. of India, Jan. 1980 to June 1980. *Address:* Chief Minister's Residence, Unit 1, Bhubaneswar.

PHILIP, Kandathil Mammen, M.A. (Hons.), Industrialist. *b.* May 2, 1912. Promoter & Dir., Madras Rubber Factory Ltd., M. M. Rubber Co. Ltd., India Coffee & Tea Distributing Co. Ltd., etc.; Hony. Life Mem., All India Rubber Inds. Assocn.; Ex-Pres., Indian Rubber Inds. Assocn. and World Alliance of YMCAs, Geneva; Dir.: Kerala Shipping Corpn. Ltd., E.D.C.S. (World Development Bank), Netherlands; Pres., National Council of YMCAs of India. *Address:* Silver Arch, 1st Flr., Petit Hall Compound, Nepean Sea Rd., Bombay 400006.

PILLAI, Subramanian Velayudhan, Mg. Dir., Pfizer Ltd., since Dec. 1970. *b.* Aug. 1928. Joined Pfizer Ltd., 1950; Elected on the Pfizer-India Board of Directors, 1965; Gen. Manager, Sept.–Dec. 1970; was also Area Controller for South East Asia Region. *Address:* Pfizer Ltd., Express Towers, Nariman Point, Bombay 400021.

PISHAROTY, Dr. Pisharoth Rama, B.A. (Hons.), M.A. (Madras), M.A. (Calif.), Ph.D. (Calif.); Scientist; Sr. Professor, Physical Research Laboratory, Ahmedabad, 1966 to 1976. *b.* Feb. 10, 1909. Conducted substantial research under Sir C. V. Raman at Bangalore; joined the India Meteorological Deptt., 1942; Research Meteorologist in U.S.A., 1952–54; Dir., Colaba & Alibagh Observatories, 1959–62; Instt. of Tropical Meteorology, 1962–66; Chmn., WHO Adv. Cttee., 1968; Mem., Intl. Orgn. Cttee. for Global Atmospheric Res. Programme, 1968–75; Vice-Pres.: India Met. Socy.; V.-Pres., Intl. Assocn. for Meteorology and Atmospheric Physics, 1972–79; Advisor, India Space Res. Organisation. *Address:* Professor Emeritus, Physical Research Laboratory, Ahmedabad 380009.

PODAR, Ganesh Narayan R., Industrialist & Businessman; Chairman, Podar Group consisting of: Jaipur Spg. & Wvg. Mills Ltd., Bombay House-Hold and Industrial Plastic Mfg. Co. Pr. Ltd., Bombay Piecegoods Yarn & Plastic Trading Co. Ltd., etc. *b.* May 11, 1930; Chmn.: Ganesh Podar Foundn. Donors of: Seth Anandilal Podar High School, Santa Cruz, Bombay; Raja Ramdeo Podar Multi-Purpose Higher Secondary School, Jaipur; R. A. Podar Coll. of Commerce & Economics, Matunga, Bombay; Dir.: New City of Bombay Mfg. Co. Ltd., Bombay, Kamarhatty Co. Ltd., Calcutta, Usha Spg. & Wvg. Mills Ltd., New Delhi; Ex-Dir.: Maharashtra Tourism Development Corpn. Ltd., Bombay; Texmaco, Calcutta; Cttee. Mem.: F.I.C.C.I., New Delhi; Indian Merchants' Chamber, Bombay, etc.; Ex-Cttee. Mem.: All India Manfrs.' Orgn., Bombay; Ex-Pres.: Western India Automobile Assocn., Bombay; Indian Merchants' Chamber, Bombay; Silk & Art Silk Mills' Research Assocn., Bombay; Rajasthan Textile Mills' Assocn., Jaipur. *Address:* Podar Chambers, S. A. Brelvi Road, Fort, Bombay 400 001.

PODAR, Kantikumar R., B.Com., Industrialist. *b.* Apr. 12, 1935. Vice-Chmn., Podar Orgn.; Chmn. of several Cos. under it and Dir. of several Pub. Ltd. Cos.; Pres., All India Orgn. of Employers, Apr. 1974–Mar. 1976; Employers' Assocn. of Rajasthan, 1968–76; Management Assocn. of Rajasthan, since 1968; Textile Assocn. (India), Bombay, 1975; Chmn., Millowners Assocn., Bombay, 1976–78; Vice-Pres., Indian Council of Foreign Trade, since 1972; Sheriff of Bombay, 1974; Vice-Chmn., Indian Cotton Mills' Fedn.; Vice-Pres., Indian Merchants' Chamber and Dy. Chmn., Bombay Textile Research Assocn.; Cttee. Mem.: F.I.C.C. & I. and Council for Fair Business Practices, etc. *Address:* Podar Chambers, S. A. Brelvi Road, Bombay 400001.

PODAR, Ramnath Anandilal, LL.D. (Honoris Causa). Industrialist. *b.* Jan. 21, 1910. Joined business, 1927: Chmn.: Bank of Jaipur, 1949–57; Devpt. Council for Silk and Art Silk Industry, 1955–59; Rajasthan Financial Corpn., 1955–68; Mill Owners' Assn., Bombay, 1957–61; Cotton Adv. Bd., 1957–62; Export Credit & Guarantee Corpn., 1962–64; Indian Cotton Mills' Fedn., 1963–65; Pres.: F.I.C.C.I., 1969–70; Rajasthan Chamber of Com. and Industry, 1950–52 & 1960–68; Indian Merchants' Chamber, 1966–67; Dy. Chmn.: Bombay Textile Research Assn., 1959–65; Dir.: East India Cotton Assn., 1946–49: State Bank of India (Central Bd.), 1957–67; Mem.: Bombay Municipal Corpn. (1943–52); Bombay Legislative Assembly (1946–52); Mem. of Parliament, 1952–54. *Address:* Podar Chambers, S. A. Brelvi Rd., Bombay 400001.

PODDAR, Ramprasad, President, Century Spg. & Mfg. Co. Ltd., Bombay. *b.* 1914. Started with Birla Orgn. of Jiyajeerao Cotton Mills, Gwalior, 1936; Gen. Manager, Birla Cotton Mills, Delhi, 1943; Dir., Udyog Services Ltd., Bombay; Pilani Investment Corpn. Ltd., Gwalior; Nav Bharat Refrigeration Co. Ltd., Bombay; Rajasthan State Indl. & Investment Corpn. Ltd., Jaipur; Ex-Pres., Delhi Factory Owners' Fedn., 1953–54; Hony. Major in Territorial Army: Past Pres., Textile Assocn. (India); Chmn., Millowners Assocn., 1973 & 1974; Ex. Mem., Cttee. of Indian Cotton Mills' Fedn., 1971–76; Mem., Cttee. of Cotton Textiles Export Promotion Council, Millowners Assocn.: Pres.: All India Marwari Fedn. *Address:* Century Spg. & Mfg. Co. Ltd., Century Bhavan, Dr. Annie Besant Rd., Worli, Bombay 400025.

PODDER, Vishnu Prasad, M.Sc. (Gold Medallist), F.I. Chem. E. (London), F.I.E., M.I.I. Chem. E., Adviser, Paper, Cement & Chemical Industries; Ex-Exec. Pres.: Rohtas Industries Ltd. *b.* August 14, 1915. Ex. President: Cement Research Inst. of India; Ex. Tech. Adviser: Sahu Jain Ltd.; Member, Pulp & Paper Adv. Cttee. of F.A.O., 1959–74; Ex Chmn., Devpt. Council for Pulp, Paper & Allied Industries; Ex-Pres., Bihar Chamber of Commerce. Founder: Indian Pulp & Paper Technical Assocn. *Address:* K-24A, Hauz Khas, New Delhi 110016.

PREMJI, Akber Alibhai, S.E.M., Social Worker and Businessman. *b.* Sept. 30, 1922. Sr. Mem., Allibhai Premji Tyrewalla; Mem., Prince Aga Khan Ismailia Federal Council of India, Indo-Arab Socy., Bd. of Management, International Tourism Council, etc.; Pres., Fidai Academy, Socy. of the Special Exec. Magistrates & Hony. Metropolitan Magistrates of Bombay, Greater Bombay New Tyre Dealers Assocn.; Hon. Gen. Secy., Maharashtra Pradesh Sampradayika Virodhi Cttee.; Hon. Treasurer, Indo-Scandinavian Socy. for Trade & Culture. *Address:* Allibhai Premji Tyrewalla, Allibhai Premji Rd., Near Apsara Cinema, Bombay 400007.

RAM, Dr. Bharat, Chairman & Mg. Director, Delhi Cloth & General Mills Co., Ltd. ; Pres., Intnl. Chamber of Commerce, 1969–71. *b.* Oct. 5, 1914. Chmn. : Coromandel Fertilisers Ltd. ; Shriram Bearings Ltd. ; Bengal Potteries Ltd. ; DCM Intnl. Ltd. ; Dir. : Escorts Ltd. ; Bajaj Electricals Ltd. ; East India Hotels Ltd. ; New India Assurance Co., Ltd., etc. ; Mem. : National Commn. on Labour ; All India Council for Tech. Education ; Exp. Promotion Adv. Council ; Council of Inventions Promotion Board ; Export Import Adv. Council ; Indian National Cttee. of ICC ; Cttee. of All India Orgn. of Ind. Employers etc., and several other bodies ; ex-Chmn., I.A.C. *Address :* 25, Sardar Patel Rd., New Delhi 110021.

RAM, Jagjivan, B.Sc., Hon. D.Sc. (Vikram Univ.), Ex-Dy. Prime Minister in charge of Defence, Govt. of India. *b.* April 5, 1908. Mem., A.I.C.C., 1940 to Feb. 1, 1977 ; Leader, Indian Delegation to : 33rd Session of the I.L.O. Cfce., 1950 ; Asian Lab. Mins. Cfce., Manila, Nov. 1966 ; F.A.O. Cfce., Rome, Nov. 1967 ; World Food Cong., Hague, June 1970 ; World Food Cong., Rome, Nov. 1974, 1975 & 1976 ; Symposium on World Food Problem, Khartoum (Sudan), Feb. 1975 ; Bangladesh for discussions on Farakka Project ; April 1975. Trustee, Nehru Memorial Trust ; Mem. : Central Parly. Board, A.I.C.C., 1950 to Feb. 1, 1977 ; Min. for : Labour, Govt. of India, 1946–52 ; Communications, 1952–56 ; Transport & Rlys., 1956–57 ; Rlys., 1957–62 ; Transport & Communications, 1962–63 ; resigned under the " Kamraj Plan," Aug. 1963 ; Min. for : Labour, Emp. & Rehab., 1966–67 ; Food, Agriculture, Community Devpt. & Co-op., 1967–70 ; held addl. charge of Min. of Labour, Emp. & Rehab., 1969–70 ; Min. for : Defence, 1970–74 ; Agri. & Irrigation, Oct. 1974–Feb. 1977 ; Min. for Defence, 1977–Jan. 1979 ; Chmn., Indian Instt. of Public Admn., 1974–75. Resigned from the A.I.C.C. & the Union Ministership on Feb. 2, 1977 ; joined Congress (U), Apr. 1980. *Address :* 6, Krishna Menon Marg, New Delhi 110011.

RAM NARAIN, Pandit, Musician & Sarangi Player. *b.* Dec. 25, 1927. Developed solo concert status to the Sarangi ; has given performances in music festivals all over the world ; Recipient of "Best Indian Instrumentalist" award for 1975, Sangeet Natak Academy. *Address :* 20, Sujata, Ghodbunder Rd., Bandra, Bombay 400050.

RAMACHANDRA, Kanakanahalli, M.Sc., Ph.D., F.N.A., F.A.Sc., Scientist ; Prof., School of Mathematics, Tata Instt. of Fundamental Research, Bombay, since 1975. *b.* Aug. 18, 1933. Took up research career, TIFR, Bombay, 1958 ; Doctorate degree, 1964 ; Associate Prof., School of Mathematics, Tata Instt. of Fundamental Research, 1970–75 ; Prof., School of Mathematics (TIFR), 1975–78 ; published Papers on Algebraic numbers, Transcendental numbers, Diophantine Analysis & Prime Numbers. *Address :* School of Maths., TIFR, Homi Bhabha Rd., Colaba, Bombay 400005.

RAMALINGASWAMI, Prof. V., M.B.B.S., M.D., D.Phil. D.Sc. (Oxford Univ.), F.R.C.P. (Lond.), F.R.C. Path. (Lond.), Dir.-Genl., Indian Council of Medical Research, New Delhi. *b.* Aug. 8, 1921. Pathologist, Nutrition Research Lab., 1947-54 ; Dy. Dir., I.C.M.R., New Delhi, 1954-57 ; Prof. of Pathology, All India Instt. of Medical Sciences, New Delhi, 1957-69 ; Dir., 1969-79 ; contributed to medical research in the fields of 'Protein Calorie Malnutrition'. 'Himalayan Endemic Goitre' & 'Endemic Goitre in S. East Asia', 'Liver Diseases in India', 'Liver Cancer', etc. *Address :* I.C.M.R., Ansari Nagar, New Delhi 110029.

RAMANATHAN, Kalpathi Ramakrishna, M.A., D.Sc., F.A.Sc., F.N.A., Scientist ; Emer. Prof., Physical Research Laboratory, Ahmedabad ; Chmn., National Cttee. for the Intnl. Hydrological Decade, 1965–75 ; Advisor, Intnl. Cttee. for IHP since 1975. *b.* 1893. Hon. Dir., Trivandrum Observatory, 1918–21 ; Supdtg. Meteorologist & Dy. Dir.-Gen. of Observatories, 1939–48 ; Dir., Physical Res. Lab., Ahmedabad, 1948–66 ; Pres., Indian Sci. Congress, Mathematics and Physics Section, Lahore, 1939 ; Pres. : Intnl. Assn. of Meteorology, 1951–54 ; Intnl. Union of Geodesy and Geophysics, 1954–57 ; Pres., Indian Geophysics Union, 1963–65 ; Pres., Intnl. Ozone Commn., 1959–67 ; Hon. Fellow, Royal Met. Socy., London, 1960 ; awarded Int. Met. Org. Prize and Medal, 1961 ; Main fields of research : Problems of molecular scattering of light in fluids, Meteorology, Hydrology, Aeronomy and Solar-Terrestrial Physics. *Address :* Physical Research Laboratory, Navrangpura, Ahmedabad 380009.

RAMANNA, Dr. Raja, B.Sc. (Hon.), Ph.D., D.Sc. (Honoris Causa) by several Univs. *b.* 1925. S. S. Bhatnagar Memorial Award for Physical Sciences, 1963 ; Padma Shri, 1968 ; Padma Bhushan, 1973 and Padma Vibhushan, 1975. Joined Atomic Energy Establishment, Trombay (now Bhabha Atomic Research Centre) in 1953 as Head, Nuclear Physics Divn. and later became Dir., BARC and Member for R. & D. Atomic Energy Commn., June 1972 to June 1978 ; Scientific Adviser to Defence Minister ; Director-General, Defence Res. and Devpt. Orgn. & Secy. in the Ministry of Defence for Defence Res., July 1978 ; Dir., BARC and Secy., Deptt. of Atomic Energy since Jan. 1, 1981 ; collaborated in the design, installation & commissioning of various research reactors & accelerators. Chmn., Indian Instt. of Tech., Bombay, since 1975 ; Mem., Scientific Adv. Cttee. to the Cabinet ; Gen. Secy., Nehru Science Centre ; Pres., Physics Secn., Golden Jubilee Session (1963) of the Indian Science Congress ; Ex-Chmn., Bharat Electronics Ltd., Bangalore ; Pres., Indian National Science Academy ; Vice-Pres., Indian Academy of Sciences. *Address :* Bhabha Atomic Research Centre, Bombay 400085.

RAMASARMA, Gollakota Butchi, B.Sc. (Hons.), A.I.I.Sc., Ph.D. ; Acharya Sir P. C. Roy Memorial Gold Medal (1970). Prof. M. L. Schroff Memorial Award (1979), Tech. Adviser, Raptakos, Brett and Co. Ltd., Bombay. *b.* Feb. 20, 1915, Joined Raptakos, Brett & Co. Ltd. as Biochemist, 1943 ; Chief, Research & Control Divn., since 1951 ; Staff Dir., 1954 ; Dy. Mg. Dir., 1964–1972 ; Mg. Dir., 1972–75 ; Editor, *Indian Journal of Pharmacy*, 1954–67 ; Pres. : 29th Indian Pharmaceutical Congress, 1977 : Chmn. : Govg. Body, Bombay College of Pharmacy since 1976 : was Mem. : Dev. Council for Drugs & Pharmaceuticals, Pharmacy Council of India, Indian Pharmaceutical Delegation to Europe, U.K., U.S.A. & Japan, Indian Pharmacopoeia Cttee., Drugs Technical Adv. Bd. ; Pres.. Indian Pharmaceutical Assn., 1972–74. *Address :* Raptakos, Brett & Co. Ltd., Worli. Bombay 400025.

RANGANATHAN, Gopal Shankar, M.S. (Wood Tech.) (Univ. of Michigan), Mg. Dir. : Ion Exchange (India) Ltd.. Bombay, since 1965. *b.* Feb. 14, 1926. Actively interested in conservation and rural development. *Address :* 2, Flowermead. Westfield Estate, B. Desai Rd., Bombay 400026.

RANGANATHAN, Saurirajan, Ex-M.P. (Rajya Sabha), M.A. (Madras), I.C.S. (Retd.). Chairman, Lucas-TVS, Madras and Sandóz (India) Ltd., Bombay ; Former Chmn., Ashok Leyland Ltd. *b.* Nov. 12, 1908. Was permanently deputed from U.P. to the Govt. of India, 1939 ; was Secy., Min. of Industry, Govt. of India, 1956–66 ;

Retd. from I.C.S., 1966 ; Comptroller & Auditor Genl. of India, 1966–72 ; was Chmn. : Indian Red Cross Socy., St. John's Assoc. & Hind Kushst Nivaran Sangh for six years ; Pres., T.B. Assn. of India. *Address :* D73, Panch Sheel Enclave, New Delhi 110017.

RAO, Dr. Calyampudi Radhakrishna, M.A., Ph.D. and Sc.D. (Cantab.), Fellow, Royal Socy., Lond., 1967 ; Foreign Hon. Mem., Am. Acad. of Arts & Sci., 1975 ; Hon. D.Sc. : Andhra, Delhi, Athens, Ohio State, Osmania & Leningrad Univs. ; Scientist. *b.* 1920. Hon. Fellow & Guy Medallist, Royal Statistical Socy. ; Hon. Fellow, Kings Coll., Cambridge ; Mem. : Intnl. Statistical Instt. ; Council, Biometric Socy., 1952–61, 1966–68 ; Fellow, Instt. of Mathematical Statistics ; American Statistical Assn. ; Econometric Socy., U.S.A. ; Indian National Sci. Academy ; Ind. Acad. of Sci. ; Treasurer, Intnl. Statistical Instt., 1962–65 ; Vice-President, INSA, 1973 ; Pres. : Biometric Socy., 1974 : Int. Stat. Instt., 1977–79 ; Inst. Math. Stat., 1977 ; and Editor, *Sankhya ;* recipient of S. S. Bhatnagar Award, 1963 ; Meghnad Saha Medal, 1969 ; J. C. Bose Gold Medal ; Jawaharlal Nehru Professor, Indian Statistical Instt. ; visiting professorships abroad. *Address :* 7, S. J. S. Sansanwal Marg, New Delhi 110029.

RAO, Chintamani Nagesa Ramachandra, M.Sc. (Banaras), D.Sc. (Mysore), Ph.D. (Purdue), F.R.I.C. (Lond.), F.A.Sc., F.N.A., Marlow Medal, Faraday Socy., Lond. (1967) ; Bhatnagar Award (1968) ; Yeddanapalli Medal and Prize (1973) ; Jawaharlal Nehru Fellow (1973) ; Centennial Foreign Fellow, American Chem. Soc. ; Scientist ; FICCI Award in Physical Sciences (1975) ; Sir C. V. Raman Award in Physical Sciences of U.G.C. (1978) ; S. N. Bose Medal of Indian Nat. Sci. Academy (1980) ; Commonwealth Visiting Prof. at Oxford Univ., 1974–75 ; Chmn., Hindustan Insecticides Ltd. (1969–75) ; Sr. Prof. of Chem., Indian Instt. of Technology, Kanpur. *b.* June 30, 1934. Head, Chemis. Deptt., I.I.T., Kanpur & later Dean of Research & Devpt. ; Chmn., Chemical Res. Cttee. of the C.S.I.R. ; Mem.. Scientific Adv. Cttee. to the Cabinet, 1981: Bureau of Intnl. Union of Pure and Appl. Chem. and Cttee. on Data on Sci. & Tech. I.C.S.U. ; National Cttee. on Sci. & Technology ; Secy. : Academy of Sciences ; Commn. on Spectroscopy ; Chmn., Cttee. on Teaching of Chemistry of the Intnl. Union of Pure & Applied Chemistry : contributed to the molecular structure & spectroscopy & solid state chemistry, hydrogen bonding & charge transfer complexes. *Address :* Chmn., Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore 560012.

RAO, Gen. K. V. Krishna, PVSM, Chief of the Army Staff, since June 1, 1981. *b.* July 16, 1923. Commissioned in the Army, Aug. 9, 1942 ; participated in the Jammu & Kashmir Operations, 1947–48 ; Instructor, Defence Services Staff Coll., Wellington, 1953–65 ; commanded a Brigade in Ladakh, 1965–66 ; did a course of Trg. at Imperial Defence Coll., London : was Dy. Dir. of Military Operations at Army Hqrs. ; commanded an Infantry Dn., 1969–70 ; was G.O.C. of the forces in Nagaland and Manipur, 1970–72 : Chief of Staff, Western Command, 1972–74 ; commanded a Corp in the Jammu Area, 1974–78 ; was Chmn., Expert Cttee. on Re-orgn. and Modernisation of the Army : Dy. Chief of the Army Staff, 1978–79 : G.O.C.-in-C., Western Command, 1979–81 ; Principal Hon. Army ADC to the President. *Address :* Army Hqrs., DHQ. P.O., New Delhi 110011.

RAO, Dr. Vijayendra Kasturi Ranga Varadaraja, M.A. (Bombay), B.A., Ph.D. (Cambridge), D.Litt. (Delhi), D.C.L. (Hon.), Oxford, 1969: Hon. Fellow, Gonville and Caius Coll., Camb., 1971. *b.* July 8, 1908. Dir. of Statistics and subsequently Plng. Adv., Food Dept., Govt. of India (1944–46) ; Chmn., U.N. Sub-Commn. on Eco. Devpt. (1947–50) ; Corresponding Mem., Instt. de Science Economique Applique, Paris since 1948 ; Mem., Univ. Prof. and Founder Dir., Delhi School of Economics, Univ. of Delhi, 1942–57 ; Vice-Chancellor, Delhi Univ., 1957–60 ; Founder Dir., Instt. of Economic Growth, 1960–63 ; Mem., Plng. Commn., 1963–66 ; Min. for Transport & Shipping, 1967–69 ; Min. for Edn. & Youth Services, Govt. of India, Feb. 1969–Mar. 1971 ; Elected M.P., 1971 ; Founder Dir. : Instt. for Soc. & Econ. Change, 1972–77 ; Prof. Emeritus, Instt. for Soc. & Econ. Change, 1980. *Address :* 'Dayanidhi', 1170-A, 26-A, Main Rd., 4th Block, Jayanagar, Bangalore 560011.

RAU, M. Chalapathi, M.A., B.L., Hon. D.Litt. (Agra) ; Hon. D. Litt. (Andhra); Hon. LL.D. (Sri Venkateswara) ; Editor and Chmn., Board of Editors, *National Herald*, Lucknow, 1946 to 1978. Advocate, Madras High Court, 1934 ; entered journalism, 1936 ; Asstt. Editor : *National Herald*, 1938–42 ; *Hindustan Times*, 1943–45 ; Member, UNESCO Press Experts Commn., Paris, 1950 ; Co-Founder, Intnl. Press Instt., New York, 1950 ; Pres. : All India Convention of Wkg. Journalists, New Delhi, 1950 ; Fedn. of Wkg. Journalists, 1950–55 ; Mem., Press Commn., 1952–54 ; Vice-Pres., UNESCO Experts' Cfce. on Journalism Educ., Paris, 1956 ; Rep., U.N. Gen. Assembly, 1958 ; Delegate, UNESCO Gen. Cfce., Delhi, 1956 ; Paris, 1960 ; Mem., Cttee. on Broadcasting and Inf. Media ; V. Chmn., Nehru Memorial Fund ; Chmn., Exec. Council, Nehru Memorial Museum & Library. *Address :* 13, Shahjehan Rd., New Delhi 110110.

RAY, Satyajit, B.A., Magsaysay Award for Journalism and Literature (1967) ; Film Producer and Dir. *b.* May 2, 1921. Produced the film *Pather Panchali* ; won the 1959 Selznick award and the Gold Laurel trophy for his films *Pather Panchali* and *Aparajito* ; won the 1963 Selznick's Golden Laurel for the non-American best film showing intnl. understanding ; his other films are *Aparajito, Apur Sansar, Paras Pathar, Jalsaghar, Devi, Teen Kanya, Abhijan, Kanchenjunga, Nayak, Goopy Gyne and Bagha Byne, Aranyer Din Ratri, Pratidwandi, Simabaddah, Ashani Sanket, Sonar Kella, Jana-Aranya & Shatranj ke Khilari ;* awarded first prize for best film direction for his 'Mahanagar' and 'Charulata' by the Berlin Intnl. Film Festival, 1964 and 1965 ; special award of honour by the 16th Intnl. Film Festival in Berlin in recognition of his artistic eminence in the world of film, 1966. *Address :* 1/1, Bishop Lefroy Rd., Calcutta 700020.

REDDY, Neelam Sanjiva, President of India, since July, 1977. *b.* May 19, 1913. Mem. and Secy., Madras Legis. Assembly, 1946 ; Indian Constituent Assembly 1947 ; Min. for Prohibition, Housing and Forests, Madras Govt., 1949-51 ; Pres. Andhra Pradesh Congress Cttee., 1951-52 ; Mem., Rajya Sabha 1952-53, A. P. Legis. Assembly, 1953-64 ; Leader of Andhra Congress Legis. Party, 1953-64 ; Dy. Chief Minister, Andhra Pradesh 1953-56 ; Chief Minister, 1956-57 ; Pres., Indian Nat. Congress 1960-62 ; Chief Minister of A. P. 1962-64 ; Union Minister of Steel and Mines, 1964-65, of Transport, Aviation, Shipping and Tourism 1966-67 ; Mem. and Speaker of Lok Sabha 1967-69 ; Speaker of Lok Sabha, March to July 1977. *Address :* Rashtrapati Bhavan, New Delhi 110004.

REDDY, Mr. Justice Ontethupalli Chinnappa, M.A., B.L., Judge, Supreme Court of India, since July 17, 1978. *b.* Sept. 25, 1922. Advocate, High Court, Madras, 1944 ; Hyderabad, 1956 ; State Pub. Prosecutor, 1960 ; Addl. Judge, A.P. High Court, Aug. 1967 – Nov. 1967 ; Punjab & Haryana High Court, June 1976 ; Ag. Chief

Justice for some time ; re-transferred to A. P. High Court, Aug. 1977. *Address :* Supreme Court of India, Tilak Mrg., New Delhi 110001.

ROSS, H.E. Mr. Andre, Ambassador of France to India, since 1979. *b.* 1922. Comml. Attache, Calcutta and New Delhi, 1949-51 ; Comml. Counsellor, Hong Kong, 1952-53 ; Tokyo, 1953-54 ; was attached to the cabinet of the Secy. of State to the Prime Minister, 1959-60 ; to the Min. of State in charge of Algerian affairs and admve. reforms (1960-62) ; Second Counsellor, Bangkok, 1964-66 ; Amb. to Laos, 1968-72 ; Zaire, 1972-78. *Address :* Embassy of France, 2, Aurangzeb Rd., New Delhi 110011.

RUIA, Madanmohan Ramnarain, B.A., Merchant, Banker and Millowner. *b.* Aug. 24, 1914. Dir. : Bajaj Auto Ltd., Baroda Rayon Corpn. Ltd., Great Eastern Shipping Co. Ltd., Century Spg. & Manuf. Co. Ltd., Bombay Oxygen Corpn. Ltd., etc.; Pres. : F.I.C.C.I., 1959–60 ; East India Cotton Assn., Ltd., 1956–73 ; Cotton Buyers Assn. ; Ex-Trustee, Bombay Port Trust, 1955–75 ; Mem. : Bombay Customs Adv. Cttee. ; Leader : Indian Delegation to Afro-Asian Eco. Confce., 1958; Intnl. Businessmen's Confce., Karachi, 1960, etc. *Address :* Eucharistic Congress Bldg., 5, Convent St., Bombay 400039.

RUIA, Radhakrishna Ramnarain, B.A., Merchant and Millowner ; Chairman and Mg. Dir., Phoenix Mills Ltd. *b.* Jan. 9, 1916. Dir. : U.P. Straw and Agro Products Ltd. ; Radhakrishna Ramnarain Ltd. ; Dhrangadhra Chemical Works Ltd., etc. ; Chmn. : Governing Council of Bombay Textile Research Assn. *Address :* Phoenix Mills Ltd., Senapati Bapat Marg, Lower Parel, Bombay 400013.

SABAVALA, Sharokh, Hons. Deg., Oxford, Business Executive. *b.* Dec. 7, 1918. Reporter, *Bombay Sentinel*, 1943 ; Editor, *Free Press Journal*, 1949 ; McGraw-Hill World News Corspdt., 1952 ; Bombay Corspdt., *Christian Science Monitor*, 1953 ; CSM Spl. Corspdt. in New Delhi for India, Pakistan, Afghanistan, Sri Lanka, Nepal and Burma, 1962-1967 ; Pub. Relations Adv. to Tata Inds., 1967 ; Vice-Chmn., Tata Services Ltd., Dir. : Tata Inds. Ltd. : Tata Iron & Steel Co. Ltd., Tata Press Ltd., Tata McGraw-Hill Publishing Co. Ltd., Lakme Ltd., Tata Aircraft Ltd., Indian Tube Co. Ltd., Mem., Gov. Council, Tata Energy Research Instt. *Address : Office :* Bombay House, Homi Mody St., Bombay 400023 and *Res. :* 77, Worli Sea Face, Bombay 400024.

SALGAOCAR, Vasudeva Mahadeva, Industrialist. *b.* May 13, 1916. Chmn. of the Salgaocar Group of Companies covering mining, international shipping, travel, industrial gases, chemicals, shipbuilding, river transport, ore processing, etc. Chmn. : Goa Zonal Cttee., Assocn. of Indian Engg. Ind. ; Shipbuilding. Ind. Socy. of Goa ; Automobile Corpn. of Goa Ltd. ; Pres. : Goa Vocational Trg. Centre, Salgaocar Medical Res. Centre. etc. ; Mem. : Indian Tech. Cttee., American Bureau of Shipping ; Tech. Cttee., Lloyds Register of Shipping ; Nippon Kaiji Kyokai ; Mormugao Plng. & Devpt. Cttee. : State Council of Techl. Edn. Environmental Cttee. of Govt. of Goa, Daman & Diu. Ex-Pres. : Goa Chamber of Comm. & Ind. *Address :* P. Box 14, Salgaocar House, Vasco-da-Gama, 403802, Goa.

SALGARE, Shesharao Apparao, M.Sc. (Research) (1971) ; awarded consecutively six times annual National Award of Indian Bioscientific Assocn., 1975–80. *b.* May 7, 1947. Lecturer in Botany, Instt. of Science, Bombay, Aug. 5, 1974 ; have published several research papers in various scientific journals in diverse fields such as Embryology, Morphology, Palynology, Physiology, Cytology, Ecology, Weed Control and Radio-Biology. *Address :* Deptt. of Botany, Instt. of Science, 15, Madame Cama Rd., Bombay 400032.

SANKALIA, Dr. Hasmukh Dhirajlal, M.A., LL.B., Ph.D. (London). Emeritus Professor, Jawaharlal Nehru Memorial Fellow, Deccan Coll. Post-Graduate at Research Instt., Pune. *b.* Dec. 10, 1908. Conducted excavations and explorations in prehistory and early history relating to Gujarat, Maharashtra, Karnataka, Madhya Pradesh, Andhra Pradesh, 1941–65 ; Kashmir & Assam, 1969–70 ; Govt. of India delegate to Intnl. Cong. of Orientalists, Ann Arbor, U.S.A., 1967 ; Intnl. Symposium on Early Man, Paris, 1969 ; Hon. Mem. : Indo-Pacific Pre-History Assn., Canberra, 1976 ; Indian Soc. for Pre-History Quarternary Studies, 1977 ; Heras Inst., St. Xavier's College, Bombay, 1977. *Address :* Deccan College Research Institute, Pune 411006.

SARAIYA, Ramanlal Gokaldas, B.A., B.Sc., Padma Bhushan, Spl. Exe. Magistrate, Cotton Merchant and Chmn., Narandas Rajaram & Co. Pvt. Ltd., Bombay, since 1961 ; Ex-Chmn., Maharashtra State Rd. Trspt. Corpn. *b.* Jan. 16, 1898. Fellow of the Chemical Socy., London ; Vice-Pres., Indian Central Cotton Cttee., 1947–52; Pres. : Indian Merchants' Chamber, 1950 ; F.I.C.C. & I., 1953–54.; Chmn. : 22nd Plenary Session of I.C.A.C., Bangalore, 1963 ; Banking Commn., 1969–72 ; Dir. : Tata Chemicals Ltd., etc. *Address :* Casa Grande, 22. Little Gibbs Rd., Bombay 400006.

SEN, Mr. Justice Amarendra Nath, B.A., B.L., Judge, Supreme Court of India, since Jan. 28, 1981. *b.* Oct. 1, 1920. Called to the Bar by the Inner Temple, London, 1946 ; Barrister, Calcutta High Court, 1947 ; Judge, 1965 ; Chief Justice, Dec. 26, 1979. *Address :* Supreme Court of India, Tilak Marg, New Delhi 110001.

SEN, Mihir Kumar, B.Sc., LL.B., Barrister-at-Law, Associate Fellow, Br. Inter-Planetary Socy., Swimmer. *b.* Nov. 16, 1930. Called to the Bar from Lincoln's Inn, Nov. 1954 ; set up practice at Calcutta High Court, May 1956 ; first ever Indian to attempt and swim the English Channel from Dover to Calais, Sept. 1958, in 14 hours 45 mins., then the fourth fastest in this direction ; first man to swim the Palk Strait, a distance of 22 miles between India & Sri Lanka in 25 hrs. 36 min., 5/6 April, 1966 ; first Asian to swim the Straits of Gibraltar on Aug. 24, 1966 ; first man to swim the Dardanelles Straits a distance of about 40 miles in 13 hours and 55 minutes, Sept. 12, 1966 ; swam the Straits of Bosporus, 16 miles, Sept. 21, 1966 ; Panama Canal, 42 miles, 35½ hours, Oct. 29 to 31, 1966 ; acknowledged as the world's Greatest Long Distance Swimmer by Guinness Book of Records. Lond., 1969 ; Fellow, Royal Geographical Socy., Lond., 1980. Founder, Explorers' Club of India, Calcutta. *Address :* 10, Government Place East, Calcutta 700001.

SETH, Darbari Shah, B.Sc. (Hons.), M.Sc. (Punjab), M.S. (Cincinnati), Industrialist. *b.* Jan. 1, 1920. Dy. Chmn. & Mg. Dir., Tata Chemicals Ltd. ; Vice-Chmn. : Tata Oil Mills Co. Ltd., Tata Energy Res. Instt., N. Delhi ; Chmn., Mgmt. Cttee. ; UNITATA Sdn. Bhd., Malaysia ; Chmn. : Rallis India Ltd. ; Chmn. & Dir. : Tritea Inc., New Jersey ; Dy. Chmn. : Tata-Finlay Ltd. ; Dir. : Tata Sons Ltd., Tata Inds. Ltd., Excel Inds. Ltd., New India Inds. Ltd., Wallace Flour Mills Co. Ltd., Varuna Invests , Goodlass Nerolac Paints, UNITATA Sdn. Bhd., Malaysia, Berta Services Sdn. Bhd., Malaysia, Tata A.G., Zug, Tata Ltd., London, Tata Inc., N. York ; Mem. : Rural Welfare Bd. – Sir Dorabji Tata Trust, Intnl. Solar Energy Socy., Australia, Trusteeship Foundn., Court of Ind. Instt. of Sci., Bangalore, Foundn. for Alternatives in Devpt. *Address :* Bombay House, 24. Homi Mody S
Bombay 400023.

SETHI, Prakash Chand, B.A., LL.B., Minister for Railways, Govt. of India. since Jan. 15, 1982. Was Min. for Petroleum. Chemicals & Fertilizers, Oct. 19, 1980–Jan. 14. 1982. *b.* Oct. 19, 1920. Mem., A.I.C.C., 1951 ; M.P., Rajya Sabha, 1961 ; re-elected, 1964 ; to Lok Sabha, 1967, 1971. 1979 ; Dy. Min. for : Steel & Heavy Engg., 1962–64 ; Steel & Mines, 1964–66 ; Iron & Steel, 1966–67 ; Min. for Steel, Mines & Metals, 1967–69 ; Min. of State for Finance, Feb. 1969–June 1970 ; Defence Production, 1970–71 ; Min. for Petroleum & Chemicals, 1971–72 ; Chief Minister, Madhya Pradesh, 1972–75 ; Min. for Chemicals & Fertilizers, 1976–77 ; elected to Lok Sabha, 1980 ; Min., Works & Housing. Jan. 14. 1980–Oct. 19. 1980. *Address :* Rail Bhavan, New Delhi 110001.

SETHNA, Homi Nusserwanji, B.Sc., B.Sc. (Tech., Bom.), M.S.E. (Chem. Engg.), Mch., F.A.Sc., F.N.A., F.I.E., D.Sc. (H. Causa), Marathwada Univ., 1973 ; L.D. (H. Causa), Bombay Univ., 1974 ; Doc. Tech. (H. Causa), J. Nehru Tech. Univ., Hyderabad, 1974 ; Doc. in Sci. (H. Causa), Roorkee Univ., 1975 ; D.Sc. (H. Causa), Karnataka Univ., 1975 ; D.Sc. (H. Causa) ; I.I.T., Bombay, 1975 ; D.Sc. (H. Causa), Orissa Univ. of Agri. & Tech., 1976 ; D.Sc. (H. Causa), Univ. of Mysore, 1976 ; D.Sc. (H. Causa), Utkal Univ., Bhubaneshwar (1977); S. S. Bhatnagar Mem. Award in 1960; Sesquicentennial Award of the Univ. of Michigan in 1967, for "Knowledge, Wisdom and Courage to Serve"; delivered the Twelfth Sir Mokshagundam Visvesvaraya Lecture in 1969 ; awarded the Sir Walter Puckey Prize for the year 1971 by the Institution of Production Engineers; awarded the Sir William Jones Memorial Medal for the year 1974 by the Asiatic Society of Calcutta ; awarded Sir Devaprasad Sarbadhikari Gold Medal for 1975, in recognition of original contributions in the field of Science ; awarded Padma Shri, 1959, Padma Bhushan, 1966, Padma Vibhushan, 1975 ; Chmn., Atomic Energy Commission and Secy. to the Govt. of India, Deptt. of Atomic Energy, since Jan. 1972 ; Principal Secy. to the Govt. of India, Dept. of Atomic Energy, since 1981. *b.* Aug. 24, 1923. Has been responsible for the designing and construction of the Plutonium Plant at Trombay ; Project Manager (India) for the Canada India Reactor ; Mem. : Indian Institute of Chemical Engineers ; U.N. Scientific Advisory Cttee. ; Scientific Adv. Cttee. to the International Atomic Energy Agency ; Institution of Engineers ; Life Member, Indian Academy of Sciences ; Chmn. : Indian Rare Earths Ltd. (till Feb. 1978) ; Electronics Corpn. of India Ltd. till July, 1979 ; Tata Memorial Centre ; first President of the Maharashtra Academy of Sciences ; Director : Andhra Valley Power Supply Co. Ltd., Bombay, since 1975 ; First Pres. : Maharashtra Acad. of Sciences, 1976–79 ; Pres. : Indian Science Cong. Association for 1976 ; Dy. Secy.-Genl., Second U.N. International Confce. on the peaceful uses of atomic energy, Geneva, 1958 ; Chancellor : North Eastern Hill Univ. : Mem. : Royal Swedish Acad. of Engg. Sciences, Sweden ; Science Adv. Cttee. to the Cabinet, Govt. of India. *Address :* Atomic Energy Commission, Chatrapati Shivaji Maharaj Marg, Bombay 400039 ; *Res.:* 12, Dept. of Atomic Energy Officers' Apartments, Little Gibbs Rd. No. 2, Malabar Hill, Bombay 400026.

SHAH, Viren J., M.P. (Rajya Sabha), Chmn. & Mg. Dir., Mukand Iron & Steel Works Ltd. *b.* May 12, 1926. Chmn., Gujarat State Petrochemical Corpn. Ltd. ; Dir. of several industrial orgns. : Founder Chmn., Steel Furnace Assn. of India : Ex-Chmn., Steel Re-Rolling Mills' Assn. of India : Mem. : Janata Party Wkg. Cttee., Cttee. of FICCI, New Delhi ; M.P., Lok Sabha, 1967–70 ; Rajya Sabha, since 1975. *Address :* Mukand Iron & Steel Works Ltd., Bajaj Bhavan. 3rd Fl., 226, Nariman Point, Bombay 400021

SHAHANEY, Ram Javhermal, B.Sc. (Engg.), (Univ. of Lond.), ACGI (Univ. of Lond.), Chmn. & Mg. Dir., Ashok Leyland Ltd., Madras. *b.* Oct. 29, 1930. Joined Jessop & Co. Ltd., 1953 ; Dir., 1968 ; Mg. Dir., 1972 ; Chmn. & Mg. Dir., 1975. *Address :* C/o Ashok Leyland Ltd., Ennore, Madras 600057.

SHAKDHER, Shyam Lal, B.A., Chief Election Commr. of India, since June 18, 1977. *b.* Nov. 1, 1918. Worked in various Ministries of Govt. of India, 1940-50 ; Deptt. of Parly. Affairs and Lok Sabha Sectt., 1950 ; Secy., Lok Sabha, 1964-73 ; Secy.-Genl., 1973-77 ; Trustee, Kashmiri Pandit Benefit Trust, etc. *Address :* Nirvachan Sadan, Ashoka Rd., New Delhi 110001.

SHAM LAL, Contributing Edit., *The Times of India*, was Editor, *The Times of India*, 1967-78. *b.* Nov. 7, 1912. With *The Hindustan Times*, 1934-46 ; Asstt. Editor, *Indian News Chronicle*, Delhi, 1946-50 ; joined *The Times of India*, 1950 ; writes regular weekly column for *The Times of India*. *Address :* A-28, Gulmohar Park, New Delhi 110049.

SHANKAR, Ravi, Presidential Award (1962 & 1980), Hon. Doctor of Fine Arts (California Univ.) (1968), Hon. Doctor of Music, Indira Kala Sangit Viswavidyalaya (1972), Hon. Doctorate, Viswa Bharati (1973) ; Intnl. Music Council UNESCO Award (1975) ; Fellow, Sangeet Natak Akademi (1976), Hon. Doctorate, B.H.U., (1980), Musician. *b.* April 7, 1920. Began his career in the company of Uday Shankar ; later devoted himself to sitar with Ustad Allaudin Khan of Maihar, 1938-44 ; joined IPTA and composed music for several ballets. 1945-46 ; Dir. of Music, A.I.R., 1949-55 ; participated in the 10th Anniversary celebration of the U.N. & UNESCO's music festival in Paris, 1958 ; first Indian musician to write music for foreign films ; has concertised widely in Europe, U.S.A. & Australia, since 1961 ; wrote & conducted orchestral music for a ballet set to Nehru's *Discovery of India* and its revised version, 1948 ; opened the Kinnara School of Music in Los Angeles, May 1967 ; head of Indian music section, California Instt. of Arts, Oct., 1970 ; won Silver Bear for score and Venice Festival Award ; Concerto for Sitar commissioned by London Symphony Orchestra, 1971 ; Mem., Intnl. Music Council; Pres. Shankar's Foundation of Creative Arts ; composed and conducted Festival of Indian Music with top Indian musicians in Europe & America, 1969 & 1974. *Address :* C/o Research Institute for Music and Performing Arts, Hemangana, S. 13/131, Tarana Bazar, Shivpur, Varanasi.

SHANTARAM, Dr. V., leading Film Producer, Dir. & Actor. *b.* Nov. 18, 1901. Chmn., Children's Film Socy., India ; of jury, 28th National Film Awards of India, 1981. Associated with film industry from 1920 ; Founder Mem., Prabhat Film Co., Pune ; recipient of National & Intnl. Awards for best picture, best direction, best techniques, etc. ; conferred degree of Dr. of Literature by Nagpur Univ., 1980 ; was Chief Producer, Govt. Films Divn. ; his film "Two Eyes Twelve Hands" won the "Gold Bear" of the Intnl. Film Festival, Berlin, The Hollywood Foreign Press' Samuel Goldwyn Award for the "Best Picture" and a plaque by the Catholic Film Bureau, Brussels for the "best human document." *Address :* Rajkamal Kalamandir (Pvt.) Ltd., Parel. Bombay 400012.

SHARMA, Anant Prasad, Minister of Tourism & Civil Aviation. Govt. of India, since Oct. 19, 1980 ; Minister for Shipping & Transport, Govt. of India. Jan. 14, 1980 to Oct. 1980. *b.* Dec. 25. 1919. M.P., Lok Sabha. 1962–67. 1971. 1980 ; M.P., Rajya Sabha. 1968–71 ; Leader, Congress Party in Lok Sabha. 1973, 1974 ; Min. of State for Industry & Civil Supplies, 1974–76. *Address :* Transport Bhavan. Parliament St., New Delhi 110001.

SHARMA, Bhagwat Dayal, M.A., Governor of Madhya Pradesh. *b.* Jan. 26, 1918. Trade Unionist and Gen. Secy., INTUC (Regnl.), Punjab, H.P. and Jammu & Kashmir ; its Pres., 1959–62 ; Mem., Wkg. Cttee., INTUC, 1959 ; its Org. Secy., 1961 ; Pres., P.C.C., Punjab, 1963-66 ; Haryana P.C.C., 1966 ; Mem., Congress (O) Wkg. Cttee., 1970 ; M.L.A., Punjab, 1962–66 ; Haryana, 1966–67; Chief Minister, Haryana, Nov. 1966–Mar. 22, 1967 ; Mem., Rajya Sabha, 1968–74 ; elected to Lok Sabha from Karnal on Janata Party ticket, 1977 ; Governor of Orissa, Sept. 1977-April 1980. *Address :* Raj Bhavan, Bhopal.

SHARMA, Kalyan Dutta, B.A., LL.B., Chief Justice, Rajasthan High Court. *b.* Oct. 23, 1921. Advocate, Alwar High Court, 1947 ; Rajasthan High Court, Aug. 1949 ; Civil & Addl. Sessions Judge, Sirohi, May 1965 ; Dist. & Sessions Judge, July 1967 ; Judl. Secy. & Legal Remembrancer to the Govt. of Rajasthan ; Addl. Judge, Rajasthan High Court, July 20, 1973 ; Permanent Judge, Apr. 2, 1975 ; Permanent Admve. Judge, May 31, 1979 to July 9, 1980 ; Ag. Chief Justice, July 10, 1980 to Jan. 6, 1981. *Address :* Rajasthan High Court, Jodhpur 342001.

SHIV SHANKAR, Punjala, B.A. (Hons.), LL.B., Minister for Petroleum & Chemicals, Govt. of India, since Jan. 15, 1982. Was Min. for Law, Justice & Company Affairs, Govt. of India. *b.* Aug. 10, 1929. Mem. & Vice-Chmn., Bar Council of A.P., 1965 ; Govt. Pleader, A. P. High Court, 1969–72 ; Judge, A. P. High Court, Oct. 1974 to June 23, 1975 ; was Sr. Advocate, Supreme Court ; elected to Lok Sabha, 1979. *Address :* 7, Race Course Rd., New Delhi 110011.

SIDHU, Gurbachan Singh, B.Sc. (Hons.), M.Sc., Ph.D., Dir.-General, C.S.I.R. and Secy. to the Govt. of India, Deptt. of Science & Technology, since May 5, 1981. *b.* July 4, 1920. Dir., Regnl. Research Lab., Hyderabad, 1963-80 ; Chmn., National Research Devpt. Corpn., since 1981 ; Padma Shri (1976), K. G. Naik Gold Medal (1966), Fedn. of Indian Chambers of Comm. & Ind. Award (1975). *Address :* C.S.I.R., Rafi Marg, New Delhi 110001.

SINGH, Chandreshwar Prasad Narayan, M.A. (Calcutta Univ.), Padma Vibhushan (1977) ; Educationist, Admnr. and Interpreter of Indian Culture ; Governor of Uttar Pradesh since Feb. 28, 1980. *b.* Apr. 18, 1901. Vice-Chancellor, United Patna Univ., 1945 ; Amb. to Nepal ; Governor of Punjab, 1953 ; Amb. to Japan, 1958 ; was Dir., Reserve Bank of India, I.D.B.I. & Chmn. of several companies. *Address :* Raj Bhavan, Lucknow 227132.

SINGH, Charan, Ex-Prime Minister of India. *b.* 1902. M.L.A., U.P., 1937–77, Min. for Justice & Inf., U.P., 1951 ; Revenue & Agri., 1952 ; Revenue, Irrigation & Power, 1958 ; Home & Agri., 1960 ; Agri. & Forests, 1962–63 ; Local Self-Govt., 1966 ; Chief Min., U.P., 1967, 1970 ; founded Bharatiya Kranti Dal in Dec. 1967 and fought mid-term poll in 1969 ; elected to Lok Sabha, 1977, 1980 ; Min. for Home Affairs, Govt. of India, 1977–78 ; Dy. Prime Min. and Finance Min., 1979 and Prime Min., 1979-80 ; Mem., 7th Lok Sabha, 1980 ; founded Lok Dal, Sept. 1980. *Address :* 12, Tughlak Rd., New Delhi 110001.

SINGH, Guru Prasanna, M.Sc., LL.B., Chief Justice, High Court, Madhya Pradesh, since July 27, 1978. *b.* Jan. 3, 1922. Advocate, M.P. High Court, 1956 ; Addl. Judge, Nov. 7, 1967 ; Permanent Judge, July 29, 1968. *Address :* 191, Vivekanand Mrg., South Civil Lines, Jabalpur.

SINGH, Kamaljit, B.A., Civil Ekonom. (Stockholm), Mg. Dir., Wimco Ltd., since Oct. 10, 1973 & Chmn., Vulcan-Laval Ltd., since Mar. 12, 1974. *b.* Feb. 2, 1930. Joined Swedish Match Group in India, 1955 ; Mg. Dir., Vulcan-Laval Ltd., Nov. 1963. *Address :* C/o Wimco Ltd., Indian Mercantile Chambers, Ramjibhai Kamani Marg, B. Estate, Bombay 400038.

SINGH, Krishna Ballabh Narayan, M.A., B.L., Chief Justice, Patna High Court, since July 19, 1977. *b.* Jan. 25, 1922. Advocate, Patna High Court, Dec. 9, 1946 ; Addl. Judge, Nov. 15, 1966 ; Permanent Judge, Mar. 21, 1968. *Address :* Chief Justice's House, Chhajjubagh, Patna 800001.

SINGH, Dr. Nagendra, M.A., LL.D. (Cantab.), D.Sc. (Law) (Moscow), D.C.L. (Delhi), M.A., B.Litt., LL.D. (Dublin), D.Litt. (Bihar), D.Phil. (Cal.), Bar-at-Law, I.C.S., i.d.c., Padma Vibhushan (1973), J.P., Judge, Intnl. Court of Justice, The Hague, since Oct. 30, 1972 ; and its Vice-Pres., since Feb. 1976. Hon. Master of the Bench of Gray's Inn, London (1973) ; Secy. to the President of India, 1966–72 ; Constitutional Adv. to the Govt. of Bhutan, 1970–72 ; joined I.C.S., 1938 ; Mem., Constituent Assembly of India, 1947 ; worked in the Ministries of Defence, I. & B., States (Home) and Transport, D.G.S. and Secy., Transport Min. (1956–66) ; Mem. : Intnl. Law Commn., 1967–73 ; Permanent Court of Arbitration, The Hague, 1967 ; Chmn., UNCITRAL 4th Session, Geneva, 1971 ; Pres. : IMCO Assembly (1963–65) ; 55th I.L.O. Maritime Session, 1970 ; Afro-Asian Legal Cttee. ; Indian Soc. of Intnl. Law ; Maritime Law Assocn. of India ; VI Cttee. of U.N. ; Nehru Professor, Geneva Univ. ; Shri Panch Tribhuvan Prof., Tribhuvan Univ., Nepal ; Visiting Prof., Univs. of Madras, Bombay, Delhi, and Jawaharlal Nehru Univ. ; Hon. Fellow of St. John's College, Cambridge. *Address :* 6, Akbar Rd., New Delhi (India) ; International Court of Justice, Peace Palace, The Hague (Netherlands).

SINGH, Thakur Vishva Narain, M.A. (1953), Diploma in Journalism (1955), Sahityaratna (1953). Braille Editor. *b.* July 30, 1928. Participated in the Quit India Movement, Hyderabad Police Action and Goa Liberation Movement ; First Braille Editor of India ; acknowledged as Father of Braille Literature and Journalism in India, 1957 ; Editor, *Nayanrashmi* and *Shishu Alok* (Braille journals) ; Soviet Land Nehru Award (1977). *Address :* Central Braille Press, Rajpur Mrg., Dehra Dun 248001.

SINGHANIA, Hari Shankar, B.Sc., F. Inst. D. (Lond.), M.B.I.M. (Lond.), Industrialist. *b.* June 20, 1933. Pres., J. K. Orgn. ; Chmn. : J. K. Industries Ltd. ; Straw Products Ltd. ; Mg. Dir. : Straw Products Ltd. ; Ex-Pres. : F.I.C.C.I. ; Mem., All India Orgn. of Employers ; Ind. Comm. Intl. Cham. of Com. ; Bd. of Ind. & Min. Resources, Madhya Pradesh, etc. : *Address :* J. K. Orgn., Nehru House, 4, Bahadur Shah Zafar Marg, N. Delhi 110002.

SIVAJI GANESAN (See under GANESAN, Sivaji).

SIVASAILAM, A., B.Com., F.B.I.M., F. Inst. SM, UK ; Businessman : Chairman : Amalgamations Ltd., Madras (Simpson Group of Companies) and Chmn. & Mg. Dir., Tractors and Farm Equipment Ltd., Madras ; *b.* Aug. 24, 1934. Pres., Associated Chambers of Commerce & Ind. of India ; Chmn., Bd. of Governors, Indian Instt. of Technology, Madras ; Mem., several State and Central Govt. Boards ; Vice-Pres., Madras Kendra, Bharatiya Vidya Bhavan ; Ex-Chmn., Madras Chamber of Commerce & Ind. ; Sheriff of Madras, 1969-70. *Address :* 861, Anna Salai, Madras 600002.

SOLANKI, Madhavsinh, B.A., LL.B., Chief Minister, Gujarat State, since 1980. *b.* Jan. 29, 1927. Lawyer and Politician ; M.L.A., Gujarat, since 1957 ; Dy. Min., 1962 ; Chief Min., 1976 ; Pres., Gujarat P.C. (I). C. and also Mem. of the Congress (I) Wkg. Cttee. for a number of years. *Address :* Bungalow No. 5, Gandhinagar 382010. (Gujarat).

SRIVASTAVA, J. K., B.Sc. Tech. (Manch.), A.M.C.T., A.T.I., Ex-M.L.A., Chmn., Sir J. P. Srivastava Group of Industries. *b.* Nov. 13, 1913. Pres., Upper India Chamber of Commerce, 1957–60; Vice-Pres., Employers' Fedn. of India; Mem.: State Plng. Board, U.P.; Export Promotion Adv. Council, Govt. of India; Indian Cotton Mills Fedn.; Exec. Cttee., All India Board of Tech. Studies in Management; Bd. of Governors, National Safety Council, Govt. of India; U.P. Leg. Assembly, 1945–52; Cttee., Cotton Adv. Board, Govt. of India and numerous Govt. and Pvt. bodies; Chmn.: Northern Regnl. Cttee., Employers' Assn. of India; Governing Council, Northern India Textiles Research Assn. *Address:* Kailash, Nawabganj, Kanpur 208001.

STEPHEN, C. M., B.A., B.L., Minister for Communications, Govt. of India, since Mar. 1980. *b.* Dec. 23, 1918. Mem., A.I.C.C., since 1952; was continuously active in the trade union field as Pres. of many trade unions for a long time; Mem., Kerala Leg. Assembly, 1960-65; Mem., Fifth Lok Sabha, 1971-77; Sixth Lok Sabha, 1977-79; Dy. Leader, Congress Parly. Party, 1975-77; Chmn., Cttee. on Sub-ordinate Legn.; Nat. Shipping Bd.; Pub. Accounts Cttee.; Leader of Opposition 1978-79; Mem., Indian Delegation to U.N. Orgn., 1972; Indian Delegation to Intnl. Labour Orgn., Geneva; Indian Delegation to Parly. Confce., London. *Address:* Ministry of Communications, Sanchar Bhavan, 20, Asoka Rd., New Delhi 110001.

SUBBULAKSHMI, Smt. Madurai Shanmugavadivu, Indian Classical Karnatak musician; Ramon Magsaysay Award (1974); President's Award for Karnatic Music, 1956. *b.* Sept. 1916. Gave solo performance and became a leading musician before 18; her part as heroine in the Hindi film "Meera" won for her all India popularity; has given more than 100 benefit recitals in aid of many national, social and religious causes; represented Carnatic Music in the Edinburgh Intnl. Festival of Arts, 1963; also gave concerts in London, Frankfurt, Geneva and Cairo; special concert before U.N. Assembly on U.N. Day (Oct. 23, 1966) on invitation: 7-week concert tour in the U.S.A., Oct.–Nov. 1966; had private audience with Pope, Dec. 3, 1966; has performed at Carnegie Hall (N. York) and in Tokyo, Bangkok, H. Kong, Manila, Singapore etc.; first woman musician to be elected Pres. of the Madras Music Academy Cfce., 1968; recipient of Tamil Isai Sangha title 'Isai Perarignar', 1970; Conferred on her: D.Litt. by Rabindra Bharati Univ., 1967; 'Doctor of Letters' by Shri Venkateswara Univ., 1971 and by Delhi Univ., 1973. *Address;* "Kalki Buildings", Chetput, Madras 600031.

SUMATI MORARJEE, Smt. *b.* March 13, 1909. Chairman: Scindia Steam Navigation Co., Ltd.; Eastern Bunkerers Ltd.; Indian Coastal Conference: Narottam Morarjee Instt. of Shipping; India Lloyds Cttee.; Vice-Chmn., Maritime Law Assn. of India; Titulary Mem. of the Comiti Maritime International (CMI), Antwerp, Belgium; Life Mem., World Wild Life Fund; Mem., Board of Trade; Dir. & Rep.: Gen. Council of the Intnl. Shipping Fed.; represents Indian National Cttee. of I.C.C. on Surface Transport; Ex-President, Indian National Shipowners' Assn.; Mg Trustees, Central Relief Fund; Sumati Morarjee Foundn.; Vice-Pres., Nathadwara Temple Board; Ex-Member, National Shipping Board; NIF-Escorts Award, "Lady of the Year 1975". *Address:* Palm Bun, Gandhigram, Juhu, Bombay 400054.

SUNDARAM, K., Industrialist: Mg. Dir., Lakshmi Mills Co. Ltd., Coimbatore; Dir.: Lakshmi Card Clothing Mfg Co. Pvt. Ltd., Palladam; Ex-Chmn., Indian Cotton Mills Fedn., Bombay; Pres., Indian Chamber of Commerce; CBE; Vice-Chmn., SITRA, Coimbatore; Mg. Trustee, Kuppuswamy Naidu Charity Trust & Memorial Hosp.; Chmn., Bhavan's Kendra, Coimbatore. *Address:* Lakshmi Mills Co. Ltd., Pappanaickenpalayam, Coimbatore 641037.

SUNDARESAN, Devadason, B.Sc. (Ag.), M.A., M.Sc., Ph.D., Dir., National Dairy Research Instt., Karnal, since 1970. *b.* March 10, 1925. *Address:* National Dairy Research Institute, Karnal 132001 (Haryana).

TALAULICAR, Jaivant Esvonta, B.A. (Hons.), B.Sc. (Econ.) (Lond. School of Economics), Industrialist. *b.* Sept. 26, 1929. Jt. Mg. Dir.: Tata Engg. & Locomotive Co. Ltd.; Chmn.: Tata Precision Inds. Pvt Ltd. (Singapore), Tata Engg. Services (PTE) Ltd., Singapore; Dir.: Tata Inds. Ltd., Tatab Inds. Sdn. Bhd. (Malaysia), Tata Aircraft Ltd.; Mem. of Bd., Tata Mgmt. Trg. Centre; Mem., Exec. Cttee., Association of Indian Automobile Mfrs. *Address: Office:* Bombay House, 24, Homi Mody St., Bombay 400023. *Res.:* 202, Silver Arch, 66-A, L. Jagmohandas Mrg., Bombay 400006.

TALEYARKHAN, Homi J. H., B.A. (Bombay), Governor of Sikkim. *b.* Feb. 9, 1917. Ex M.L.A., Maharashtra; Min. for Health & Family Plng., Food, Civil Supplies, Housing, Tourism, etc., Maharashtra, 1960-67; Mem., A.I.C.C., Vice-Pres., BPCC; was Dir., Shipping Corpn. of India; Ex-Pres., Intnl. Tourism Council, Indian Council of Foreign Trade, etc.; was Amb. to Libyan Arab Republic. *Address:* Raj Bhavan, Gangtok 737103.

TALWAR, Gursaran Prashad, B.Sc. (Hons.), M.Sc. (Tech.), Docteur es Scs.; Fellow, Indian Coll. of Allergy & Applied Immunology, Indian Academy of Medical Scs. & Indian Nat. Sci. Academy; Scientist; Prof. & Head, Deptt. of Biochemistry, AIIMS, New Delhi, since July 1965; Head, ICMR-WHO Research & Trg. Centre in Immunology of India & South East Asia, since June 1973; Project Leader, Anti-Pregnancy Vaccine, Intnl. Cttee. for Contraception Research. *b.* Oct. 2, 1926. Visiting Prof., Population Council, Rockefeller Univ., New York, 1964 & 1966; National Award in Bio-medicine, Min. of Family Plng., 1969–70; Basanti Devi Amir Chand Sr. Prize of I.C.M.R., 1972; Dr. P. N. Raju Oration Award, 1972-73; National Lecturer, UGC, 1975; Sir J. C. Bose Oration Award, 1976; Sundar Lal Hora Medal of Indian National Sci. Aca., 1978; Pres., Indian College of Allergy and Applied Immunology, 1979; Endocrine Socy. of India (1978); Mem., Intnl. Brain Research Organization (UNESCO); Indian National Cttee. for Biochemistry; Hari Om Ashram Trust Award in Life Sciences, UGC (1978); FICCI Award for Biomedical Res. (1977). *Address:* Deptt. of Biochemistry, A.I.I.M.S., New Delhi 110016.

TAPASE, Ganpatrao Devaji, B.A., LL.B., Governor of Haryana, since Feb. 28, 1980. *b.* Oct. 30, 1908. Pres., Satara City Congress Cttee., 1938-46; Mem., Maharashtra PCC Executive, 1939-46 and also Mem. of A.I.C.C. till 1957; elected to Bombay Assembly, 1946; 1952; was Min. of Bombay Govt., 1946-57; held portfolios of Industries, Welfare of Backward Classes, Local Self-Govt., Relief & Rehab., Fisheries & Housing; was Mem. of Rajya Sabha, 1962-68; Chmn., Railway Service Commn., Bombay, 1968-71; Governor of U.P., Oct. 2, 1977 to Feb. 27, 1980. *Address*. Haryana Raj Bhavan, Chandigarh 160019.

TARNEJA, Dr. Ram S., B.A. (Hons.) (Delhi), M.A., Delhi & Virginia, Ph.D. (Cornell), awarded Fellowship of the Indian Instt. of Personnel Management, 1973; Managing Director, Bennett, Coleman & Co., Ltd. (Proprietors of the Times of India and Allied Publications), since May 1, 1981; associated with this company since March 1970. *b.* Dec. 7, 1931, at Karachi. Gold Medalist

Research Asstt., Univ. of Virginia, 1953–55 ; Graduate Research Asstt., Cornell Univ., 1955–57 ; Asstt. Prof. of Management, Duquesne Univ., 1957–60 ; Dir., Graduate Dept. of Business Admn., Duquesne, 1958–61 ; Assoc. Prof. of Management, Duquesne Univ., 1960 ; Director of Personnel, Sahu Jain Group of Industries, Calcutta, 1961–70 ; Past Pres. : All India Management Assn. ; Patna Management Assn. ; Mem. : Acad. of Management ; All India Board of Tech. Studies in Management ; Council Mem. : All India Management Assn. ; Mem. : Bd. of Directors, United News of India ; Arim Metal Industries Pvt. Ltd. ; Arim Tyres Pvt. Ltd. ; Welcast Steels Ltd. ; Bombay Wire Ropes Ltd. ; Indian & Eastern Newspaper Socy. ; Audit Bureau of Circulations Ltd. ; New Standard Engg. Co. Ltd. ; Ceekay Automotive Products Ltd. ; Otis Elevators (India) Ltd. ; Anil Hardboards Ltd. ; Bharat Gears Ltd. ; Fellow, Instt. of Directors, London ; National Instt. of Personnel Mgmt. and All India Mgmt. Assocn. *Address : Res. :* 3-C, Woodlands, 67, Pedder Rd., Bombay 400026 ; *Office :* The Times of India, Dr. D. Naoroji Rd., Bombay 400001.

TATA, Darab Ratanji Dadabhoy, Industrialist. *b.* Paris, Feb. 26, 1912. Trustee : Sir Dorabji Tata Trust, Lady Tata Memorial Trust. *Address : Res. :* Taj Mahal Hotel, Bombay 400039. *Office :* Bombay House, Homi Mody St., Bombay 400023.

TATA, Jehangir Ratanji Dadabhoy, D.Sc. (Hon. Causa) (Allahabad Univ.) (1947), Doctor of Laws (Hon. Causa) (Bombay Univ.) (1981), Hon. Air Vice-Marshal I.A.F., Officer of the Legion of Honour, Paris, France (1954), Knight Commander of the Order of St. Gregory the Great (1964). Industrialist. *b.* July 29, 1904, in Paris. Chmn. : Tata Sons Ltd., Tata Inds. Ltd., Tata Iron & Steel Co. Ltd., Tata Oil Mills Co. Ltd., Tata Chemicals Ltd., Indian Hotels Co. Ltd., Tata Burroughs Ltd., Tata Ltd., London, Tata Inc., New York, Tata A.G. Zug, Tata Instt. of Fundamental Research, National Centre for the Performing Arts, Mg. Council, Homi Bhabha Fellowships Council, Family Plng. Foundn. ; Dir. : Tata Engg. & Loco. Co. Ltd. ; Air India ; Pres., Court of the Indian Instt. of Science, Bangalore ; Chmn.: Sir Dorabji Tata Trust, J. N. Tata Endowment ; Tata Energy Research Instt. ; Trustee: Gandhi Smarak Nidhi and Kasturba Gandhi National Memorial Trust ; Jawaharlal Nehru Memorial Fund : Mem.: National Council of Applied Economic Research (General Body), Central Adv. Council of Inds., Council of Scientific and Industrial Research Socy., Atomic Energy Commn., National Integration Council, Govg. Council & Exec. Cttee., Rajaji Instt. of Public Affairs & Admn. ; first pilot to qualify in India holding a private licence from 1929–75 ; Solo flight India-England, 1930 ; founded Tata Airlines, 1932 and piloted inaugural service Karachi Bombay, Oct. 1932. *Address : Office :* Bombay House, Homi Mody St., Bombay 400023 ; *Res. :* The Cairn, Altamount Rd., Bombay 400026.

TATA, Naval Hormusji, Industrialist. *b.* Aug. 30, 1904, Bombay. Chmn. : Central India Spg., Wvg. & Mfg. Co. Ltd., Swadeshi Mills Co. Ltd., Ahmedabad Advance Mills Ltd., Tata Mills Ltd., Tata Electric Companies, Oriental Hotels Ltd., Indian Cancer Socy. ; Dy. Chmn. : Tata Sons Ltd., Tata Industries Ltd. ; Director : Telco Ltd., Tata Exports, Indian Hotels Co. Ltd. ; Pres. : Employers' Fedn. of India ; Trustee : Sir Dorabji Tata Trust, Sir Ratan Tata Trust, N. M. Petit Trust ; Mem. : Indian Cotton Mills Fedn., Governing Body, I.L.O., Geneva ; Vice-Chmn. : Intnl. Orgn. of Employers, Geneva. *Address : Res. :* Tata House, Waudby Rd., Fort, Bombay 400001 ; *Office :* Bombay House, Homi Mody St., Bombay 400023

TATA, Ratan Naval, Industrialist ; Dir.-in-Charge, National Radio & Electronics Co. Ltd. *b.* Dec. 28, 1937. Vice-Chmn. : Central India Spg., Wvg. & Mfg. Co. Ltd. ; Dir. : Tata Sons Ltd., Tata Iron & Steel Co. Ltd., Bombay Dyeing and Manufg. Co. Ltd., Ahmedabad Advance Mills Ltd., Tata McGraw-Hill Publishing Co. Ltd., Indian Resort Hotels Ltd., Andhra Valley Power Supply Co. Ltd. ; Trustee : J. N. Tata Memorial Trust, Sir Ratan Tata Trust, etc. *Address :* Tata House, Waudby Rd., Bombay 400001.

THIRANI, Sushil Kumar, Industrialist ; Chmn. & Mg. Dir.: Kores (India) Ltd., since 1966. *b.* Oct. 20, 1930. Joined the Board of Directors, Kores (India) Ltd., after Indianisation. *Address :* Kores (India) Ltd., P.O. Box 6558, Plot No. 10, Off Dr. E. Moses Rd., Worli, Bombay 400018.

***THOMSON, H.E. Sir John Adam,** British High Commissioner to India. *b.* Apr. 27, 1927. Entered Foreign Service, 1950 and served in British Embassies in Jeddah, Damascus and Washington ; Private Secy. to the Permanent Under Secy. ; Actg. Head, Plng. Staff and Counsellor, Head of Plng. Staff ; Chief of Assessments Staff, Cabinet Office, 1968 ; Min. & Dy. Permanent Rep. to the North Atlantic Council, 1972 ; Asstt. Under Secy. of State, Foreign & Commonwealth Office, Oct. 1973–76. *Address :* British High Commission, Shantipath, Chanakyapuri, New Delhi 110021.

TIWARI, Narayan Datt, M.A., LL.B., Minister for Industry, Steel & Mines, Govt. of India. *b.* Oct. 18, 1925. Political and social worker ; Min. for Finance & Parly. Affairs, U.P., 1970, 1971-73 & 1973-77 ; also held portfolios of Plng., Ind., Irri. & Power, Labour, etc., from time to time ; Chief Minister, U.P., Jan. 1976 to Apr. 1977 ; M.L.A., U.P., 1952-62 & 1969 to Jan. 1980 ; Dy. Leader of the Opposition, 1957-62 ; Leader of the Opposition, July 1977 to Mar. 1978 ; Oct. 1978 to Oct. 1979 ; was Min. for Planning & Dy. Chmn., Planning Commission, Govt. of India. *Address :* Udyog Bhavan, New Delhi 110011.

TOBACCOWALA, Akhtarali Hasanali, B.A., M.A., LL.B. (Bombay Univ.), M.B.A. (Chicago Univ.), Industrialist. *b.* January 17, 1925. Vice-Chmn., Mg. Dir., Voltas Ltd. ; Chmn., Volrho Ltd. ; Dir. : Tata Industries, Ltd., Merck Sharp & Dohme of India Ltd., Lakshmi Machine Works Ltd., Lakshmi Automatic Loom Works Ltd., Roche Products Ltd., Voltas International Ltd., Metrovol Ltd. (Sharjah, U.A.E.), Bombay Cham. of Comm. & Ind., Tata Projects Ltd. *Address : Office :* 19, J. N. Heredia Marg, Ballard Estate, Bombay 400038 ; *Res. :* 21-B, Woodlands, 67, Pedder Rd., Bombay 400026.

TODI, Sanwarmal Bhagwandas, Industrialist. *b.* July 13, 1925. Chmn. : Hathising Mfg. Co. Ltd. ; Dir., Todi Ind. Pvt. Ltd., Todi Woollen Mills Ltd., Crop Devpt. Pvt. Ltd., etc. ; Chmn., All India Mfrs. Assocn. ; Ex-Pres., All India Rope Mfrs. Assn., Marwadi Sammelan ; Trustee, Marine Drive Citizens Assn. ; Trustee & Founder Mem., Bhagwandas Todi Charitable Trust ; Wkg. Cttee. Mem., AIMO, DGS & D, Central Purchase Adv. Council, Central P. & T. Adv. Council, etc. *Address : Office :* Todi Estate, Lower Parel, Bombay 400013 ; *Res. :* Vishwa Mahal, C Rd., Churchgate, Bombay 400020

TULZAPURKAR, Mr. Justice Vidyaranya Dattatraya, B.A., LL.B., Attorney-at-Law ; Judge, Supreme Court of India, since Sept. 30, 1977 ; Advocate, Bombay High Court, Dec. 1, 1942 ; Judge, City Civil Court and Addl. Sessions Judge, Bombay, July 16, 1956 ; Principal Judge, Apr. 19, 1962 ; Addl. Judge, Bombay High Court, Dec. 21, 1963 ; Permanent Judge, Sept. 22, 1966. *Address :* 11, Tughlak Rd., New Delhi 110011

---

* Leaving India shortly.

UPTON, H. E. Mr. Gordon Noll, B.A., Australian High Commissioner to India and Amb. to Nepal, since 1980. *b.* Dec. 24, 1920. Royal Australian Air Force, 1942-45; held various positions in Canberra and at Australian diplomatic missions in San Francisco, Washington, Bangkok, Jakarta; High Commr. to Sri Lanka, 1966-70; Min., High Commn. in London, 1973-74; Embassy at Washington, 1974-76; High Commr. to Fiji, Tonga, W. Samoa and Tuvalu, 1976-79. *Address :* Australian High Commission, 1/50G, Shantipath, Chanakyapuri, New Delhi 110021.

VAJPAYEE, Atal Bihari, M.A., M.P. (Lok Sabha), Pres., Bharatiya Janata Party, 1980. Journalist. *b.* Dec. 25, 1926. Joined Arya Samaj in 1939; R.S.S., 1940; arrested in freedom movement, 1942; joined Bharatiya Jan Sangh since its inception, 1951; Pres., Bharatiya Jan Sangh, 1968–72; elected to Lok Sabha from U.P., 1957 & 1967 and from M.P., 1971; Rajya Sabha, 1962; leader, Jan Sangh Parly. Party, 1957–75; detained, June 26, 1975; elected to Lok Sabha from N. Delhi, 1977; & 1980; Mem.: National Integration Council, 1962; Parly. delegation to the Commonwealth Parly. Assn. meeting, Canada, 1966 and Zambia, 1980; Inter Parliamentary Cfce., Tokyo, 1975; Rly. Convention Cttee., 1971–72; Hindi Salahkar Samiti; Chmn., Public Accounts Cttee., Lok Sabha, 1969–70; Assurance Cttee., 1967–68; Minister for External Affairs, 1977–79. *Editor : Swadesh,* daily, Lucknow, 1949; *Veer Arjun,* Delhi, 1952–53 and some periodicals. *Address :* 6, Raisina Rd., New Delhi 110001.

VAKIL, Shiavax Ratanshaw, Advocate, Supreme Court, Attorney-at-Law & Notary. *b.* July 9, 1917. Dir.: Tata Engg. & Locomotive Co. Ltd., A.C.C., Bombay Dyeing & Mfg. Co. Ltd., Tata Power Co. Ltd., Tata Mills Ltd., Ahmedabad Advance Mills Ltd., Jayabharat Credit & Investment Co. Ltd., Herdillia Chemicals Ltd., Pennwalt India Ltd., Tata Inds. Ltd., Gokak Patel and Volkart Ltd., etc.; Trustee: Maneckji Cooper Education Trust, Ness Wadia Foundation, Sir Ratan Tata Trust, Hirabai Tata Trust, The Jayprakash Institute of Human Freedoms. *Address :* Bombay House, Homi Mody St., Bombay 400023.

VALLURI, Dr. Sitaram Rao, B.Sc. (Engg.), D.I.I.Sc. (Aeronautics), M.S. (Aeronautics), Ph.D. in Aeronautics; Dir., National Aeronautical Laboratory, since Nov. 1965. *b.* June 25, 1924. Research Fellow and Sr. Research Fellow, California Instt. of Technology, 1954–63; Sr. Prof., Indian Instt. of Tech., Madras, 1963–65. *Address :* National Aeronautical Laboratory, Post Bag No. 1779, Kodihalli, Bangalore 560017.

VARADARAJAN, A., B.A., B.L., Judge, Supreme Court of India, since Dec. 1980. *b.* Aug. 17, 1920. Enrolled as advocate, Madras High Court, Aug. 1944; worked as Dist. Munsif, Sub-ordinate Judge and Dist. Judge, 1949-66; was Presiding Officer, Labour Court, for a year and as an Industrial Tribunal for a short time; was judl. mem., Cttee. for the Examination of the Jurisdiction of Civil and Criminal Courts in T. Nadu; Judge, Madras High Court, 1973. *Address :* 6, Moti Lal Nehru Place, New Delhi 110011.

VASQUEZ, H. E. Tomas, Ambassador of Chile to India, since April 1979. *b.* Nov. 16, 1926. Joined the Min. of Foreign Affairs and worked in various capacities, 1947-71; Minister-Counsellor for Economic Affairs, Embassy in Paris, Apr. 1971; also Consul-General in Paris, July 1971; Dir.-General (Admve.), Min. of Foreign Affairs, Dec. 1975; Charge d'Affaires in Lebanon, Jan. 1977; has participated in many confces. of EL ECLA, UNIDO, UNCTAD, ILO, etc.; has been decorated by the Govts. of Argentina, Peru, Ecuador and France. *Address:* Embassy of Chile, 1/13, Shantiniketan, New Delhi 110021.

VAZIFDAR, Homi Nadirshaw, B.Sc., Industrialist. *b.* Aug. 9, 1915. Vice-Chmn. & Jt. Mg. Dir.: Swadeshi Mills Co. Ltd., Chmn.: Coromandel Garments Ltd.; Dir.: Tata Inds. Ltd., Central India Spg., Wvg. & Mfg. Co. Ltd., Ahmedabad Advance Mills Ltd.; Mem., Mg. Cttee., Millowners' Assocn. *Address : Office :* Tata Textiles, Bombay House, 24, Homi Mody St., Bombay 400023. *Res. :* Sea Green Bldg., N. Subhas Rd., Bombay 400020.

VENCATACHELLUM, Smt. Jothi, Governor of Kerala State, since Oct. 14, 1977. *b.* Oct. 27, 1917. Ex-Mem., Madras Leg. Council and Assembly; was Min. for: Prohibition and Women's Welfare (1953-54); Pub. Health, (1962-63) and Public Health, Indian Medicines, Orphanages, Women's Welfare and Town Planning (1963-67); Mem.: Syndicate, Madras Univ., Central Bd. of Film Censors, Red Cross Socy. and Madras Metropolitan Devpt. Authority; Pres., Madras Juvenile Deliquency Court, Arts Academy and Ayyappa Arts Academy and Depressed Classes Assocn.; Chmn., Food Council, Tamil Nadu; Treasurer and Dy. Leader, Janata Party, Tamil Nadu. *Address :* Raj Bhavan, Trivandrum 695099.

VENKATARAMIAH, Mr. Justice Engalaguppe Seetharamiah, B.A., LL.B., Judge, Supreme Court of India, since March 8, 1979. *b.* Dec. 18, 1924. Enrolled as Advocate, Mysore High Court, Jan. 5, 1948; Spl. Govt. Pleader, Govt. of Mysore, June 2, 1966 to June 4, 1969; Govt. Advocate, June 5, 1969 to March 4, 1970; Advocate-General, Mysore, Mar. 5, 1970 to June 25, 1970; Addl. Judge, High Court of Karnataka, June 25, 1970; Permanent Judge, Nov. 20, 1970. *Address :* 4, Tughlak Rd., New Delhi 110011.

VENKATASWAMY NAIDU, Rangasamy Naidu, B.Sc., B.Sc. Tech. (Manch.); Industrialist. Chmn., ACCEL and S.A.E. (I) Ltd. *b.* May 12, 1910. Promoted & became Mg. Dir., S. Indian Viscose Ltd. & Madras Aluminium Co. Ltd.; Ex-Chmn., T. N. Ind. Investment Corpn. Ltd.; Hon. Secy., S. I. Millowners' Assn., 1940–47 and Chmn., 1948–58; Dir. in several textile mills, engg. industries etc. *Address :* 'Kamala Nilayam', Peelamedu, Coimbatore 641004.

VERGHESE, Boobli George, B.A., Gandhi Peace Foundation Fellow in rural development. Columnist. Editor, "Voluntary Action"; Chmn., Media Foundn.; Editorial Adviser, "Commerce" (1976), Editor, *Hindustan Times,* 1969–75 (Sept.). *b.* June 21, 1927. Special Corspdt. and Asstt. Editor, *The Times of India,* 1949–66; Information Adviser to the Prime Minister, 1966–68; Ramon Magsaysay Award for journalism, 1975; Chmn.: Working Group on Autonomy for *Akashvani* and *Doordarshan* 1977–78; Mem.: UNESCO Commission on Communication Policy. *Address :* C-11, Dewan Shree, 30, Ferozshah Rd., New Delhi 110001.

VERMA, Dr. Ajit Ram, M.Sc., Ph.D., D.Sc., F.N.A., Dir., National Physical Laboratory, New Delhi, since May 1965. *b.* Sept. 20, 1921. *Address :* Director, National Physical Laboratory, New Delhi 110012.

VERMA, V. K., Chartered Accountant, B.A., Com., (Hons.); Diploma in Business Management (Delhi Univ.) with long professional experience in Taxation, Audit & Management Accounting; Associate Mem., Corpn. of Secs., Lond.; Mem., Instt. of Company Secs. of India. *Address :* V. K. Verma & Co., C-37, Connaught Place, New Delhi 110001.

VISSANJI, Pratapsinh Mathuradas, Businessman, Chairman : Wallace Flour Mills Co. Ltd. *b.* March 19, 1916. Dir., Khatau Makanji Spg. & Wvg. Mills Ltd., Bombay Dyeing & Manufg. Co. Ltd., etc. *Address : Residence :* Sir Mathuradas Vissanji Rd., Andheri, Bombay; *Office :* 9, Wallace St., Fort, Bombay 400001.

VYJAYANTHIMALA, Smt. Bali, Artiste. *b.* Aug. 13, 1933. Acted in films till 1969 & received Best Actress Awards for "Sadhana", "Ganga Jamuna" & "Sangam"; exponent of Bharata Natyam & started 'Natyalaya'—academy of classical Bharata Natya & Music—Bombay, 1967; danced at the U.N. Gen. Assembly, Dec. 1969; undertook dance tour to Australia co-sponsored by the Dept. of Tourism, Govt. of India and Adelaide Festival Centre Trust, March 1975; danced in U.S.A., Canada, (Royal Opera Ballet Festival), Stockholm, France, Belgium and Germany, 1977. *Address :* 131, Ashoka Apartments, Nepean Sea Rd., Bombay 400006.

WADIA, Neville Ness, Chmn. : Nowrosjee Wadia & Sons (Private) Ltd.; National Peroxide Ltd.; Sturdia Chemicals Ltd.; Citurga Biochemicals Ltd.; Neville Wadia Pvt. Ltd. *b.* Aug. 22, 1911. *Address:* C/o Neville Wadia Pvt. Ltd.; *Office :* Neville House, Ballard Estate, Bombay 400038.

WADIA, Smt. Sophia, Editor, *The Aryan Path* (since 1930) and *The Indian P.E.N.*, since 1934, Bombay. *b.* Sept. 13, 1901. Associate of the United Lodge of Theosophists; Lecturer, Founder-Organiser of the P.E.N. All-India Centre; a Founder and Pres. of the Indian Instt. of World Culture, Bangalore; Chmn. & Mg. Trustee, Asian Book Trust; Vice-Pres., All India Animal Welfare Assn.; Vice-Chmn., Buddha Jayanti Charities Socy. and worker in women's ednl., social and cultural movements. *Address :* 40, New Marine Lines, Bombay 400020.

WAGLE, Nityanand Mangesh, M.A., M.Sc. (Econ.), I.C.S. (Retd.), Padma Bhushan, Chairman : Crompton Greaves Ltd.; Macmillan India; Paville Fashions Pvt. Ltd.; Chartered Bank, L.A.B.; XLO India Ltd. *b.* Aug. 16, 1914. Entered I.C.S., 1938; served in the Dists. of Gujarat, 1938–42, and in the Sectt. at Bombay, 1942–47; retired from the I.C.S. and joined Greaves Cotton & Co. Ltd., April 1947; Mg. Dir., Greaves Cotton & Co. Ltd., 1957–75; V.-Chmn.: Bombay Dyeing; Dir.: Greaves Cotton, Associated Bearing, Glaxo, IDBI, WIMCO, Tata Hydro and other companies; Pres. : Bombay Chamber of Commerce & Industry, 1961 & 1968; Associated Chambers of Commerce & Industry, 1968–69; Vice-Pres. and Chmn., Western Region Employers' Federation of India. *Address :* 17A, Carmichael Rd., Bombay 400026.

WARRIER, P. Krishnan Kutty, Managing Trustee, Arya Vaidya Sala, Kottakkal, since 1953. *b.* 1921 at Kottakkal. Has been with the Arya Vaidya Sala since 1947; is its Addl. Chief Physician; Pres., All India Ayurvedic Congress; Mem., Exec. Cttee., Central Council of Indian Medicine; Ayurvedic Adv. Bd., Kerala. *Address :* Arya Vaidya Sala, Kottakkal 676503 (Kerala State).

LATE PARTICULARS

RAJYA SABHA

73 members are due to retire on April 2, 1982.

BANKING

R. Raghupati is the Chairman & Mg. Director of Syndicate Bank.

R. C. Shah has been appointed Chairman & Mg. Director of the newly created EXIM BANK with hqrs. in Bombay, for financing exports.

Amitabha Ghosh, till recently Chairman & Mg. Director, Allahabad Bank, has taken over as Dy. Governor, Reserve Bank of India, from January 21, 1982.

P. K. Sengupta has been appointed Chairman & Mg. Director of Allahabad Bank.

K. L. Roy has been appointed Chairman and Mg. Director of United Bank of India.

CIVIL AVIATION

Capt. A. M. Kapoor is now Chairman of the International Airports Authority of India.

Capt. N. M. Pereira & Capt. K. Chadha have been appointed as Mg. Directors of Indian Airlines.

Satyanarayana Seethepalli is now Director, Finance, Indian Airlines.

With the arrival of 2 more advanced version's of Boeing 737 aircraft, the number of Boeing 737s with IA has now gone up to 21. Besides it has 8 airbuses, 12 HS-748s and 8 Fokker Friendships.

Mr. A. H. Mehta, Chairman of Indian Airlines, retired on Feb. 28, 1982.

Capt. Kamini Chadha has been appointed Mg. Director and Chairman of Indian Airlines.

FILM INDUSTRY

Indian Motion Picture Distributors Assocn.: Pres., Gulshan Rai; *V.-Pres.*, N. N. Sippy; *Hon. Treasurer*, Sunder F. Rai; *Hon. Secs.*, G. L. Naik, Devendra T. Shah.

ECONOMIC SITUATION

The official economic survey presents the following profile of the economy in 1981–82 :—Gross national product (plus) 4·5 per cent; Agricultural production (plus) 3 per cent; Industrial production (plus) 8 per cent; Foodgrain production 134 million tonnes; Wholesale prices (increase) around 10 per cent; Monetary expansion (plus) about 17 per cent; Exports (plus) 12–13 per cent; Imports (plus) 4 to 5 per cent; Trade gap Rs. 55,000–56,000 million; Foreign exchange reserves (decline) Rs. 14,000 million; Net inflow of external assistance : Rs. 10,890 million.

AWARDS & PRIZES

Bhatnagar Awards (1981) : Dr. S. N. Roy of Tata Instt. of Fundamental Research & Prof. R. Srinivasan (*Physical Sciences*); Dr. R. Balasubramaniam & Prof. B. M. Dev (*Chemical Sciences*); Dr. P. V. Sane & Dr. Sushil Kumar (*Biological Sciences*); Prof. S. C. Dutta Ray (*Engineering Sciences*); Dr. U. C. Chaturvedi (*Medical Sciences*) & Prof. J. K. Ghosh (*Mathematical Sciences*).

Nehru Awards (1981) : Prof. Gunnar Myrdal & wife Mrs. Alva Myrdal (Sweden) for *International Understanding*.

Nobel Prize Awards (1981) : *Physics :* Nicolaas Bloembergen (A), Arthur Schawlow (A), Kai Siegbahn (S). *Chemistry :* Prof. Kenichi Fukui (J), Prof. Roals Hoffmann (A). *Physiology & Medicine :* Dr. Robert Sperry (A), Prof. David Hubel (A), Torstenn Wiesel (A). *Literature :* Elias Canetti (B). *Economics :* Prof. James Tobin (A).

SMALL SCALE INDUSTRY

The Government has thrown open 13 items reserved so far for production exclusively in the small-scale sector. The de-reserved items are: dehydrated vegetables, tyre retreading, rubber to metal bonded parts, tartaric acid from maleic anhydride, fumeric acid, sodium chromate, potassium bichromate, ammonium bichromate, simple cone pulley driven lathe upto 2,000 mm bed length, satchet filling machines for pouches, fan belts, hypodermic needles and pressure guage.

Eleven more items have been reserved for production exclusively in the small-scale sector. With this the number of items reserved for small-scale sector comes to 852. The new items listed for production in the small-scale sector are: 'HDPE' woven sacks (except sacks manufactured on circular looms), P.P. woven sacks (except those made on circular looms), coke briquettes (except lignite and coke for integrated plants), M.S. storage tank upto 1,500 litres storage capacity (except storing chemicals and other similar items), other than cyrogenic tank and vessels, hand threading tap bolders 12 mm drilling machine upto 1,500 r.p.m. bench and pedestal type, manually operated screw presses and hand presses, orthoaminophenol and crown corks.

PUBLIC HEALTH

Mental Diseases: At present there are 38 mental hospitals with accommodation for about 25,000 patients. About 1 million Indians suffer from mental sickness (1971).

The incidence of mental illness is on the increase because of increased stresses and strains of modern life. It was proposed to establish 50 psychiatric clinics in medical colleges during the Fifth Plan. The following is a list of mental hospitals in India:

Andhra Pradesh: Government Mental Hospital, Waltair; Hospital for Mental Diseases, Hyderabad. **Assam**: Mental Hospital, Tezpur. **Bihar**: Hospital for Mental Diseases, Ranchi; Ranch Mansika Arogya Shala, Ranchi. **Delhi**: Mental Hospital, Delhi. **Goa**: Mental Hospital, Panaji, Goa. **Gujarat**: Mental Hospital, Ahmedabad; Mental Hospital, Vadodara; Mental Hospital, Bhavnagar; Mental Hospital, Bhuj; Mental Hospital, Jamnagar. **Jammu & Kashmir**: Mental Hospital, Srinagar. **Karnataka**: Mental Hospital attached to National Institute of Mental Health and Neuro Sciences, Bangalore; Government Mental Hospital, Dharwar. **Kerala**: Mental Hospital, Trivandrum: Mental Hospital, Trichur; Mental Hospital, Calicut. **Madhya Pradesh**: Mental Hospital, Indore; Mental Hospital, Gwalior. **Maharashtra**: Mental Hospital, Thane; Mental Hospital, Ratnagiri; Central Mental Hospital, Yeravada; Mental Hospital, Nagpur; Private Hospital, Miraj. **Orissa**: Orissa Red Cross Mental Health Institute, Cuttack. **Punjab**: Mental Hospital, Amritsar. **Rajasthan**: Mental Hospital, Jaipur; Mental Hospital, Jodhpur. **Tamil Nadu**: Government Mental Hospital, Madras. **Uttar Pradesh**: Mental Hospital, Varanasi; Mental Hospital, Agra; Mental Hospital, Bareilly; Nur Manzil Psychiatric Centre, Lucknow. **West Bengal**: Mental Observation Ward, Calcutta; Lumbini Park Mental Hospital, 24-Parganas: Bangya Unmad Ashram, Calcutta: Mental Hospital, Calcutta: Bodhi Peet Mental Hospital, Calcutta: Mental Hospital, Mankundu, Hooghly

There are at present 51 institutions (25 Government and 26 private) for the **mentally retarded** and the **mentally handicapped**. The major centres are in. Chandigarh (1), Uttar Pradesh (5), Karnataka (2), Maharashtra (19), Tamil Nadu (1), Madhya Pradesh (1), Kerala (1), Gujarat (3), Delhi (7), Bihar (2) and Andhra Pradesh (2).

National Institute of Mental Health & Neuro-sciences, Bangalore 560027, is registered as a society and it is the premier institution of its kind in India. (See Chapter on "Education" for courses conducted.)

The institute is backed by a well-equipped hospital complex. It provides treatment in the fields of neurosurgery, neurology and psychiatry. A community psychiatric service in 50 surrounding villages and a project to probe "human consciousness" which includes a study of altered conscious states in the *Kundalini yoga* and after the use of drugs are among the schemes currently undertaken by the Institute.

CHAMBERS OF COMMERCE

DELHI

Federation of Indian Chambers of Commerce & Industry, *President*: G. K. Devrajulu.

CENTRAL GOVT. UNDERTAKINGS

V. Subramaniam has been appointed Chairman & Mg. Director of Fertilisers & Chemicals (Travancore) Ltd.

Dr. P. K. Narayanaswamy, who took over as Chairman-cum-Mg. Director of Indian Petrochemicals Corpn. Ltd., Vadodara, died on 28-2-1982.

S. K. Chib is appointed Managing Director of Food Corporation of India.

Narendrasing Mahida has been appointed Chairman of Shipping Corpn. of India.

STATE GOVT. UNDERTAKINGS

A. R. Antulay has been appointed Chairman of the Irrigation Development Corpn. of Maharashtra Ltd.

Mr. Ashok Desai, I.A.S., took over as the Vice-Chairman and General Manager of the Maharashtra State Road Transport Corporation.

NATIONAL INCOME

Growth: During the year 1980–81 **national income** registered an increase of 7·7 per cent in real terms against the estimated seven per cent.

Per capita income is estimated to have registered an increase by 5·3 per cent in real terms, from Rs. 661 in 1979–80 to Rs. 696 in 1980–81.

SPORTS

CRICKET: Test Matches: **with England**: 1981 (in India) India won 1 and drew 5.

STATES

Kerala and Assam States are now under President's rule consequent upon the resignation of the Ministries and the dissolution of the State Assemblies.

EVENTS — 1981

INDIAN

January 2: The Centre announces increase in prices of petroleum products; The Special Bearer Bonds Ordinance promulgated.

February 2: Bhabha Atomic Research Centre, Trombay, develops the first fully indigenous nuclear reactor vessel "Calandria": **3**: The Supreme Court orders status quo to be restored in the transfer of the chief justices of Patna and Madras high courts; **9**: A 4-day conference of non-aligned foreign ministers opens in New Delhi: The 1981 census begins; **13**: The National Development Council approves the Sixth Five Year Plan; **28**: Manipur comes under President's rule.

March 8: Oil struck in Kharsang area of Arunachal Pradesh; **29:** The Prime Minister, Mrs. Indira Gandhi, lays the foundation stone of Asia's largest aluminium complex in Orissa.

April 1: Anti-reservation violence erupts in Gujarat; **15:** Supreme Court directs LIC to pay bonus to its Class III and IV employees; Uranium deposits found in Karnataka, UP, Madhya Pradesh and Himachal Pradesh; **17:** Over 100 people killed in a tornado in Orissa.

May 3: Famous film actress and Rajya Sabha member Nargis dies in Bombay.

June 1: General K. V. Krishna Rao takes over as new chief of Army staff; **6:** Samastipur-Banmakhi passenger train falls into the Bagmati, killing over 200 people; **9:** Rohini II satellite burns up in space; **13:** Bye-elections to seven Lok Sabha and 23 Assembly seats take place; **20:** Chief Election Commissioner orders repoll in Garhwal L.S. Constituency of U.P.; **28:** China agrees to open *Mansarover* and *Kailash* to Indian pilgrims; Mrs. Anwara Taimur Ministry in Assam resigns; **30:** Assam placed under President's rule.

July 1: Government decides to import 200,000 tonnes of sugar; **9:** India buys 1·5 million tonnes of wheat from the US; **10:** The Centre raises the prices of petroleum products; **22:** APPLE, India's first experimental communications satellite starts relaying television programmes; **23:** The Chief Election Commissioner recognises the Congress (I) as the Indian National Congress and derecognises the Congress (U) as a national party; **27:** The Essential Services Maintenance Ordinance promulgated.

August 6: C.P.I. leader Bhupesh Gupta dies in Moscow: **8:** Rajasthan Governor Raghukul Tilak sacked; **29:** Supreme Court decides that air hostesses can work up to 45 years of age; **31:** Air Chief Marshal Dilbagh Singh takes over as new Chief of Air Staff.

September 2: Supreme Court upholds validity of special bearer bonds; **20:** Sant Jarnail Singh Bhindranwale surrenders and violence erupts in Amritsar; **25:** Oil found in off-shore Cauveri basin; **29:** An Indian Airlines Boeing 737 hijacked to Lahore.

October 20: Left Front government of Mr. Nayanar in Kerala falls.

November 2: Troposcatter communication link between India and the Soviet Union inaugurated; **7:** Supreme Court stays all executions; **18:** Vice Admiral O. S. Dawson named as new Chief of Naval Staff; **20**: *Bhaskara II* satellite goes into orbit; **23**: India expels three Pakistan embassy employees; **24**: Pakistan expels four Indian embassy employees; **25**: Dr. M. S. Swaminathan elected as FAO President.

December 30: Supreme Court, by a four to three majority, upholds the validity of the transfer of Judges; **31:** Inter-State dispute on the sharing of Ravi and Beas waters between Punjab, Haryana and Rajasthan is resolved.

FOREIGN

January 20: Iran frees 52 American hostages on the 444th day of the captivity; Ronald Reagan assumes office as the 40th President of the U.S.; **25:** Death penalty for Chairman Mao's widow Jiang Qing suspended for two years; **30:** Norwegian Prime Minister Odvar Nordli resigns.

February 1: Iran breaks diplomatic relations with Jordan and Morocco; **9:** Conference of Non-aligned Foreign Ministers begins in New Delhi; **10:** Polish Prime Minister Josef Pinkowski resigns; **11:** Gen. Wojciech Jaruzelski becomes new Polish Premier; **25:** Chun Doo-Huan re-elected South Korean President.

March 3: Leonid Brezhnev re-elected as Soviet Communist Party general secretary; **13:** Soviet Union launches its 50th cosmonaut into space; **24:** Two man Soviet spaceship Soyuz-39 links up with Salyut-6 orbital space station; **27:** Millions of workers go on strike in Poland; **30:** President Reagan survives an assassination attempt.

April 12: The US launches the world's first space shuttle "Columbia"; **17:** Zaire Prime Minister Nguza Karl Bond resigns; **22:** The US agrees to give $ 2·5 billion military aid to Pakistan; **23:** US lifts grain embargo against the Soviet Union.

May 13: Pope John Paul II hit by three bullets at the St. Peter's Square; **26:** Italian Prime Minister Arnaldo Forlani resigns; **30:** Bangladesh President Zia Ur Rahman assassinated.

June 8: Israeli planes attack Iraqi atomic reactor; **16:** Surya Bahadur Thapa takes over as Nepalese Prime Minister; Ferdinand Marcos re-elected as Philippines President; **22:** Iranian President Bani Sadr dismissed; **28:** Giovanni Spadolini becomes Italian Prime Minister; **29:** Ayatollah Beheshti and four ministers are among the 69 killed in a bomb blast in Iran; EEC summit opens in Luxembourg; Hua Zao Bang succeeds Hua Feng as Chinese Communist Party Chairman.

July 1: Britain grants freedom to Belize; **18:** Stanislaw Kania re-elected first secretary of the Polish Communist Party; **25**: Mohammad Ali Rajai wins Iranian Presidential election; **29**: Prince Charles of England weds Lady Diana Spencer.

August 2: Gambian coup crushed; **5:** H. M. J. Bahonar appointed Iranian Prime Minister; **10:** Portuguese Prime Minister Franevto Balsemao resigns; **11:** Japan launches its first geostationary satellite "*Himawari-II*"; **29:** South African forces invade Angola; **30:** Iranian President Mohammed Ali Rajai and Prime Minister H. M. J. Bahonar killed in an explosion.

September 26: China launches three satellites into orbit; **29:** Indian Airlines plane hijacked to Lahore; **30:** 42-nation Commonwealth Summit opens in Melbourne.

October 6: Egyptian President Anwar Sadat assassinated by soldiers; **13**: H. A. Khameini becomes Iranian President; **16:** Gen. Moshe Dayan dead; **21:** Prime Minister Mrs. Gandhi and President Reagan hold talks at Cancun in Mexico.

November 9: U San Yu elected Burmese President; **15:** Abdus Sattar elected Bangladesh President; **26:** Air India plane hijacked by South Africa mercenaries.

December 5: Pakistan ambassador signs F-16 deal in Washington; **11:** Javler Perez de Cueller of Peru chosen UN Secretary General by the Security Council; Argentinian President Roberto Viola removed from office; **13:** Emergency and Martial Law in Poland; **15:** UN General Assembly appoints Javler Perez de Cueller as new Secretary General; **29:** Pakistan assures India that it will not give any base to the US as a follow-up of the military supplies to it from Washington; Fifth World Cup Hockey Championship begins in Bombay; **30:** US bans high-technology sales and imposes other trade sanctions against the USSR; in reaction, USSR brands President Reagan a "liar"; **31:** Civilian government of President Hilla Limann in Ghana is toppled in a coup d'etat.

GENERAL INDEX

PAGE

A

Academy of Administration, Lal Bahadur Shastri National .. 857
  ,, of Architecture .. 130
  ,, of Earth & Environmental Sciences .. 130
Accommodation (Tourist Guide) .. 13
Accounting & Taxes, Study of .. 117
Accounts Cttee., Public .. 2
Acetate Filament Yarn & Staple Fibre .. 53
Acharya Narendra Deva University of Agriculture 195
Administration of Justice .. 3
Administrative Personnel:
  Government of India .. 850
  State Government .. 863
Administrative Staff College of India .. 127
Adult Education, Dept. of .. 854
  ,, ,, , Study of .. 117
Advertising Agencies .. 754
  ,, and Visual Publicity, Directorate of .. 857
Aerodromes Directorate, Air Routes & .. 861
Aeronautical Communication Services .. 200
  ,, Engineering, Study of .. 117
  ,, Laboratory, National .. 135
  ,, Society of India .. 372
Aeronautics, Directorate of .. 854
  ,, Ltd., Hindustan .. 335
Afro-Asian Rural Reconstruction Orgn. .. 885
Aga Khan Cup .. 323
Aged, Institutions for the .. 258
Agencies, Government .. 862
Aggressions Against India .. 299
Agnigundala Lead-copper Project (HCL) .. 338
Agra .. 17
  ,, University .. 195
Agriculture .. 106
  Exports .. 108
  Ministry of .. 851
  State-wise Area and Production Tables 110–12
Agriculture, Study of .. 118
Agricultural Aviation Services .. 757
  ,, Co-op. Marketing Fedn. Ltd. (NAFED) 343
  .. Engg., Central Instt. of .. 137
  .. ,, , Study of .. 117
  .. Finance Corpn. Ltd. .. 330
  ,, Marketing, Study of .. 118
  ,, Refinance and Development Corpn. .. 330
  ,, Research & Education, Dept. of .. 852
  ,, ,, , Indian Council of .. 108, 137
  ,, ,, Instt., Indian .. 137
  ,, Resources Inventory & Survey Experiment .. 146
  ,, Sciences, University of .. 170
  .. Statistics Research Instt., Indian .. 137
  .. University, Kerala .. 172

PAGE

Agro Industries Corporations (Statewise) .. 349–366
  ,, Machinery Corpn. Ltd., Kerala .. 356
  ,, Marine Products Ltd., Gujarat .. 352
  ,, Oil Enterprises Ltd., Gujarat .. 352
  ,, Pumpsets & Implements Ltd. .. 349
  ,, Seeds Corpn. Ltd., Karnataka State .. 354
Agronomy, Indian Socy. of .. 372
Ahmedabad .. 22
Aid Giving Countries .. 277
  ,, to India, Foreign .. 277
Air Accidents .. 201
  ,, Force .. 296, 854
  ,, India .. 201
  ,, ,, Charters Ltd. .. 201
  ,, Pollution .. 267
  ,, Routes and Aerodromes Directorate .. 861
  ,, Safety Directorate .. 201
  ,, Staff, Chief of .. 296, 854
  ,, Traffic Statistics .. 201
  ,, Transport, Non-Scheduled & Scheduled .. 201
  ,, Warfare, College of .. 298
Aircraft Developments .. 200
Airline Companies .. 757
Airlines, Indian .. 201
Airports .. 200
  ,, Authority of India, International .. 200
Ajanta-Ellora .. 21
Akademi Awards, Sahitya .. 307
Akashvani (All India Radio) .. 203
Alibag Observatory .. 139
Aligarh Muslim University .. 195
Alkalies & Chemicals Ltd., Gujarat .. 352
Alkaloid Works Undertaking, Govt. Opium & .. 335
All India Corporations (see Govt. of India Undertakings) .. 330
  ,, ,, Handicrafts Board .. 852
  ,, ,, Port and Dock Workers Fedn. .. 304
  ,, ,, Radio, Dir.-Gen. .. 857
  ,, ,, Trade Union Congress (AITUC) .. 304
Allahabad .. 18
  ,, Mandal Vikas Nigam Ltd. .. 364
  ,, University .. 195
Alloy Steel Plant — Durgapur .. 330
Almora .. 18
  ,, Magnesite Ltd. .. 364
Aluminium .. 55
  ,, Co. Ltd., Bharat .. 330
Ambassadors Abroad, Indian .. 876
Ambulance Asscn. & Brigade, St. John .. 367, 372
  ,, , College of .. 130
American Studies Research Centre .. 127
Amritsar .. 17
Anaesthesiology, Study of .. 118
Analytical Chemists .. 757
Anatomy Research .. 136

PAGE

A—(*Contd.*)

Anatomy, Study of 118
Ancient Indian History, Study of 118
Ancillary Industries (Small-scale) 79
Andaman & Nicobar Islands 149, 863
,, ,, ,, **Forest & Plantation Devpt. Corpn. Ltd.** 330
Andhra Pradesh State 152
,, ,, **Agricultural University** 153
,, ,, **Associations & Societies** 366
,, ,, **Chambers of Commerce** 405
,, ,, **Legislative Assembly/Council** 822, 824
,, ,, **Ministry** 863
,, ,, **Ports** 204
,, ,, **State Adm. Personnel** 863
,, ,, ,, Corpns. and Ind. Undertakings 349
,, **University** 153
Animal Husbandry 113
,, , **Study of (see Dairy Science)** 119
Anna Univ. of Technology, Peraringar 191
Annamalai University 191
Anthropological Society, Indian 402
,, **Survey of India** 139, 862
Anthropology, Study of 118
Antibiotics Ltd., Hindustan 335
Anti-tank Missiles 297
Apatite 55
Applied Chemistry, Study of 118
,, **Economic Research, National Council of** 140
,, **Economics, Study of** 119
,, **Geology, Study of** 118
,, **Man-power Research, Institute of** 139, 140
,, **Physics, Study of** 118
,, **Sociology, Study of** 118
,, **Statistics, Study of** 118
Apprentice Training Scheme 300
Apsara Reactor 147
Arabic Culture & Civilisation, Study of 118
,, , **Study of** 118
Arbitration, Board of 858
,, , Indian Council of 373
Archaeological & Cultural Research Instt., Birla 140
,, **Survey of India** 862
Architecture, Academy of 130
,, School of Planning & 854
,, **Study of** 118
Architectural Engg., Study of 118
Archives of India, National 854
Area, Length & Breadth of India (see Some Basic Facts) 8
Arecanut Industry 22
Arecanut & Spices Devpt., Directorate of
Cocoa, 23, 86, 852
Location, Consumption 22
Production, Research 23
Arid Zone Research Instt., Central 137

PAGE

Arjuna Awards 306
Armament Research & Devpt. Establishment 142
,, **Technology, Instt. of** 298
Armed Forces Medical College 298
,, ,, ,, Service, Dir.-Gen. of 854
Army 296, 853
,, **Cadet College** 298
,, **Staff, Chief of** 296, 853
Aromatic Plants, Central Instt. of Medicinal & 136
Art, National Gallery of Modern 315
,, Silk Mills Research Assocn., Silk & 53
Artificial Limbs Mfg. Corpn. 330
Arunachal Pradesh 154
,, ,, Adm. Personnel 864
,, ,, **Legislative Assembly** 824
,, ,, Ministry 864
"Aryabhata" Satellite 145, 341
Asbestos 55
Ashoka Hotel 330
Assam State 154
,, **Agricultural University** 156
,, **Associations & Societies** 368
,, **Chamber of Commerce** 405
,, **Commercial Asscns.** 368
,, Legislative Assembly (since dissolved) 825
,, **State Adm. Personnel** 864
,, ,, Corporations and Indl. Undertakings 350
Assamese, Study of 118
Assemblies & Councils, Legislative 822
Association for Social Health in India 241
Associations & Societies:
State-wise ; Commercial ; Cultural ; Professional (Medical etc.) and Social 366
Astrological Asscn. of India 402
Astronomical Asscn., Indian 373
Astronomy, Study of 118
Astrophysical Observatory 139
Astrophysics, Indian Instt. of 863
Ati Vishisht Seva Medal 306
Atlas Orgn., National 139
Atomic Energy 147
Commission 147, 851
Dept. of 851
Minerals Division 148
Power Projects 148
Research Centre, Bhabha 147
Attorney-General of India 858
Audiology & Research Centre, Education, 126
,, **& Speech Therapy, Study of** 118
Audit Bureau of Circulations 380
Auditor-General of India, Comptroller and 3, 862
Aurangabad 21
Australian Aid 280
Author's Guild of India 373
Auto Tractors Ltd. 364
Automation Centre, National Traffic Planning & 357
Automobile Ancillary Industries 82

PAGE

A—(*Contd.*)

Automobile Assen., Western India .. 13, 380
,, Associations .. 13, 24
,, Engg., Study of .. 118
Automobile Industry .. 23
Ancillary Products .. 24
Production .. 23
Automobile Research, Devpt. & Training .. 24
Automotive Research Assen. of India .. 24, 142
Aviation, Civil .. 200
,, ,, , Trng. Centre .. 200
,, Medicine, Study of .. 118
Awadesh Pratap Singh University .. 176
Awadh University .. 195
Awards & Prizes .. 305, 915
Bhatnagar .. 306
Defence .. 306
Filmfare .. 309
Films, National .. 308
Jnanpith .. 308
Nobel Prize .. 313
Phalke .. 309
Republic Day Awards .. 305
Sahitya Akademi, Sangeet Natak Akademi, Nehru .. 307
Ayurveda & Siddha, Central Council for Research in 138
Ayurvedic Colleges .. 125
,, Congress, All India .. 373
,, Medicine Manufrs. .. 428
,, ,, Research .. 138
,, ,, , Study of .. 121
,, University, Gujarat .. 163

B

Backward Areas (Industrially) .. 84
,, Classes (Tribals), Research Institutes for the Welfare of .. 241
Bacteriology, Study of .. 118
,, , ,, of Medical Pathology & .. 121
Bajaj Instt. of Management Studies, Jamnalal .. 131
Bakeries (India) Ltd., Modern .. 343
Bal Bhavan Society .. 370
Balance of Payment .. 291
Balmer Lawrie & Co. Ltd. .. 330
Balvihar .. 254
Banana & Fruit Devpt. Corpn. Ltd. .. 330
Banaras .. 18
,, Hindu University .. 195
Banasthali Vidyapith .. 132
Bandipur Game Sanctuary .. 21
Bangalore University .. 170
Bank Administration, Study of .. 118
Bank for Reconstruction & Devpt., (World Bank) International .. 885
,, Ltd., Jammu & Kashmir .. 353
Bankatna Wildlife Sanctuary .. 19

PAGE

Banking .. 284, 915
,, & Finance, Study of .. 118
Banks .. 759
,, , Foreign .. 284
,, , Nationalised .. 284
,, , Regional Rural .. 285
Bar Assocn. of India .. 373
,, Council of India .. 373
Basic Chemicals, Pharm. & Cosmetics Export Promotion Council .. 283
,, Facts, Some (Physiography) .. 8
,, Medical Sciences, Study of .. 118
Bauxite .. 54
Bee Research Instt., Central .. 139
Beet-Sugar .. 90
Beggars' Home .. 257
Behring Instt. (Vaccine Plant) .. 36
Beighton Cup .. 323
Belgium (Belgian Aid) .. 280
Belur .. 20
Bengali, Study of .. 118
Bennett, Coleman & Co. Ltd. .. 572
Berhampur University .. 185
B.E.S.T. Undertaking .. 179, 870
Bhabha Atomic Research Centre (BARC) .. 147
Bhadra Training Ship .. 123
Bhagalpur University .. 157
Bhagini Seva Mandir .. 254
Bharat Aluminium Co. Ltd. .. 330
,, Dynamics Ltd. .. 330
,, Earth Movers Ltd. .. 331
,, Electronics Ltd. .. 331
,, Gold Mines Pvt. Ltd. .. 331
,, Heavy Electricals Ltd. .. 331
,, ,, Plate and Vessels Ltd. .. 331
,, Leather Corpn. Ltd. .. 331
,, Ophthalmic Glass Ltd. .. 331
,, Petroleum Corpn. Ltd. .. 71
,, Pump and Compressors Ltd. .. 331
,, Sevak Samaj .. 372
,, Wagon & Engg. Co. Ltd. .. 331
Bharati Dock .. 205
Bharatiya Vidya Bhavan .. 127, 129, 130
Bharatpur Wildlife Sanctuary .. 19
"Bhaskara" Satellite .. 145, 341
Bhilai Steel Plant .. 87, 331
Bhopal University .. 176
Bhubaneshwar .. 16
Bicameral Legislatures .. 817
Bicycle, Tricycle & Perambulator Parts Mfg. (Small Scale) .. 83
Bidhan Chandra Krishi Viswavidyalaya .. 197
Bisco Lawrie Ltd. .. 331
Bihar State .. 156
,, Associations & Societies .. 368
,, Chamber of Commerce .. 405
,, Co-op. Lac Mktg. Fedn. .. 49

PAGE

B—(*Contd.*)

Bihar State Administrative Personnel 864
,, ,, Corpns. and Indl. Undertakings .. 351
,, ,, Legislative Assembly/Council .. 825, 827
,, ,, Superphosphate Factory .. 42, 351
,, University 157
Bijapur 21
Billiards 324
Biochemistry, Study of 118
Bio-gas 102
Biological Science, Indian Assen. of 402
Bio-Pharmaceutical Corpn. Ltd., Haffkine 358
Biophysics, Study of 118
Birla Instt. of Tech. & Sciences 126
,, Research Instt. for Applied Sciences .. 142
Birth Rate 271
Blind, Centres for 255
,, , Institutions for the 242
,, , Teachers Training for the 126
Blindness, National Society for the Prevention of 141
Board of Film Censors, Central 47
,, ,, Secondary Education, Central 854
Boat Building Industry (Small Scale) 82
Bodh Gaya 16
Bokaro Steel Plant 89, 331
Bombay 21
,, High 66
,, Municipal Corpn. 213
,, Port 204
,, ,, Trust 870
,, , University of 178
,, Vigilance Assen. 388
Bonded Labour 303
Bondla Game Sanctuary 22
Bongaigaon Petrochemicals Ltd. 68, 72, 331
Book Trust, India National 127
Border Roads 211
Borivli National Park 22
Borlaug Award 307
Botanic Gardens, Indian 139
Botanical Research Instt. 135
,, Survey of India 139, 862
Botany, Study of 118
Braithwaite & Co. Ltd. 331
Breeding (Cattle) 114, 115
Bridge and Roof Co. (India) Ltd. 332
,, Assen., Maharashtra 388
British Aided Projects, Major 279
,, High Commission/Council 385
Boardcasting 203
,, , Ministry of Information & 857
Buddhist Studies 118
Budget, Central (1981-82) 292
Buffaloes 114
Building Research Instt., Central 135
Buildings Construction Corpn. Ltd., National .. 343
,, Orgn., National 139

PAGE

Bullion 285
Bundelkhand University 195
Burdwan, University of 197
Bureau of Investigation, Central 857
,, ,, Mines, Indian 139, 861
Bureaux, Vocational Guidance 134
Burmah-Shell Refineries Ltd. (see Bharat Petroleum Corpn.) 71
Burn Standard Co. Ltd. 332
Business Administration, Study of 118
,, Advisory Committee 2
,, Management, Indian Instt. of Social Welfare & 134
,, ,, , Study of 118, 119
By-election, Leg. Assembly 817

C

Cabinet Ministers 850
,, Secretariat 851
Cable Co. Ltd., Traco 357
Cables Ltd., Hindustan 336
Calcutta 16
,, Metropolitan Devpt. Authority 365
,, Municipal Corpn. 213
,, Port 204
,, Tramways Co. Ltd. 332
,, University 197
Calicut, University of 172
Cambodian, Study of 118
Canadian Aid 279
Cancer Research 267
,, Society, Indian 388
Canning & Preservation Centres 108
Cape Comorin (See Kanya Kumari) 20
Capital Formation 288
,, Receipts & Disbursements of Govt. 293
Caprolactum Plant 68
Carcass Utilisation 114
Cardamom 85
,, Board 853
Cardiology, Study of 118
Cardiothoracic Surgery, Study of 118
Cartography, Study of 118
Cashew Corpn. of India Ltd. 332
.. Devpt. Corpns. Ltd. 354, 356
,, Export Promotion Council .. 283
Cashewnut Devpt., Directorate of 26, 852
Cashewnut Industry 26
Castor Seed Research 64
Castorseeds/Oils 64
Catering Technology, Instt. of .. 128, 130, 133, 134
Cattle 114
Ceiling on Land Holding (see Food & Agriculture) .. 113
Cellulosics Fibre Industry 53
Cement Corpn. of India Ltd. 332
Cement Industry 27
,, Manufrs. 28
,, Research Instt. of India 28, 141

PAGE

C—(*Contd.*)

Cements Ltd. (State Govt. Und.) 353, 357
Censorship, Film 46
Census — 1981 271
,, Commissioner (Registrar-General) 856
,, , Livestock 113
,, Statistics 272–273
Central Arid Zone Research Instt. 99, 137
,, Board for Workers Education 858
,, ,, of Direct Taxes 855
,, ,, ,, Excise & Customs 855
,, ,, ,, Film Censors 47
,, ,, ,, Irrigation & Power 858
,, ,, ,, Secondary Education 854
Central Budget 292
,, Building Research Instt. 199
,, Bureau of Investigation (CBI) 857
,, Cabinet Secretariat 851
,, Coalfields Ltd. 332
,, Coir Research Institute 31
,, Cottage Ind. Corpn. of India Ltd. 332
,, Councils for Research in Indian Systems of Medicine (Ayurveda, Siddha, Unani, Homoeopathy, Yoga, Nature Cure) .. 138
,, Drug Research Instt. 135
,, Drugs Laboratory 856
,, ,, Standard Control Orgn. 856
,, Electricity Authority Ltd. 854
,, Electro-Chemical Research Instt. 135
,, Electronics Engg. Research Instt. 135
,, ,, Ltd. 332
,, Fisheries Corpn. Ltd. 332
,, Food Laboratory 269
,, ,, Technological Research Instt. .. 135
,, Forensic Science Laboratory 857
,, Frozen Semen Bank 114
,, Fuel Research Instt. 136
,, Glass & Ceramic Research Instt. 136
,, Ground-Water Board 108
,, Inland Water Transport Corp. Ltd. .. 332
,, Instt. of English & Foreign Languages .. 127
,, ,, Fisheries Technology .. 116, 137
,, ,, Plastics Engg. & Tools .. 133, 332
,, Leather Research Instt. 136
,, Marine Fisheries Research Instt. .. 116, 137
,, Metal Forming Instt. (**HMT**) 336
,, Mine Plng. & Design Instt. Ltd. 332
,, Passport & Emigration Orgn. 855
,, Plantations Crop Research Institute 29, 86
,, Public Works Dept. 862
,, Railway 209, 870
,, Revenues Control Laboratory 855
,, Salt & Marine Chemicals Research Instt. .. 136
,, Sericulture Research & Training Institute 79
,, Sheep and Wool Research Instt. 97
,, Silk Board 78, 853
,, ,, Conditioning & Testing House .. 79

PAGE

Central Social Welfare Board 241, 861
,, Tasar Research and Training Institute .. 79
,, Tobacco Research Instt. 95
,, University of Hyderabad 153
,, Vigilance Commission 862
,, Wakf Council 859
,, Warehousing Corpn. 333
,, Water Commission 99
Centre of Indian Trade Unions 304
Centres for Physically Handicapped 260
Ceramic Devpt. Corpn. Ltd., West Bengal .. 366
,, Factory, A.P. Govt. 349
,, Industries (Small-Scale), Glass & .. 81
,, Research Instt., Central Glass & 136
,, Tech., Study of 118
Ceramics Ltd., Kerala 356
,, Ltd., Tamil Nadu 363
Chambers of Commerce 405, 916
Chandigarh 17, 158
,, Govt. Undertakings 351
Chandmari Copper Project (HCL) 336
Chandraprabha Sanctuary 19
Chandrashekhar Azad Univ. of Agri. & Tech. .. 195
Chartered Accountants of India, Institute of 373, 374
,, Engrs., Institute of 373
Chemical Engg., Study of 119
,, Industries (Small-Scale) 81
,, Laboratory, National 135
Chemicals & Allied Products Exp. Prom. Council .. 283
,, ,, Chemical Products (Small-Scale Ind.) 80
,, ,, Fertilisers, Deptt. of 860
,, ,, ,, Ltd., Rashtriya 346
,, ,, Pharmaceuticals Corpn. of India Ltd., State 347
,, Ltd., Hindustan Organic 337
,, Ltd., Pyrites, Phosphates & 346
,, , Pharm. & Cosmetics Exp. Prom. Council, Basic 283
,, (Travancore) Ltd., Fertilisers & 42, 334
Research Instt., Central Salt & Marine 136
Chemistry, Study of 118
Cheshire Home, Bombay 385
Chief Controller of Imports & Exports, Office of . 852
,, Justice of India 862
,, Minister, State 3
,, of Air Staff 296, 854
,, ,, Army Staff 296, 853
,, ,, Naval ,, ... 296, 854
Child, The Indian 252
,, Guidance Centres 253
,, Health, Study of 118
,, Welfare 254
,, ,, , Study of Maternity & 121
Children in Need of Special Care, School for .. 247
Children's Film Society 47
,, Fund, U.N. (UNICEF) 885
Chilka Lake 17

PAGE

C—(*Contd.*)
Chillies .. 85
Chinese, Study of .. 118
Chinmaya Mission .. 385
Chir Pine (Pinus roxburghii) .. 105
Chittaranjan Locomotive Works .. 333
Cholera .. 267
Chromite .. 54
Cigarette Production and Export .. 94
Cinema Houses, No. of Theatres & .. 46
Cinematograph Exhibitors Asson. of India .. 47
Citizenship .. 1
City & Ind. Devpt. Corpn. of Maharashtra .. 358
,, , Largest Populated .. 8, 274
Civil & Hydraulic Engg., Study of .. 118
,, Liberties, People's Union for .. 373
Civil Aviation .. 200, 915
,, ,, , Dir. Gen. of .. 200
,, ,, , Ministry of Tourism & .. 861
,, ,, Research and Devpt. Directorate 139, 200
,, ,, Training Centres .. 200
,, Supplies, Ministry of .. 852
,, ,, Corpns. Ltd., State .. 349–363
Climate .. 7
Clinical Pathology, Study of .. 121
Coach Factory, Integral .. 341
Coal and Lignite (Mines & Minerals) .. 54, 101
,, Controller .. 855
,, Dept. of .. 855
,, India Ltd. (CIL) .. 333
,, Mining, Study of .. 118
Coalfields Ltd., Central .. 332
Coastal Conference, Indian .. 77
Coastline of India (see Some Basic Facts) .. 8
Cochin .. 20
,, Port .. 205
,, Refineries Ltd. .. 72, 333
,, Shipyard Ltd. .. 333
,, University .. 172
Cocoa, Arecanut & Spices Devpt., Directorate of 86, 852
,, Devpt. Council, Indian Arecanut & .. 28
Cocoa Industry .. 28
Coconut .. 31, 63
,, Devpt. Corpn. Ltd., Kerala State .. 356
,, ,, , Directorate of .. 852
,, Research Station, Central .. 139
Coffee Board .. 30, 853
,, Export Promotion Council .. 30
Coffee Industry .. 29
,, Research Instt., Central .. 139
Coir Board .. 31, 857
,, Corpn. Ltd., Kerala State .. 356
,, Goods Manufrs. .. 31
,, Hindustan .. 336
Coir Industry .. 30
,, Research Instt., Central .. 31, 139
,, Trg. & Design Centre, National .. 31

PAGE

Coking Coal Ltd., Bharat .. 333
Colaba Observatory .. 139
Colleges, Medical .. 123
,, , Number of .. 117
Commemorative Special Stamps .. 203
Commerce, Ministry of .. 852
,, , Study of .. 119
,, , Trade (Constitution) .. 5
Commercial Firms .. 410
  Dealers .. 706
  Manufacturers .. 410
  Services .. 754
Commercial Intelligence and Statistics, Dte. Gen. of 852
Commission of Railway Safety .. 861
Committee, Business Advisory .. 2
,, , Estimates .. 2
,, for Space Research, Indian National .. 145
,, on Privileges .. 2
,, , Public Accounts .. 2
Communications: (see also under each State) .. 202
  Ministry of .. 853
  Overseas Communication Service .. 203, 853
  Post and Telegraph/Board .. 853
  Television .. 204
Communications & Electronics Ltd., Gujarat .. 352
,, Engg., Study of Electronics & .. 119
Community Aid and Sponsorship Programme .. 385
,, Psychology, Study of Education & .. 119
Company Affairs .. 326
  Industrial Pattern .. 328
  Non-Government Companies, State-wise .. 327
Company Affairs, Dept. of .. 854
,, ,, , Ministry of Law, Justice & .. 858
,, Secretaries of India, Inst. of 373, 389, 396, 403
Companies, Private .. 325
,, Registrar of (Region-wise) .. 559
Compost Manure Plant .. 44
Comptroller and Auditor General of India .. 3, 863
Computer Education, Instt. of .. 134
,, Maintenance Corpn. Ltd. .. 333
  Programming Consultants .. 772
,, Science, Study of .. 119
Computers & Data Processing Equipment .. 39
Computing Techniques, National Centre for Software Devpt. & .. 41, 142
Congress, Indian National Trade Union .. 304
Conjeevaram .. 19
Conservation of Cultural Property, National Res. Lab. for .. 135
Constitution of India .. 1
  Amendment .. 6
  Directive Principles .. 1
  Fundamental Rights [illegible]
  Justice .. 6
Construction Corpns. Ltd., State (State Govt. Undertakings) .. 349–366
Consulates (see Diplomatic Representatives) [illegible]

PAGE

C—(*Contd.*)

Consulting Engineers, National Assocn. of .. 373
Consumer Council of India 370
,, Electronics 39
,, Guidance Society 389
Control & Industrial Electronics 41
Controller of Imports & Exports, Office of Chief .. 852
,, ,, Insurance 855
Co-operation, Study of 119
Co-operative Federation Ltd., Maharashtra Consumers 389
,, Devpt. Corpn., National 343
,, Instt., Bombay Central (See Sahakari) 132
,, Management, Vaikunth Mehta National Instt. of 131
,, Sugar Factories Ltd., National Fed. of 91
Copper 55
,, Ltd., Hindustan 336
,, Project, Rakha 336
Corbett National Park 19
Corporate Giants in India 325
Corporations, All India (see Govt. of India Undertakings) 330
,, , State (see State Govt. Undertakings) 349
Cosmetics Export Prom. Council, Basic Chemicals, Pharmaceuticals & 283
Cost and Works Accountants of India, Institute of 389, 403
Cottage Ind. Corpn. of India Ltd., Central 332
Cottigao Game Sanctuary 22
Cotton 31, 110
Cotton and Cotton Textile Industry 31
,, Corpn. of India Ltd. 333
,, Devpt., Directorate of 852
,, Mills Federation, Indian 33, 381
,, Research, Central Instt. of 137
,, ,, Stations, Regional 32
,, Tech. Research Laboratory .. 32, 137
,, Textile Export Prom. Council 283
,, ,, Mills 668
Cottonseed Crushers' Assocn., All India 381
,, Oil 63
Council for Cultural Relations, World 371
,, of Agricultural Research, Indian 108, 137
,, ,, Medical Research, Indian 138
,, ,, Ministers 2
,, ,, Sports, All India 372
,, ,, Scientific and Industrial Research .. 135
Councils, Legislative 822
Courts:
High: Appointment, Qualifications, Removal, Jurisdiction 4, 6
Lower (subordinate) 4
Magisterial, Civil 6, 7
Sessions 6
Supreme: Retirement, Qualifications, Removal, Present Strength, Jurisdiction, Appellate Jurisdiction, Civil Appeals, Criminal Appeals 3, 6

PAGE

Credit & Investment Corpn. Ltd., Bihar State .. 351
,, Guarantee Corpn., Deposit Insurance .. 333
Cricket — Test Matches 323
Criminology, Study of 119
Crops Research Instt., Central Plantation .. 86
,, ,, ,, International 139
Crude (Petroleum) 68
Cultural Property, National Research Laboratory for Conservation of 135
,, Relations, Indian Council for .. 370, 385
Culture, Study of (see Ancient Indian History) .. 118
Custodian of Enemy Property 852
Customs, Central Board of Excise and 855

D

Dachigam Wildlife Sanctuary 19
Dada Saheb Phalke Awards for Films 46
Dadra and Nagar Haveli 159
Dairy Corpn., Indian 35, 338
,, Devpt. Board, National 35, 344
,, Devpt. Corporations (State Govt. Undertakings) 349-66
Dairy Industry 34
,, Plants 34
,, Research Instt., National 36
,, Science, Study of 119
Dalma Wildlife Sanctuary 17
Daman & Diu, Goa 160
Dance, Study of (see Music) 119, 121
Dandakaranya Project, Chairman (Dept. of Rehabilitation) 861
Dandeli Game Sanctuary 21
Danish Aid 280
Danwantari Awards 308
Dapchari Milk Project 177
Dariba Copper Plant (HCL) 336
Darjeeling 16
Darraha Wildlife Sanctuary 19
Data Processing Equipment, Computers & 39
Davis Cup 323
Deaf & Dumb, Teachers Training for 126
,, ,, ,, , Instt. for the 245
,, , Centres for the 257
Dealers (Commercial Firms):
Abrasives, Grinding Wheels etc. 706
Acid Resisting Bricks and Cements 706
Acoustic Insulations 706
Addressing and Listing Machines 706
Air/Gas Compressors 706
Air-conditioners, etc. 706
Air conditioning & Refrigeration Equipment .. 707
Aluminium Products 707
Arms and Ammunitions 708
Artist's Airbrush 708
Asbestos & Asbestos Products 708
Automobile Spare Parts and Accessories .. 709
Ball, Roller and Needle Bearings 711

PAGE

D—(*Contd.*)

Belting & V Belts .. 714
Blades, Safety Razor .. 714
Bolts, Nuts, Screws & Rivets .. 714
Booksellers and Publishers .. 714
Calculators .. 719
Carpets and Rugs .. 720
Cellulose Lacquers (Synthetic Enamel) .. 750
Chain Pulley Blocks .. 720
Chains .. 720
Chemicals, Aromatic .. 720
,, , Laboratory .. 737
,, , Pharmaceuticals, Dyes, etc. .. 720
Cinema Equipment .. 725
Crockeries and Potteries .. 726
Crucibles .. 726
Diesel Engines, Generators and Spares .. 726
Drilling Equipment .. 726
Drums, Barrels & Containers .. 726
Earthmoving Machinery and Spares .. 726
Electric Cables & Wires .. 726
Electrical Goods .. 727
Electronic Components .. 727
Electroplating Materials .. 729
Enamels & Lacquers (see Synthetic Enamels) 750
Engineering Tools .. 729
Engravers & Die Sinkers .. 729
Essential Oils .. 729
Export Firms .. 729
Farm Equipment .. 733
Filters & Filter Papers .. 733
Foundry Materials .. 733
Garage Equipment & Tools .. 733
Garden Requisites .. 733
Glass & Mirrors .. 733
Grinding Wheels (see Abrasives) .. 706
Handicrafts Exporters .. 734
Hardware Tools and Machinery .. 734
Hides and Skins .. 735
Hydraulic Equipment .. 735
Insulation Materials .. 735
Iron & Steel .. 736
Jewellery, Gold & Diamond .. 737
Laboratory Chemicals .. 737
,, Equipment .. 737
Machine Polishing Cloth .. 739
,, Tools and Machinery .. 739
Marble & Tiles (Flooring) .. 740
Marine Diesel Engines .. 740
Minerals .. 740
Office Equipment .. 741
Packing Materials .. 741
Paints, Enamels & Varnishes .. 741
Paper .. 741
Petroleum Jelly I. P. .. 742
,, Products .. 742
Photographic Materials .. 743
Pipes and Fittings .. 743

PAGE

Plastic Products .. 746
Pressure Gauges .. 746
Pumps and Pumping Sets .. 746
Refrigerators (see Air-Conditioners) .. 706
Sanitary Goods .. 747
Scientific Instruments & Laboratory Equipments .. 748
Scrap .. 748
Seafood Exporters .. 748
Sewing Machines .. 749
Sports Goods .. 750
Spray Painting Guns .. 750
Surveying Instruments .. 750
Synthetic Enamels & Cellulose Lacquers .. 750
Textile Stores & Machinery .. 750
Timber .. 751
Tool, Alloy & Special Steel .. 751
Tools .. 752
Tractors & Spares .. 752
Typewriters .. 752
Valves & Cocks .. 752
Weighing Machines .. 753
Welding Equipment .. 753
Wire Ropes .. 753
X-ray Machinery .. 753
Death Rate .. 271
Deaths — 1980 .. 239 & 240
Deccan Sugar Instt. .. 91
Defence Academy, National .. 299, 854
,, **Awards** .. 306
,, **College, National** .. 299, 854
,, **Instt. of Fire Research** .. 298, 854
,, ,, ,, Stores Preservation & Packaging 298
,, ,, ,, **Work Study** .. 298
,, **Management, Instt. of** .. 298
,, Metallurgical & Research Laboratory .. 140
,, **Ministry of** .. 853
,, **Production** .. 299
,, **Recruitment & Training** .. 297
,, **Research & Devpt. Establishment** .. 142
,, **Science Laboratory** .. 854
,, **Scientific Information & Documentation Centre** .. 854
Defence Services .. 296
,, **Services Staff College** .. 298
,, **Strength** .. 296
,, **Studies & Analysis, Instt. of** .. 298
,, **Training Establishments** .. 298
Delhi .. 17, 160
,, Adm. Personnel .. 865
,, **Associations & Societies** .. 368
,, Chambers of Commerce .. 406
,, **Devpt. Authority** .. 865
,, **Financial Corpn.** .. 351
,, Govt. Undertakings .. 351
,, **Municipal Corpn.** .. 213
,, **Universities** .. 160

PAGE

D (*Contd.*)

Demographic Centres 264
,, Characteristics of India . 272
,, Research . 264
Denmark (Foreign Aid) 280
Density, National Average . 275
Dentistry, Study of 119
Dental Colleges .. 125
,, Council of India 270
,, Education 125, 270
,, Hygienists & Mechanics, Training of 125
Deodara Wood (Cedrus deodara) 105
Department of Agriculture & Co-operation 851
,, ,, Atomic Energy 851
,, ,, Electronics 851
,, ,, Environment.. 851
,, ,, Explosives 862
,, ,, Food 852
,, ,, Parliamentary Affairs 851
,, ,, Science and Tech 851
,, ,, Space 851
Deposit Insurance and Credit Guarantee Corpn. .. 323
Depressed Classes Federation of India 371
Dermatologists & Venereologists, Indian Assn. of 373
Dermatology, Study of 119
Design Instt., National 139
Destitutes, Centres for .. 259
Development Authority, Greater Cochin .. 868
,, Bank of India, Industrial 340
,, Programme, U.N. 385
,, Studies, Centre for 142
Diabetes 268
Diabetic Assn. of India 389
Dialects Spoken (see Some Basic Facts) 8
Diamond Co. Ltd., Hindustan 336
Dibrugarh University.. 156
Diesel Engine, Production of .. 24
,, Locomotive Works, Varanasi 333
Dietetics, Study of 119
Diplomatic Representatives, Foreign in India 880
,, ,, , Indian Abroad 876
Direct Taxes, Central Board of 855
Directive Principles of State Policy.. 1
Directorate-General of Shipping 77, 860
,, of Marine Engg. Trg. 128, 860
Dispensaries, Hospitals 267
District Industrial Centres 79
Districts — Area & Population (see under each State and Territory)
Districts, Number of (see Some Basic Facts) 8
Dockyard Apprentice School 130
Doctor-Population Ratio 267
Documentary Producers Assn., Indian 381
Documentation Centre, Indian National Scientific [illegible]
Dogri, Study of .. .. [illegible]
Doordarshan (Television) India, Directorate-General
Drama, Study of .. ..
Dredging Corpn. of India Ltd. 334
Drilling Technology, Indian Institute of 71
Drought 98
Drug & Drug Intermediates Industries (Small Scale) 81
Drugs & Pharmaceutical Industry 36
,, and Pharmaceuticals Ltd., Indian (IDPL) .. 38, 339
,, ,, ,, ,, (State Corpns.) 356, 362, 364
,, Laboratory, Central 856
,, Production 37
,, Research Instt., Central 135
,, Standard Control Org., Central 856
Dudhva National Park 19
Dufferin Training Ship 123
Duleep Trophy 324
Dumb, Institutions for the 246
,, , Training Teachers for 126
Durand Cup 323
Durgapur Chemicals Ltd. 365
,, Steel Plant 58
,, Projects Ltd. 365
Dutch Aid 280
Dyes, Study of Intermediates & 120
Dye-Stuff Industry (Small-Scale) 81
Dynamics Ltd., Bharat 330

E

Earth & Environmental Sciences, Academy of .. 130
,, Movers Ltd., Bharat 331
,, Moving Equipment, Production of 24
Earthquake Engg., School of Research & Trg. in 133
,, Technology, Indian Society of .. [illegible]
East Coast Ports 207
Eastern Coalfields Ltd. .. .. [illegible]
,, Railway 209
Ecology Board, Housing Urban Renewal & (Maharashtra) .. .. [illegible]
Econometrics, Study of 119
Economic Affairs, Dept. of .. .. .. [illegible]
Economic Situation 291, 915
,, Social Research, Sardar Patel Instt. of 141
Economics, Study of 119
,, & Statistics, Directorate of 852
Edible Oils 63
Education (See also under each State and Territory) 117
Adult Education 117
Central Board of Secondary Education .. 864
Free Education 117
Health Education 269
Medical Education 138, 269
Ministry of 854
Subjects of Study, University-Wise 117
Education & Community Psychology, Study of .. 119
Educational & Vocational Guidance, Study of .. 119
,, Administration, Study of 119
,, Guidance & Counselling, Study of .. 119

PAGE

E—(*Contd.*)

Educational Institutions, State-wise 126
,, Measurement & Evaluation, Study of 119
,, Research & Trg., National Council of 854
Election Commission 5, 862
Elections, General 815
Electric Power Corpn. Ltd., North Eastern .. 345
Electrical and Allied Engg. Co. Ltd., Kerala .. 356
,, Engg., Study of 119
,, Equipment Ind. Ltd., Northern .. 364
,, Industries Ltd., United 358
,, ,, (Small-Scale) 82
Electricity (see Power Projects) 100
,, Authority Ltd., Central 854
Electrification Corpn. Ltd., Rural 346
,, , Rural 100
Electro-Chemical Research Instt., Central 135
Electrology, Study of Medical 119
Electro-Medical & Allied Ind. Ltd. 366
Electronic Components 41
,, Data Processing Centre 854
,, Equipment, Medical 41
,, Industries (Small-Scale) 82
,, Research Centre, Sarabhai 141
,, Technology, Indian Instt. of 134
Electronics Commission 851
,, & Communication, Study of 119
,, , Consumer 39
,, , Control and Industrial 41
,, Corpn. of India 148, 334
,, , Dept. of 851
,, , Directorate of 854
,, Engg. Research Instt., Central .. 135
,, Export Processing Zone, Santa Cruz .. 283
,, Industrial 41
,, Ind. Devpt. Corpn. Ltd., W. Bengal .. 366
Electronics Industry 38
,, Ltd., Bharat 39, 41, 331
,, Ltd., Central 41, 332
,, , Study of Industrial 120
,, , ,, of Radio-Physics & 122
,, Trade & Tech. Devpt. Corpn. Ltd. .. 334
Ellora, Ajanta 21
Embassies Abroad, Indian 876
,, in India, Foreign 880
Emergency Provisions 5
Emigration Orgn., Central Passport & 855
Employees' Deposit Linked Insurance Scheme .. 302
,, Prov. Funds Scheme 302
,, State Insurance Corpn. 302, 334
Employers, All India Organisation of 369
Employers' Fedn. of India 382
Employment 300
,, and Training Dir.-Gen. of 858
,, Corpn. Ltd., Kerala State Small Ind. Devpt. & 357
,, Exchanges 300

Employment Promotion Consultants Ltd., Overseas Devpt. & 357
,, Publications 303
,, Service, Central Instt. of Research & Trg. in 141
,, Statistics 302, 303
Endocrinology, Study of 119
Enemy Property, Custodian of 852
Energy 100
Bio-gas 102
Coal 101
Geo-Thermal Energy 101
Nuclear Energy 101
Oil and Gas 101
Power Position 100
Solar Energy 101
Energy, Ministry of 854
Enforcement Directorate 855
Engineering Consultants (India) Ltd., Metallurgical & 342
,, Corpn. Ltd., Heavy 335
,, Export Prom. Council 283
,, Projects India Ltd. 334
,, Research Instt., Mechanical 136
,, , Study of 119
Engineers, Architects & Townplanners' Assen. .. 389
India Ltd. 334
,, (India), Institution of 373
English & Foreign Languages, Central Instt. of .. 127
,, (South India), Regional Instt. of 129
English, Study of 119
E.N.T., Study of 119
Entomological Society of India 373
Entrepreneurs, National Alliance of Young .. 373
Environment, Dept. of 851
Environmental Engg. Research Instt., National .. 135
Equatorial Rocket Launching Stn., Thumba .. 145
Eri & Muga Silk 77
Essential Oils Mfg., Natural (Small Scale) 81
Estimates Committee 2

Events
Indian (1980) (1981) 237, 916
Foreign (1980) (1981) 238, 917
Exchange Reserves, Foreign 277
Excise and Customs, Central Board of .. .. [illegible]
Expectancy of Life at Birth 8, 267
Expenditure, Dept. of 855
Experimental Medicine, Indian Instt. of 135
Explosives, Dept. of 862
Export Corpns. (State Govt. Und.) 349–66
,, Credit and Guarantee Corpn. Ltd. 334
,, Inspection Council of India 283
,, Organisations, Federation of Indian .. 369
,, Promotion Councils 283
,, Trade 281
Exports & Imports, Chief Controller of 852
,, India's Principal 281
External Affairs, Ministry of 855

PAGE

F

Factory Advice Service and Labour Instts., Dir.-Gen. of 858
Fair Trade Practices Assen. 382
Family Planning Assens. 263, 376, 385
,, Welfare Centres 261
Family Welfare Programme 262
Administration, Funds & Expenditure 262–63
Contraceptives, Sterilisation Targets, Religion & F. Plng., Research & Training, Progress 264–66
Family Welfare Instt. 139, 264
,, ,, , National Institute of Health & 128
,, ,, Trg. Research Centre 139, 264
Farms Corpn. of India Ltd., State 347
,, , Mechanised 108
Fats & Waxes, Study of Oil 121
Federation of Co-op. Sugar Factories, National 91
Fermentation Tech., Study of 119
Fertiliser Assocn. of India (Research) 45
,, Co-operative Ltd., Indian Farmers 42, 369
,, Corpn. of India Ltd. 42, 334
Fertiliser Industry 42
,, (Plng. & Devpt.) India Ltd. 334
,, (Research) 45
,, Manufrs. 43, 45, 508
,, Phosphatic 43
,, Potassium 45
Fertilisers and Chemicals Ltd., Canara 354
,, ,, ,, Travancore Ltd. (FACT) 42, 334
,, Co. Ltd., Gujarat Narmada Valley 352
,, Corpn. Ltd., (HFCL) Hindustan 336
,, , Dept. of Chemicals & 860
,, Ltd., Himalaya 353
,, Ltd., Hyderabad Chemicals & 42, 349
,, Ltd., Madras 42, 341
,, Ltd., National 344
,, Ltd., Rashtriya Chemicals & 42
Fertility 274
,, Control, Research in Reproductive Biology & 264
Fibre Foam Ltd. 355
,, Industry, Man-made 50
,, Science, Study of 119
,, Synthetic (Units) 50–51
Filament Yarn 53
Filaria 268
Filariasis Training Centres 268
Film and Television Instt. of India 47
,, Archives of India, National 47
,, Associations 47
,, Awards 46, 309, 311
,, Censors, Central Board of 47
,, Exporters' Assen., Indian 389
,, Federation of India 389
,, Festivals Director (Min. of I & B) 857
Film Industry 46, 915
,, Industry Devpt. Corpn. Ltd., Karnataka 354
,, Producers Guild of India Ltd. 47

PAGE

Film Society, Children's 47
,, Stage & Cultural Devpt. Corpn. Ltd., Maharashtra 359
Filmfare Awards 309
Films Division 47
,, Manufg. Co. Ltd., Hindustan Photo 47, 337
Finance Corpn. Ltd., Agricultural 330
,, ,, of India, Industrial 340
,, , Ministry of 855
Financial & Industrial Relations, Study of 119
,, Assistance, Foreign Aid 277
,, Corporations (State-wise) 349–66
,, Enterprises Ltd., Kerala State 357
Fine Arts, Study of 119
Fir (Abies pindraw) 105
Fire Bricks & Insulation Co., Ltd., India 338
,, Research, Defence Inst. of 298
Fireworks Manufacturers' Assen., Small-Scale 394
Fisheries 115
,, Corpn. Ltd., Central 332
,, Devpt. Corporations (State Govt. Undertakings) 349–66
,, Education, Central Instt. of 116, 131
,, Project, Integrated 136
,, Research Instt., Central Inland 116, 137
,, ,, ,, , ,, Marine 116, 137
,, Study of (See Marine Biology) 120
,, Technology, Central Instt. of 116, 137
Fishing Harbours 116
,, Orgn., Deep Sea 139
Five-Year Plan, Sixth 293
Flag Day, Merchant Marine 76
Floods 99
Damage 99
Flying Clubs 200
Fodder Research Instt., Indian Grassland & 137
Folklore Studies 119
Food and Agriculture 106
Food Corpn., National Seeds Corpn. Ltd. 108
Production 108
Food and Agriculture Orgn. (FAO) 885
,, ,, Allied Industries (Small Scale) 80
,, ,, Nutrition 269
,, Corporation of India 108, 334
,, Craft Instt. 127
,, Dept. of 832
,, Export Prom. Council, Processed 283
,, Laboratory, Central 269
,, Technological Research Instt., Central 135
,, Technology 119
Foodgrains, Production of 107, 108
Foot and Mouth Vaccine Plants 36
Football—National, Olympic 323
,, Assen. 389, 403
Footwear Corpn. of India Ltd., Tannery & 347
,, Industry (Leather—Small Scale) 80
,, Ltd., Punjab 361
Ford Foundation, The 367, 373

PAGE

F—(*Contd.*)

Foreign Aid to India .. 277
,, Banks .. 284
Foreign Diplomatic Representatives in India 880
,, Events, Major .. 238
,, Exchange Regulation Appellate Board (Dept. of Legal Affairs) .. 858
,, Exchange Reserves .. 277
,, Languages, School of (Defence) .. 299
,, ,, , Study of (See under each language)
,, Trade Commissions in India .. 880
,, Trade, Indian Instt. of .. 128
,, ,, , Regional Pattern of India's .. 282
Foreigners, Registration of .. 14
Forensic Medicine Sciences, Study of .. 119
,, Science Laboratory, Central .. 139
Forests .. 103
Classification .. 104
Education and Research .. 104
Project Tiger .. 105
Forest Devpt. Corporations .. 105
Andaman & Nicobar Islands .. 330
Forest Devpt. Corpns. (State Govt. Undertakings) 349–66
,, Research Centre .. 139
,, ,, Instt. and Colleges .. 66, 104, 139
,, ,, Laboratory .. 139
Forum of Free Enterprise .. 386
Forward Markets Commission .. 852
Foundry and Forge Tech., National Instt. of .. 139
,, Forge Plant **(HECL)** .. 335
,, Ltd., IISCO Stanton Pipe & .. 338
France (French Aid) .. 281
Free Education .. 117
Freedom Fighters, Home for the Aged .. 242
Freight (Shipping Industry) .. 77
French, Study of .. 119
Fruit Devpt. Corpn., Banana & .. 330
Fuel Refinery .. 72
,, Research Instt., Central .. 136
,, Saving .. 777
,, Wood .. 105
Fuels, Mineral .. 54
Fundamental Duties .. 1
,, Research, Tata Instt. of .. 142
,, Rights .. 1
Furnaces Tech., Study of .. 119

G

Game Sanctuaries .. 16, 17, 19, 21, 22
Gandhi Darshan Samiti .. 315
,, Smarak Nidhi .. 371
Gandhian Studies, Instt. of .. 133
Gandhigram Rural Instt. .. 191
Garage Equipment (Small Scale industry) .. 82
Garden Reach Shipbuilders & Engineers Ltd. .. 334
Garhwal University .. 195
Garments Ltd., Kerala .. 356

PAGE

Garments, Readymade .. 33
Gas Co. Ltd., Assam .. 350
,, , Natural .. 66, 101
Gastro-Enterologists, Assocn. of .. 373
Gastro-Enterology, Study of .. 119
Gauhati University .. 156
Gem and Jewellery Export Prom. Council .. 283
Gemmological Institute of India .. 131
General Elections .. 815
,, Insurance Corpn. of India .. 335, 856
Genetic Studies, Instt. of .. 130
Genito-Urinary Surgery, Study of .. 119
Geodetic and Research Branch .. 139
Geography, Indian Instt. of .. 140
,, , Study of .. 120
Geological Consultants & Prospectors .. 777
,, Survey of India .. 139, 860
Geology, Study of .. 120
Geomagnetism, Indian Instt. of .. 131, 863
Geophysical Research Instt., National .. 136
Geophysics, Study of .. 120
Geothermal Energy .. 101
German Aid .. 280
,, Studies, Indian Instt. of .. 131
,, , Study of .. 120
Ginger .. 85
Gir Forest .. 22
Glass & Ceramic Industries (Small Scale) .. 81
,, and Ceramics Research Instt., Central .. 136
,, Plant, Optical .. 345
,, Tech., Study of .. 120
Gliding Clubs .. 200
Goa, Daman and Diu .. 22, 160
,, Adm. Personnel .. 865
,, Assocns. .. 374
,, Chamber of Commerce .. 406
,, Daman & Diu Economic Devpt. Corpn. .. 352
,, Govt. Undertakings .. 352
,, Legislative Assembly .. 828
,, Shipyard Ltd. .. 335
Goats .. 115
Goitre .. 268
Gold .. 285
,, & Silver Prices .. 287
,, Auction .. 288
,, Control Administrator (Dept. of Revenue) .. 855
,, International Price .. 285
,, Mines Co. Ltd., Hutti .. 354
,, ,, Ltd., Bharat .. 331
,, Production .. 286
,, , Standard .. 286
Gopal Ratna Award .. 308
Gorakhpur University .. 195
Goran Altaskiya (See Pashmina) .. 97
Government Administrative Personnel .. 850, 863
,, Hydrogenation Factory .. 64

PAGE

G—(*Contd.*)

Government of India Undertakings .. 330–48, 916
,, Opium & Alkaloid Works Undertakings .. 335
Government of India Personnel .. 850–63
,, Undertakings, State .. 349–66
Governor, State .. 3
Govind Ballabh Pant University .. 195
Grain Storage Research and Training Centre 139, 144
Gram .. 110
Grants, Foreign Aid .. 277–81
Grassland and Fodder Research Instt., Indian .. 137
Greek, Study of .. 120
Gross National Product (GNP) .. 290
Groundnut .. 63, 110
Groundwater Board, Central .. 108
Growth of Population .. 271
Guidance Bureaux, Vocational .. 134
Gujarat State .. 162
,, Associations & Societies .. 374
,, Ayurved University .. 163
,, Chambers of Commerce .. 406
,, Legislative Assembly .. 828
,, Olefins Project .. 68
,, Ports .. 207
,, State Adm. Personnel .. 866
,, ,, Corporations .. 352
,, ,, Ind. Undertakings .. 352
,, Universities .. 163
,, Vidyapith .. 163
Gujarati, Study of .. 120
Gulbarga University .. 170
Gulmarg .. 18
Gur, Sugarcane & .. 90
Guru Nanak University .. 188
Gurukul Kangri University .. 195
Gynaecology, Study of .. 120
Gypsum .. 55

H

H.M.T. (International) Ltd. .. 336
Haematology, Research in .. 138
Haffkine Bio-Pharmaceutical Corpn. Ltd. .. 358
,, Institute .. 142
Haldia Refinery .. 69
Halebid .. 21
Handicapped, Institutions for the .. 242
Mentally Handicapped, Centres for .. 254
Orthopaedically Handicapped, Institutions for .. 248
Physically Handicapped, Centres for .. 260
Handicraft Devpt. Corporations (State Govt. Undertakings) .. 349–66
Handicrafts Board, All India .. 852

PAGE

Handicrafts and Handlooms Development Corpn. Ltd., North Eastern .. 345
,, ,, ,, Export Corpn. of India Ltd. .. 335
Handloom Devpt. Corporations (State Govt. Undertakings) .. 349–66
,, Export Prom. Council .. 283
,, Fabrics Marketing Co-op. Society Ltd. 382
,, Tech., Indian Instt. of .. 139
Handlooms, Devpt. Commissioner for .. 853
,, Exp. Corpn. of India Ltd., Handicraft & 335
Handmade Paper Instt. .. 131
Harbour Board, National .. 204
Hari Om Ashram Research Award .. 307
Harijan Housing & Devpt. Corpn. Ltd., Tamil Nadu .. 363
,, Sevak Sangh, All India .. 371
Haryana State .. 164
,, Agricultural University .. 165
,, Associations & Societies .. 376
,, Chambers of Commerce .. 406
,, State Adm. Personnel .. 866
,, ,, Corporations .. 353
,, ,, Ind. Undertakings .. 353
,, Universities .. 165
,, Vidhan Sabha .. 829
Hazaribagh National Park .. 17
Health & Family Welfare, Ministry of .. 856
,, Education .. 269
,, , Preventive Medicine Research .. 138
,, , Public .. 267
,, Services, Availability of .. 270
,, ,, , Dir.-Gen. of .. 856
Heart Disease & Rehabilitation, Society for the Prevention of .. 389
,, Foundation, All India .. 373
Heavy Engineering Corpn. Ltd. .. 335
,, Ind., Dept. of .. 857
,, Machine Building Plant (HECL) .. 335
,, ,, Tools Plant (HECL) .. 335
,, Vehicles Factory .. 335
,, Water Plants .. 148
Hebrew, Study of .. 120
Hide Flaying .. 114
High Altitude Research Laboratory .. 147
High Commissions, Foreign in India .. 884
,, ,, , Indian Abroad .. 879
,, Court (See also State Adm. Personnel) .. 4, 6
,, Voltage Engg., Study of .. 120
,, Yielding Varieties (Food) .. 106
Highway Engg., Study of .. 120
Highways, National .. 210
Hill Agriculture, Vivekanand Laboratory for (Vivekananda Parvatiya Krishi Anusandhan Shala) 137
,, Area Lift Irrigation Corpn., Bihar .. 351
,, Devpt. Corpn. Ltd., U.P. .. 364
Himachal Pradesh State .. 166
,, ,, Associations & Societies .. 376

PAGE

H—(*Contd.*)

Himachal Pradesh State Adm. Personnel 867
,, ,, ,, Corporations 353
,, ,, ,, Ind. Undertakings 353
,, ,, University 167
,, ,, Vidhan Sabha 830
Himalaya Fertilizers Ltd. 353
Himalayan Car Rally 324
Hind Mazdoor Sabha 304
Hindi, Study of 120
Hindustan Aeronautics Ltd. (HAL) 335
,, Antibiotics Ltd. 335
,, Cables Ltd. 336
,, Coir 336
,, Copper Ltd. 336
,, Diamond Co. Ltd. 336
,, Fertiliser Corpn. Ltd. (HFCL) 336
,, Insecticides Ltd. 336
,, Latex Ltd. 336
,, Machine Tools Ltd. 336
,, Organic Chemicals Ltd. 337
,, Paper Corpn. Ltd. 66, 337
,, Petroleum Corpn. Ltd. 72, 337
,, Photo Films Mfg. Co. Ltd. 337
,, Prefab Factory Ltd. 199, 337
,, Salts Ltd. 337
,, Shipyard Ltd. 337
,, Steel Ltd. 337
,, Steel Works Construction Ltd. 337
,, Teleprinters Ltd. 338
,, Zinc Ltd. 338
Historic Dates (1900–79) 216–37
Historical Research, Indian Council of 141
History & Culture, Heras Instt. of 143
History, Study of 120
Hockey — Records : Olympic, National 323
Home Affairs, Ministry of 856
,, for the Aged Freedom Fighters 242
,, Science, Study of 120
Homoeopathic Physicians, Asscn. of 389
Homoeopathy, Central Council for Research in 138
Horticultural Produce Mktg. & Processing Corpn., H.P. 353
,, Research, Instt. of 137
Horticulture, Study of 120
Hospitals 778–80
Hotel, Ashoka 330
,, Corpn. of India Ltd. 201, 338
,, Janpath 338
Hotels 780
,, and Restaurant Asscns. of India, Federation of 369
Housing 198
,, and Urban Devpt. Corpn. Ltd. 338
,, , Ministry of Works & 862
,, , Public Sector Undertakings 199
,, Urban Renewal & Ecology Board (Maharashtra) 870

PAGE

Housing Wing, Rural (Research) 139
Humanitarian League, Bombay 386
Hutti Gold Mines Co. Ltd. 354
Hyderabad-Secunderabad 17
Hydraulic Engg., Study of Civil & 118
Hydro-Carbons (India) Pvt. Ltd. 338
Hydro-electric Power Corpn., National 344
Hydrogenation Factory, Govt. 64
Hygiene and Public Health, All India Instt. of 856
,, , Study of 120

I

IFA Shield 323
IISCO Stanton Pipe & Foundry Ltd. 338
Illiterates, Number of 117
Impeachment 2
Implements and Machineries Co. Ltd., Karnataka 354
Import and Export Trade 281
Important Legislations 276
Imports and Exports, Chief Controller of 852
Income, National 288
,, , Per Capita 289
,, Tax Appellate Tribunal 859
,, ,, & Wealth Tax, Settlement Commn. for 855
India Fire Bricks & Insulation Co. Ltd. 338
,, Foundation 391
,, Meteorological Dept. 863
,, Population Project 264
,, Security Press 855
,, Tourism Devpt. Corpn. Ltd. 338
Indian Agricultural Research Instt. 137
,, Air Force 854
,, Airlines 201
,, and Eastern Newspaper Socy. 373
,, Army 853
,, Botanic Garden 139
,, Bureau of Mines 139, 861
Indian Child, The 252
,, Coastal Conference 77
,, Copper Complex (HCL) 336
,, Cotton Mills Federation 33
,, Council for Mental Health 253
,, ,, of Agricultural Research 108, 137
,, ,, of Medical Research 138
,, ,, of Social Science Research 141
,, ,, of Social Welfare 372, 374, 376, 377
,, ,, of World Affairs 372
,, Dairy Corpn. 35, 338
Indian Diplomatic Representatives Abroad 876
,, Drugs and Pharmaceuticals Ltd. (IDPL) 38, 339
,, Events 237
,, Farmers' Fertilizer Co-op. Ltd. 42, 369
,, Institute of Astrophysics 863
,, ,, ,, Drilling Technology 71
,, ,, ,, Experimental Medicine 135
,, ,, ,, Geomagnetism 863

PAGE

I—(*Contd.*)

Indian Institute of Management .. 129, 134
,, ,, ,, Mass Communication .. 128
,, ,, ,, Petroleum .. 73, 136
,, ,, ,, Science .. 170
,, ,, ,, Sugarcane Research .. 91
,, ,, ,, Technology .. 129, 132, 133, 134
,, ,, ,, Tropical Meteorology .. 863
,, Investment Centre .. 339
,, Iron and Steel Co. Ltd. .. 89, 339
,, Lac Development Council .. 49
,, ,, Research Instt. .. 49, 137
,, Language Newspapers' Asscn. .. 383
,, Medicine, Study of .. 121
,, Military Academy .. 298
,, Motion Picture Distributors' Asscn. .. 48
,, ,, ,, Producers' Asscn. .. 47
,, Museums .. 315
,, National Cttee. for Space Research (INCOPAR) .. 145
,, ,, Satellite System (INSAT) .. 146
,, ,, Science Academy .. 374
,, ,, Shipowners Asscn. .. 77
,, ,, Trade Union Congress (INTUC) 304
,, Navy .. 854
,, Oil Blending Ltd. .. 71, 339
,, ,, Corpn. Ltd. .. 71, 339, 859
,, ,, ,, R & D Centre .. 71, 860
,, Oilseeds Devpt. Council .. 140
,, Petro-chemicals Corpn. Ltd. .. 68, 339
,, Philosophy, Study of .. 122
,, Railway Construction Co. Ltd. .. 339
,, Rare Earths Ltd. .. 148, 339
,, Register of Shipping .. 76
,, Road Construction Corpn. Ltd. .. 211, 339
,, Socy. of Advertisers Ltd. .. 380
,, Space Research Orgn. (ISRO) .. 145
,, Spices Devpt. Council .. 86
,, Standards Institution .. 339
,, Statistical Instt. .. 129, 130, 132, 134
,, Sugar Mills Assocn. .. 91
,, Telephone Industries Ltd. .. 340
,, Tobacco Devpt. Council .. 95
,, Union, The .. 1
,, Veterinary Research Instt. .. 36, 137
,, Woollen Mills Federation .. 98
India's Foreign Trade, Regional Pattern of .. 282
,, Frontiers .. 296
Indira Sangeet Vishwavidyalaya .. 176
Indo-American Society .. 386
Indo-Arab Assocn. .. 367
,, Society .. 386
Indo-Burma Petroleum Co. Ltd. .. 71, 340
Indo-G.D.R. Friendship Assen. .. 386
Indo-Nippon Precision Bearings Ltd. .. 350
Indo-Norwegian Fisheries Project .. 130
Indo-Soviet Cultural Society .. 386

PAGE

Indology, Institute of .. 128
,, , Study of (see Ancient Indian) .. 118
Indore Vishwavidyalaya .. 176
Indrail Pass .. 13
Industries (see also under each State) .. 22–98
,, Centres, District .. 79
,, Reserved for Small Scale Sector .. 80
Industrial and Tech. Consultancy Orgns. Ltd. 331, 350, 356, 362
,, and Technological Museums .. 137
,, Area Devpt. Authority, Bokaro .. 351
,, ,, ,, ,, , Patna .. 865
,, Centres, District .. 79
,, Costs & Prices, Bureau of .. 857
,, Credit and Investment Corporation of India Ltd. (ICICI) .. 340
,, ,, Co. Ltd. .. 340
,, Devpt. Bank of India .. 340
,, ,, Corpn. Ltd., National .. 344
,, ,, Corpns. (State-wise) .. 349–366
,, ,, , Dept. of .. 857
,, Electronics Tech., Study of .. 120
,, Engineering, Indian Institution of .. 389
,, ,, , National Instt. for Trg. in 131
,, Enterprises Ltd., Kerala State .. 357
,, Finance Corpn. of India .. 340
,, Health, Study of .. 120
,, Management, Study of (see Business Management) .. 120
,, Reconstruction Corpn. of India Ltd. .. 340
,, Relations .. 300
,, ,, & Human Resources, Shri Ram Centre for .. 141
,, ,, , Study of Financial & .. 119
,, Research and Devpt. Centre .. 143
,, ,, , Council of Scientific & .. 135
,, ,, , Sri Ram Instt. of .. 141
,, Trade Centre, Visweswaraya .. 355

Industrial Undertakings :
Govt. of India .. 330–48
State .. 349–366
Industrially Backward Areas .. 84
Industry, Ministry of .. 857
Infant Mortality Rate (see Some Basic Facts) .. 6
Infectious Diseases Research .. 138
Influenza .. 268
Informatics Centre, National .. 41, 141
Information and Broadcasting, Ministry of .. 857
,, Centre, U. N. .. 885
,, Centres, (Research) .. 137
Inland Water Transport .. 77
,, ,, ,, Corpn., Central .. 332
Insecticides Ltd., Hindustan .. 336
Instant Tea .. 93
Institute for Research in Reproduction .. 143
,, of Armament Technology .. 298
,, ,, Child Health .. 253

PAGE

I—(*Contd.*)

Institute of Company Secretaries of India 373, 389, 396, 403
,, .. Cost & Works Accountants of India 389, 403
,, .. Defence Management 298
,, ,, Defence Studies and Analysis .. 298
,, .. Jute Technology 48
,, ,, Nuclear Medicines & Allied Sciences 298
,, .. Oceanography, National 136
,, ,, Petroleum Exploration 73
,, ,, ,, , Indian 136
,, .. Plastics Engg. & Tools, Central .. 332
,, ,, Secretariat Training & Management 857
,, ,, Shipping, Narottam Morarjee .. 123
,, ,, Sugarcane Research 91
,, ,, Work Study, Defence 298
Institutions Deemed to be Universities 126
,, for the Aged 258
,, ,, Blind 242
,, ,, Deaf & Dumb 245
,, ,, Mentally Retarded 247
,, ,, Orthopaedically Handicapped .. 248
,, ,, Serving Leprosy Patients 250
Institutions for the Handicapped 242
Instructors, Central Training Institute of 127
Instrumentation Ltd. 340
Instruments, Electronic 41
,, Ltd., National 344
Insulation Co. Ltd., India Fire Bricks & 338
Insurance Co. Ltd., National 344
,, ,, ,, , Oriental Fire & General .. 345
,, ,, ,, , United India 348
,, , Controller of 855
Insurance Corpn. of India, General .. 335, 856
Integral Coach Factory 341
Intelsat IV 39
Intermediates & Dyes, Study of 120
Internal Combustion, Study of 120
International Airports Authority of India 200
,, Bank for Reconstruction & Devpt. (WB) 885
,, Centre, India 371
,, Instts. of Population Studies .. 139
,, Labour Orgn. (ILO) 885
,, Law, Indian Society of 373
,, Wool Secretariat 97
,, Youth Centre 372
Investment Centre, Indian 339
Iodised Salt 56
Iron and Steel Control Orgn. 861
,, ,, ,, Co. Ltd., Indian 339
,, ,, ,, Ltd., Visveswaraya 355
,, Ore (Mines and Minerals) 54
Irrigation 100
,, & Power, Central Board of 858
,, ,, ,, Projects 100
,, , Ministry of 858
,, , Minor 100

PAGE

Irrigation Projects 100
Islamic Studies 120
Isomed Radiation Sterilisation Plant 149
ISRO Satellite Centre (ISAC) 341
Italian, Study of 120

J

Jabalpur Vishwavidyalaya 176
Jadavpur University 197
Jaipur 18
Jal Nigam, U.P. 365
Jaldapara Game Sanctuary 17
Jamia Millia Islamia 126
Jammu and Kashmir State 167
,, ,, ,, ,, Associations & Societies 377
,, ,, ,, ,, Chambers of Commerce 406
,, ,, ,, ,, Legislative Assembly/Council .. 830, 831
,, ,, ,, ,, State Adm. Personnel 867
,, ,, ,, ,, ,, Corporations and Ind. Undertakings 353
Jamnalal Bajaj Central Research Instt. for Village Industries 143
Janpath Hotel 338
Japanese Aid 280
,, , Study of 120
Jawaharlal Nehru Krishi Vishwavidyalaya 176
,, ,, Technological University, Shri 153
,, ,, University 160
Jessop & Co. 341
Jewellery Export Prom. Council, Gem & 283
Jiwaji Rao Vishwavidyalaya 176
Jnana Prabodhini 143
Jnanpith Awards 308
Journalism, Study of 120
Journalists Assn., Indian 403
Jowar 107
Jules Rimett Cup 323
Justice, Administration of 3
Justice — Present Position 6
Jute 110
,, Agricultural Research Instt. 48, 137
,, Commissioner, Office of.. 48
,, Corpn. of India Ltd. 341
,, Devpt., Directorate of 48, 852
,, Ind. Research Assn., Indian 48, 144
Jute Industry 48
,, Mills 49
,, Technological Research Laboratories .. 137
,, Technology, Instt. of 48, 134
Juvenile Service Bureau 253

K

Kakatiya University 153
Kalinga Prizes 308
Kalyani, University of 197
Kamaraj University 191
Kamleshwar Singh Sanskrit University 157
Kanchipuram (see Conjeevaram) 19

PAGE

K—(*Contd.*)

Kandla Port .. 205
Kanha National Park .. 16
Kannada, Study of .. 120
Kanpur University .. 195
Kanyakumari .. 20
Karnataka State .. 169
,, **Associations & Societies** .. 377
,, **Chambers of Commerce** .. 406
,, **Industrial Areas Devpt. Board** .. 354
,, **Legislative Assembly/Council** .. 831, 832
,, **State Adm. Personnel** .. 867
,, ,, Corporations & Industrial Undertakings .. 354
,, ,, **Sheep & Wool Devpt. Board** .. 97
,, **University** .. 170
Kashi Vidyapith .. 195
Kashmir .. 18, 167
Kashmiri, Study of .. 120
Kaziranga Game Sanctuary .. 17
Keltron Counters Ltd. .. 356
Kendriya Vidyalaya Sangathan .. 117
Kerala State .. 171
,, Agricultural University .. 172
,, Associations & Societies .. 379
,, Chambers of Commerce .. 407
,, Legislative Assembly (since dissolved) .. 833
,, , Minor Ports of .. 208
,, **State Adm. Personnel** .. 868
,, ,, Corporations & Industrial Undertakings .. 355
,, **University** .. 172
Khadi & Village Ind. Boards (State-wise) .. 863–875
,, ,, ,, ,, Commission .. 857
Khajuraho .. 16
Khetri Copper Complex (HCL) .. 336
Kodaikanal .. 20
Kolar Gold Mines (see Bharat Gold Mines) .. 331
Konarak .. 16
Konkan Agricultural University .. 178
,, Ltd., Devpt. Corpn. of .. 358
Korba Aluminium Project .. 330
Koyali Refinery .. 69
Krishna Consciousness, Intnl. Socy. for .. 367
Kudremukh Iron Ore Co. Ltd. .. 341
Kulu & Kangra Valleys .. 18
Kumaon Mandal Vikas Nigam Ltd. .. 364
,, **University** .. 195
Kurla Dairy .. 177
Kurukshetra University .. 165
Kyanite .. 55

L

Laboratories/Institutions, National .. 135
Laboratory for Conservation of Cultural Property, National Research .. 315
,, Chemicals .. 80

PAGE

Labour .. 300
,, **Bureau** .. 858
,, **Commissioner, Chief** .. 858
,, **Instts., Dir.-Gen. of Factory Advice Service &** .. 858
,, **Instt., National** .. 128
,, **Instts., Regional (Min. of Labour)** .. 858
,, **, Ministry of** .. 858
,, **Studies, Maharashtra Instt. of** .. 131
,, **, Study of** .. 120
,, **Welfare Board, Gujarat** .. 866
Lac Devpt. Council, Indian .. 49
,, ,, **, Directorate of** .. 49, 852
Lac Industry .. 49
,, Marketing Federation, Bihar Co-op. .. 49
,, Research Instt., Indian .. 49, 137
Laghu Udyog Nigam Ltd., Madhya Pradesh .. 358
Lakshadweep .. 172
Lal Bahadur Shastri National Academy of Administration .. 857
,, ,, ,, Nautical and Engineering College .. 123
Lalit Kala Akademi .. 373
Land Army Corpn. Ltd., Karnataka .. 354
,, **Ceiling** .. 113
,, **Frontier of India (see Some Basic Facts)** .. 8
,, **Holding, Average** .. 113
,, **Reforms** .. 113
,, **Use Planning, National Soil Survey &** .. 108, 137
Language, Official .. 5
,, **Press** .. 215
Languages (Physiography) .. 8
Language-wise Break-up of Population .. 275
Laringology, Study of .. 120
Late Particulars .. 915
Latex Ltd., Hindustan .. 336
Latin, Study of .. 120
Law Commission (see Dept. of Legal Affairs) .. 858
,, **Instt., Indian** .. 373, 403
,, **, Justice & Company Affairs, Ministry of** .. 858
,, **, Study of** .. 120
Lead (Mines & Minerals) .. 55
,, Mine, Agnigundala (HZL) .. 338
League of Arab States Mission .. 885
Leather and Leather Manufrs., Exp. Prom. Council for Finished .. 283
,, and Leather Products (Small-Scale) .. 80
,, **Corpn. Ltd., Bharat** .. 331
,, Export Prom. Council .. 283
,, Industries Devpt. Corpn. (State-wise) .. 350–366
,, Research Instt., Central .. 136
,, Technologists' Asscn., Indian .. 403
,, Technology, Study of .. 120
Legal Affairs, Dept. of .. 858
,, Aid Society, Indian .. 403
,, **Consultative Cttee., Asian-African** .. 885
Legislations—1980 Important Central .. 276

PAGE

L—(*Contd.*)

Legislative Assemblies and Councils 822
  Andhra Pradesh 822
  Arunachal Pradesh 824
  Assam (since dissolved) 825
  Bihar 825
  Goa 828
  Gujarat 828
  Haryana 829
  Himachal Pradesh 830
  Jammu and Kashmir 830
  Karnataka 831
  Kerala (since dissolved) 833
  Madhya Pradesh 834
  Maharashtra 836
  Manipur 838
  Meghalaya 839
  Mizoram 839
  Nagaland 839
  Orissa 840
  Pondicherry 841
  Punjab 841
  Rajasthan 842
  Sikkim 843
  Tamil Nadu 843
  Tripura 845
  Uttar Pradesh 846
  West Bengal 848
Legislative Councils :
  Andhra Pradesh 824
  Bihar 827
  Jammu and Kashmir 831
  Karnataka 832
  Maharashtra 838
  Tamil Nadu 845
  Uttar Pradesh 848
Legislative Department 858
Legislative Procedure 2
Legislatures, State 3
Lemon-grass Oil 64
Length & Breadth of India (see Some Basic Facts) 8
Leprosy Control Programme, National 268
  ,, Patients, Instts. Serving 250
  ,, Research 138, 268
  ,, Training and Research Instt., Central 268
Libraries, Museums & 315
Library, National 854
Library Science, Study of 120
Life Expectancy 271
  ,, Insurance Corpn. of India (LIC) 856
Lighthouses 204
  ,, and Lightships Dept. 861
Lignite (Mines & Minerals) 54
  ,, Corpn. Ltd., Neyveli 345
Limestone 56
Linguistic Minorities in India, Commissioner for 856
Linguistics, Study of 120

PAGE

Linoleums Export Prom. Council, Plastics & 283
Linseed Oil 64
  ,, Research 64
Literacy 274, 275
Livestock (see Animal Husbandry) 113
  ,, Devpt. & Milk Marketing Board Ltd., Kerala 356
Local Self-Govt., All India Instt. of 131
  ,, ,, , Study of 120
Locomotive Works, Chittaranjan 333
  ,, ,, , Diesel 333
Logging Training Centres (Forests) 104
Lok Ayukta 864, 869
Lok Sabha 819
  ,, ,, Poll 816, 817
  ,, ,, Secretariat 851
  ,, ,, Speaker 819
Lotus Awards 308
Lower Courts 4
Lube Refinery 72
Lubrizol India Ltd. 73
Lucknow University 195

M

Machine Tool Corpn. Ltd., Gujarat State 352
  ,, ,, Institute, Central 139, 142
  ,, ,, Prototype Factory 341
  ,, Tools Corpn. of India Ltd. 341
  ,, ,, Ltd., Hindustan 336
Machinery Corpn. Ltd., Mining & Allied 342
Madhya Pradesh State 173
  ,, ,, Associations & Societies 380
  ,, ,, Audyogik Vikas Nigam Ltd. 358
  ,, ,, Chambers of Commerce 407
  ,, ,, Laghu Udyog Nigam Ltd. 358
  ,, ,, Legislative Assembly 834
  ,, ,, State Adm. Personnel 868
  ,, ,, ,, Corporations 358
  ,, ,, ,, Ind. Undertakings 358
  ,, ,, ,, Universities 176
  ,, ,, ,, Vidyut Yantra Ltd. 358
Madras 19
  ,, Atomic Power Station 148
  ,, Fertilizers Ltd. 42, 341
  ,, Municipal Corpn. 213
  ,, Port 205
  ,, Refineries Ltd. 72, 342
  ,, University 191
Madurai Pandiyan Engg. Corpn. Ltd. 362
MAFCO Ltd. 359
Magadh University 157
Magisterial Courts 6
Magnesite 56
  ,, Ltd., Almora 364
  ,, Ltd., Tamil Nadu 363
Magsaysay Awards 314
Maha Bodhi Society of India 371, 403

Page

M—(*Contd.*)

Mahabalipuram 19
Maharaja Sayaji Rao University of Baroda .. 163
Maharashtra State 176
,, Associations & Societies 380
,, Chambers of Commerce 407
,, Legislative Assembly/Council 836, 838
,, State Adm. Personnel 869
,, ,, Corporations 358
,, ,, Ind. Undertakings 358
,, ,, Ports, Minor 207
Mahatma Phule Agricultural University 178
Mahavir Wildlife Sanctuary 21
Maithili, Study of 120
Maize 107
Major Ports 207
Malanjkhand Copper Project (HCL) .. 55, 336
Malaria 268
,, and other Communicable Diseases, Indian Socy. of 373
Malayalam, Study of 120
Management Assen., All India 373
,, ,, , Bombay 389
,, Consultants 790
,, Devpt. Instt. 128
,, , Indian Instt. of 129, 134
,, Science, Study of 120
,, Studies, Jamnalal Bajaj Instt. of .. 131
Manas Game Sanctuary 17
Mandhar Cement Factory 342
Mandya National Paper Mills Ltd. 342
Mangalore Port, New 206
,, University 170
Manganese Ore 54
,, ,, (India) Ltd. 342
Manipur State 180
,, Adm. Personnel 871
,, Associations 392
,, Legislative Assembly 838
,, Small Industries Corpn. Ltd. .. 360

Man-made Fibre Industry 50
Manpower Research, Instt. of Applied 139

Manufacturers (Commercial Firms)
Abrasives and Grinding Wheels 410
Acids 410
Adding & Calculating Machines 574
Addressing Machines 575
Adhesive Tapes 410
,, ,, , Cellulose (Paper Tapes) .. 586
Adhesives 413
Advertising Novelties 413
Aerated Water 414
Aerating Machines 414
Aerial Ropeway 414
Agarbattis 589
Agricultural Implements 414

Page

Air Circulator & Air Control Equipment .. 416
Air Compressors, Pneumatic Equipment and Spares 680
Air Pillows & Air Mattresses 416
Air-conditioners — Car 416
,, , Refrigerators & Rectifiers .. 416
Air-conditioning — Industrial 420
Alkalies 420
Aluminium Doors, Windows & Furniture .. 420
,, Products 421
Ampoules Glass 531
Animal Farm Equipments 423
,, Feeds 423
Architects' Requisites 423
Asbestos Products 423
Automobile Ancillaries 424
Ayurvedic Medicines 428
Badges & Emblems 428
Bakelite, Plastic & Nylon Moulding 428
Baking Machinery 428
Ball & Roller Bearings 432
,, Point Pen & Refills 428, 589
Barges (Steel) 429
Barrels & Cases — Wooden 429
,, — Buckets, Drums & Steel & Tin Containers 429
Batteries, Dry Cell 430
,, , Storage 430
Battery Chargers & Eliminators 432
Bearings — Ball, Bi-metal, Roller and Needle 432
Belting, Hair, V. Belts, etc. 432
Bicycles & Accessories 433
Bidis 433
Biscuit Making Plants 434
Biscuits & Confectionery 434
Bitumen 435
Blades — Hacksaw, Bandsaw, Safety, Shears, Knives 435
Boats & Motor Launches 435
Boiler Laggings & Compositions 435
Boilers 435
Bolts, Nuts, Rivets & Screws 437
Bottling Machinery & Plants 437
Box (Tin) Manufacturers 675
,, Strappings 437
Braiding Machines 439
Brass & Copper Sheets & Rolls, etc. 439
,, & Steel Components 439
Breweries 472
Brick Making Plants 439
Bricks & Tiles 439
Bright Steel Bars etc. 439
Brushes 440
Buckets 429
Builders' Hardware 441
Building Materials 464
Burners — Oil/Gas 441

PAGE

M—(*Contd.*)

Manufacturers—(*Contd.*)
  Bus-Truck Body Builders 441
  Business Equipment, Office & 574
  ,, Forms & Charts 575
  Cables — Electric 491
  Calculators — Pocket Size 441
  ,, — Table Size 441
  Camphor 442
  Camping Equipment 442
  Can Seaming Machines 442
  Candle-making Machines 442
  Canning Machinery, Food Processing & .. 514
  Capacitors — Electrical & Aluminium Electrolytic 442
  Capsules — Gelatine 443
  Carbon Blocks & Brushes 443
  ,, Film Resistors 443
  Carbons — Cinema Arc 443
  Cardboard Boxes 443
  Carpets 444
  Cars & Trucks 444
  Casein & Caseinates 444
  Cassette Tape Recorders 445
  ,, Tapes 445
  Cast Iron & G. I. Pipes 445
  Castings — Die & Malleable 445
  ,, —Non-Ferrous Metal, Alloy, Iron, Cast Iron, Steel, Stainless Steel & Brass .. 446
  Castors & Trolley Wheels 449
  Catalysts 449
  Cattle Feed (see Animal Feeds) 423
  Cellulose Acetate 596
  ,, Products 449
  Cement Products 450
  Cement-making Machinery 449
  Ceramic Machinery 451
  Ceramics & Potteries 451
  Chain Pulley Blocks 557
  Chains 452
  Chandeliers & Crystal Glass Fittings 454
  Chemical Plants & Equipment 454
  Chemicals 455
  Chucks 462
  Cigarettes 462
  Cinema Equipment & Projectors 462
  Circlips 637
  Circuit Breakers 463
  Clamping Elements 463
  Clocks — Transistorised 463
  Collapsible Tubes 463
  Compressors & Spares — Air/Gas 463
  Computers 575
  Concrete Mixers & Vibrators 463
  Conduits & Conduit Pipes 463
  Connectors (Rectangular) 463
  Construction Machinery 464

PAGE

  Construction Materials 464
  Conveyor Belts 464
  Conveyors 464
  Cooling Towers 465
  Copiers 575
  Copper Sheets & Rolls, Brass & 439
  ,, Wires & Tubes 465
  Cork Products 466
  Corrugated Box Making Machine 466
  ,, Boxes 466
  ,, Sheets 468
  Cosmetics 468
  Couplings (Flexibles) 468
  Cranes & Crane Components 469, 557
  Crash Helmets 469
  Crockeries — Ceramic & Porcelain 469
  Crucibles 469
  Dairy Machinery 469
  ,, Products 470
  Detergents 470
  Diesel Engines, Generator Sets & Components 470
  Distilleries & Breweries 472
  Distillery Plants — Small 473
  Domestic Grinders & Mixers 473
  Doors — Flush 473
  Drawing Office Equipment 575
  Drills & Drilling Machines 474
  Drugs & Pharmaceuticals 474
  Drums 429
  Dry Ice 484
  Duplicating Machines 575
  Dyestuffs 484
  Earthmoving Equipment 487
  Educational Equipment 488
  Electric Control Panels 488
  ,, Fans 506
  ,, Goods 489
  ,, Lamps & Accessories 489
  ,, Laundry Apparatus 490
  ,, Lifts 490
  ,, Motors & Generators 530, 569
  ,, Tools & Stampings 491
  ,, Wires, Cables, etc. 491
  Electrical Appliances (Domestic) 492
  ,, ,, (Industrial) 493
  ,, Distribution & Transmission Line Equipment 493
  ,, Equip. for Large Plants 499
  ,, Heating Appliances .. 499, 535
  ,, ,, Elements 499
  ,, Industries 499
  ,, Meters & Measuring Instruments .. 565
  ,, Switches, Switchgears, Switch Fuses & Accessories 656
  Electronic Components 502
  ,, Timers 504
  Electroplating Materials 505

PAGE

M—(*Contd.*)

Manufacturers—(*Contd.*)
Electroplating Plants .. 505
Elevators (Electric lifts) .. 490
Embossing Machines, Guns & Tapes .. 505
Embroidered Textiles .. 675
Emergency Light .. 505
Enamels, Paints & Varnishes .. 583
Enamelware .. 505
Engines — Diesel & Oil .. 470
.. Expellers — Oil .. 505
Essences .. 505
Explosives .. 505
Fabrication — Steel .. 643
Fans, Electric .. 506
,, — Industrial & Blowers .. 506
Fasteners (Industrial) .. 506
Felts .. 507
Ferro-Alloy .. 507
Fertilisers .. 508
Fibre Reinforced Pipes .. 509
Fibre-Glass & Fibre-Glass Products .. 509
,, Tanks & Reaction Vessels .. 511
Filing Systems .. 576
Film Strip Projectors .. 511
Filter Rods for Cigarettes .. 511
Filters, Filter Papers & Filter Presses .. 511
Fins & Finned Tubes .. 511
Fire Fighting Equipment .. 511
Fishing Aids .. 514
Flash Lights & Torch Lights .. 514
Food Processing & Canning Machinery .. 514
Foods, Fish & Meat Canning .. 514
,, , Fruit & Vegetable Canning .. 516
Foods, Processed .. 517
,, , Protein .. 518
Footwear .. 518
Forgings & Stampings .. 519
Fork Lift Trucks .. 556
Foundry Equipment & Materials .. 523
Franking Machines .. 523
Fuel Injection Equipment .. 523
Furnaces .. 523
Gardening Equipment .. 525
Garments, Readymade .. 525
Gas Cylinders .. 526
,, Fittings & Welding Rods .. 526
,, Lamps, Lighters, Mantles, Lanterns .. 526
,, Plants .. 526
Gases .. 526
Gaskets .. 527
,, — Boiler .. 527
Gears, Gear Boxes, Gear Pumps & Geared Motors 527
Gem, Synthetic .. 656
Generators .. 530
Glass, Glass Apparatus, Ampoules & Vials .. 531
,, Products — Bottles, Mirrors etc. 532, 533

PAGE
Gloves, Rubber .. 624
Glyoxal .. 533
Gobar Gas Plant .. 534
Gramophone Records .. 534
Graphite Products .. 534
Greeting Cards .. 534
Grinders & Mixers — Domestic .. 473
Gum .. 534
Gunny Bag Cleaner .. 534
Handlooms and Handicrafts .. 534
Heat Exchangers .. 534
Heaters, Industrial Ovens, Incubators, etc. .. 535
Heating Appliances .. 499, 535
Hoists .. 557
Hoses — Hydraulic .. 538
Hosiery .. 536
Hospital Equipment .. 560
,, Furniture .. 561
Household Wares .. 538
Hurricane Lanterns .. 538
Hydraulic Equipment, Presses, Hoses, etc. .. 538
Ice Plants .. 539
Imitation Jewellery .. 539
Incubators (Heaters) .. 535
Ink-making Machinery .. 539
Instruments — Scientific .. 539
Insulators & Insulation Materials .. 542
Intercom System .. 544
Irrigation Systems .. 545
Jewellery — Imitation .. 539
Jigs, Fixtures .. 681
Jute Goods .. 545
,, Mill Machinery .. 545
Kitchen Aids & Equipments .. 545
Labels — Metal .. 545
Laboratory Chemicals .. 547
,, Equipment .. 547
Ladders .. 550
Laminated Products .. 550
Lanterns & Stoves .. 550
Lathes .. 550
Laundry Equipment .. 551
Lead & Lead Products .. 551
Leather & Leather Products .. 551
,, Footwear .. 518
Lifting Jacks .. 556
Lime & Allied Products .. 553
,, Kilns .. 553
Locks & Fittings .. 553
Machine Polishing Cloth .. 554
,, Tools .. 679
Machinery .. 554
Magnets & Magnetic Appliances .. 556
Mantles — Gas Lamp .. 526
Marbles & Tiles .. 558
Marine Crafts & Engines .. 556
Material Handling Equipment .. 556

PAGE

M—(*Contd.*)

Manufacturers—(*Contd.*)

Measuring Instruments, & Meters, Electrical .. 565
Meat Canning Foods, Fish & .. 514
Medical Equipment .. 560
Metal Powders .. 562
,, Stampings .. 562
Metallised Materials .. 562
Metallo-plastic Yarn .. 562
Metals, Ferrous & Non-ferrous .. 562
,, — Perforated & Metal Sheets .. 565
Meters & Measuring Instruments, Electrical .. 565
Milk Powder .. 567
Milling Machines & Cutters .. 567
Mineral Beneficiation Machinery .. 567
Minerals .. 567
Mining Machinery & Equipment .. 568
Mixers & Grinders — Domestic .. 473
,, & Vibrators, Concrete .. 463
Mopeds .. 631
Mosquito Nettings .. 569
Motors — Electric .. 569
,, **— Geared** .. 527
Moulds, Precision .. 613
Musical Instruments .. 571
Navigation Aids .. 571
Needles .. 571
Newspapers .. 572
Non-Ferrous Metals .. 562
Nuts, Bolts & .. 437
Nylon & Polyester Filament Yarn .. 574
,, **Parts** .. 574
,, Ropes, Sheets, Rods, Tubes etc. .. 574
,, Tyre Cord .. 574
Office & Business Equipment .. 574
,, **Furniture** .. 576
,, **Machines** .. 576
,, **Stationery & Requisites** .. 576
Oil Emulsion .. 578
,, Engines .. 470
,, Mill Machinery .. 578
,, Mills — Vegetable .. 578
,, Seals, 'O' Rings .. 579
Optical Frames & Instruments .. 579
Orthopaedic Equipment .. 561
Ovens, Industrial (Heaters) .. 535
P. F. Moulding Powder/Resins .. 596
P.V.C. and Fibreglass Fabrication .. 611
,, Cables & Flexibles .. 610
,, Laminated Sheets, etc. .. 611
,, Leather Cloth .. 611
,, Pipes & Conduits .. 611
,, Plastic Articles .. 612
,, Resins and Compositions .. 612
,, Sheeting for Files .. 612
Packaging Machinery .. 581
Packing & Packaging Materials .. 581

PAGE

Paints, Enamels & Varnishes .. 583
Paper & Board Mills .. 586
,, Cones & Tubes .. 586
,, Converters .. 586
,, Gummed Tape etc. .. 586
,, , Handmade .. 586
,, Machinery .. 586
,, , Marble, Carbonless, Fancy Leatherite & Embossed .. 586
,, **Plant & Mills** .. 587
Pattern Cutting Machines .. 589
Patterns — Wooden & Metal .. 589
Pens, Ball Point & Fountain, Sketch, Refills, etc. .. 589
Perfumes and Agarbattis .. 589
Pesticides .. 592
Petroleum Products .. 594
Pharmaceutical Machinery .. 595
Pharmaceuticals, Drugs & .. 474
Photo Goods .. 595
Photographic Equipment .. 595
Physiotherapy Equipment .. 561
Pine Oil .. 596
Pipes and Fittings .. 596, 685
,, **— Cast Iron** .. 445
,, **— Fibre Reinforced** .. 509
Plaster of Paris .. 596
Plastic Bangles .. 596
,, **Blow Moulding** .. 598
,, **Cane and Ropes** .. 598
,, Compression Mouldings .. 598
,, **Electrical Accessories** .. 599
,, **Extrusion** .. 599
,, **Fabrication** .. 600
,, **Foam** .. 600
,, Footwear .. 519
,, Goods .. 600
,, Hoses .. 601
,, Injection Mouldings .. 601
,, **Lamination** .. 603
,, **Leather Cloth** .. 603
,, **Machinery** .. 604
,, **Moulds** .. 604
,, Presentation Novelties .. 604
,, Raw Material Suppliers .. 605
,, Sheet — Metallised .. 605
,, **Spectacle Frames** .. 605
,, **Tooth Brushes** .. 605
,, Transfer Moulding .. 605
,, Vacuum Forming .. 605
Plasticizers .. 606
Playing Cards .. 606
Plywood Products .. 606
Pneumatic Tools & Equipment .. 608
Polishing Machine .. 608
Polyester Yarn, Nylon and .. 574
Polystyrene, Polypropylene & Polyfibres .. 609

PAGE

M—(*Contd.*)

Manufacturers—(*Contd.*)

- Polythene Bags 609
  - ,, Containers 610
  - ,, Film 610
  - ,, Products 610
- Porcelain 469
  - ,, & Refractory Materials 610
- Potato Wafer-making Machines 610
- Potteries, Ceramics & 451
- Presses — Hydraulic 538
- Pressure Cookers 612
  - ,, Vessels & Gauges 612
- Printing Ink 612
  - ,, Press Machinery 613
  - ,, ,, Requisites 613
- Process Control and Precision Moulds, Instruments & Tools 613
- Processed Foods 517
- Projectors — Cinema 462
- Protein Foods 518
- Public Address Systems 617
- Pulleys, Cranes, Hoists etc. 557
- Pumps & Pumping Sets 617
- Radio & Television Sets 619
- Railway Coaches and Wagons, etc. 620
- Rayon 620
- Ready-made Garments 525
- Record Players 620
- Rectifiers 620
- Reduction Gears & Speed Controllers, Indicators, etc. 622
- Refractories 622
- Refrigerators 623
- Rivets & Fasteners 623
- Road-making Machines & Road Rollers 623
- Ropes 624
- Rosin & Turpentine 688
- Rubber Aprons 624
  - ,, Blankets & Mattings 624
  - ,, Cellular & Latex Foam 624
  - ,, Flooring Tiles 624
  - ,, Footwear 519
  - ,, Gloves 624
  - ,, Hoses 625
  - ,, Lining 625
  - ,, Machinery 625
  - ,, Oilseals 625
  - ,, Products 626
  - ,, Reclaimed 629
  - ,, Rollers 629
  - ,, Sheets 629
  - ,, Sports Goods 629
  - ,, Tapes 629
  - ,, Tread 629
  - ,, Tubing 630
- Rubberised Coir Products 630

PAGE

- Safety Appliances 630
  - ,, Matches 630
- Sanitarywares & Fittings 630
- Scientific Instruments 539
- Scooters & Scooterettes, Mopeds, Two & Three Wheelers & Accessories 631
- Screws 632
- Seals & Sealing Products 632
- Seeds 632
- Sewing Machines 632
  - ,, Thread 633
- Silica & Silicates 633
- Silk & Art Silk Mills 633
- Silos 634
- Sirens & Hooters 634
- Slotted Angles 634
- Soap & Toiletries 635
  - ,, Plants 636
- Sound Equipment & Projectors 636
- Spectacle Frames, Plastic 605
- Sports Goods 636
- Sprayers & Spray Guns 636
- Springs, Washers & Circlips 637
- Stampings, Electric Tools & 491
- Staplers 639
- Stationery 639
  - ,, Making Machines 643
- Steel-Alloy 643
  - ,, Components, Brass & 439
  - ,, Fabrication 643
  - ,, Furnaces 644
  - ,, Furniture & Security Equipment 645
  - ,, Stainless 647
  - ,, Strips 649
  - ,, Tubes & Pipes 649
  - ,, Tubular Poles, Structures etc. 650
  - ,, — Windows, Doors, Rolling Shutters, Collapsible Gates, Grills, etc. 652
  - ,, Wires and Wire Ropes 653
- Stoves, Lanterns & 550
- Structurals 654
- Sugar Mill Machinery & Accessories 654
  - ,, Mills 655
- Surgical Dressings 561
  - ,, Instruments 561
- Switches, Switchgears, Switch Fuses and Accessories 656
- Synthetic Fibre Spinners 657
  - ,, Fibres & Resins 657
  - ,, Gem 658
- Syringes 658
- Tablet Making Machines 658
- Tanks & Pressure Vessels 658
- Tanks — Fibreglass 511
- Tape Recorders 658
- Tapes and Webbings 659
  - ,, — Gummed & Cellulose Adhesive 586
  - ,, — Recording 659

PAGE

M—(*Contd.*)

Manufacturers—(*Contd.*)
  Tarpaulins, Tents, etc. .. 659
  Tea Garden Machinery .. 661
  ,, , **Instant** .. 661
  Teflon Products .. 661
  Telecommunication Equipment .. 661
  Television Sets & Components .. 619, 662
  Testing Machines & Temperature Control Instruments .. 662
  Textile Auxiliaries .. 662
  ,, **Machinery** .. 663
  ,, ,, **& Spares** .. 666
  ,, **Mills** .. 668
  ,, **Shuttles** .. 675
  Textiles — Embroidered .. 675
  Thermometers (Industrial) .. 675
  Thread, Sewing .. 633
  Tiles, Bricks & .. 439
  Time Recorder .. 675
  Tin Printers and Box Mfrs. .. 675
  Tinplate & Steel Fabricators .. 676
  Tools & Stampings — Electric .. 491
  ,, **— Carbide — Diamond** .. 677
  ,, — Cutting, Milling Cutters, Precision Cutters, Reamers, Twist Drills .. 677
  ,, **— Drilling** .. 679
  ,, — Hand & Other Misc. Small .. 679
  ,, — Machine .. 679
  ,, — Air Compressors, Pneumatic Equipment & Spares .. 680
  ,, **— Taps, Die Tool, Jigs, Fixtures, etc.** .. 681
  ,, **— Tungsten Carbide** .. 681
  Torch Lights, Flash Lights & .. 514
  Tower Packings .. 683
  Toys .. 683
  Tractors and Spare Parts .. 683
  Trailers & Trollies .. 559
  Transformers .. 684
  Trolley Wheels, Castors & .. 449
  Tubes — Collapsible .. 463
  ,, **— Copper** .. 465
  ,, **, Pipes and Fittings** .. 685
  Tubewell Machinery & Accessories .. 686
  Tubular Structures & Products .. 688
  Turpentine & Rosin .. 688
  Typewriters & Accessories .. 688
  Tyre Retreading Machinery .. 688
  Ultrasonic Cleaning Systems .. 688
  Umbrellas & Umbrella Fittings .. 688
  Vacuum Flasks .. 688
  ,, **Forming, Plastic** .. 605
  Valves & Cocks .. 689
  Varnish Coating Plants .. 690
  Varnishes, Paints, Enamels and .. 58[illegible]
  Vegetable Canning Foods, Fruit & .. 516
  ,, **Oil Mills** .. 57[illegible]
  Veneer .. 690

PAGE

  Venetian Blinds .. 690
  Vials — Glass .. 531
  Voltage Stabiliser .. 691
  Wagons .. 620
  Washers .. 637
  Washing Machines .. 691
  Watch & Clock Jewels .. 691
  ,, **Straps and Bracelets** .. 691
  Watches — Alarm Clocks (Electronic), Desk Time Pieces .. 691
  ,, — Wrist, Stop .. 692
  Water Coolers, Heaters & Filters, etc. .. 692
  ,, Filters (Pressure/Storage Types) .. 693
  ,, **Meters & Water Fittings** .. 693
  ,, **Treatment Plants & Water Tanks** .. 693
  Waterproof Paper .. 693
  Waterproofing Material .. 693
  Wax & Wax Products .. 693
  Weighing Machines and Scales .. 694
  Welding & Safety Equipment, Electrodes, etc. .. 694
  ,, **Rods, Gas Fittings &** .. 526
  Winches & Hoists .. 700
  Wire, Copper .. 465
  ,, **Drawing Machines** .. 700
  ,, **Products** .. 700
  Wireless Equipment .. 702
  Wires, Cables and Accessories .. 702
  Wood Treatment Plants .. 703
  ,, Working Machinery & Spares .. 703
  Woollen Textiles .. 703
  X-Ray Machines .. 562
  Yarn, Nylon & Polyester Filament .. 574
  Zinc Oxide .. 704
  Zip Fasteners .. 704
Manufacturers' Organisation, All India .. 366
Manures & Composts .. 44
Maps .. (Facing Last Page of Gen. Index)
Marathi, Study of .. 120
Marathwada Agricultural University .. 178
Marathwada University .. 178
Marine Biology, Study of .. 120
  ,, **Chemicals Research Instt., Central Salt &** 136
  ,, **Engg. Trg., Directorate of** .. 123, 860
  ,, Fisheries Research Instt., Central 116, 137
  ,, **Products Exp. Devpt. Authority** .. 116, 283
  ,, Engg. Structures, Study of Highway & .. 120
  ,, Technologists, Instt. of .. 389
Maritime Board, National .. 389
  ,, Union of India .. 389
Marketing & Management, Instt. of .. 373
  ,, Fedn. Ltd., Maharashtra State Co-op. 359
Marwari Federation, All India .. 404
Mass Communication, Indian Institute of .. 128
Master Mariners of India, Company of .. 389
  ,, Printers, All India Fedn. of .. 369
Material Science Engg., Study of .. 121
Maternity and Child Welfare, Study of .. 121

PAGE

M—(*Contd.*)

Mathematical Instruments (Small-Scale) 83
,, Research Instt., Bhaskaracharya 143
,, Society, Indian 390
Mathematics, Study of 121
Mathura Refinery 72
Max Mueller Bhavan 371
Mazagon Dock Ltd. 342
Mechanical Engg. Industries (Small-Scale) 81
,, Engg. Research Instt., Central 24, 136
,, Engg., Study of 119
Mechanised Brick Plant, TACEL 362
Medical & Tech. Instts. of National Importance 126
,, Assen., Indian 390
,, Colleges 123
,, College, Armed Forces 298
,, Council of India 270
,, Education and Research 138, 269
,, Electronic Equipment 41
,, Laboratory Technology 121
,, Pathology, Study of 121
,, Radiodiagnosis/Radio Therapy, Study of 122
,, Radiological Diagnosis, Study of 122
,, ,, Therapy, Study of 122
,, Radiology, Study of 122
,, Research, Indian Council of 138
,, Sciences, All India Instt. of 138
,, Sciences, Rajendra Prasad Memorial Research Instt. of 140
,, Statistic, Research in 138
Medicinal and Aromatic Plants, Central Institute of 136
Medicine Research, Indian System of 138
,, , Study of 121
,, , Study of General 121
Meerut University 195
Meghalaya State 182
,, Adm. Personnel 871
,, Legislative Assembly 839
,, State Ind. Undertakings 360
"Menaka" Rocket 145
Mental Diseases and Hospitals 916
,, Health & Neuro Sciences, National Instt. of 130, 916
,, ,, Research 138
Mentally Handicapped, Centres for 254
,, Retarded, Instt. for 247
,, ,, , Teachers Training for 126
Mentha Oil 64
Mercantile Marine Dept. 860
Merchant Navy Training Board 77
,, ,, ,, Institutions 123
Metal Scrap Trade Corpn. Ltd. 342
Metallic Minerals 54, 57
Metallurgical & Engg. Consultants Ltd. 342
,, Instt. of India, Mining, Geological & 404
,, Laboratory, National 24, 89, 136
Metallurgy/Metallurgical Engg., Study of 121

PAGE

Metals, Indian Instt. of 404
,, Trdg. Corpn. of India, Minerals & 342
Meteorological Dept., India 139, 863
Meteorology 9
Average Monthly Rainfall & Temperature 9–11
Institute of Tropical 139
Study of 121
Meter Works, Aseb 350
Metropolitan Cities, Population in 272
,, Devpt. Authority, Calcutta 365, 875
,, Development Authority, Madras 874
,, Instruments Ltd. 357
,, Regn. Devpt. Authority, Bombay 869
,, Transport Project (Railways) 871, 875
Mica 56
,, Mines Labour Welfare Fund, Coal Mines & 858
,, Syndicate Ltd., Bihar 351
,, Tradg. Corpn. 342
Microbiology, Study of 121
Middle Eastern Languages, Study of 121
,, Income Group Housing 199
Military (see Army) 296, 853
,, Academy, Indian 298
,, College, Rashtriya Indian 299
,, Lands & Cantonments, Dte. of 854
,, Observers Group in India & Pakistan, U.N. 885
,, Schools 298
,, Science, Study of 121
Milk Consumption (Per Capita) 34
,, Import 36
,, Marketing Board, Kerala Livestock Devpt. & 356, 868
,, Powder Plant 177
,, Producing Factories 34, 35
,, Project, Greater Bombay 177
Millets Devpt., Directorate of 852
Mine Planning & Design Instt. Ltd., Central 352
Mineral Devpt. Board 342
,, ,, Corporations (States) 351-60
,, ,, Corpn. Ltd., National 344
,, Exploration Corpn. 342
Minerals and Metals Trdg. Corpn. India Ltd. 342
Mines and Minerals 54
Export Import 59
Mineral Fuels, Metallic Minerals — Ferrous Group 54
Non-Ferrous Group, Non-Metallic Minerals 54, 55
Rare Minerals 58
Production and Value of Minerals 56
Mines, Dept. of 861
,, , Indian Bureau of 139, 861
,, , Ministry of Steel and 861
,, Safety, Directorate of 858
Mining and Allied Machinery Corpn., Ltd. 342
,, Engineering, Study of 121
,, Research Station, Central 136
Ministries, Central
Agriculture 851
Civil Supplies 852

PAGE

M—(*Contd.*)

Ministries, Central (*Contd.*)
  Commerce 852
  Communications 853
  Defence 853
  Education & Culture 854
  Energy 854
  External Affairs 855
  Finance 855
  Health & Family Welfare 856
  Home Affairs 856
  Industry 857
  Information and Broadcasting 857
  Irrigation 858
  Labour 858
  Law, Justice & Company Affairs 858
  Petroleum, Chemicals & Fertilisers 859
  Planning 860
  Railways 860
  Rural Reconstruction 860
  Shipping and Transport 860
  Social Welfare 861
  Steel and Mines 861
  Supply and Rehabilitation 861
  Tourism and Civil Aviation 861
  Works & Housing 862
Ministries, State 863–75
Minorities Commission 856
,, in India, Commissioner for Linguistic 856
Mint, India Govt. 855
Miscellaneous Manufactures 60–62
Mishra Dhatu Nigam Ltd. 342
Missiles, Anti-Tank 297
Mithila University 157
Mizoram 182
,, Adm. Personnel 871
,, Associations 392
,, Legislative Assembly 839
Modern Bakeries (India) Ltd. 343
Mogul Lines Ltd. 343
Molasses 90
Mollem Game Sanctuary 22
Mongolian, Study of 121
Monopolies and Restrictive Trade Practices Commn. 862
Mopeds Ltd., Tamil Nadu 363
Mormugao Port 206
Motion Picture Distributors Assocn., Indian 48
,, Picture Producers' Assocn., Indian 47
Motor Vehicle Statistics, State-wise 25
Motoring in India 13
Mount Abu 19
,, ,, Wildlife Sanctuary 19
Mountaineering Foundation, Indian 371
,, Institute, Himalayan 134
Mudumalai Game Sanctuary 21
Muga Silk Research 79
Mulberry Silk Research 79

PAGE

Municipal Corporations (1980) 212
Museums and Libraries 315, 791
,, , International Council of (Regnl. Agency in Asia at Delhi) 792
,, , Science 136
Music & Performing Arts, Research Instt. for 143
Music, Study of 121
Musical Instruments Mfg. Co-op. Indl. Socy. Ltd. 369
Musicology, Study of 121
Mustard Research 64
Mysore 20
,, University 170

N

Nagaland State 183
,, Adm. Personnel 871
,, Legislative Assembly 839
,, Pulp & Paper Co. Ltd. 343
,, State Corpns. 360
Nagar Haveli, Dadra & 159
Nagarhole Game Sanctuary 21
Nagarjuna University 153
Nagpur University 178
Nagzira Wildlife Sanctuary 22
Naini Tal 18
Nal Sarovar Bird Sanctuary 22
Nanda Devi Musk Deer Park 19
Naphtha-based Industries 67
Narcotics Dept. 856
Narora Nuclear Power Station 148
Narotam Morarjee Instt. of Shipping, Shri 123
National Aeronautical Laboratory 135
,, Agricultural Co-operative Marketing Fedn. (NAFED) 343
,, Archives of India 854
,, Association for the Blind 243
,, Atlas Organisation 139
,, Awards 308
,, Bicycle Corpn. of India 343
,, Book Trust 127
,, Botanical Research 135
,, Buildings Const. Corpn. Ltd. 343
,, ,, Organisation 139
,, Cadet Corps, Dir.-Gen. of 854
,, Centre for Software Devpt. & Computing Technique 41
,, Chemical Laboratory 135
,, Co-op. Consumers' Fedn. Ltd. 389
,, Co-op. Devpt. Corpn. Ltd. 343
,, Committee for Space Research, Indian 145
,, Council of Educational Research & Trg. 854
,, Cultural Organisation 370
,, Dairy Devpt. Board 35, 344
,, ,, Research Instt. 36, 137
,, Defence Academy 299
,, ,, College 299
,, Design Instt. 139
,, Environmental Engg. Research Instt. (NEERI) 135

PAGE

N—(*Contd.*)

National Federation of Co-op. Sugar Factories Ltd. .. 91
,, Fertilizers Ltd. .. 42, 344
,, Film Archives of India .. 47
,, ,, Devpt. Corpn. Ltd. .. 47, 344
,, Football .. 323
,, Gallery of Modern Art .. 315
,, Harbour Board .. 204
,, Highways .. 210
,, Hockey .. 323
,, Hydroelectric Power Corpn. .. 344
National Income .. 288, 916
,, Industrial Devpt. Corpn. Ltd. .. 344
,, Informatics Centre (Electronics Commission) .. 41
,, Instt. for Trg. in Industrial Engineering .. 131
,, ,, of Foundry & Forge Technology .. 127
,, ,, of Health & Family Welfare .. 264, 128
,, ,, of Nutrition .. 140
,, ,, of Rural Devpt. .. 860
,, ,, of Social Defence .. 241
,, Institutes .. 135
,, Instruments Ltd. .. 344
,, Insurance Co. Ltd. .. 344
,, Laboratories .. 135
,, Library .. 315
,, Maritime Day .. 76
,, Metallurgical Laboratory .. 89, 136
,, Mineral Devpt. Corpn. Ltd. .. 344
,, Museums .. 315
,, Newsprint and Paper Mills Ltd. (NEPA) 65, 344
,, Organic Chemical Ind. Ltd. (NOCIL) .. 68
,, Parks (Tourist's Guide) .. 16, 17, 22
,, Physical Laboratory .. 136
,, Power Grid .. 103
,, Productivity Council .. 370
,, Projects Construction Corpn. Ltd. .. 344
,, Register .. 135
,, Research Devpt. Corpn. of India .. 135, 345
,, ,, Laboratory for Conservation of Cultural Property .. 315
,, Sample Survey Orgn. .. 860
,, Savings Commissioner for India .. 856
,, Seeds Corpn. Ltd. .. 108, 345
,, Shipowners' Association, Indian .. 77
,, Shipping Board .. 76
,, Small Ind. Corpn. Ltd. .. 345
,, Sugar Instt. .. 91
,, Textile Corpn. Ltd. .. 33, 345
,, Thermal Power Corpn. Ltd. .. 345
,, Traffic Planning & Automation Centre .. 357
,, Water Supply and Sanitation Programme 269
Nationalised Banks .. 284, 915
,, Transport .. 211
Natural Gas .. 66
Naulakhi Training Ship .. 123
Nautical and Engineering College, The L. B. S. .. 123
,, Adviser to the Govt. of India .. 860

PAGE

Naval Architecture, Study of .. 121
,, Staff, Chief of .. 296
Navy .. 296, 854
Nehru Awards .. 307, 915
,, Memorial Museum & Library .. 141, 315
,, Science Centre .. 137, 386
Nephrology, Study of .. 121
Net Domestic Product .. 275, 289
Netherlands Aid .. 280
Neuro Sciences, National Instt. of Mental Health & 130, 916
Neurology, Study of .. 121
Neurosurgery, Study of .. 121
New India Assurance Co. Ltd. .. 345
,, Mangalore Port .. 206
,, Okhla Industrial Devpt. Authority .. 351
Newspaper Editors' Conference, All India .. 373
,, Employees Fedn., All India .. 373
Newspaper Statistics .. 215
Newspapers .. 573
,, Asson., Indian Language .. 383
,, , Registrar of (Min. of I & B) .. 857
Newsprint .. 65
,, and Paper Mills Ltd., National (NEPA) 65, 344
Neyveli Lignite Corpn. Ltd. .. 345
Nickel Project, Sukinda .. 347
Nicobar Islands, Andaman and .. 149
Nirankari Mandal, Sant .. 372
Nitrogenous Fertilisers .. 43
Nobel Prizes .. 313, 915
Non-edible Oils .. 64
Non-metallic Minerals .. 55, 57
North Bengal, University of .. 197
,, East Frontier Railway .. 209, 864
,, ,, Hill University .. 182
,, ,, Electric Power Corpn. .. 345
,, ,, Handicrafts Devpt. Corpn. .. 345
,, Eastern Railway .. 209, 874
Northern Railway .. 209, 865
Norway/Norwegian Aid .. 280
Nuclear Energy .. 101
,, Explosion .. 149
,, Fuel Complex .. 148
,, Medicine & Allied Sciences, Instt. of .. 298
,, Physics, Saha Instt. of .. 134, 147
,, Power .. 147
,, Research Bodies .. 147
,, ,, Laboratory .. 141, 147
Nurses' Assn. of India, Trained .. 373
Nursing Council .. 270, 390
,, , Schools of (Defence) .. 299
,, , Study of .. 121, 270
Nutrition, National Instt. of .. 140
,, Research .. 138
,, , Study of (see Dietetics) .. 119
Nylon Fibre Manfg. Units .. 50
,, Tyre Cord .. 51
,, Yarn .. 50

PAGE

O

Observatory, Astrophysical 139
,, , Central Seismological 139
,, , Colaba and Alibag 139
Obstetrics, Study of (see Gynaecology) 120
Occupational Health Research 138
,, Therapy, Study of 121
,, ,, Training School & Centre 131
Oceanography, National Instt. of 116, 136
,, , Study of 121
Officers Training School (Defence) 299
Official Assignee 4
,, Language (See also under each State & Territory) 5
Offshore Drilling of Oil 70
Oil & Gas for Power 101
,, ,, Natural Gas Commission 69
,, ,, ,, ,, ,, , Research & Trg. Instt. 139
,, Blending Ltd., Indian 339
,, Co. Ltd., Assam 73
,, Co. Ltd., Tide Water (India) 73
,, Companies 69
,, Corpn. Ltd., Indian 71, 859
,, Exploration, Offshore & Overseas 70
,, India Ltd. 71
,, Industry Devpt. Board 859
,, Technological Research Instt. 140
,, Technologists Asson. of India 390
Oil-palm 64
Oils (Edible) Import & Export, Consumption 63
,, , Fats and Waxes Tech., Study of 121
,, , Natural Essential (Small Scale) 81
,, , Vegetable 63
Oilseeds 62
,, Devpt. Council, Indian 140
,, ,, , Directorate of 852
,, Research 64
Oilseeds & Vanaspati 62
Okhla Ind. Devpt. Authority, New 351
Olefins Project, Gujarat 68
Oleoresins 85
Olympic Champions 316
Ootacamund 20
Operation Flood (Dairy) Programme 34
Operational Research, Study of 121
Ophthalmic Glass Ltd., Bharat 331
Ophthalmological Society, All India 390
Ophthalmology Research 138
,, , Study of 121
Opium and Alkaloid Works Undertaking, Govt. 335
,, ,, ,, Factories of India, Govt. 856
Optical Glass Plant (CGCIR) 345
Ordnance Factories 299
,, Factory Board 854
Organic Chemical Ind. Ltd., National (NOCIL) 68
,, Chemicals Ltd., Hindustan 337

PAGE

Oriental Fire & General Insurance Co. Ltd. 345
,, Learning, Study of 121
,, Research Institute, Bhandarkar 143
,, Research Instt., Scindia 142
Orissa State 184
,, Associations & Societies 392
,, Chambers of Commerce 408
,, Legislative Assembly 840
,, State Adm. Personnel 872
,, ,, Corporations 360
,, ,, Ind. Undertakings 360
,, University of Agri. and Tech. 185
Oriya, Study of 121
Orthopaedically Handicapped, Instt. for the 248
Orthopaedics, Central Instt. of 128, 139
,, Surgery, Study of 121
Osmania University 153
Otology 120
Otorhinolaryngology, Study of 121
Overseas Communication Service 203, 853
,, Devpt. & Employment Promotion Consultants Ltd. 357
,, Employment Corpn. of Maharashtra Ltd. 360
,, Tourist Offices 12

P

P.E.N., All India Centre 390, 404
Packaging, Defence Instt. of Stores Preservation & 298
,, , Indian Instt. of 132
Paddy 107
Padma Vibhushan, Padma Bhushan, Padma Shri Awards 305
Paediatrics Research 138
,, , Study of (see Child Health) 118
Pahalgam 18
Painting, Study of 121
Paints & Varnishes Tech., Study of 121
Palaeobotany, Birbal Sahni Instt. of 144
Palamau National Park 17
Palestine Liberation Orgn. 885
Pali, Study of 121
Pallathra Bricks and Tiles Ltd. 357
Palm Oil 64
Palmrosa Oil 64
Panjabrao Deshmukh Agricultural University 178
Paper Based Industries (Small Scale) 80
,, Co. Ltd., Nagaland Pulp & 343
,, Corpn. Ltd., Hindustan 66, 337
Paper Industry 65
,, Mill, Security 65
,, Mills 66
,, Mills Ltd., Mandya National 342
,, ,, ,, , National Newsprint & 65, 344
,, Technology, Instt. of 66
,, ,, , Training in 66
Paradip Port 206
Param Vishisht Seva Medal 306

PAGE

P—(*Contd.*)

Parkhe Research Instt. 66
Parliament & Assemblies 815
  Elections 2, 815
  Immunity for M.P.s, Legislative Procedure, Quorum, Language, Budget, Distribution of Seats, Courts & Parliament, Committees 2, 3
  Lower House (Lok Sabha) 819
  Upper House (Rajya Sabha) 817
Parliamentary Affairs, Dept. of 851
"Pashmina" Wool 97
Passport 13
  ,, & Emigration Orgn., Central 855
Pasteur Instts. 127, 133, 134
Patents & Trade Mark Attorneys 794
  ,, Office (see also Trade Marks Registry) 857
Pathology Research 138
  ,, , Study of Clinical 121
  ,, , Study of Medical 121
Patna University 157
Peace Council, All India 371
Pearl Culture, Study of 121
P.E.N. All India Centre, Theosophy Hall 390
Pendency (In Courts) 6, 7
Pepper 84
Per Capita Income 271
Performing Arts, National Centre for the 143
Periyar Game Sanctuary 21
Persian, Study of 121
Personnel & Administrative Reforms, Dept. of 857
  ,, Management, National Instt. of 397, 404
Petro-Chemicals Corpn. Ltd., Indian 68, 339
  ,, Industries Corpn. Ltd., Southern 362
Petro-Chemical Industry 66
  ,, Ltd., Assam 68, 350
  ,, ,, , Bongaigaon 68
  ,, Technology, Study of 122
Petrofils 68
  ,, Co-op. Ltd. 345
Petroleum, Chemicals & Fertilisers, Ministry of 859
  ,, Co. Ltd., Indo-Burma 71, 340
  ,, Corpn. Ltd., Bharat 71, 331
  ,, ,, ,, , Hindustan 72, 337
  ,, , Dept. of 859
  ,, Exploration, Instt. of 73
  ,, , Indian Instt. of 73, 136
Petroleum Industry 68
Phalke Awards 46, 309
Pharmaceutical Industry, Drugs & 36
  ,, Technology, Study of 122
Pharmaceuticals Corpn., State Chemicals & 347
  ,, & Cosmetics Exp. Prom. Council, Basic Chemicals, 283
  ,, Ltd., Indian Drugs & 339
Pharmacology, Study of 122
Pharmacy Colleges 124

PAGE

Pharmacy Council of India 270
  ,, Research 138
  ,, , Study of 122
Philosophy, Study of 122
Phosphates & Chemicals Ltd., Pyrites, 346
Phosphatic Fertilisers 43
Photo Films Manufg. Co. Ltd., Hindustan 47, 337
Photogrammetric Tech., Study of 122
Photo-Interpretation Instt., Indian 133
Physical Education, Study of 122
  ,, Laboratory, National 136
  ,, Medicine and Rehabilitation, All India Institute of 249
  ,, Research Laboratory 141, 145, 146
Physically Handicapped, Centres for 260
Physicians of India, Assen. of 390
Physics Laboratory, Solidstate 854
  ,, , Study of 122
Physiography —
  Climate, Vegetation and Soils, Natural and Cultivated, States and Territories, Some basic facts 7 & 8
  Physical Features 7
Physiology Research 138
  ,, , Study of 122
Physiotherapy, Study of 122
Piggery 115
Pin Code (Postal) 202
Pindari Glacier 18
Pine Oil 64
Pineapple Fibre Research Centre 139
Pipe & Foundry Ltd., IISCO Stanton 338
Plan, Sixth Five-Year 293
Planning & Architecture, School of 854
  ,, Commission 862
  ,, , Ministry of 860
  ,, , Study of 122
Plant Genetic Resource, National Bureau of 137
  ,, Protection, Quarantine & Storage, Directorate of 852
Plantation Crops Research Instt., Central 23, 29, 86
Planters Association of Southern India, United (UPASI) 93
Plastic Based Industries (Small-Scale) 80
  ,, Research Centre, Fibre Reinforced 144
  ,, Surgery, Study of 122
Plastics & Linoleum Exp. Prom. Council 283
  ,, Engg. & Tools, Central Institute of 133, 332
Plastics Industry 73
  ,, Technology, Study of 122
Plywood Industries Ltd., Travancore 357
  ,, ,, Research Instt., Indian 144
Police Research & Devpt., Bureau of 857
  ,, Force, Dir. Gen. of Central Reserve 857
Polish, Study of 122
Political Science, Harold Laski Institute of 129
  ,, ,, , Study of 122
Polyester Fibre Units 51

PAGE

P—(*Contd.*)

Polyester Yarn Units .. 51
Polymers Corpn. of Gujarat Ltd. .. 352
Polyolefins Ind. Ltd. .. 68
Pondicherry .. 20, 185
,, Adm. Personnel .. 872
,, Associations .. 392
,, Chambers of Commerce .. 408
,, Ind. Undertakings and Corpns. .. 361
,, Leg. Assembly .. 841
Poompuhar Shipping Corpn. Ltd .. 362
Poona, University of .. 178
Population .. 8, 270
Demographic Characteristics, State-wise .. 273
Growth, Future Growth, Age Structure, Rural-Urban, Sex-Ratio, Literacy, Religion, Age at Marriage & at Widowhood, Fertility, Occupational Category .. 271-275
Projection upto Year 1991 .. 275
Population Project, India .. 264
,, Studies, International Instt. of .. 139, 264
Port & Dock Workers' Federation, All India .. 304
Ports .. 204
Portuguese, Study of .. 122
Posts and Telegraphs .. 202
,, ,, ,, Board .. 853
Post Offices, Number of .. 202
Potassium Fertilisers .. 45
Potato .. 107
,, Research Instt., Central .. 137
Poultry .. 115
Power .. 100
,, Corpn. Ltd., Karnataka .. 354
,, ,, ,, , National Thermal .. 345
,, Engineers Training Society .. 346
,, Grid, National .. 103
,, Projects Engineering Division .. 148
,, Reactor Fuel Processing Plant .. 148
,, Research Institute .. 139
,, ,, Station, Central Water & .. 140
,, Stations, Nuclear .. 148
,, Supply .. 100
,, Tillers, Production of .. 24
Powerloom Weavers Service Centres (Textile Comm.) 852
Powerlooms Corpn. Ltd., Maharashtra State .. 359
Prakrit, Study of .. 122
Precious Stone Exporters Assocn. .. 375
Prefab Ltd., Hindustan .. 337
Pregnancy Act, Medical Termination of .. 266
Preservation Centres, Community Canning & .. 108
President :
Secretariat .. 850
Union Executive; Salary; Powers; Impeachment; Election .. 1 & 2
President's Rule .. 6
Press (See under each State)
,, Association of India .. 390

PAGE

Press Commission, Chairman (Min. of I. & B.) .. 857
,, Information Bureau .. 857
,, Institute of India .. 128
Preventive & Social Medicine, Study of .. 122
,, Medicine Research, Health .. 138
Primary Schools, Number of .. 117
Prime Minister .. 2, 850
,, Minister's Office .. 851
Principles of State Policy (Constitution) .. 1
Privileges, Committee of .. 2
Processed Food Exp. Prom. Council .. 283
Productivity Council, National .. 139, 370, 383
Project Tiger .. 105
Projects and Equipment Corpn. of India Ltd. .. 346
,, Construction Corpn. Ltd., National .. 344
Protected Areas (Tourist's Guide) .. 14
Provident Fund & Miscellaneous Provisions Act, Employees' .. 302
Provident Fund Commr., Central .. 858
Psychiatric Nursing, Study of .. 122
,, Social Work, Study of .. 122
Psychiatry, Study of .. 122
Psychological Medicine, Study of .. 122
,, Research, Directorate of .. 854
,, ,, School of .. 299
Psychology, Study of .. 122
,, , Study of Clinical .. 122
Psychotherapeutical Society, Indian .. 404
Public Accounts Committee .. 2
,, Administration, Study of .. 122
,, Co-operation, Central Instt. of Research & Training in .. 141
,, Enterprises, Bureau of .. 855
Public Health .. 267, 916
,, ,, All India Instt. of Hygiene and .. 856
,, ,, Assen., Indian .. 404
,, ,, Engg., Study of .. 122
,, ,, , Study of .. 122
,, Relations (Defence), Directorate of .. 854
,, ,, Society of India .. 390
Public Sector .. 328
,, Service Commn., Maharashtra .. 870
,, ,, ,, Union .. 5, 862
,, Works Dept., Central .. 862
Publication and Information Directorate (Research) 137
Publishers & Booksellers, All India Fedn. of .. 370
Pulp and Paper Mills, Pravara (Co-op.) .. 66
,, ,, ,, Research Instt. .. 143
,, Mills .. 66
Pulses (Area & Production) .. 106, 107
,, Devpt., Directorate of .. 852
Pumps and Compressors Ltd., Bharat .. 331
Punjab State .. 187
,, Agricultural University .. 188
,, Associations & Societies .. 392
,, Chambers of Commerce .. 408
,, Legislative Assembly .. 841

PAGE

P—(*Contd.*)
Punjab State Adm. Personnel 872
,, ,, Corporations and Ind. Undertakings 361
,, University 188
Punjabi University 188
,, , Study of 122
Punjabrao Deshmukh Agri. University 178
Puri 16
Purnima Reactor 147
Pyrites, Phosphates & Chemicals Ltd. 346
,, Production 58

Q
QMS (Quick Mail Service) 202
Quartz 59

R
Rabindra Bharati University 197
Radar Engg. — Master's, Study of 122
,, ,, , Study of 122
Radiation, Sterilisation Plant, Isomed 149
Radio and Electricals Mfg. Co. 346
,, ,, Electronics Assocn., All India 383
,, Office of the Research Engineer, All India 139
,, Physics, Study of 122
Radioactive Minerals 58
Radiodiagnosis, Study of Medical 122
Radiology/Radiological Medicine, Study of 122
Radiotherapy Research 138
,, , Study of 122
Rail India Tech. & Economic Services Ltd. 346
Railway Accidents 208
,, Board 860
,, , Central 209, 870
,, Construction Co. Ltd., Indian 339
,, , Eastern 209, 875
,, , North-East Frontier 209, 864
,, , North-Eastern 209, 874
,, , Northern 209, 865
,, Passengers Conference Assocn., Indian 387
,, Rates Tribunal 860
,, Safety, Commn. of 861
,, Service Commn. 871, 874, 875
,, , South-Central 209, 864
,, , South-Eastern 209, 875
,, , Southern 209, 874
,, Statistics 209
,, , Western 209, 870
Railways 208
,, Research, Designs & Standards Orgn. 140, 860
,, , Ministry of 860
Rainfall 10
Minimum, Maximum (see Some Basic Facts) 8
Rajasthan State 188
,, Associations & Societies 393
,, Atomic Power Station 148
,, Chambers of Commerce 408

PAGE
Rajasthan Industrial & Mineral Devpt. Corpn. 362
,, Legislative Assembly 842
,, State Adm. Personnel 873
,, ,, Corporations 362
,, ,, Ind. Undertakings 362
Rajendra Agricultural University 157
,, , Training Ship 123
Rajya Sabha 2, 817, 915
,, ,, Secretariat 851
Rakha Copper Project 336
Ramakrishna Math & Mission 371, 404
Raman Research Institute 142
Ramganga Command Area Devpt. Authority 364
Ramthambore Wildlife Sanctuary 19
Ranchi University 157
Rangaswamy Cup 323
Rangathitoo Bird Sanctuary 21
Ranji Trophy 324
Rapeseed/Research 64
Rare Earth Ltd., Indian 148, 339
,, ,, Plant 148
,, Minerals 58
Rashtriya Chemicals & Fertilisers Ltd. 346
,, Indian Military College 299
,, Mill Mazdoor Sangh 304
Ratings Training Establishments 123
Ravishankar Vishwavidyalaya 176
Rayon Textiles Exp. Prom. Council, Silk & 283
,, Tyre Yarn Units 53
Reactor Research Centre 147
Readymade Garments 33
Red Cross Society, Indian 371, 387, 397, 404
Refinance & Development Corpn., Agricultural 330
Refineries 69, 72, 860
,, Ltd., Cochin 72, 333
,, Ltd., Madras 72, 342
Refinery Gas 67
Refractories, Study of Furnaces & 119
,, Ltd. 349, 355
Regional Film Awards 311
Register of Shipping, Indian 76
Registrar-General of India 856
Rehabilitation Centres 256
,, Industries Corp. Ltd. 346
,, , Ministry of Supply & 861
,, Services, Directorate of Social Welfare 241
Religion, Study of (see Indian Philosophy) 122
Religion-wise Population 274
Remand Homes, Children's 256
Remote Sensing Agency, National 140
,, ,, Satellite, Indian 145
Reproduction, Institute for Research in 143
,, Research 138, 143
Research 135
,, Bodies 135–144
,, Centre, Sarabhai 141

PAGE

R—(*Contd.*)

Research, Council of Scientific & Industrial .. 135
,, Devpt. Corpn., National 135, 345
,, Laboratories, Regional 136
,, Reactors 147
,, Sericulture and Silk 79
,, , Space 145
Reserve Bank of India 856
Reserved Industries under Small-scale sector .. 80
Restaurant Assocns. of India, Federations of Hotel & 369
Restricted, Protected Areas (Tourist Guide) .. 14
Restrictive Trade Practices Commn., Monopolies & 862
Revenue, Dept. of 855
,, Receipts & Expenditure 293
Revenues Control Laboratory, Central 855
Rice 110
,, Devpt., Directorate of 852
,, Research Instt., Central 137
,, ,, ,, , ,, Saline 140
Richardson & Cruddas Ltd. 346
Rights, Fundamental 1
River Research Instt. 144
Rivers, Important (*see* Some Basic Facts) 8
Road Construction Corpn. Ltd., Indian .. 211, 339
,, Length in India 212
,, Research Instt., Central 136
,, Traffic Statistics 211
,, Transport, Central Instt. of 132
,, ,, , Indian Instt. of 132
,, World's Highest 211
Roads 210
,, Congress, Indian 370
Rock Phosphate (Mining Programme) .. 55, 338
Rocket Launching Stn., Thumba Equatorial .. 145
,, Propellant Plant 145
Rocketry, Study of Space Engg. & 122
Rohilkhand University 195
'Rohini' Rocket 145
Rohtak University 165
Roorkee University 195
Rosewood 105
Rosin & Turpentine Factory, H.P. 353
,, Co. Ltd., Indian Turpentine & 364
Rourkela Fabrications Pvt. Ltd. 361
,, Steel Plant 88
Rovers Cup 323
Rubber Based Industries (Small-Scale) 80
,, Board 75, 853
Rubber Industry 74
,, Mfrg. Research Assocn., Indian 143
,, Research Instt. of India 75
,, , Synthetic 75
,, Tech., Study of (see Plastics) 122
Rural Devpt. Corpn. Ltd., Gujarat State 352
,, ,, Instt. of Regional Devpt. Planning .. 143
,, ,, , National Instt. of 860
Rural Education — Shri Mouni Vidyapeeth . 143
,, Electrification 100
,, ,, Corpn. Ltd. 346
,, Health 267
,, Housing Wing (Research) 139
,, Reconstruction, Ministry of 860
,, ,, Orgn., Afro-Asian 885
,, Studies, Study of 122
Russian, Study of 122

S

S.N.D.T. University 178
Safety First Association of India 387, 404
Saffron 85
Saha Instt. of Nuclear Physics 147
Sahakari Sangh, Maharashtra Rajya 132
Sahitya Akademi 371
,, ,, Awards 307
Sainik Schools 299
Sal Wood 105
Salem Steel Plant 87, 346
Sales International Ltd., Mysore 355
Salt and Marine Chemicals Research Instt., Central 136
,, Commissioner 857
,, Test Laboratory, Govt. 140
Salts Ltd., Hindustan 337
Salvation Army 241
Sambalpur University 185
Sambhar Salts Ltd. 347
Sample Survey Orgn., National 860
Sanchi 15
Sanctuaries, Game 16, 17, 19, 21, 22
Sangeet Natak Akademi 371
,, ,, ,, Awards 307
Sanitary Science, Study of 122
Sanitation Programme, National Water Supply & 269
Sanskrit, Study of 122
,, Vishva Parishad 132
,, Vishwavidyalaya, Shri Jagannath .. 185
Santa Cruz Electronics Export Processing Zone (SEEPZ) 283
Santosh Trophy 323
Sarabhai Research Centre 141
Sardar Patel University 163
Sariska Game Sanctuary 19
Satellite Centre, ISRO 145, 341
,, Communications Earth Station .. 146
,, Instructional Television Experiment (SITE) 146
,, Launching Vehicle 145
,, System, Indian National (INSAT) .. 146
,, Telecommunication Experiment Project (STEP) 146
,, Tracking & Ranging Station (STARS) .. 146
Saugar Vishwavidyalaya 176
Saurashtra University 163
Savings Commissioner for India, National .. 856

PAGE

S—(*Contd.*)

Scheduled Castes & Scheduled Tribes Devpt. Corpn. Ltd., Karnataka .. 354
Scheduled Castes & Scheduled Tribes Ltd., Kerala State Devpt. Corpn. for .. 356
Scheduled Castes and Tribes, Commissioner for .. 856
,, Tribes & Other Backward Classes, All India Federation of .. 372
Schools for Mentally Retarded Children .. 254
Science and Tech., Dept. of .. 851
,, Education, Dept. of (Research) .. 140
,, , Indian Instt. of .. 24, 130, 170
,, Laboratory, Defence .. 854
,, Museums .. 136, 315
Sciences, Directorate of Research in Basic .. 854
,, , Indian Academy of .. 379
,, , ,, Assocn. for the Cultivation of .. 144
Scientific and Industrial Research, Council of (CSIR) .. 135, 851
,, Documentation Centre, Indian National 137
,, Instruments Orgn., Central .. 136
Scindia Oriental Research Instt. .. 142
Scooters, Bihar .. 351
,, (India) Ltd. .. 347
,, (Kerala) Ltd. .. 357
,, Ltd., Punjab .. 361
Scouts Asscn., All India Boy .. 372
Sculpture, Study of .. 122
Seafarers of India, National Union of .. 390
Seafood Exporters Assen. of India .. 379
Seamen, Recruitment of .. 77
Seamen's Welfare Office .. 77, 861
Secondary Education, Central Board of .. 854
,, ,, , West Bengal Board of .. 875
Secretariat Training & Management, Instt. of .. 857
Secretaries, Instt. of Chartered .. 404
Secunderabad-Hyderabad .. 17
Security Press, India .. 855
,, Services .. 798
Seeds Corpn. Ltd., Assam .. 350
,, ,, ,, , Gujarat State .. 352
,, ,, ,, , Maharashtra State .. 359
,, ,, ,, , National .. 345
,, ,, ,, , Orissa State .. 361
,, Devpt. Corpn. Ltd., A. P. State .. 349
,, ,, ,, Pvt. Ltd., Haryana .. 353
,, ,, ,, , Tarai .. 108
,, Ltd., Vidarbha Quality .. 360
SEEPZ (See Santa Cruz Electronics Export Processing Zone) .. 283
Seismic Station, Gauribidanur .. 147
Seismological Observatory, Central .. 139
Semen Bank, Central Frozen .. 114
Semiconductor Devices Ltd., Punjab .. 361
Semlipal National Park .. 17
Serbo-Croatian, Study of .. 122
Sericultural Research and Training Instt., Central 140

PAGE

Sericulture .. 77
Serology Research .. 138
Serum Instt., Mysore .. 130
Servants of India Society .. 392
Service Awards (Defence) .. 306

Services :
Advertising Agencies .. 754
Agricultural Aviation Services .. 757
Airline Companies .. 757
Analytical Chemists .. 757
Anodisers .. 759
Auctioneers .. 759
Banks .. 759
Block Makers .. 768
Building Contractors .. 769
,, Specialists .. 769
Clearing and Forwarding Agents .. 771
Computer Programming Consultants .. 772
Container (Marine) Repairers .. 772
Contractors for Gunite, Grouting and Colloidal Concrete .. 769
Debt Collectors .. 772
Diving & Underwater Services .. 772
Domestic Electric Appliances Repairers .. 772
Electric Appliances Repairers .. 772
Electroplaters and Galvanisers .. 772
Engineers & Contractors, Consulting .. 774
,, —Structural .. 776
Engravers & Die Stampers .. 777
Export Consultants .. 777
Financiers .. 777
Fuel Saving .. 777
Gas Appliances Repairers .. 777
Geological Consultants & Prospectors .. 777
Hard Chrome Plating .. 777
Hearing Aids .. 777
Heat Treatment .. 777
Hospitals, Bombay .. 778
,, , Calcutta .. 778
,, , Delhi .. 778
,, , Madras .. 779
Hotels .. 780
Indenting Agents .. 787
Industrial & Marketing Consultants .. 787
Insulation Contractors .. 790
Kitchen Appliances Repairers .. 790
Machining Jobs .. 790
Management Consultants .. 790
Marine Engineers .. 791
Museums .. 791
Naval Architects .. 794
Packers .. 794
Painting & Decorating Contractors .. 794
Patents & Trade Mark Attorneys .. 794
Pest Control .. 794
Piling Contractors .. 770
Prestressed Concrete Specialists .. 770

PAGE

S—(*Contd.*)

Services (*Contd.*)
  Printers .. 796
    ,, , Letterpress .. 797
    ,, , Lithography .. 797
    ,, , Offset .. 798
    ,, , Silk-Screen .. 798
  Refrigeration Engineers .. 798
  Security Services .. 798
  Shell Roof Specialists .. 771
  Shipbuilders, Ship Repairers .. 800
  Shipchandlers .. 801
  Shipping Agents .. 801
    ,, Companies .. 802
  Stevedores .. 804
  Tanners .. 804
  Transport Companies (Goods) .. 804
  Travel Agencies .. 810
  Tube-Well Drillers .. 814
  Underwater Services, Diving & .. 814
Services, Civil .. 5
Sesamum Research .. 64
Sevak Samaj, Bharat .. 372
Sex Ratio .. 274
Shantiniketan (Vishva-Bharati) .. 197
Sharada Udyog Mandir .. 392
SHAR Centre, Sriharikota .. 146, 851
Shaurya Chakra .. 306
Sheep .. 114
  ,, and Wool Devpt. Board, Karnataka State 97
  ,, ,, ,, ,, Corpn., Gujarat .. 97, 352
  ,, ,, ,, Research Instt., Central .. 97
Shellac Exp. Prom. Council .. 49, 283
Sheriffs .. 4
Shipbuilders & Engineers Ltd., Garden Reach .. 334
Shipbuilding Industry .. 76
Shipowners' Association, Indian National .. 77
Shipping and Transport, Ministry of .. 860
  ,, Board, National .. 76
  ,, Corpn. of India Ltd. .. 347
  ,, ,, Ltd., Kerala .. 356
  ,, ,, Ltd., Poompuhar .. 362
  ,, Devpt. Fund Committee .. 861
  ,, , Dir.-Gen. of .. 77, 860
  ,, , Indian Register of .. 76, 861
Shipping Industry .. 76
  ,, , Shri Narottam Morarji Instt. of .. 123
Shipyard Ltd., Cochin .. 333
  ,, Ltd., Goa .. 335
  ,, Ltd., Hindustan .. 337
Shivaji University .. 178
Shivpuri National Park .. 16
Shrimati Nathibai Damodar Thackersey Women's University (SNDT) .. 178
Shri Ram Instt. for Industrial Research .. 33
Sikkim State .. 189
  ,, Legislative Assembly .. 843

PAGE

Sikkim Mining Corpn. .. 362
  ,, State Adm. Personnel .. 873
Silicate Tech., Study of .. 122
Silk and Art Silk Mills Research Assen. **(SASMIRA)** .. 53, 143
  ,, ,, Rayon Textiles Exp. Prom. Council .. 283
  ,, Board, Central .. 78, 853
  ,, Conditioning and Testing House, Central .. 79
Silk Industry .. 77
Sillimanite .. 55
Silver .. 287
Sindhi, Study of .. 122
Sirsilk Ltd. (Acetate Filament Yarn) .. 50
Sixth Five Year Plan .. 293
Slaughter Houses .. 113
Small Ind. Corpn., National .. 345
  ,, ,, Devpt. Corpns. (State-wise) .. 348–366
  ,, ,, Ext. Training Instt. .. 140
  ,, ,, Research & Devpt. Organisation .. 141
  ,, ,, Service Instts. .. 84
Small-Scale Industry .. 79, 916
  ,, ,, Ind. Devpt. Commissioner .. 857
Smallpox .. 268
Soaps & Detergents Ltd., Karnataka .. 354
  ,, and Oils Ltd., Kerala .. 356
Soccer, World Cup .. 323
Social & Economic Change, Institute for .. 142
  ,, Defence, National Institute of .. 241
  ,, Guidance, Instt. for .. 372
  ,, Health in India, Assen. for .. 241, 372
  ,, Institute, Indian .. 129
  ,, Medicine, Study of Preventive & .. 122
  ,, Science Research, Indian Council of .. 141
  ,, Sciences, Tata Institute of .. 126, 132
  ,, Service, Study of .. 122
  ,, Work, Schools of .. 126
  ,, ,, , Study of .. 122
Social Welfare .. 241
  Research Institutions .. 241
  Salvation Army, The .. 241
  Study of (see Labour) .. 122
Social Welfare & Business Management, Indian Instt. of .. 134
  ,, ,, Board, Central .. 241, 861
  ,, ,, , Directorate of .. 241
  ,, ,, , Indian Council of .. 372
  ,, ,, , Ministry of .. 861
Societies & Associations (State-wise) .. 366-405
Society for Mentally Retarded .. 255
Socio-Economic Research Instt. .. 144
Sociology, Study of .. 122
Soil and Land Use Survey Orgn., All India .. 108
  ,, ,, Water Conservation Research & Trng. Instt., Central .. 137
  ,, Conservation .. 108
  ,, ,, Research, Demonstration and Trg. Centre .. 140, 144
  ,, ,, Socy. of India .. 140

PAGE

S—(*Contd.*)

Soil Mechanics Research Station, Central .. 140
,, Salinity Research Instt. .. 137
,, Survey & Land Use Plng., National Bureau of 137
Solar Energy .. 101
Solicitor-General of India .. 858
Solidstate Physics Laboratory (Min. of Defence) .. 854
South Central Railway .. 209, 864
,, Eastern Railway .. 209, 875
,, Gujarat University .. 163
,, India, Regional Instt. of English .. 129
Southern Petrochem. Ind. Corpn. Ltd. .. 362
,, Railway .. 209, 874
Soya Production and Research Asscn. .. 144
Soyabean .. 63
Space Applications Centre .. 145, 851
,, Centre, Vikram Sarabhai (VSSC) .. 145, 851
,, Commission .. 145, 851
,, , Dept. of .. 851
,, Engg. & Rocketry, Study of .. 122
Space Research .. 145
,, ,, , Indian National Committee for 145
,, ,, Orgn., Indian (ISRO) .. 145
,, Science and Technology Centre .. 145
,, , Study of .. 122
Spark Battery Manufg. Works Ltd. .. 361
Spastic Education/Society .. 132
Speech Research, Voice & .. 138
,, Therapy, Study of (see Audiology) 118, 122
Spice Oils and Oleoresins .. 85
Spices Industry .. 84
,, Devpt. Council, Indian .. 86
,, ,, , Directorate of Cocoa, Arecanut and 23, 86, 852
,, Exp. Prom. Council .. 284
Sponge Iron India Ltd. .. 350
Sports .. 316, 916
,, , All India Council of .. 372
,, Goods Exp. Prom. Council .. 284
,, ,, (Small Scale) .. 83
Spruce (Picea smithiana) .. 105
Sravana Belgola .. 20
Srinagar .. 18
Srirangapatna .. 20
St. John Ambulance Asscn. & Brigade .. 372, 404
Stamps, Commemorative Special .. 203
,, , Controller of (India Security Press) .. 855
Standard Institution, Indian .. 140, 339
State Administrative Personnel .. 863
,, Assembly Elections .. 3
,, Chief Minister .. 3
State Associations .. 366
,, Bank of India .. 856
,, Chem. & Pharma. Corpn. .. 347
,, Corporations (see State Govt. Undertakings) 349
,, Executive .. 3
,, Farms Corpn. of India Ltd. .. 347
,, Finance Corpns. (See State Govt. Undertakings) 349

PAGE

State Governor .. 3
,, Govt. Personnel .. 863
State Govt. Undertakings .. 349, 916
,, , Largest (see Some Basic Facts) .. 8
,, Legislatures .. 3
,, , Most Literate (see Some Basic Facts) .. 8
,, , ,, Populated (see Some Basic Facts) .. 8, 275
,, Policy, Directive Principles of (Constitution) 1
,, Trading Corpn. of India Ltd. .. 347
States , Territories .. 8
Stationery Items Mfg (Small Scale) .. 83
Statistical Instt., Indian .. 126, 129, 130, 132, 134
Statistics, Dept. of .. 860
,, , Directorate-General of Commercial Intelligence and .. 852
,, , ,, of Economics & .. 852
,, , Study of .. 122
Steel and Mines, Ministry of .. 861
,, Authority of India Ltd. (SAIL) .. 87, 347
,, Co. Ltd., Indian Iron & .. 87, 339
,, Control Orgn. Iron & .. 861
Steel Industry .. 87
,, Ltd., Visvesvaraya Iron & .. 87, 355
,, Plants .. 87, 88, 89, 331, 861
,, Products Ltd., Cuttack Iron & .. 360
,, ,, ,, , Tungabhadra .. 348
,, Works Construction Ltd., Hindustan .. 337
Stock Exchange, Bombay .. 384
Stone Exporters Assen., Precious .. 375
Stores Preservation & Packaging, Defence Instt. of 298
Structural Engg. Research Centre .. 136
Structurals Ltd., Southern .. 362
,, ,, , Triveni .. 348
Subsidised Housing Schemes .. 199
Sugar Factories' Assen., Deccan .. 384
,, Factories Ltd., National Fedn. of Co-op. .. 91
Sugar Industry .. 89
,, Instt., Deccan .. 91
,, Instt., National .. 91
,, Mills .. 90
,, ,, Assen., Indian .. 91
,, Technologists Assen. of India .. 399
Sugarcane .. 90
,, Breeding Instt. .. 137
,, Devpt., Directorate of .. 852
,, Research Instt. .. 91
,, ,, , Indian Instt. of .. 91, 137
Sukinda Nickel Project .. 347
Sulphur .. 56
Sultanpur Lake Bird Sanctuary .. 19
Sunflower Oil .. 64
Supplies and Disposals, Dir.-Gen. of .. 861
Supply, Dept. of .. 861
,, & Rehabilitation, Ministry of .. 861
Supreme Court of India .. 3, 6, 7, 862
Surgery, Rehabilitation & Research, Society for Reconstructive .. 390

PAGE

S—(*Contd.*)

Surgery, Study of .. 123
,, , Study of Plastic .. 122
Suriska Game Sanctuary .. 19
Survey Instruments, Mathematical & (Small Scale) 83
,, of India .. 862
,, ,, ,, , Anthropological .. 862
,, ,, ,, , Archaeological .. 862
,, ,, ,, , Botanical .. 862
,, ,, ,, , Geological .. 860
,, ,, ,, , Zoological .. 863
Swahili, Study of .. 123
Swedish Aid .. 281
Swimming Assen., National .. 404
Swiss Aid .. 279
"Symphonie" Satellite .. 146
Synthetic Drugs Plants .. 38
Synthetic Fibre Industry (see Man-made Fibre Ind.) 50
,, ,, Manufrs. .. 50
,, Rubber .. 75
Syriac, Study of .. 123

T

Table Tennis Fedn. of India .. 372
Taj Mahal .. 17
Tambaku Vikas Nideshalaya .. 95
Tamil Nadu State .. 190
,, ,, Agricultural University .. 191
,, ,, Associations & Societies .. 394
,, ,, Chambers of Commerce .. 408
,, ,, Legislative Assembly/Council 843, 845
,, ,, State Adm. Personnel .. 873
,, ,, Corporations and Ind. Undertakings 362
,, , Study of .. 123
Tannery and Footwear Corpn. of India Ltd. .. 347
Tansa Lake Wildlife Sanctuary .. 22
Tarai Seeds Devpt. Corpn. .. 108
Tarapur Atomic Power Station .. 148
Tasar Silk Research .. 79
Tata Instt. of Fundamental Research .. 142, 147
,, ,, ,, Social Sciences .. 126, 132
,, Iron and Steel Co. Ltd. .. 87
,, Memorial Centre .. 147
Taxes, Central Board of Direct .. 855
,, , Study of Accounting & .. 117
Tea Auction Centres .. 92
,, Board .. 93, 853
,, Corpn., Assam .. 93, 350
,, Councils (Export Promotion) .. 92
Tea Industry .. 91
,, , Instant .. 93
,, Research Assen. .. 140, 144
,, Trade Assen. of Cochin .. 379
,, Trdg. Corpn. of India .. 347
Teachers' Fedn., All India Secondary .. 374
,, Orgn., All India Fedn. of Univ. & College 404
Teak Wood .. 105
Technical Instt., Victoria Jubilee .. 132
,, Personnel Abroad, Indian .. 117
Technological Instt., Shri Krishnarajendra Silver Jubilee .. 130
,, Instts. of National Importance, Medical & .. 126
,, Museums, Industrial & .. 136
Technology, Dept. of Science and .. 851
,, , Indian Instt. of 126, 129, 132, 133, 134
Telecommunication Circles .. 853
,, Engg., Study of .. 123
,, Equipment .. 39

PAGE

Telecommunication Research Centre .. 140
Telecommunications Consultants India Ltd. .. 347
Telegraph Offices .. 202
Telegraphs Board, Posts & .. 853
Telephone Dists., Heads of .. 853
,, Ind. Ltd., Indian .. 340
,, Subscribers' Assen., All India .. 388
Telephones .. 202
Teleprinters Ltd., Hindustan .. 338
Television (Doordarshan) .. 204, 857
,, Experiment, Satellite Instructional .. 146
,, Instt. of India, Film & .. 47
,, Sets Production .. 40
Telex Service .. 202
,, ,, , Subscriber/Dialling, International .. 203
Telugu, Study of .. 123
Temperature (Meteorology) .. 9
,, , Maximum, Minimum (see Some Basic Facts) .. 8
Tennis Assocn., All India Lawn .. 372
,, Records .. 323
Termination of Pregnancy Act .. 264
Territories, States .. 1, 8
Test House, National .. 24, 140
Testing Laboratory, Regional .. 144
Textile and Allied Ind. Research Orgn. (TAIRO) 33, 142
,, Chemistry, Study of .. 123
,, Commissioner .. 852
,, Corpn. of Marathwada .. 360
,, ,, Ltd., National .. 33, 345
,, Devpt. Corporations : (State Corpns.) 349-66
,, Engg., Study of .. 123
,, Export Promotion Council, Cotton 33, 283
,, Ind. Research Assen., Ahmedabad (ATIRA) .. 142
Textile Industry, Cotton .. 31
,, Machinery Mfrs.' Assen. .. 384
,, Products including Hosiery (Small Scale) 80
,, Research Assen., Bombay (BTRA) 33, 143
,, ,, ,, , Northern India (NITRA) 33
,, ,, ,, , South India (SITRA) 33, 144
Textiles Committee .. 284
Thai, Study of .. 123
Theatres and Cinema Houses, No. of .. 46
Theology, Study of .. 123
Thermal Power Corpn. Ltd., National .. 345
,, Research Reactor Project .. 148
Thorium Reserves .. 58
Thumba Equatorial Rocket Launching Station .. 145
Tibetan, Study of .. 123
Ticketless Travel on Railways .. 209
Tidal Power .. 101
Tide Water Oil Co. (India) Ltd. .. 73
Tiger, Project (Forests) .. 105
Time Difference of International Cities .. 305
Titanium Products Ltd., Travancore .. 357
Tobacco .. 110
,, Association, Indian .. 367
,, Board .. 853
,, Devpt. Council, Indian .. 95
,, ,, , Dte. of (Tambaku Nideshalaya) .. 852
Tobacco Industry .. 93
,, Research Instt., Central .. 95
Toklai Experimental Station .. 93
Tourism and Civil Aviation, Ministry of .. 861
,, Council, International .. 390
,, Devpt. Corpn. Ltd., India .. 338

PAGE

T—(*Contd.*)

Tourism Devpt. Corpns., States (State Govt. Undertakings) .. 349-366
Tourist Guide, A .. 12
  Accommodation .. 13
  Indrail Pass .. 13
  Information .. 12
  Office, Govt. of India Tourist .. 870
  Overseas Tourist Offices .. 12
  Passport/Visa .. 13
  Places of Tourist Interest .. 15
  Protected Area Regulations .. 14
  Traffic .. 22
Toxicology Research Centre, Industrial .. 136
Trachoma .. 268
Tractor Statistics .. 108
Trade and Technology Devpt. Corpn., Electronics .. 41
  ,, Centre, Indian International .. 132
  ,, Commerce & Intercourse (Constitution) .. 5
  ,, Commissions, Abroad, Indian (see Embassies) 876
  ,, ,, in India, Foreign .. 880
  ,, Devpt. Authority .. 348
  ,, Fair Authority of India .. 348
  ,, Fairs & Exhibitions, Indian Council of .. 384
  ,, Mark Attorneys, Patents & .. 794
  ,, Marks Registry .. 857
  ,, Practices Commission, Monopolies & Restrictive .. 862
Trade Unions .. 304
Trading Corpn. of India Ltd., State .. 347
Traffic Planning & Automation Centre, National .. 357
Training & Devpt., Indian Socy. for .. 141
  ,, Seamen .. 77
Transformers & Electricals Kerala Ltd. .. 357
Transport Companies (Goods) .. 804
  ,, Equipment Industry (Small Scale) .. 82
  ,, , Ministry of Shipping & .. 860
  ,, Nationalised .. 211
Travancore Cochin Chemicals Ltd. .. 357
  ,, Plywood Ind. Ltd. .. 357
  ,, Rayons Ltd. .. 50
  ,, Titanium Products Ltd. .. 357
Travel Agencies .. 15, 810
  ,, in India, Mode of .. 13
Tribal Corpn., Maharashtra State Co-op. .. 359
  ,, Culture Research .. 140
  ,, Devpt. Co-op. Corpn. of Orissa Ltd. .. 361
  ,, Research Institutes .. 241
Tripura State .. 193
  ,, Adm. Personnel .. 874
  ,, Associations .. 398
  ,, Ind. Undertakings & Corpns. .. 364
  ,, Legislative Assembly .. 845
Trivandrum .. 20
Triveni Structurals Ltd. .. 348
Tropical Forests .. 104
  ,, Meteorology, Indian Institute of .. 863
Truck Body Building Industry (Small Scale) .. 82
Trunk Dialling, Subscriber .. 203
Tuber Crops Research Instt., Central .. 137
Tuberculosis Assen. of India .. 374
  ,, Instt. of India, National .. 269
  ,, Research .. 138, 269
  ,, , Study of .. 123
Tungabhadra Steel Prod. Ltd. .. 348, 355
Turkish, Study of .. 123
Turmeric .. 85

PAGE

Turpentine and Rosin Co. Ltd., Indian .. 364
  ,, Factory, H.P. Govt. Rosin & .. 353
Tuticorin Port .. 206
Tyre Cord, Nylon (Units) .. 51
  ,, Yarn, Rayon .. 53
Tyres & Tubes Production .. 76

U

U. N. & Other Bodies in India 885
UNESCO .. 885
U.S.S.R. Aid .. 278
Udaipur .. 19
Unani Medicine, Central Research Institute for .. 140
Unemployment .. 300
Union & The States, Administrative Relations .. 4
  ,, ,, ,, ,, , Legislative Relations .. 4
  ,, Budget .. 2, 292
  ,, Carbide India Ltd. .. 68
  ,, Elections, Legislation .. 2, 5
  ,, Executive .. 1
  ,, Judiciary .. 3
  ,, Parliament .. 2
  ,, Public Service Commission (UPSC) .. 862
  ,, Territories .. 1, 3
Union — States Relations .. 4
Unit Trust of India .. 348
United India Insurance Co. Ltd. .. 348
  ,, Kingdom Aid to India .. 279
  ,, Nations and Other Agencies .. 885
  ,, ,, Assens., Indian Federation of .. 372
  ,, Planters' Assen. of India .. 93
  ,, States Aid .. 277
  ,, Trades Union Congress .. 304
Universities in India (See also different States) .. 126
  ,, , Insttns. deemed to be .. 126
  .. , Number of .. 117
University Grants Commission .. 117, 854
Uranium Corpn. of India Ltd. .. 148, 348
  ,, Deposits .. 58
Urban Devpt. Corpn. Ltd., Housing and .. 199, 338
Urdu, Study of .. 123
Utkal University .. 185
Uttar Pradesh .. 194
  ,, ,, Associations & Societies .. 398
U.P. Chambers of Commerce .. 409
  ,, Legislative Assembly/Council .. 846, 848
  ,, State Corporations .. 364–365
  ,, ,, Ind. Undertakings .. 364–365

V

Vaccine Plants (Foot and Mouth Diseases) .. 36
Vacuum Society, Indian .. 390
Vanaspati & Oilseeds .. 62
  ,, Industry .. 64
Varanaseya Sanskrit University .. 195
Varanasi .. 18
Variable Energy Cyclotron .. 148
Varnishes, Study of Paints & .. 121
Vayudoot .. 202
Vedanthangal Bird Sanctuary .. 21
Vedic Research Instt., Vishveshwaranand .. 144
Vegetable Oils (Vanaspati) .. 64
Vehicles Research & Devpt. Instt. .. 143
Venereal Diseases .. 269
Venereology, Study of .. 123
Venkateshwara University, Sri .. 153
Veterinary Colleges, Hospitals and Dispensaries .. 36

PAGE

V—(*Contd.*)

Veterinary Research Instt., Indian 36
,, Science, Study of 123
Vice-President 2, 850
Vigilance Association, Bombay 388
,, Commission, Central 862
Vikram Sarabhai Space Centre 145, 851
,, Vishwavidyalaya 176
Village Industries, Jamnalal Bajaj Central Research Instt. for 140, 143
,, Panchayats, Number of (see Some Basic Facts) 8
Villages Electrified 100
,, , Number of (see Some Basic Facts) 8
Virology, National Institute of 138
Virus Infection Research 138
Visakh Refinery 72
Visakhapatnam Port 206
,, Steel Plant 87
Viscose Filament Yarn Units 53
,, Staple Fibre Units 53
Vishva-Bharati University 197
Visual Publicity, Directorate of Advertising and 857
Visveswaraya Industrial Trade Centre 355
,, ,, & Technological Museum 137
,, Iron & Steel Ltd. 355
Vivekanand Parvatiya Krishi Anusandhan Shala 137
Vivekananda Mission & Society 405
Vocational Guidance Bureaux 134
,, ,, , Study of 123
Voice and Speech Research 138

W

Wages 302
Wagon (India) Ltd. 348
Wakf Council, Central 859
War (see Aggression Against India) 299
Warehousing Corpn., Central 333
,, Corporations. States 349, 352, 359, 364, 366
Watch Factories (HMT) 336
Watches Mfg. (Small-Scale) 83
Water and Power Devpt. Consultancy Services (India) Ltd. 348
,, ,, ,, Research Station, Central 140
,, Board. Central Ground 108
,, Commission, Central 858
,, Conservation Research Trg. Instt., Central Soil & 137
,, Devpt. Corpn., Bihar State 351
,, Diviners Socy. (Indian Socy. of Dowsers) 367
,, Pollution Board, Maharashtra Prevention of 870
,, ,, , Central Board for Prevention & Control of 141
,, ,, , Karnataka State Board for Prevention & Control of 868
,, ,, , Kerala State Board for Prevention & Control of 868
,, Resources 100
,, ,, Devpt. Corpn., Gujarat 352
,, Supply & Sanitation Programme, National 269
,, ,, ,, Sewerage Board, Karnataka 868
,, ,, ,, ,, . Madras Metropolitan 874
,, Transport Corpn. Ltd., Central Inland 332
,, ,, , Inland 77
Waxes. Study of Oils, Fats & 121
Wealth Tax, Settlement Commn. for Income Tax & 855
Welfare Centres for Mentally Handicapped Children 254
,, , Social 241

PAGE

West Bengal 196
,, ,, Associations & Societies 399
,, ,, Chambers of Commerce 409
,, ,, Legislative Assembly 848
,, ,, State Adm. Personnel 875
,, ,, ,, Corporations 365–366
,, ,, ,, Ind. Undertakings 365–366
,, German Aid 280
Western Railway 209, 870
Wheat 107, 110
Who's Who 886–915
Wild Life, Indian Board for 372
,, ,, , Preservation of 105
,, ,, ,, Socy. of India 399
,, ,, Sanctuaries (Tourist's Guide) 16, 17, 19, 22
,, ,, Societies 105
Women in India, National Council of 392
Women's Assocn., International 262
,, Conference, All India 372, 405
,, University (SNDT) 178
Wood Based Industries (Small Scale) 80
,, Processors Ltd., Himachal 353
Wool 114
,, and Woollen Exp. Prom. Council 97, 284
,, Devpt. Board, Karnataka Sheep & 97
,, ,, Corpn., Gujarat Sheep and 97, 352
,, Research Assen. 97
,, ,, Instt., Central Sheep and 36, 97, 137
,, Secretariat, International 97
Woollen Industry 96
,, Mills 96
,, ,, Fedn., Indian 98
Work Study, Defence Instt. of 298
Workers Education, Central Board for 858
Working Force 274
,, Journalists, Indian Fedn. of 374
,, Population 301
Works & Housing, Ministry of 862
Workshop for the Blind 256
World Affairs, Indian Council of 372
,, Bank (IBRD) 885
,, Cup Soccer 323
,, Food Programme (FAO) 885
,, Health Orgn. (WHO) 885
,, Wildlife Fund 390
World's Highest Road 211
Worli Dairy (Greater Bombay Milk Scheme) 177
Writers' Guild 405

Y

YMCAs of India, National Council of 372
Yoga Institutes 125
Yogic Research Training Instt. 143
,, Science, Study of 123

Z

Zawar Group of Mines 338
' Zerlina ' Reactor 147
Zinc (see Lead) 55
,, Ltd., Hindustan 338
Zoo Physiology. Study of 123
Zoological Society of India 405
,, Survey of India 140, 863
Zoology, Study of 123
Zoroastrian Assen. 388

Statement about ownership and other particulars about newspaper entitled " The Times of India Directory & Yearbook " (including Who's Who) — 1981–82. Bombay, as required to be published in the first issue every year after last day of February.

FORM IV

(See Rule 8)

1. Place of Publication : The Times of India Press, The Times of India Bldg., Dr. D. Naoroji Rd., Bombay 400 001.
2. Periodicity of Publication : Yearly.
3. Printer's Name : Shri Tehemton Peshotan Pithavala for the Proprietors : Bennett, Coleman & Co. Ltd.
   Whether Citizen of India : Yes.
   Address : 53, Rewa Apartments, Bhulabhai Desai Road, Bombay 400 026.
4. Publisher's Name : Shri Tehemton Peshotan Pithavala for the Proprietors : Bennett, Coleman & Co. Ltd.
   Whether Citizen of India : Yes.
   Address : 53, Rewa Apartments, Bhulabhai Desai Road, Bombay 400 026.
5. Editor's Name : Shri Girilal Jain.
   Whether Citizen of India : Yes.
   Address : 22, Ashoka Apartments, Nepean Sea Rd., Bombay 400 006.
6. Names and Addresses of individuals who own the newspaper and partners or shareholders holding more than one per cent of the total Paid-up Capital as on 28–2–1982 :

SHAREHOLDERS

1. **Shri Ashok Kumar Jain,**
   6, Sardar Patel Marg,
   New Delhi 110 011.
2. **Ashoka Holdings Ltd.,**
   Times House, 4th Floor,
   7, Bahadurshah Zafar Marg,
   New Delhi 110 002.
3. **Ashoka Viniyoga Ltd.,**
   14, Govt. Place East,
   Calcutta 700 001.
4. **Bharat Nidhi Ltd.,**
   Times House, 4th Floor,
   7, Bahadurshah Zafar Marg,
   New Delhi 110 002.
5. **Miss Nandita Jain,**
   Shantiniketan, 12th Floor,
   8, Camac Street,
   Calcutta 700 017.
6. **Shri Manoj Kumar Jain,**
   Shantiniketan, 12th Floor,
   8, Camac Street,
   Calcutta 700 017.
7. **Shri Akshaya Kumar Jain**
   and
   Shri Lakshmi Chandra Jain,
   C/o Bharatiya Jnanpith,
   B/45-47, Connaught Place,
   New Delhi 110 001.
8. **Shri Nemi Chand Jain**
   and
   Shri Prabhudayal Dabriwala,
   C/o Sahu Jain Trust,
   7, Bahadurshah Zafar Marg,
   New Delhi 110 002.
9. **PNB Finance & Industries Ltd.,**
   B/45-47, Connaught Place,
   New Delhi 110 001.
10. **Messrs. Sahu Jain Ltd.,**
    Times House, 4th Floor,
    7, Bahadurshah Zafar Marg,
    New Delhi 110 002.
11. **Messrs. Sahu Properties Ltd.,**
    8, Camac Street,
    Calcutta 700 017.
12. **Smt. Indu Jain,**
    Shantiniketan, 12th Floor,
    8, Camac Street,
    Calcutta 700 017.
13. **Shri Samir Kumar Jain,**
    Shantiniketan, 14th Floor,
    8, Camac Street,
    Calcutta 700 017.
14. **Smt. Meera Jain,**
    Shantiniketan, 14th Floor,
    8, Camac Street,
    Calcutta 700 017.

I, Tehemton Peshotan Pithavala, hereby declare that the particulars given above are true to the best of my knowledge and belief.

T. P. Pithavala
Signature of Publisher.

Date : 1–3–1982.

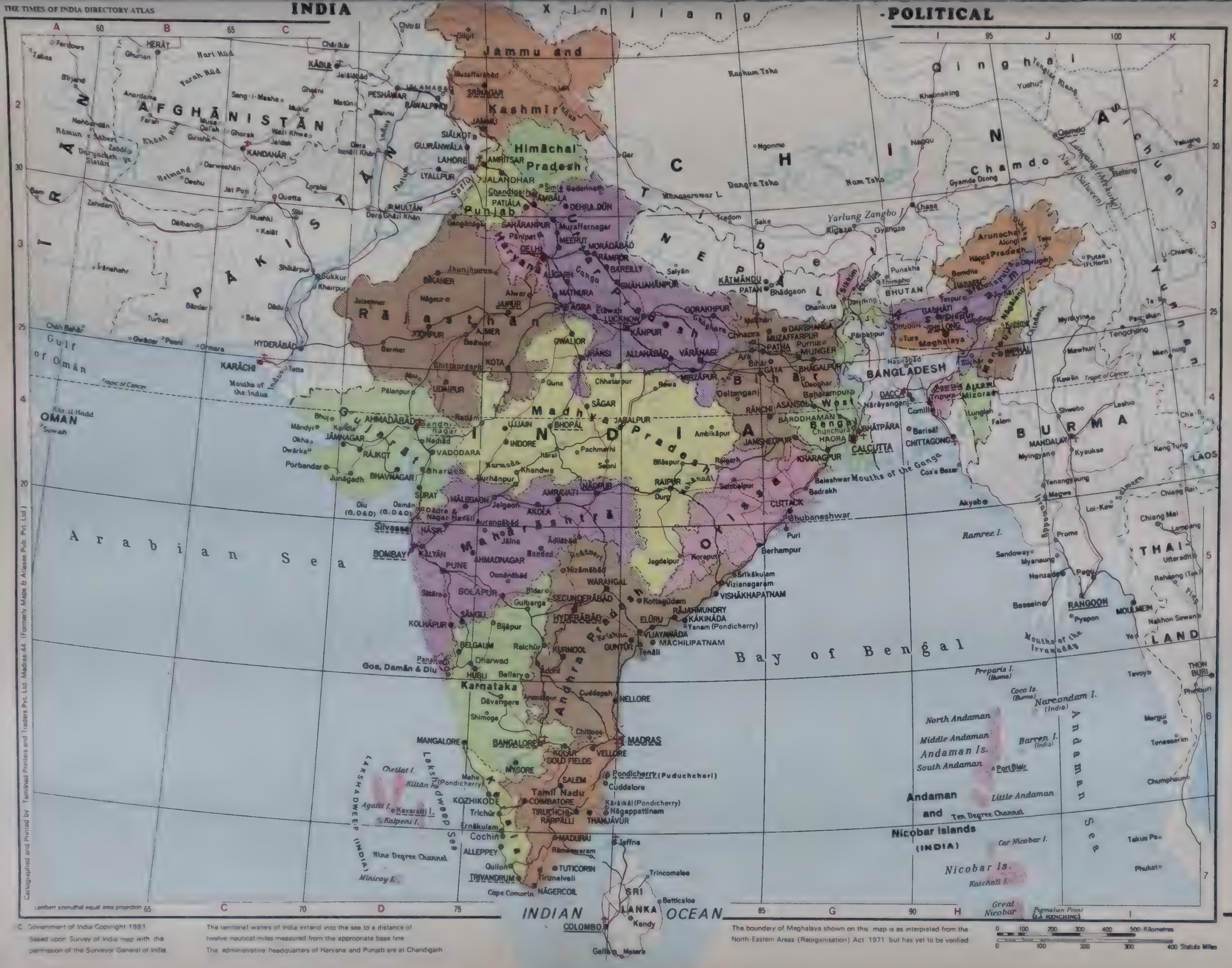
It pays to advertise in

The Times of India Directory & Yearbook.

Try it and see the results.

LIBRARY
1028(W)
20

INDIA -POLITICAL


Jammu and Kashmir
Himāchal Pradesh
Punjab
Haryana
Rājasthān
Uttar Pradesh
Bihār
West Bengal
Gujarat
Madhya Pradesh
Mahārāshtra
Orissa
Andhra Pradesh
Karnataka
Tamil Nadu
Kerala
Arunachal Pradesh
Assam
Meghālaya
Nagaland
Manipur
Tripura
Mizoram
Sikkim
Goa, Damān & Diu
Lakshadweep Sea
LAKSHADWEEP (INDIA)
Andaman and Nicobar Islands (INDIA)
I N D I A
AFGHĀNISTĀN
PĀKISTĀN
IRAN
C H I N A
Xinjiang
Tibet
Qinghai
Sichuan
Yunnan
NEPAL
BHUTAN
BANGLADESH
B U R M A
THAILAND
LAOS
SRI LANKA
OMAN
Gulf of Omān
Arabian Sea
Bay of Bengal
Andaman Sea
INDIAN OCEAN
Tropic of Cancer
DELHI
BOMBAY
CALCUTTA
MADRAS
HYDERĀBĀD
BANGALORE
AHMADĀBĀD
KARĀCHI
KĀBUL
ISLAMABAD
KĀTMĀNDU
DACCA
RANGOON
COLOMBO
Lambert azimuthal equal area projection
0 100 200 300 400 500 Kilometres
0 100 200 300 400 Statute Miles

Cartographed and Printed by Tamilnad Printers and Traders Pvt. Ltd Madras-44 (Formerly Maps & Atlases Pub Pvt. Ltd.)

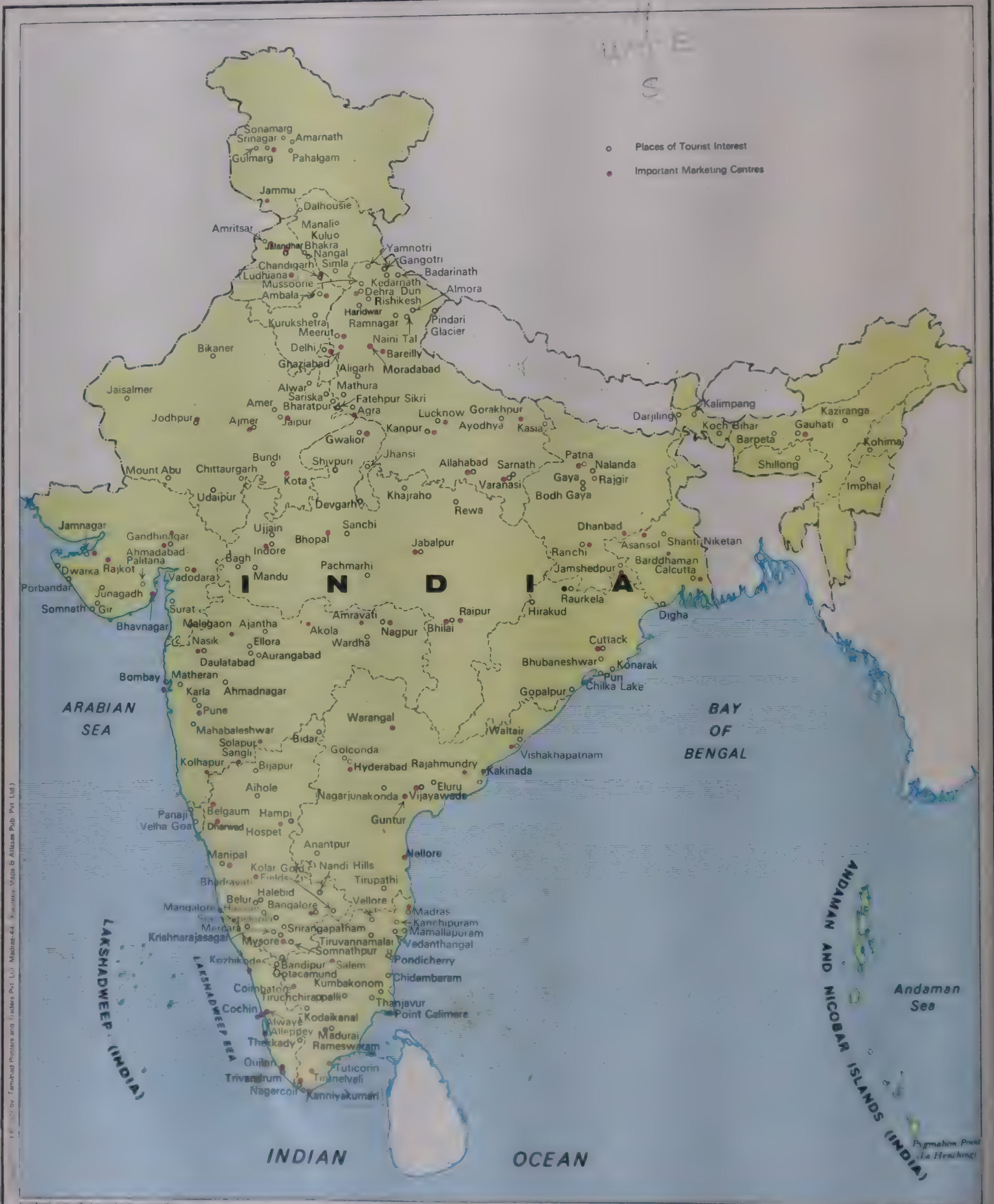
C Government of India Copyright 1981
Based upon Survey of India map with the permission of the Surveyor General of India.

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line

The administrative headquarters of Haryana and Punjab are at Chandigarh

The boundary of Meghalaya shown on this map is as interpreted from the North-Eastern Areas (Reorganisation) Act 1971 but has yet to be verified

INDIA - TOURIST AND MARKETING CENTRES


○ Places of Tourist Interest
● Important Marketing Centres
Sonamarg
Srinagar
Amarnath
Gulmarg
Pahalgam
Jammu
Dalhousie
Amritsar
Manali
Kuluo
Jullundur
Bhakra
Nangal
Yamnotri
Gangotri
Badarinath
Chandigarh
Simla
Ludhiana
Mussoorie
Kedarnath
Almora
Ambala
Dehra Dun
Rishikesh
Haridwar
Kurukshetra
Ramnagar
Pindari Glacier
Meerut
Naini Tal
Bikaner
Delhi
Bareilly
Ghaziabad
Aligarh
Moradabad
Jaisalmer
Alwar
Mathura
Sariska
Fatehpur Sikri
Amer
Bharatpur
Agra
Lucknow
Gorakhpur
Jodhpur
Ajmer
Jaipur
Kanpur
Ayodhya
Kasia
Gwalior
Darjiling
Kalimpang
Koch Bihar
Gauhati
Kaziranga
Barpeta
Kohima
Shillong
Bundi
Jhansi
Mount Abu
Chittaurgarh
Shivpuri
Allahabad
Sarnath
Patna
Nalanda
Kota
Varanasi
Gaya
Rajgir
Udaipur
Khajraho
Bodh Gaya
Imphal
Devgarh
Rewa
Jamnagar
Sanchi
Dhanbad
Ujjain
Gandhinagar
Bhopal
Jabalpur
Asansol
Shanti Niketan
Ahmadabad
Indore
Ranchi
Palitana
Bagh
Barddhaman
Dwarka
Rajkot
Pachmarhi
Calcutta
Jamshedpur
Vadodara
Mandu
INDIA
Porbandar
Junagadh
Raurkela
Somnath
Gir
Surat
Raipur
Hirakud
Amravati
Digha
Bhavnagar
Malegaon
Ajantha
Akola
Bhilai
Nagpur
Nasik
Ellora
Wardha
Cuttack
Aurangabad
Daulatabad
Bhubaneshwar
Konarak
Bombay
Matheran
Puri
Chilka Lake
Karla
Ahmadnagar
Gopalpur
ARABIAN SEA
Pune
BAY OF BENGAL
Warangal
Mahabaleshwar
Waltair
Solapur
Bidar
Sangli
Golconda
Vishakhapatnam
Kolhapur
Bijapur
Hyderabad
Rajahmundry
Kakinada
Aihole
Eluru
Nagarjunakonda
Vijayawada
Panaji
Belgaum
Hampi
Velha Goa
Dharwad
Hospet
Guntur
Anantpur
Manipal
Nellore
Kolar Gold Fields
Nandi Hills
Bhadravati
Tirupathi
Halebid
Belur
Vellore
Bangalore
Mangalore
Madras
Kanchipuram
Mercara
Srirangapatnam
Mamallapuram
Krishnarajasagar
Mysore
Tiruvannamalai
Vedanthangal
Somnathpur
Kozhikode
Bandipur
Salem
Pondicherry
LAKSHADWEEP (INDIA)
LAKSHADWEEP SEA
Ootacamund
Chidambaram
Kumbakonom
Coimbatore
Tiruchchirappalli
Thanjavur
Cochin
Point Calimere
Kodaikanal
Alwaye
Alleppey
Madurai
Thekkady
Rameswaram
Quilon
Tuticorin
Trivandrum
Tirunelveli
Nagercoil
Kanniyakumari
ANDAMAN AND NICOBAR ISLANDS (INDIA)
Andaman Sea
Pygmalion Point (La Hesching)
INDIAN
OCEAN

Lambert azimuthal equal area projection

Scale 1 17 500 000

[illegible] by Tamilnad Printers and Traders Pvt Ltd Madras-44 [illegible] Maps & Atlases Pub Pvt Ltd)

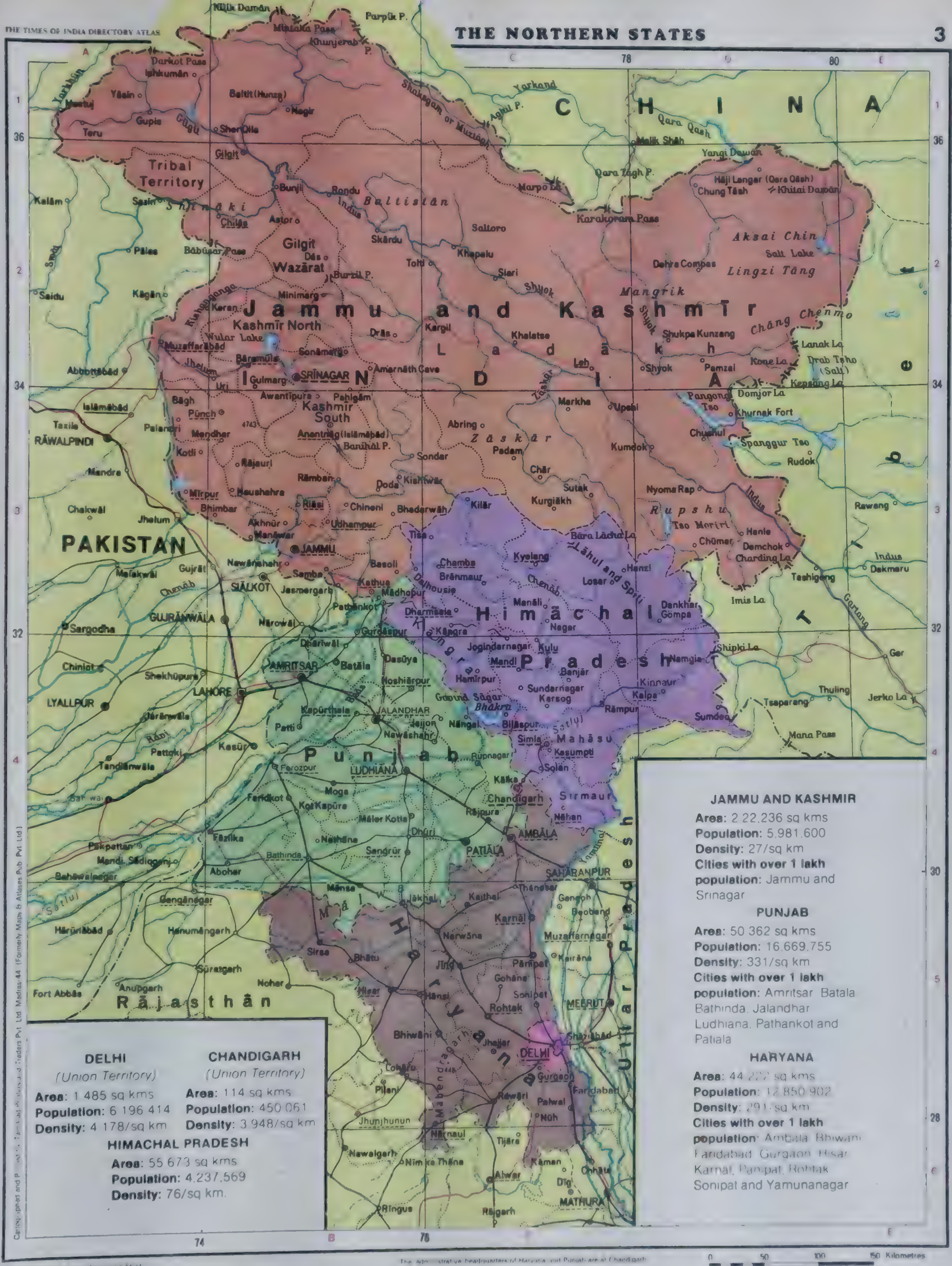
[illegible]

Based upon [illegible] with the permission of the Surveyor General of India

[illegible] twelve nautical miles measured from the appropriate base line

The boundary of Meghalaya shown on this map is as interpreted from the North-Eastern Areas (Reorganisation) Act 1971 but has yet to be verified

THE NORTHERN STATES


Nilik Daman
Parpik P.
Mintaka Pass
Khunjerab P.
Darkot Pass
Ishkuman
Yasin
Mastuj
Teru
Gupis
Gilgit
Baltit (Hunza)
Nagir
Sher Qila
Tribal Territory
Kalam
Sazin
Shinaki
Chilas
Bunji
Bondu
Indus
Baltistan
Astor
Skardu
Babusar Pass
Gilgit Wazarat
Das
Burzil P.
Pales
Kagan
Saidu
Minimarg
Keran
Kishanganga
Kashmir North
Wular Lake
Muzaffarabad
Jhelum
Baramula
Sonamarg
Amarnath Cave
Gulmarg
SRINAGAR
Abbottabad
Uri
Awantipura
Pahlgam
Kashmir South
Bagh
Punch
Palandri
Mendhar
Kotli
Anantnag (Islamabad)
Banihal P.
Rajauri
Islamabad
Taxila
RAWALPINDI
Mandra
Mirpur
Naushahra
Bhimbar
Riasi
Ramban
Chakwal
Jhelum
Akhnur
Manawar
Chineni
Udhampur
JAMMU
Doda
Kishtwar
Bhadarwah
PAKISTAN
Gujrat
Nawanshahr
Malakwal
Samba
Basoli
SIALKOT
Jasmergarh
Kathua
Madhopur
Pathankot
Chenab
GUJRANWALA
Narowal
Gurdaspur
Dhariwal
Sargodha
Chiniot
AMRITSAR
Batala
Dasuya
Sheikhupura
LAHORE
LYALLPUR
Hoshiarpur
Kapurthala
JALANDHAR
Jejon
Nawashahr
Patti
Jaranwala
Ravi
Pattoki
Kasur
Tandlianwala
Ferozpur
LUDHIANA
Punjab
Moga
Faridkot
Kot Kapura
Maler Kotla
Pakpattan
Fazilka
Mandi Sadiqganj
Nathana
Dhuri
Sangrur
PATIALA
Bahawalnagar
Abohar
Bathinda
Mansa
Satluj
Ganganagar
Hanumangarh
Harunabad
Suratgarh
Fort Abbas
Anupgarh
Nohar
Rajasthan
Sirsa
Bhatu
Hisar
Hansi
Jind
Bhiwani
Loharu
Pilani
Jhunjhunun
Narnaul
Mahendragarh
Nawalgarh
Nim ka Thana
Ringus
Alwar
Rajgarh
Tijara
Kaman
Dig
MATHURA
Chhata
Nuh
Palwal
Rewari
Gurgaon
Faridabad
DELHI
Jhajjar
Rohtak
Sonipat
Gohana
Panipat
Karnal
Kaithal
Narwana
Jakhal
Haryana
Thanesar
SAHARANPUR
Gangoh
Deoband
Muzaffarnagar
Kairana
MEERUT
Ghaziabad
Uttar Pradesh
Yamuna
AMBALA
Rajpura
Chandigarh
Kalka
Nahan
Sirmaur
Solan
Kasumpti
Simla
Mahasu
Bilaspur
Rupnagar
Nangal
Bhakra
Gobind Sagar
Hamirpur
Mandi
Kangra
Dharmsala
Dalhousie
Chamba
Brahmaur
Tisa
Kilar
Jogindarnagar
Kulu
Manali
Nagar
Kyelang
Lahul and Spiti
Losar
Hanzi
Dankhar Gompa
Himachal Pradesh
Banjar
Sundarnagar
Karsog
Rampur
Kinnaur
Kalpa
Namgia
Shipki La
Sumdeo
Mana Pass
Tsaparang
Thuling
Jerko La
Ger
Gartang
Indus
Dakmaru
Tashigang
Imis La
Rawang
Hanle
Demchok
Charding La
Chumar
Tso Moriri
Rupshu
Nyoma Rap
Kurgiakh
Sutak
Char
Padam
Zaskar
Abring
Sondar
Markha
Upshi
Kumdok
Rudok
Spanggur Tso
Chushul
Khurnak Fort
Pangong Tso
Domjor La
Kepsang La
Drab Tsho (Salt)
Lanak La
Kone La
Chang Chenmo
Pamzal
Shyok
Shukpa Kunzang
Leh
Khalatse
Kargil
Dras
Ladakh
Jammu and Kashmir
INDIA
Tibet
Mangrik
Lingzi Tang
Aksai Chin
Salt Lake
Dehra Compas
Siari
Khapalu
Tolti
Saltoro
Karakoram Pass
Marpo La
Haji Langar (Qara Qash)
Chung Tash
Khitai Dawan
Yangi Dawan
Qara Tagh P.
Malik Shah
Qara Qash
Yarkand
Aghil P.
Shaksgam or Muztagh
CHINA
A
B
C
D
E
1
2
3
4
5
6
34
36
32
30
28
74
76
78
80
4743

JAMMU AND KASHMIR

Area: 2 22,236 sq kms
Population: 5,981,600
Density: 27/sq km
Cities with over 1 lakh population: Jammu and Srinagar

PUNJAB

Area: 50 362 sq kms
Population: 16,669,755
Density: 331/sq km
Cities with over 1 lakh population: Amritsar Batala Bathinda, Jalandhar Ludhiana, Pathankot and Patiala

HARYANA

Area: 44 222 sq kms
Population: 12 850 902
Density: 291/sq km
Cities with over 1 lakh population: Ambala Bhiwani Faridabad Gurgaon Hisar Karnal, Panipat, Rohtak Sonipat and Yamunanagar

DELHI

(Union Territory)

Area: 1 485 sq kms
Population: 6 196 414
Density: 4 178/sq km

CHANDIGARH

(Union Territory)

Area: 114 sq kms
Population: 450 061
Density: 3 948/sq km

HIMACHAL PRADESH

Area: 55 673 sq kms
Population: 4,237,569
Density: 76/sq km.

0 50 100 150 Kilometres
0 50 100 Statute Miles

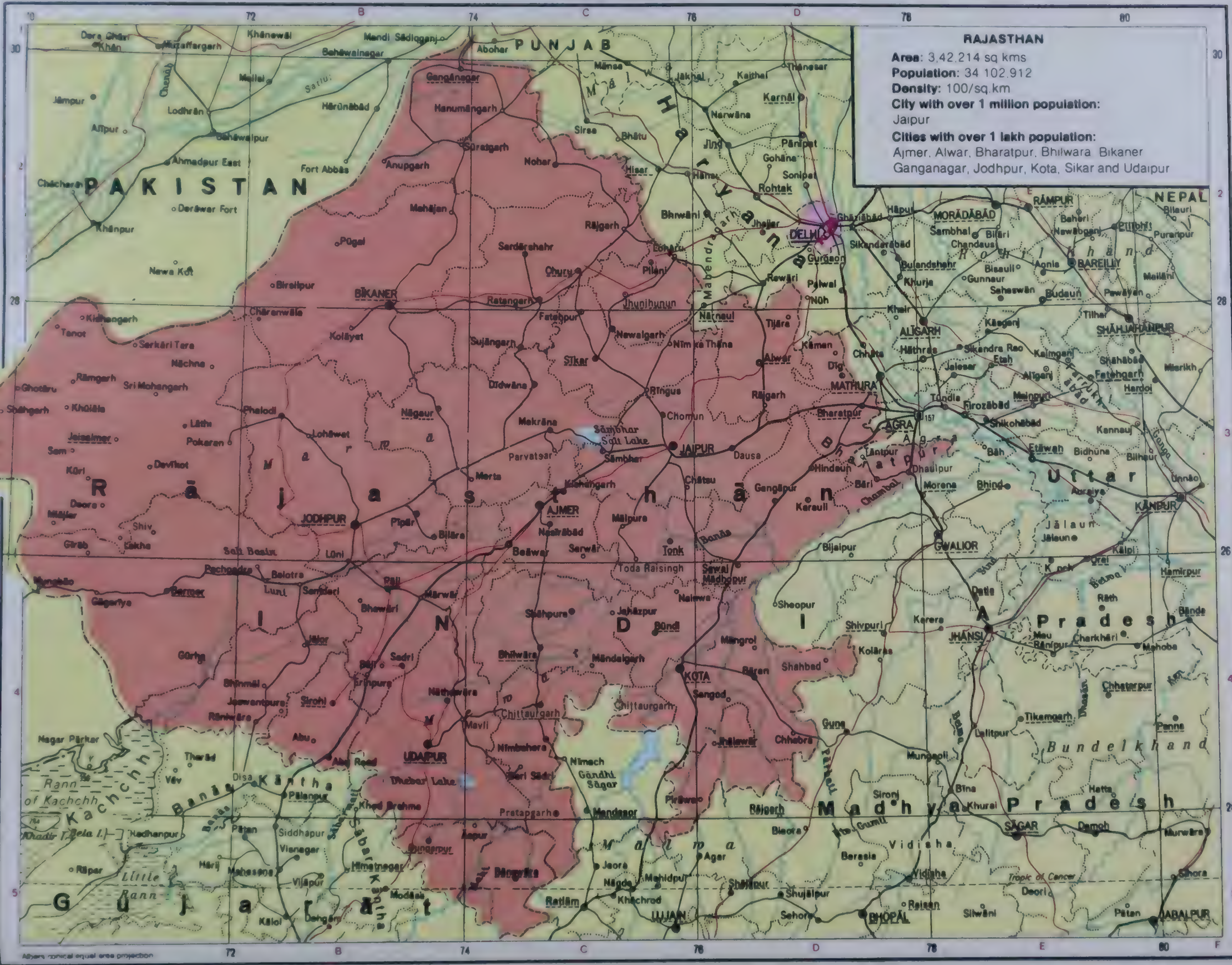
Cartographed and Printed by Tamil Nadu Printers and Traders Pvt Ltd Madras-44 (Formerly Maps & Atlases Pub Pvt Ltd)

© Government of India Copyright 1981

Based upon Survey of India map with the permission of the Surveyor General of India

The administrative headquarters of Haryana and Punjab are at Chandigarh

RAJASTHAN


PAKISTAN
PUNJAB
Haryana
NEPAL
Uttar Pradesh
Madhya Pradesh
Gujarat
Rajasthan
INDIA
Marwar
Malwa
Bundelkhand
Rohilkhand
Rann of Kachchh
Little Rann
Jaipur
Jodhpur
Bikaner
Ajmer
Kota
Udaipur
Alwar
Bharatpur
Bhilwara
Sikar
Ganganagar
Jaisalmer
Barmer
Delhi
Agra
Gwalior
Tropic of Cancer
72
74
76
78
80
B
C
D
E
F
26
28
30
24

RAJASTHAN

Area: 3,42,214 sq kms

Population: 34 102 912

Density: 100/sq.km

City with over 1 million population:
Jaipur

Cities with over 1 lakh population:
Ajmer, Alwar, Bharatpur, Bhilwara Bikaner Ganganagar, Jodhpur, Kota, Sikar and Udaipur

Albers conical equal area projection

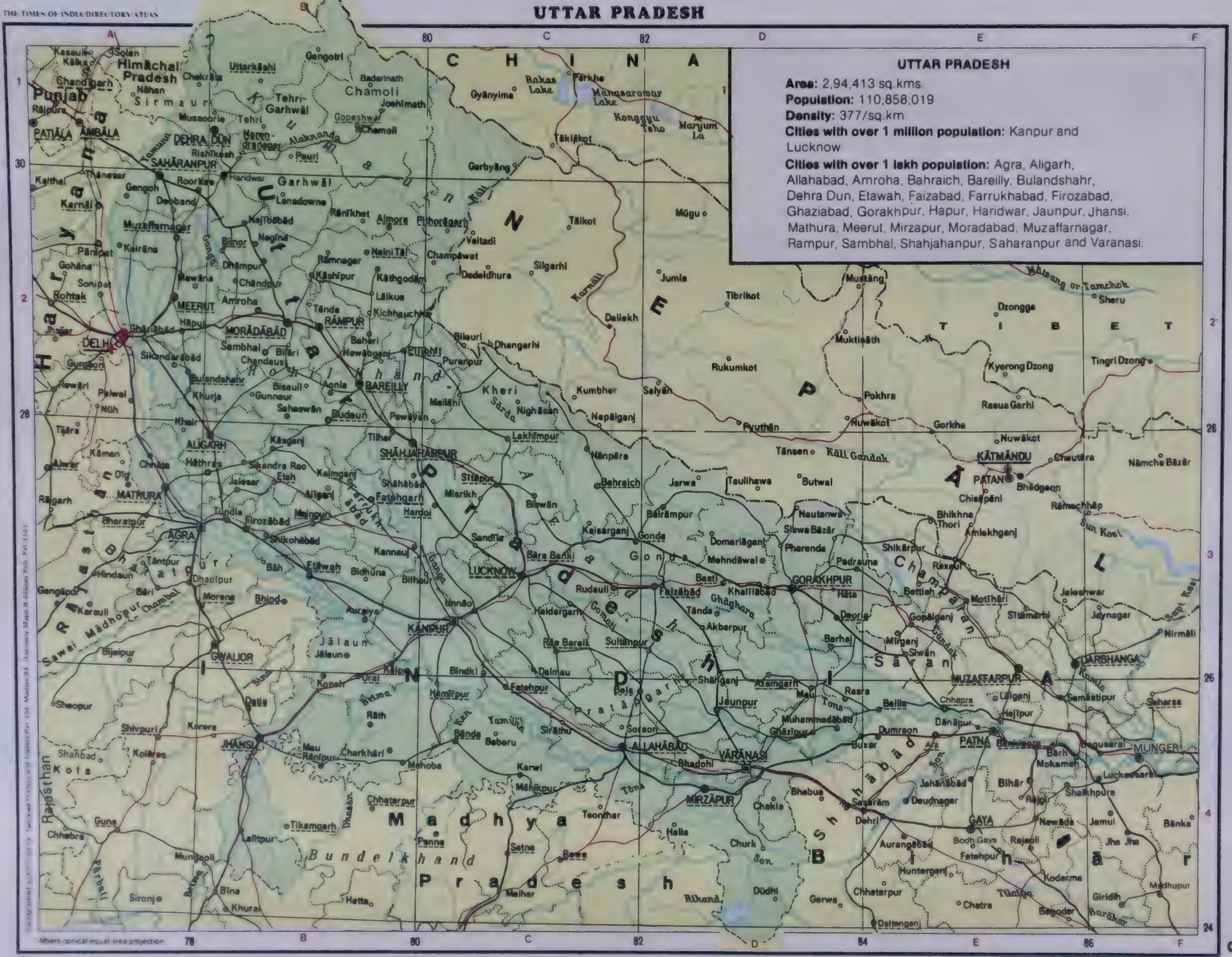
0 50 100 150 Kilometres

© Government of India Copyright 1981

Based upon Survey of India map with the permission of the Surveyor General of India

Cartographed and Printed by Tamilnad Printers and Traders Pvt. Ltd. Madras-44 (Formerly Maps & Atlases Pub. Pvt. Ltd.)

UTTAR PRADESH


CHINA
NEPAL
TIBET
Himāchal Pradesh
Punjab
Haryana
Uttar Pradesh
Rajasthan
Madhya Pradesh
Bihār
Rohilkhand
Bundelkhand
Kumaun
Garhwāl
Chamoli
Tehri-Garhwāl
Sirmaur
Gonda
Pratāpgarh
Jālaun
Champāran
Sāran
Shāhābād
Kheri
Farrukhabad
Bharatpur
Sawai Mādhopur
Kota
Delhi
Dehra Dūn
Sahāranpur
Meerut
Morādābād
Bareilly
Aligarh
Agra
Mathura
Shāhjahānpur
Lucknow
Kānpur
Allahābād
Vārānasi
Gorakhpur
Faizābād
Jhānsi
Gwalior
Mirzāpur
Patna
Muzaffarpur
Darbhanga
Munger
Gaya
Kātmāndu
Patan
Rākas Lake
Mānsarowar Lake
Ganga
Yamuna
Ghāghara
Gomati
Kāli Gandak
Chambal
Betwa
Son
Karnāli
Sun Kosi
Alaknanda
Albers conical equal area projection
78
80
82
84
86
A
B
C
D
E
F
1
2
3
4
30
28
26
24
0
50
100
150 Kilometres
0
50
100 Statute Miles

UTTAR PRADESH

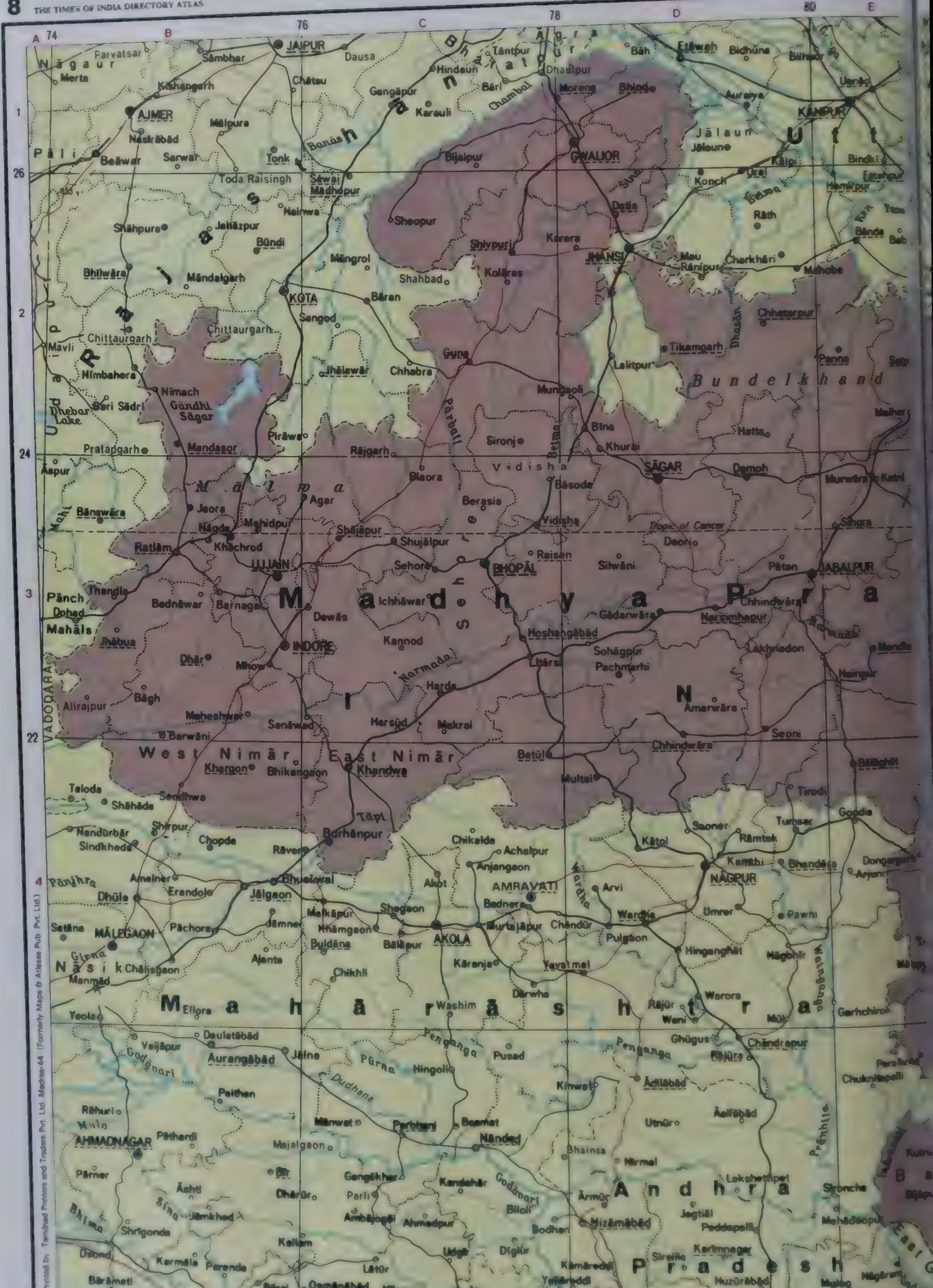
Area: 2,94,413 sq.kms.
Population: 110,858,019
Density: 377/sq.km.
Cities with over 1 million population: Kanpur and Lucknow
Cities with over 1 lakh population: Agra, Aligarh, Allahabad, Amroha, Bahraich, Bareilly, Bulandshahr, Dehra Dun, Etawah, Faizabad, Farrukhabad, Firozabad, Ghaziabad, Gorakhpur, Hapur, Haridwar, Jaunpur, Jhansi, Mathura, Meerut, Mirzapur, Moradabad, Muzaffarnagar, Rampur, Sambhal, Shahjahanpur, Saharanpur and Varanasi.

[illegible] Printers and Traders Pvt Ltd Madras 84 (formerly Maps & Atlases Pub Pvt Ltd)

© Government of India Copyright 1981

Based upon Survey of India map with the permission of the Surveyor General of India

MADHYA PRADESH


A
B
C
D
E
74
76
78
80
26
24
22
1
2
3
4
Nāgaur
Merta
Parvatsar
Sāmbhar
JAIPUR
Dausa
Kishangarh
Chātsu
AJMER
Nasīrābād
Mālpura
Pāli
Beāwar
Sarwār
Tonk
Toda Raisingh
Sawai Mādhopur
Nainwa
Shāhpura
Jahāzpur
Būndi
Bhīlwāra
Māndalgarh
Kota
Sangod
Bāran
Māngrol
Chittaurgarh
Mavli
Nimbahera
Nimach
Gāndhi Sāgar
Dhebar Lake
Bari Sādri
Pratāpgarh
Mandasor
Pirāwa
Jhālawār
Chhabra
Āspur
Bānswāra
Mahi
Rājasthān
Udaipur
Agra
Bharatpur
Hindaun
Tāntpur
Dhaulpur
Bāri
Gangāpur
Karauli
Chambal
Banās
Morena
Bhind
Bāh
Etāwah
Bidhūna
Auraiya
KANPUR
Unnāo
Jālaun
Jālaun
Kālpi
Konch
Urai
Hamīrpur
Fatehpur
Bindki
Rāth
Bānda
Charkhāri
Mahoba
Uttar
GWALIOR
Bijaipur
Sheopur
Datia
Sind
Shivpuri
Karera
JHANSI
Mau Rānīpur
Kolāras
Shahbad
Guna
Tīkamgarh
Chhatarpur
Dhasan
Panna
Lalitpur
Bundelkhand
Mungaoli
Bīna
Khurai
Betwa
Pārbati
Sironj
Hatta
Maihar
SĀGAR
Damoh
Murwāra
Katni
Rājgarh
Biaora
Vidisha
Bāsoda
Berasia
Vidisha
Mālwa
Agar
Jaora
Nāgda
Mahidpur
Ratlām
Khāchrod
Shājāpur
Shujālpur
Tropic of Cancer
Deori
Sihora
UJJAIN
Sehore
BHOPĀL
Raisen
Silwāni
Pātan
JABALPUR
Thandla
Pānch Mahāls
Dohad
Jhābua
Bednāwar
Barnagar
Dewās
Ichhāwar
Madhya Pradesh
Gādarwāra
Narsimhapur
Chhindwāra
INDORE
Kannod
Hoshangābād
Itārsi
Sohāgpur
Pachmarhi
Lakhnādon
Mandla
Nainpur
Dhār
Mhow
Narmada
Harda
Alīrājpur
Bāgh
Maheshwar
Senāwad
Harsūd
Makrai
Amarwāra
Seoni
Barwāni
West Nimār
East Nimār
Khargon
Bhikangaon
Khandwa
Betūl
Multai
Chhindwāra
Bālāghāt
Tirodi
VADODARA
Taloda
Shāhāda
Sendhwa
Shirpur
Tāpi
Burhānpur
Nandurbār
Sindkheda
Chopda
Rāver
Chikalda
Achalpur
Anjangaon
Kātol
Saoner
Tumsar
Rāmtek
Gondia
Kāmthi
Bhandāra
Dongargarh
Arjuni
Pānjhra
Amalner
Erandol
Bhusāwal
Jālgaon
Akot
AMRAVATI
Wardha
Arvi
NĀGPUR
Dhūle
Malkāpur
Shegaon
Badnera
Umrer
Pawni
Satāna
MĀLEGAON
Pāchora
Jāmner
Khāmgaon
Buldāna
Bālāpur
AKOLA
Murtajāpur
Chāndūr
Wardha
Pulgaon
Hinganghāt
Nāgbhīr
Girna
Nāsik
Chālisgaon
Ajanta
Kāranja
Yavatmāl
Manmād
Chikhli
Dārwha
Wainganga
Ellora
Mahārāshtra
Washim
Rājūr
Wani
Warora
Mūl
Garhchiroli
Yeola
Penganga
Ghūgus
Chāndrapur
Vaijāpur
Daulatābād
Rājura
Godāvari
Aurangābād
Jālna
Pūrna
Hingoli
Pusad
Kinwat
Ādilābād
Chukhāpalli
Dudhana
Paithan
Āsifābād
Rāhuri
Mula
Mānwat
Parbhani
Basmat
Utnūr
Prānhita
AHMADNAGAR
Pāthardi
Majalgaon
Nānded
Bhainsa
Nirmal
Pārner
Bīr
Gangākher
Kandahār
Ārmūr
Lakshettipet
Sironcha
Āshti
Dhārūr
Parli
Biloli
Andhra
Sina
Jāmkhed
Ambājogāi
Ahmadpur
Jagtiāl
Peddapalli
Bhima
Shrīgonda
Bodhan
Nizāmābād
Mahādeopur
Kalam
Udgīr
Degūr
Sircilla
Karīmnagar
Daund
Karmāla
Paranda
Lātūr
Kāmāreddi
Bārāmati
Bārsi
Osmānābād
Nilanga
Yellāreddi
Pradesh
Huzūrābād
Mulug
Indāpur
Kurduvādi
Tuljāpur
Bhālki
Mānjra
Nizām Sāgar
Medak
Siddipet
Phaltan
Basavakalyān
Bīdar
Jogipet
Medak
WARANGAL
Narsampet
Khamm
Mohol
East G
Albers conical equal area projection

Cartographed and Printed by Tamilnad Printers and Traders Pvt. Ltd. Madras-44 (Formerly Maps & Atlases Pub. Pvt. Ltd.)

© Government of India Copyright 1981

Based upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line

AND ORISSA

MADHYA PRADESH

Area: 4,42,841 sq.kms. **Population:** 52,131,717

Density: 118/sq.km

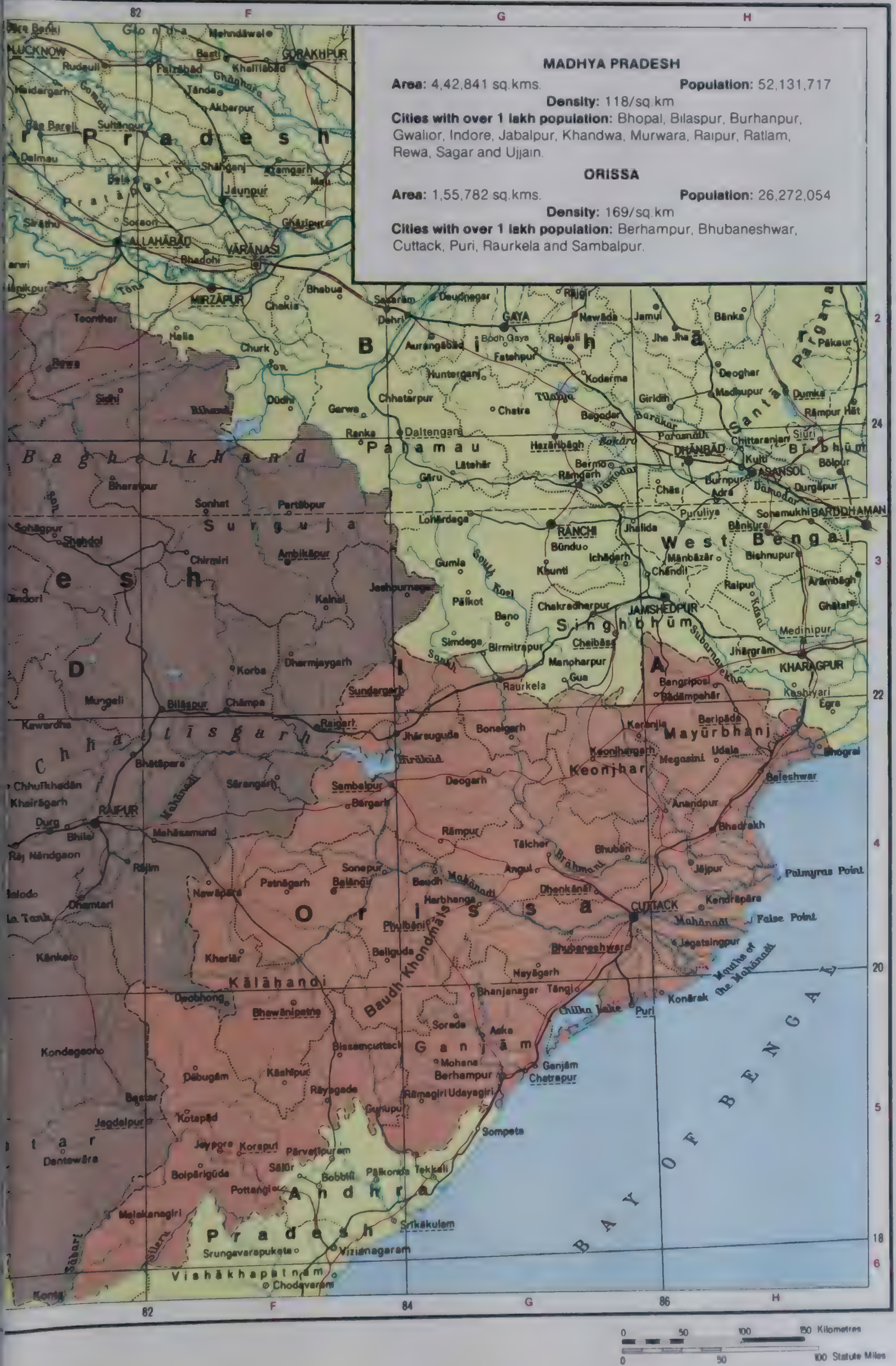
Cities with over 1 lakh population: Bhopal, Bilaspur, Burhanpur, Gwalior, Indore, Jabalpur, Khandwa, Murwara, Raipur, Ratlam, Rewa, Sagar and Ujjain.

ORISSA

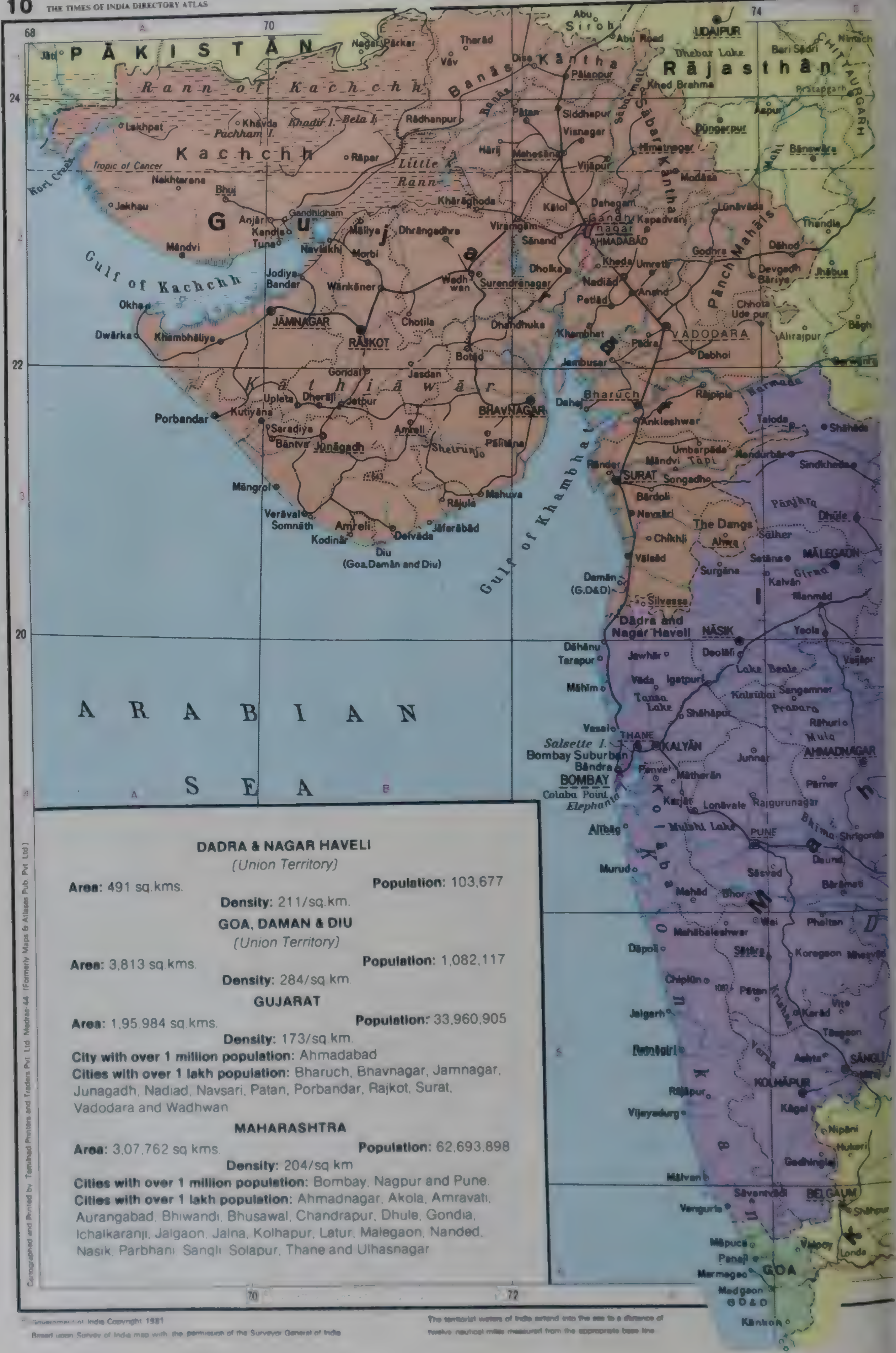
Area: 1,55,782 sq.kms. **Population:** 26,272,054

Density: 169/sq.km

Cities with over 1 lakh population: Berhampur, Bhubaneshwar, Cuttack, Puri, Raurkela and Sambalpur.


82
F
G
H
2
24
3
22
4
20
5
18
6
84
86
LUCKNOW
Rudauli
Haidargarh
Gomati
Faizābād
Basti
Mehndāwal
GORAKHPUR
Khalīlābād
Tānda
Ghāghra
Akbarpur
Rae Bareli
Sultānpur
Pradesh
Dalmau
Shāhganj
Āzamgarh
Mau
Bela
Pratāpgarh
Jaunpur
Sirāthu
Soraon
ALLAHĀBĀD
Ghāzīpur
VĀRĀNASI
Bhadohi
Tons
MIRZĀPUR
Chakia
Bhabua
Sasarām
Daudnagar
Rajgir
Dehri
GAYA
Nawāda
Jamui
Bānka
Santal Pargana
Pākaur
Teonthar
Rewa
Halia
Churk
Son
Aurangābād
Bodh Gaya
Rajauli
Bihār
Jha Jha
Fatehpur
Hunterganj
Koderma
Deoghar
Madhupur
Dumka
Sīdhi
Dūdhi
Chhatarpur
Chatra
Tilaiya
Giridih
Rāmpur Hāt
Garwa
Bagodar
Barākar
Siūri
Ranka
Daltenganj
Pārasnāth
Chittaranjan
Palamau
Hazāribāgh
Bokāro
DHANBĀD
Birbhūm
Bermo
Kulti
Baghelkhand
Lātehār
Rāmgarh
Dāmodar
ASANSOL
Bolpur
Bharatpur
Gāru
Burnpur
Adra
Durgāpur
Sonhat
Partābpur
Chās
Purūliya
Sonamukhi
BARDDHAMAN
Sohāgpur
Shahdol
Surguja
Lohārdaga
RĀNCHI
Jhalida
Bānkura
Bundu
West Bengal
Chirmiri
Ambikāpur
Gumla
South Koel
Ichāgarh
Mānbāzār
Bishnupur
Dindori
Jashpurnagar
Khunti
Chāndil
Ārāmbāgh
Kainsi
Pālkot
Raipur
Kāsai
Ghātāl
Bano
Chakradharpur
JAMSHEDPUR
Singhbhūm
Medinīpur
Simdega
Birmitrapur
Chaibāsa
Subarnarekha
Jhārgrām
Sankh
Manoharpur
KHARAGPUR
Korba
Dharmjaygarh
Gua
Bangriposi
Raurkela
Kashiyari
Mungeli
Bilāspur
Chāmpa
Sundargarh
Bādāmpahār
Egra
Kawardha
Raigarh
Karanjia
Bāripāda
Chhattīsgarh
Jhārsuguda
Bonaigarh
Mayūrbhanj
Hīrākud
Keonjhargarh
Udala
Bhogrāi
Bhātāpāra
Keonjhar
Megasini
Chhuīkhadān
Sārangarh
Mahānadi
Sambalpur
Deogarh
Bāleshwar
Khairāgarh
Bargarh
Ānandpur
RAIPUR
Durg
Mahāsamund
Bhadrakh
Bhilai
Rāmpur
Rāj Nāndgaon
Tālcher
Bhubān
Brāhmani
Rājim
Sonepur
Angul
Jājpur
Palmyras Point
Balodā
Patnāgarh
Balāngīr
Baudh
Mahānadi
Dhenkānāl
Newāpāra
Harbhanga
Kendrāpāra
Dhamtari
Orissa
CUTTACK
La. Tank
Phulbāni
Mahānadi
False Point
Jagatsinghpur
Baliguda
Bhubaneshwar
Mouths of the Mahānadi
Kānker
Kherlār
Baudh Khondmāls
Nayāgarh
Kālāhandi
Bhanjanagar
Tāngi
Konārak
Deobhong
Chilka Lake
Puri
Bhawānipatna
Soroda
Aska
Kondegaon
Bissamcuttack
Ganjām
Mohana
Ganjām
Berhampur
Chatrapur
Dēbugām
Kāshīpur
Rāyagada
Bastar
Rāmagiri Udayagiri
Gunupur
Kotapād
Jagdalpur
Sompeta
Bastar
Jeypore
Koraput
Pārvatīpuram
Dantewāra
Sālūr
Boipārigūda
Bobbili
Pālkonda
Tekkali
Pottangi
Andhra
Malakānagiri
Srīkākulam
Pradesh
Sileru
Sabari
Srungavarapukota
Vizianagaram
Vishākhapatnam
Chodavaram
Konta
BAY OF BENGAL
0 50 100 150 Kilometres
0 50 100 Statute Miles

GUJARAT, MAHARASHTRA, DADRA &


PĀKISTĀN
Rann of Kachchh
Kachchh
Gulf of Kachchh
Tropic of Cancer
Kori Creek
Little Rann
Gujarat
Kāthiāwār
Gulf of Khambhat
Rājasthān
Dadra and Nagar Haveli
ARABIAN SEA
Bhuj
Gandhidham
Kandla
Māndvi
Lakhpat
Jakhau
Nakhtarana
Okha
Dwārka
JĀMNAGAR
RĀJKOT
Morbi
Porbandar
Junāgadh
Veraval
Somnāth
Diu (Goa, Damān and Diu)
BHAVNAGAR
Palanpur
Mehsāna
Pātan
Gandhinagar
AHMADĀBĀD
Nadiād
Anand
Kheda
Godhra
Dāhod
VADODARA
Bharuch
Ankleshwar
SURAT
Navsāri
Valsād
Damān (G.D&D)
Silvassa
The Dangs
NĀSIK
MĀLEGAON
Dāhānu
Thane
KALYĀN
Salsette I.
Bombay Suburban
Bāndra
BOMBAY
Colaba Point
Elephanta
Alībāg
Murud
PUNE
AHMADNAGAR
Sātāra
Mahābaleshwar
Dāpoli
Chiplūn
Ratnāgiri
Rājāpur
Vijaydurg
Mālvan
Vengurla
SĀNGLI
KOLHĀPUR
BELGAUM
Panaji
Mārmagao
Madgaon
GOA
Konkan
Mahārāshtra
UDAIPUR
68
70
72
74
24
22
20

DADRA & NAGAR HAVELI

(Union Territory)

Area: 491 sq.kms. **Population:** 103,677

Density: 211/sq.km.

GOA, DAMAN & DIU

(Union Territory)

Area: 3,813 sq.kms. **Population:** 1,082,117

Density: 284/sq.km.

GUJARAT

Area: 1,95,984 sq.kms. **Population:** 33,960,905

Density: 173/sq.km.

City with over 1 million population: Ahmadabad

Cities with over 1 lakh population: Bharuch, Bhavnagar, Jamnagar, Junagadh, Nadiad, Navsari, Patan, Porbandar, Rajkot, Surat, Vadodara and Wadhwan

MAHARASHTRA

Area: 3,07,762 sq.kms. **Population:** 62,693,898

Density: 204/sq.km

Cities with over 1 million population: Bombay, Nagpur and Pune.

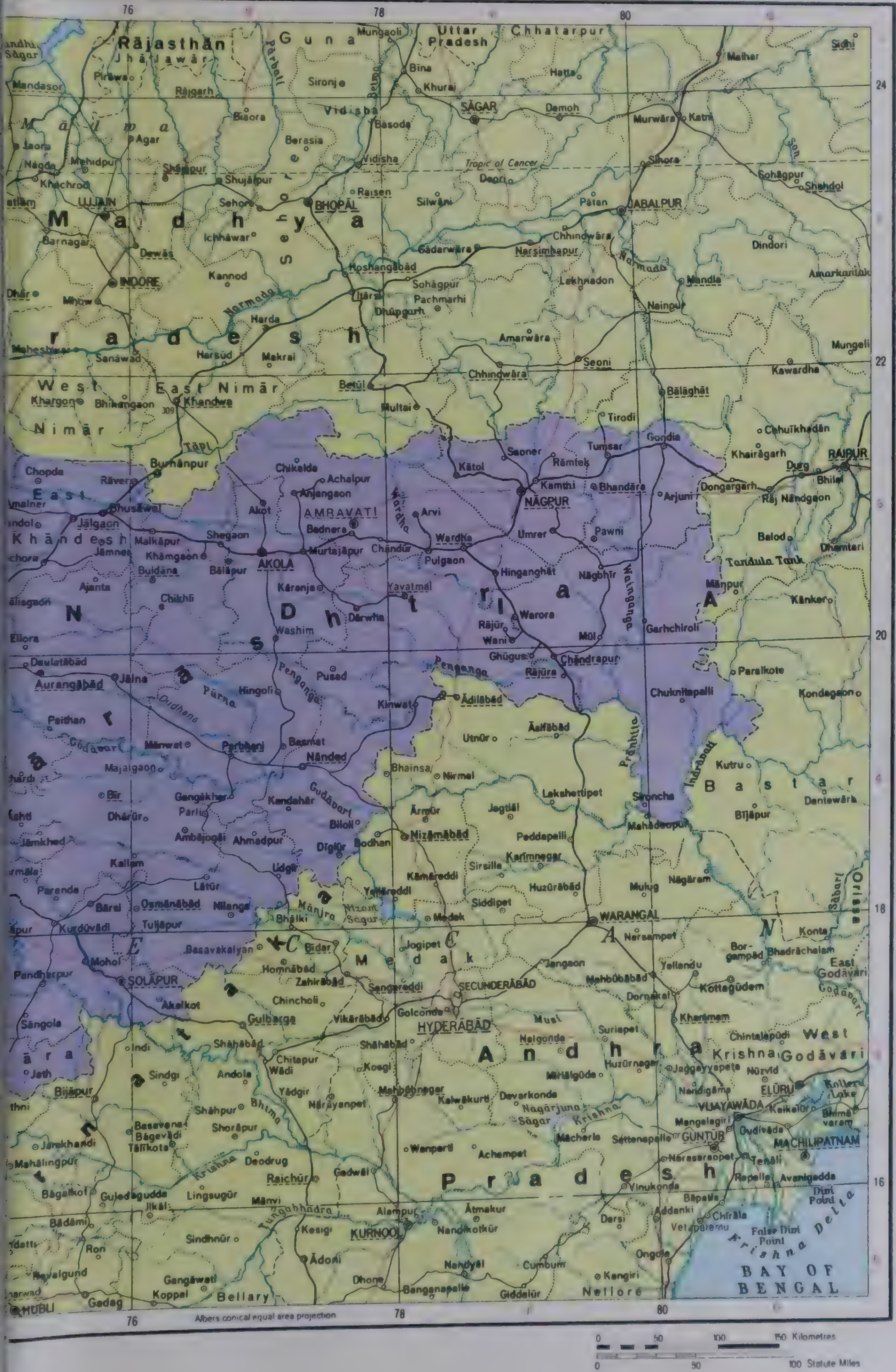
Cities with over 1 lakh population: Ahmadnagar, Akola, Amravati, Aurangabad, Bhiwandi, Bhusawal, Chandrapur, Dhule, Gondia, Ichalkaranji, Jalgaon, Jalna, Kolhapur, Latur, Malegaon, Nanded, Nasik, Parbhani, Sangli, Solapur, Thane and Ulhasnagar

Cartographed and Printed by Tamilnad Printers and Traders Pvt Ltd Madras-44 (Formerly Maps & Atlases Pub. Pvt Ltd.)

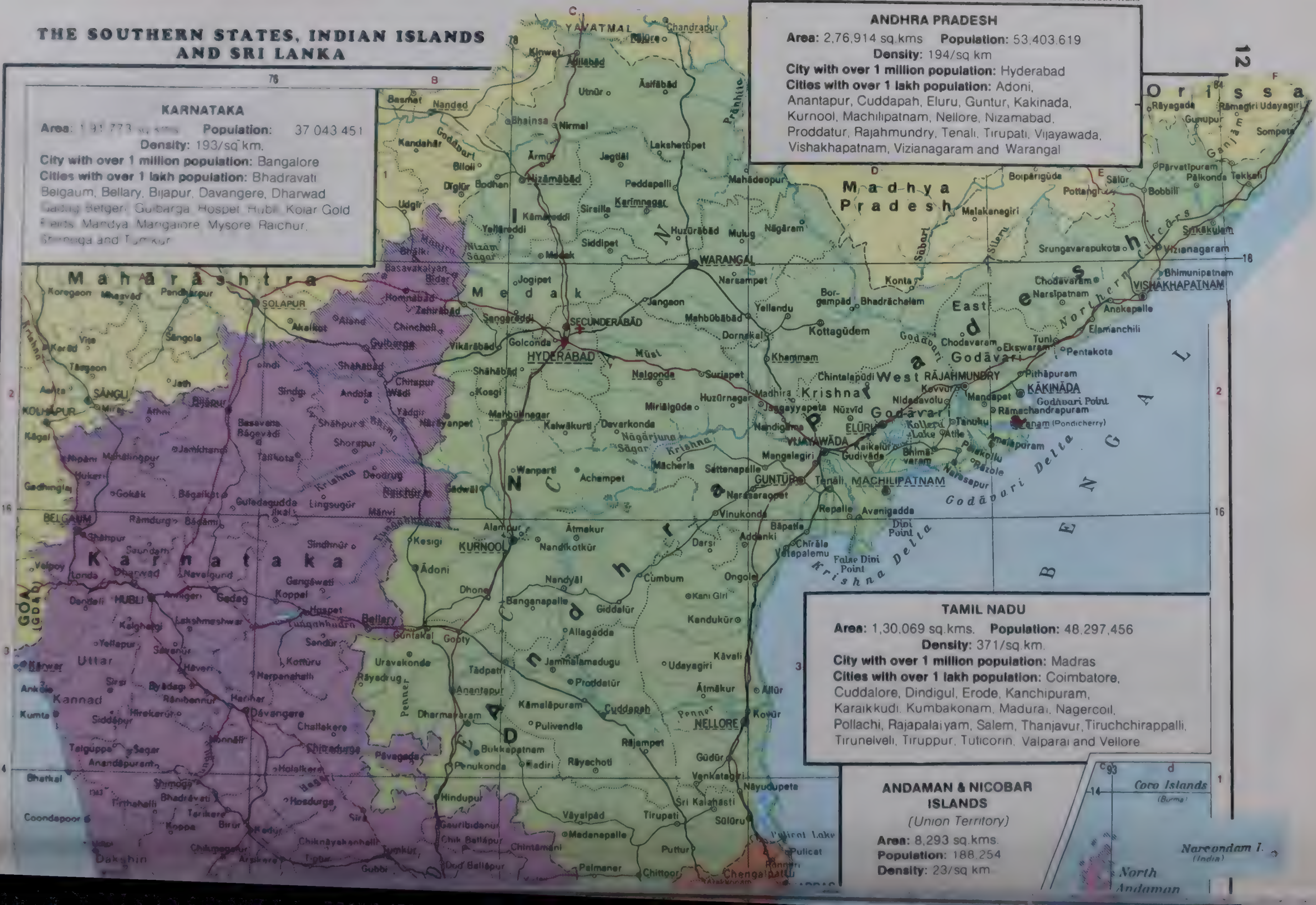
© Government of India Copyright 1981

Based upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line


76
78
80
24
22
20
18
16
Rājasthān
Jhālawār
Guna
Uttar Pradesh
Chhatarpur
Mungaoli
Sidhi
Maihar
Mandasor
Pirāwa
Rājgarh
Sironj
Bina
Khurai
Hatta
Vidisha
SĀGAR
Damoh
Murwāra
Katni
Biaora
Agar
Berasia
Basoda
Son
Jaora
Nāgda
Mehidpur
Shājāpur
Vidisha
Tropic of Cancer
Deori
Sihora
Sohāgpur
Shahdol
Khachrod
Shujālpur
Raisen
Ratlām
UJJAIN
Sehore
BHOPĀL
Silwāni
Patan
JABALPUR
Madhya Pradesh
Barnagar
Ichhāwar
Chhindwāra
Dindori
Dewās
Gādarwāra
Narsimhapur
Narmada
Kannod
Hoshangābād
Mandla
Amarkantak
INDORE
Sohāgpur
Lakhnadon
Dhār
Mhow
Itārsi
Pachmarhi
Dhūpgarh
Nainpur
Harda
Maheshwar
Sanawad
Harsūd
Makrai
Amarwāra
Mungeli
Seoni
Kawardha
West Nimār
East Nimār
Betūl
Chhindwāra
Bālāghāt
Khargon
Bhikangaon
Khandwa
309
Multai
Tirodi
Cahuīkhadān
Tāpi
Tumsar
Gondia
Khairāgarh
RAIPUR
Burhānpur
Saoner
Rāmtek
Durg
Chopda
Chikalda
Kātol
Bhilai
Rāver
Achalpur
Kamthi
Bhandāra
Arjuni
Dongargarh
Anjangaon
NĀGPUR
Rāj Nāndgaon
East Khāndesh
Bhusāwal
Akot
AMRAVATI
Arvi
Amalner
Wardha
Jālgaon
Bednera
Wardha
Umrer
Pawni
Balod
Erandol
Shegaon
Malkāpur
Dhamtari
Chālisgaon
Jāmner
Khāmgaon
AKOLA
Murtajāpur
Chāndur
Pulgaon
Tandula Tank
Buldāna
Bālāpur
Hinganghāt
Nāgbhīr
Wainganga
Ajanta
Kāranja
Yavatmāl
Mānpur
Maharashtra
Chālisgaon
Chikhli
Dārwha
Kānker
Warora
Ellora
Washim
Rājūr
Wani
Garhchiroli
Mūl
Daulatābād
Ghūgus
Chāndrapur
Aurangābād
Jālna
Penganga
Pusad
Penganga
Rājūra
Parelkote
Pūrna
Hingoli
Chuknitapalli
Kondagaon
Dudhana
Kinwat
Ādilābād
Paithan
Godāvari
Āsifābād
Mānwat
Parbhani
Basmat
Utnūr
Prānhita
Majalgaon
Nānded
Indrāvati
Bhainsa
Nirmal
Kutru
Bastar
Bīr
Gangākher
Kandahār
Godāvari
Lakshettipet
Sironcha
Dantewāra
Dhārūr
Parli
Armūr
Jagtiāl
Bījāpur
Biloli
Mahādeopur
Jāmkhed
Ambājogāi
Ahmadpur
Deglūr
Bodhan
Nizāmābād
Peddapalli
Karīmnagar
Kallam
Sirsilla
Udgīr
Kāmāreddi
Bārsi
Lātūr
Huzūrābād
Mulug
Nāgāram
Sābari
Orissa
Parenda
Yellāreddi
Nizam Sāgar
Mānjra
Siddipet
Osmānābād
Nilanga
Medak
Kurdūvādi
Tuljāpur
Bhālki
WARANGAL
Konta
Basavakalyān
Jogipet
Narsampet
Borgampād
Bhadrāchalam
Mohol
Bīdar
Medak
Jangaon
Pandharpur
Homnābād
Zahīrābād
Yellandu
East Godāvari
SOLĀPUR
Sangāreddi
SECUNDERĀBĀD
Mahbūbābād
Akalkot
Chincholi
Dornakal
Kottagūdem
Godāvari
Sāngola
Golconda
Gulbarga
Vikārābād
HYDERĀBĀD
Musi
Khammam
Indi
Shāhābād
Shāhābād
Nalgonda
Suriapet
Chintalapūdi
West Godāvari
Chitapur
Kosgi
Andhra Pradesh
Krishna
Jath
Sindgi
Andola
Wādi
Huzūrnagar
Miriālgūda
Jaggayyapeta
Nūzvid
Bijāpur
Yādgir
Mahbūbnagar
Kalwākurti
Devarkonda
Nandigāma
ELŪRU
Kolleru Lake
Jamkhandi
Shāhpur
Nārāyanpet
Nāgārjuna Sāgar
Krishna
VIJAYAWĀDA
Kaikalūr
Bhīma
Bhīmavaram
Basavana Bāgevādi
Tālīkota
Shorāpur
Māchherla
Sattenapalle
GUNTŪR
Gudivāda
Mangalagiri
Mahālingpur
Deodrug
Wanparti
Achampet
Narasaraopet
MACHILIPATNAM
Krishna
Tenāli
Bāgalkot
Gulēdagudda
Lingsugūr
Raichūr
Gadwāl
Repalle
Avanigadda
Ilkal
Mānvi
Vinukonda
Bāpatla
Divi Point
Bādāmi
Tungabhadra
Ātmakūr
Addanki
Chirāla
Alampur
Kesigi
KURNOOL
Nandikotkūr
Darsi
Vetapalemu
False Divi Point
Krishna Delta
Ron
Sindhnūr
Ādoni
Ongole
Navalgund
Nandyāl
Cumbum
Kangiri
BAY OF BENGAL
Dhārwād
Gangāwati
Dhone
Banganapalle
Giddalūr
HUBLI
Gadag
Koppal
Bellary
Nellore
Albers conical equal area projection
0
50
100
150 Kilometres
0
50
100 Statute Miles

THE SOUTHERN STATES, INDIAN ISLANDS AND SRI LANKA


Mahārāshtra
Karnataka
Andhra Pradesh
Madhya Pradesh
Orissa
Northern Circars
BAY OF BENGAL
Godāvari Delta
Krishna Delta
HYDERABAD
SECUNDERABAD
WARANGAL
VISHAKHAPATNAM
KĀKINĀDA
RĀJAHMUNDRY
VIJAYAWĀDA
GUNTŪR
MACHILIPATNAM
NELLORE
KURNOOL
SOLAPUR
BELGAUM
HUBLI
Bellary
GOA
Coco Islands
Narcondam I.
North Andaman
76
78
84
16
18
14
B
C
D
E
F

KARNATAKA

Area: 1,91,773 sq.kms. **Population:** 37 043 451

Density: 193/sq km.

City with over 1 million population: Bangalore

Cities with over 1 lakh population: Bhadravati Belgaum, Bellary, Bijapur, Davangere, Dharwad Gadag Betgeri, Gulbarga, Hospet, Hubli, Kolar Gold Fields, Mandya, Mangalore, Mysore, Raichur, Shimoga and Tumkur

ANDHRA PRADESH

Area: 2,76,914 sq.kms **Population:** 53,403,619

Density: 194/sq km

City with over 1 million population: Hyderabad

Cities with over 1 lakh population: Adoni, Anantapur, Cuddapah, Eluru, Guntur, Kakinada, Kurnool, Machilipatnam, Nellore, Nizamabad, Proddatur, Rajahmundry, Tenali, Tirupati, Vijayawada, Vishakhapatnam, Vizianagaram and Warangal

TAMIL NADU

Area: 1,30,069 sq.kms. **Population:** 48,297,456

Density: 371/sq.km.

City with over 1 million population: Madras

Cities with over 1 lakh population: Coimbatore, Cuddalore, Dindigul, Erode, Kanchipuram, Karaikkudi, Kumbakonam, Madurai, Nagercoil, Pollachi, Rajapalaiyam, Salem, Thanjavur, Tiruchchirappalli, Tirunelveli, Tiruppur, Tuticorin, Valparai and Vellore

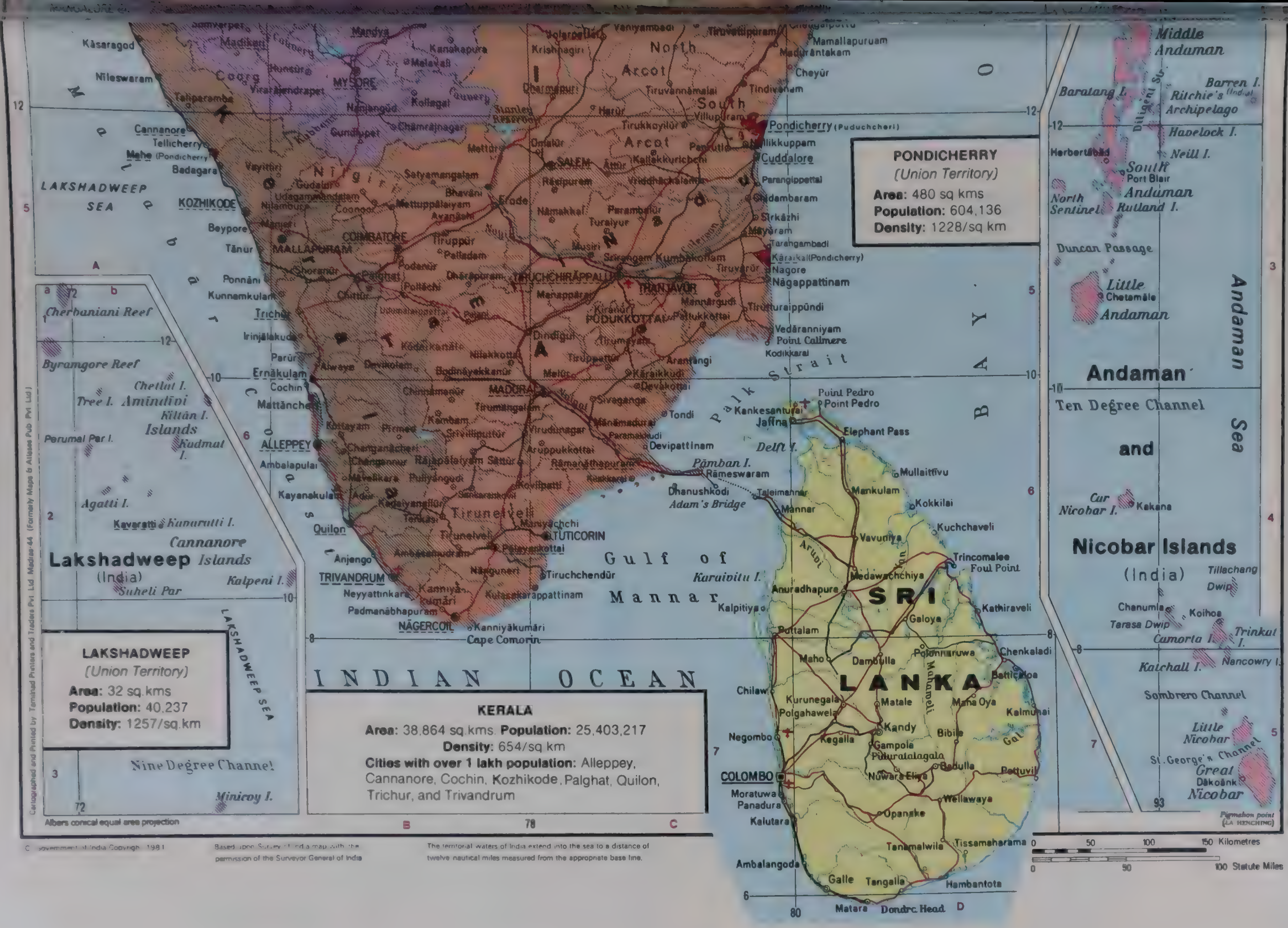
ANDAMAN & NICOBAR ISLANDS

(Union Territory)

Area: 8,293 sq.kms.

Population: 188,254

Density: 23/sq km


Kerala
Tamil Nadu
Mysore
Coorg
Nilgiri
North Arcot
South Arcot
Kāsaragod
Nileswaram
Taliparamba
Cannanore
Tellicherry
Mahe (Pondicherry)
Badagara
KOZHIKODE
Beypore
Tānur
MALLAPURAM
Ponnāni
Kunnamkulam
Trichur
Irinjālakuda
Parūr
Ernākulam
Cochin
Mattānchēri
ALLEPPEY
Ambalapulai
Kayankulam
Quilon
Anjengo
TRIVANDRUM
Neyyattinkara
Padmanābhapuram
NĀGERCOIL
Kanniyākumāri
Cape Comorin
Palghat
Coimbatore
Erode
SALEM
Dharmapuri
Krishnagiri
Vaniyambadi
Tiruvannāmalai
Villupuram
Tindivanam
Cheyūr
Madurāntakam
Mamallapuram
Pondicherry (Puduchcheri)
Cuddalore
Parangipettai
Chidambaram
Sīrkāzhi
Māyūram
Tarangambadi
Kāraikal (Pondicherry)
Nagore
Nāgappattinam
Tiruturaippūndi
Vedāranniyam
Point Calimere
Kodikkarai
Tiruchchirāppalli
THANJAVŪR
Kumbakonam
PUDUKKOTTAI
Dindigul
MADURAI
Sivaganga
Rāmanāthapuram
Devipattinam
Tondi
Pāmban I.
Rāmeswaram
Dhanushkodi
Adam's Bridge
TUTICORIN
Tirunelveli
Pālayankottai
Tiruchchendūr
Kulasekarappattinam
Nāngunēri
Gulf of Mannar
Palk Strait
Karaitivu I.
Delft I.
BAY OF BENGAL
INDIAN OCEAN
LAKSHADWEEP SEA
Cherbaniani Reef
Byramgore Reef
Chetlat I.
Tree I.
Amindivi Islands
Kiltān I.
Kadmat I.
Perumal Par I.
Agatti I.
Kavaratti
Kunarutti I.
Cannanore Islands
Lakshadweep Islands (India)
Kalpeni I.
Suheli Par
Nine Degree Channel
Minicoy I.
SRI LANKA
Point Pedro
Kankesanturai
Jaffna
Elephant Pass
Mullaittivu
Mankulam
Kokkilai
Kuchchaveli
Vavuniya
Mannar
Talaimannar
Medawachchiya
Anuradhapura
Trincomalee
Foul Point
Kalpitiya
Puttalam
Galoya
Polonnaruwa
Kathiraveli
Chenkaladi
Batticaloa
Maho
Dambulla
Kurunegala
Polgahawela
Matale
Mahaweli
Maha Oya
Kalmunai
Chilaw
Negombo
Kegalla
Kandy
Gampola
Bibile
Nuwara Eliya
Badulla
Pottuvil
COLOMBO
Moratuwa
Panadura
Kalutara
Wellawaya
Opanake
Ambalangoda
Tanamalwila
Tissamaharama
Galle
Tangalla
Hambantota
Matara
Dondra Head
Andaman Sea
Middle Andaman
Baratang I.
Barren I. (India)
Ritchie's Archipelago
Havelock I.
Neill I.
Herbertabad
South Andaman
Port Blair
North Sentinel
Rutland I.
Duncan Passage
Little Andaman
Chetamale
Ten Degree Channel
Andaman and Nicobar Islands (India)
Car Nicobar I.
Kakana
Tillachang Dwip
Chanumla
Koihoa
Tarasa Dwip
Camorta I.
Trinkat I.
Katchall I.
Nancowry I.
Sombrero Channel
Little Nicobar
St. George's Channel
Great Nicobar
Dākoank
Pigmalion point
Albers conical equal area projection
0 50 100 150 Kilometres
0 50 100 Statute Miles

LAKSHADWEEP
(Union Territory)
Area: 32 sq.kms
Population: 40,237
Density: 1257/sq.km

KERALA
Area: 38,864 sq.kms. **Population:** 25,403,217
Density: 654/sq.km
Cities with over 1 lakh population: Alleppey, Cannanore, Cochin, Kozhikode, Palghat, Quilon, Trichur, and Trivandrum

PONDICHERRY
(Union Territory)
Area: 480 sq kms
Population: 604,136
Density: 1228/sq km

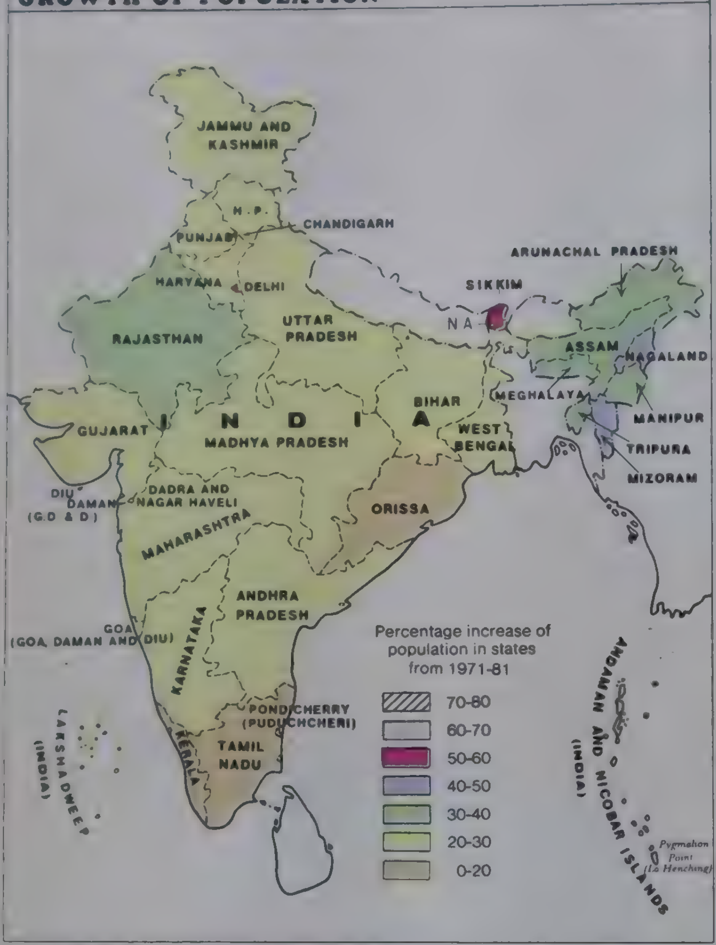
Cartographed and Printed by Tamilnad Printers and Traders Pvt Ltd Madras-44 (Formerly Maps & Atlases Pub Pvt Ltd)

© Government of India Copyright 1981

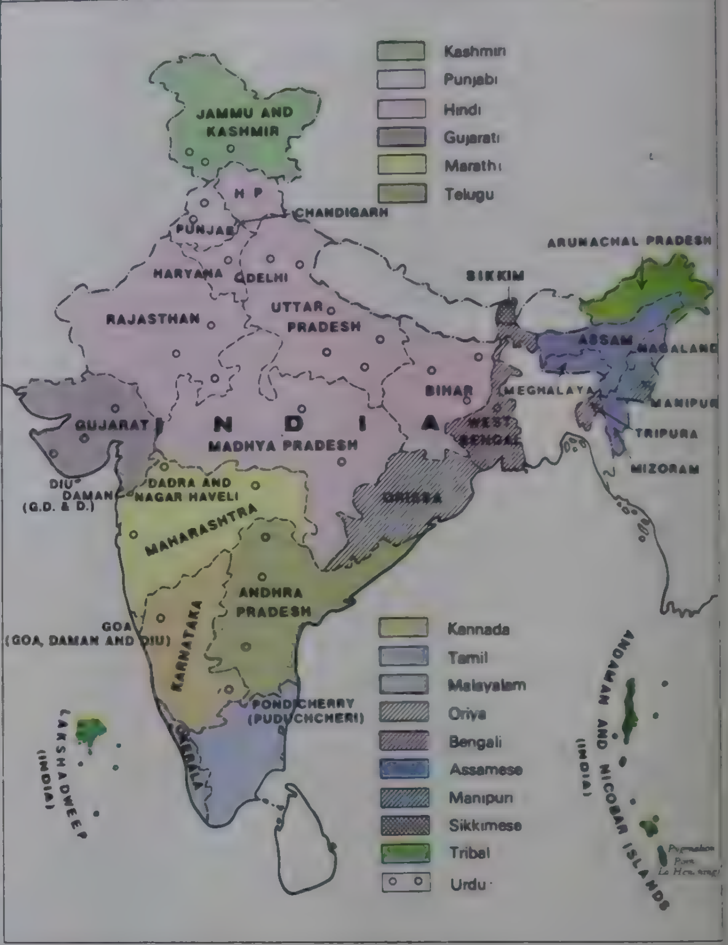
Based upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.

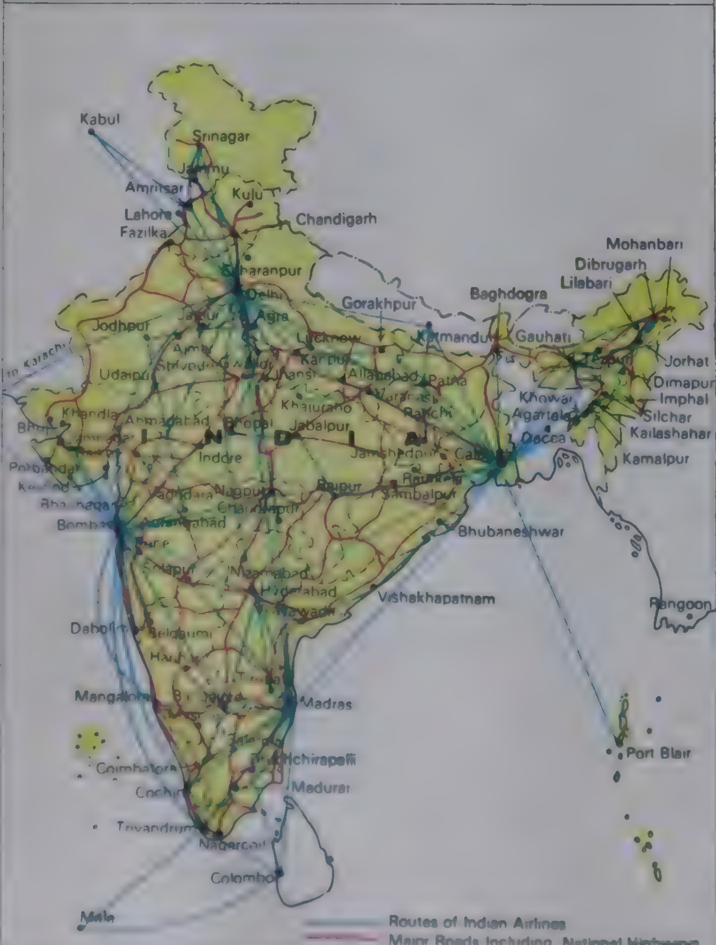
GROWTH OF POPULATION


JAMMU AND KASHMIR
H.P.
CHANDIGARH
PUNJAB
HARYANA
DELHI
RAJASTHAN
UTTAR PRADESH
SIKKIM
NA
ARUNACHAL PRADESH
ASSAM
NAGALAND
MEGHALAYA
MANIPUR
TRIPURA
MIZORAM
BIHAR
WEST BENGAL
GUJARAT
I N D I A
MADHYA PRADESH
DIU
DAMAN
(G.D & D.)
DADRA AND NAGAR HAVELI
MAHARASHTRA
ORISSA
ANDHRA PRADESH
GOA
(GOA, DAMAN AND DIU)
KARNATAKA
PONDICHERRY (PUDUCHCHERI)
TAMIL NADU
KERALA
LAKSHADWEEP (INDIA)
ANDAMAN AND NICOBAR ISLANDS (INDIA)
Pygmalion Point (La Henching)
Percentage increase of population in states from 1971-81
▨ 70-80
60-70
50-60
40-50
30-40
20-30
0-20

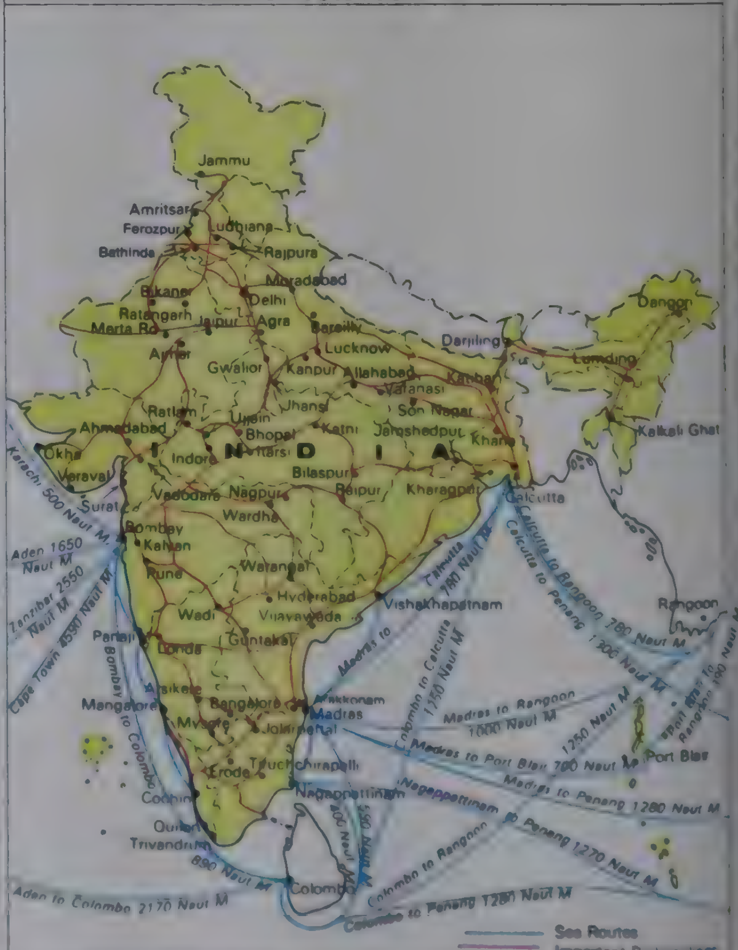
LANGUAGES


Kashmiri
Punjabi
Hindi
Gujarati
Marathi
Telugu
JAMMU AND KASHMIR
H P
CHANDIGARH
PUNJAB
HARYANA
DELHI
RAJASTHAN
UTTAR PRADESH
SIKKIM
ARUNACHAL PRADESH
ASSAM
NAGALAND
MEGHALAYA
MANIPUR
TRIPURA
MIZORAM
BIHAR
WEST BENGAL
GUJARAT
I N D I A
MADHYA PRADESH
ORISSA
DIU
DAMAN
(G.D. & D.)
DADRA AND NAGAR HAVELI
MAHARASHTRA
ANDHRA PRADESH
GOA
(GOA, DAMAN AND DIU)
KARNATAKA
PONDICHERRY (PUDUCHCHERI)
KERALA
LAKSHADWEEP (INDIA)
ANDAMAN AND NICOBAR ISLANDS (INDIA)
Pygmalion Point (La Henching)
Kannada
Tamil
Malayalam
Oriya
Bengali
Assamese
Manipuri
Sikkimese
Tribal
○ ○ Urdu

MEANS OF COMMUNICATION I


Kabul
Srinagar
Jammu
Amritsar
Kulu
Lahore
Fazilka
Chandigarh
Saharanpur
Delhi
Agra
Jaipur
Jodhpur
Udaipur
to Karachi
Gorakhpur
Lucknow
Kanpur
Jhansi
Allahabad
Patna
Varanasi
Khajuraho
Bhopal
Jabalpur
Ranchi
Ahmadabad
Indore
Kandla
Bhuj
Porbandar
Bhavnagar
Bombay
Aurangabad
Nagpur
Raipur
Jamshedpur
Rourkela
Sambalpur
Calcutta
Bhubaneshwar
Baghdogra
Kathmandu
Gauhati
Mohanbari
Dibrugarh
Lilabari
Jorhat
Dimapur
Imphal
Silchar
Kailashahar
Khowai
Agartala
Dacca
Kamalpur
Pune
Hyderabad
Vishakhapatnam
Dabolim
Belgaum
Mangalore
Madras
Tiruchirapalli
Madurai
Coimbatore
Cochin
Trivandrum
Nagercoil
Colombo
Port Blair
Rangoon
Male
Routes of Indian Airlines
Major Roads Including National Highways

MEANS OF COMMUNICATION II


Jammu
Amritsar
Ferozpur
Ludhiana
Bathinda
Rajpura
Moradabad
Bikaner
Delhi
Ratangarh
Marta Rd
Jaipur
Agra
Bareilly
Lucknow
Ajmer
Gwalior
Kanpur
Allahabad
Varanasi
Son Nagar
Darjiling
Dangori
Lumding
Katihar
Ratlam
Jhansi
Ujjain
Bhopal
Katni
Jamshedpur
Kharia
Kalkali Ghat
Ahmadabad
Okha
Veraval
Indore
Itarsi
Bilaspur
Raipur
Kharagpur
Calcutta
Surat
Vadodara
Nagpur
Wardha
Bombay
Kalyan
Pune
Warangal
Hyderabad
Vijayawada
Vishakhapatnam
Wadi
Guntakal
Panaji
Londa
Arsikere
Mangalore
Bangalore
Mysore
Jolarpettai
Arakkonam
Madras
Erode
Tiruchirapalli
Nagapattinam
Cochin
Quilon
Trivandrum
Colombo
Rangoon
Port Blair
Karachi 500 Naut M.
Aden 1650 Naut M
Zanzibar 2550 Naut M
Cape Town 4590 Naut M
Bombay to Colombo
Madras to Calcutta 780 Naut M
Colombo to Calcutta 1250 Naut M
Calcutta to Rangoon 780 Naut M
Calcutta to Penang 1300 Naut M
Madras to Rangoon 1000 Naut M
Madras to Port Blair 700 Naut M
Madras to Penang 1280 Naut M
Nagapattinam to Penang 1270 Naut M
Colombo to Rangoon
Colombo to Penang 1280 Naut M
Aden to Colombo 2170 Naut M
890 Naut M
400 Naut M
550 Naut M
1250 Naut M
Sea Routes
Important Railway lines

Scale 1:40,000,000

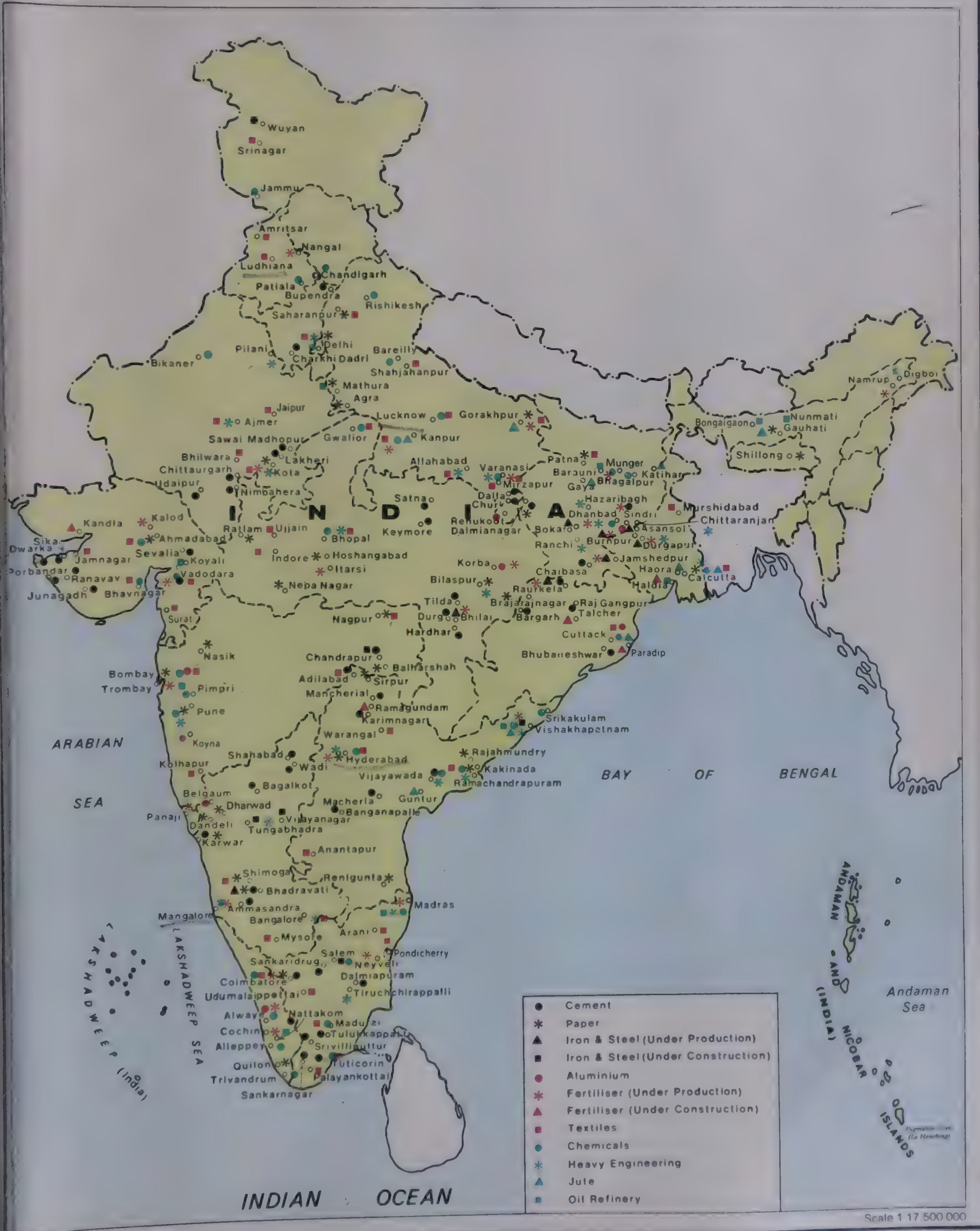
© Government of India Copyright 1981

Based upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line

The boundary of Meghalaya shown on this map is as interpreted from the North-Eastern Areas (Reorganisation) Act, 1971, but has yet to be verified

INDIA-INDUSTRIES

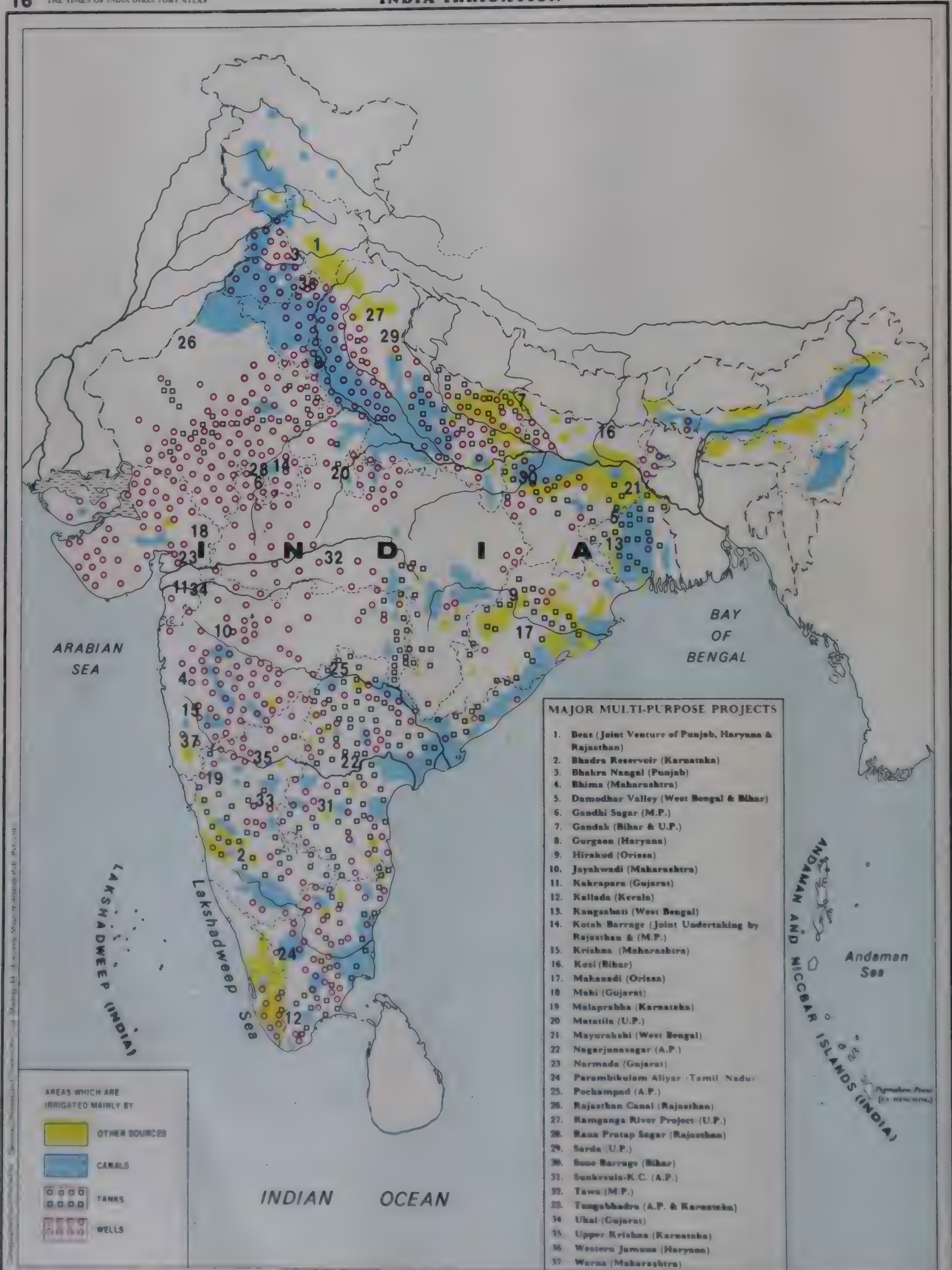

Wuyan
Srinagar
Jammu
Amritsar
Nangal
Ludhiana
Chandigarh
Patiala
Bupendra
Rishikesh
Saharanpur
Delhi
Pilani
Charkhi Dadri
Bareilly
Bikaner
Shahjahanpur
Mathura
Agra
Jaipur
Ajmer
Lucknow
Gorakhpur
Sawai Madhopur
Gwalior
Kanpur
Bhilwara
Lakheri
Chittaurgarh
Kota
Udaipur
Nimbahera
Allahabad
Varanasi
Mirzapur
Patna
Barauni
Munger
Bhagalpur
Katihar
Gaya
Hazaribagh
Satna
Dalla
Churk
Renukoot
Dalmianagar
Dhanbad
Sindri
Murshidabad
Chittaranjan
I N D I A
Kandla
Kalod
Ratlam
Ujjain
Bhopal
Keymore
Bokaro
Asansol
Sika
Dwarka
Ahmadabad
Jamnagar
Sevalia
Koyali
Indore
Hoshangabad
Ranchi
Burnpur
Durgapur
Porbandar
Vadodara
Itarsi
Korba
Jamshedpur
Ranavav
Chaibasa
Haora
Calcutta
Junagadh
Bhavnagar
Nepa Nagar
Bilaspur
Raurkela
Haldia
Tilda
Brajarajnagar
Raj Gangpur
Surat
Nagpur
Durg
Bhilai
Bargarh
Talcher
Hardhar
Cuttack
Nasik
Chandrapur
Bhubaneshwar
Paradip
Balharshah
Bombay
Adilabad
Sirpur
Trombay
Pimpri
Mancherial
Pune
Ramagundam
Karimnagar
Srikakulam
Vishakhapatnam
ARABIAN
Warangal
Koyna
Shahabad
Rajahmundry
Kolhapur
Wadi
Hyderabad
Kakinada
Vijayawada
BAY OF BENGAL
Ramachandrapuram
Bagalkot
Belgaum
SEA
Dharwad
Macherla
Guntur
Panaji
Banganapalle
Dandeli
Vijayanagar
Tungabhadra
Karwar
Anantapur
Shimoga
Renigunta
Bhadravati
Madras
Ammasandra
Mangalore
Bangalore
Arani
Mysore
LAKSHADWEEP SEA
LAKSHADWEEP (India)
Salem
Pondicherry
Sankaridrug
Neyveli
Dalmiapuram
Coimbatore
Udumalaippettai
Tiruchchirappalli
Alwaye
Nattakom
Cochin
Madurai
Tulukkappatti
Alleppey
Srivilliputtur
Quilon
Tuticorin
Trivandrum
Palayankottai
Sankarnagar
INDIAN OCEAN
Namrup
Digboi
Bongaigaon
Nunmati
Gauhati
Shillong
ANDAMAN AND NICOBAR ISLANDS (INDIA)
Andaman Sea
● Cement
✱ Paper
▲ Iron & Steel (Under Production)
■ Iron & Steel (Under Construction)
● Aluminium
✱ Fertiliser (Under Production)
▲ Fertiliser (Under Construction)
■ Textiles
● Chemicals
✱ Heavy Engineering
▲ Jute
■ Oil Refinery
Scale 1 17 500 000

rnment of India Copyright 1981
d upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line

North Eastern Areas (Reorga [illegible]

INDIA-IRRIGATION


I N D I A
ARABIAN SEA
BAY OF BENGAL
INDIAN OCEAN
Andaman Sea
LAKSHADWEEP (INDIA)
Lakshadweep Sea
ANDAMAN AND NICOBAR ISLANDS (INDIA)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
AREAS WHICH ARE IRRIGATED MAINLY BY
OTHER SOURCES
CANALS
TANKS
WELLS
Lambert azimuthal equal area projection
Scale 1:17 000 000

MAJOR MULTI-PURPOSE PROJECTS

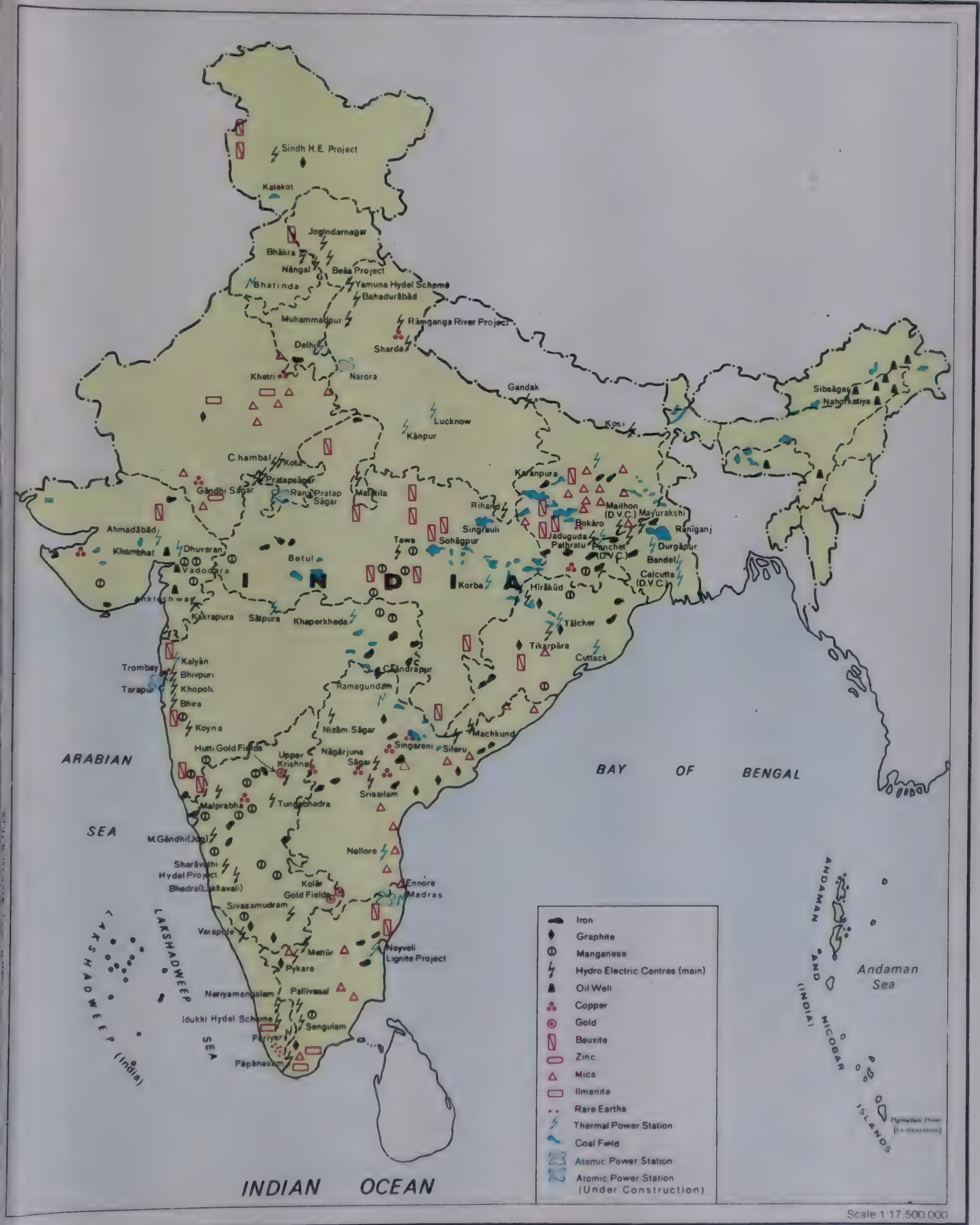
1. Beas (Joint Venture of Punjab, Haryana & Rajasthan)
2. Bhadra Reservoir (Karnataka)
3. Bhakra Nangal (Punjab)
4. Bhima (Maharashtra)
5. Damodhar Valley (West Bengal & Bihar)
6. Gandhi Sagar (M.P.)
7. Gandak (Bihar & U.P.)
8. Gurgaon (Haryana)
9. Hirakud (Orissa)
10. Jayakwadi (Maharashtra)
11. Kakrapara (Gujarat)
12. Kallada (Kerala)
13. Kangsabati (West Bengal)
14. Kotah Barrage (Joint Undertaking by Rajasthan & (M.P.)
15. Krishna (Maharashtra)
16. Kosi (Bihar)
17. Mahanadi (Orissa)
18 Mahi (Gujarat)
19 Malaprabha (Karnataka)
20 Matatila (U.P.)
21. Mayurakshi (West Bengal)
22 Nagarjunasagar (A.P.)
23 Narmada (Gujarat)
24 Parambikulam Aliyar (Tamil Nadu)
25. Pochampad (A.P.)
26. Rajasthan Canal (Rajasthan)
27. Ramganga River Project (U.P.)
28. Rana Pratap Sagar (Rajasthan)
29. Sarda (U.P.)
30. Sone Barrage (Bihar)
31. Sunkesula-K.C. (A.P.)
32. Tawa (M.P.)
33. Tungabhadra (A.P. & Karnataka)
34 Ukai (Gujarat)
35 Upper Krishna (Karnataka)
36 Western Jamuna (Haryana)
37 Warna (Maharashtra)

Based upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line

The boundary of Meghalaya shown on this map is as interpreted from the North Eastern Areas (Reorganisation) Act 1971 but has yet to be verified

INDIA-MINERALS AND POWER


Sindh H.E. Project
Kalakot
Jogindarnagar
Bhākra
Nāngal
Beās Project
Yamuna Hydel Scheme
Bahadurābād
Bhatinda
Muhammadpur
Rāmganga River Project
Delhi
Sharda
Narora
Khetri
Lucknow
Kānpur
Gandak
Kosi
Sibsāgar
Nahorkatiya
Chambal
Kota
Pratapsāgar
Gāndhi Sāgar
Rana Pratap Sāgar
Matatila
Rihand
Karanpura
Maithon (D.V.C.)
Mayurakshi
Bokāro
Singrauli
Sohāgpur
Tawa
Jaduguda
Pathratu
Panchet (D.V.C.)
Rānīganj
Durgāpur
Bandel
Calcutta (D.V.C.)
Ahmadābād
Khambhat
Dhuvaran
Vadodara
Betul
I N D I A
Korba
Hīrākūd
Ankleshwar
Kakrapura
Sātpura
Khaperkheda
Tālcher
Tikarpāra
Cuttack
Trombay
Tarapur
Kalyān
Bhivpuri
Khopoli
Bhira
Koyna
Chandrapur
Ramagundam
Nizām Sāgar
Machkund
Singareni
Sileru
Hutti Gold Fields
Upper Krishna
Nāgārjuna Sāgar
Srisailam
Malprabha
Tungabhadra
ARABIAN SEA
BAY OF BENGAL
M.Gāndhi(Jog)
Sharāvathi Hydel Project
Bhadra(Lakkavali)
Nellore
Kolār Gold Fields
Ennore
Madras
Sivasamudram
Varapole
Mettūr
Neyveli Lignite Project
Pykara
LAKSHADWEEP SEA
LAKSHADWEEP (India)
Neriyamangalam
Pallivasal
Idukki Hydel Scheme
Senguiam
Periyar
Pāpānasam
ANDAMAN AND NICOBAR ISLANDS (INDIA)
Andaman Sea
Pygmalion Point
INDIAN OCEAN
Iron
Graphite
Manganese
Hydro Electric Centres (main)
Oil Well
Copper
Gold
Bauxite
Zinc
Mica
Ilmenite
Rare Earths
Thermal Power Station
Coal Field
Atomic Power Station
Atomic Power Station (Under Construction)
Scale 1:17,500,000

Government of India Copyright 1981

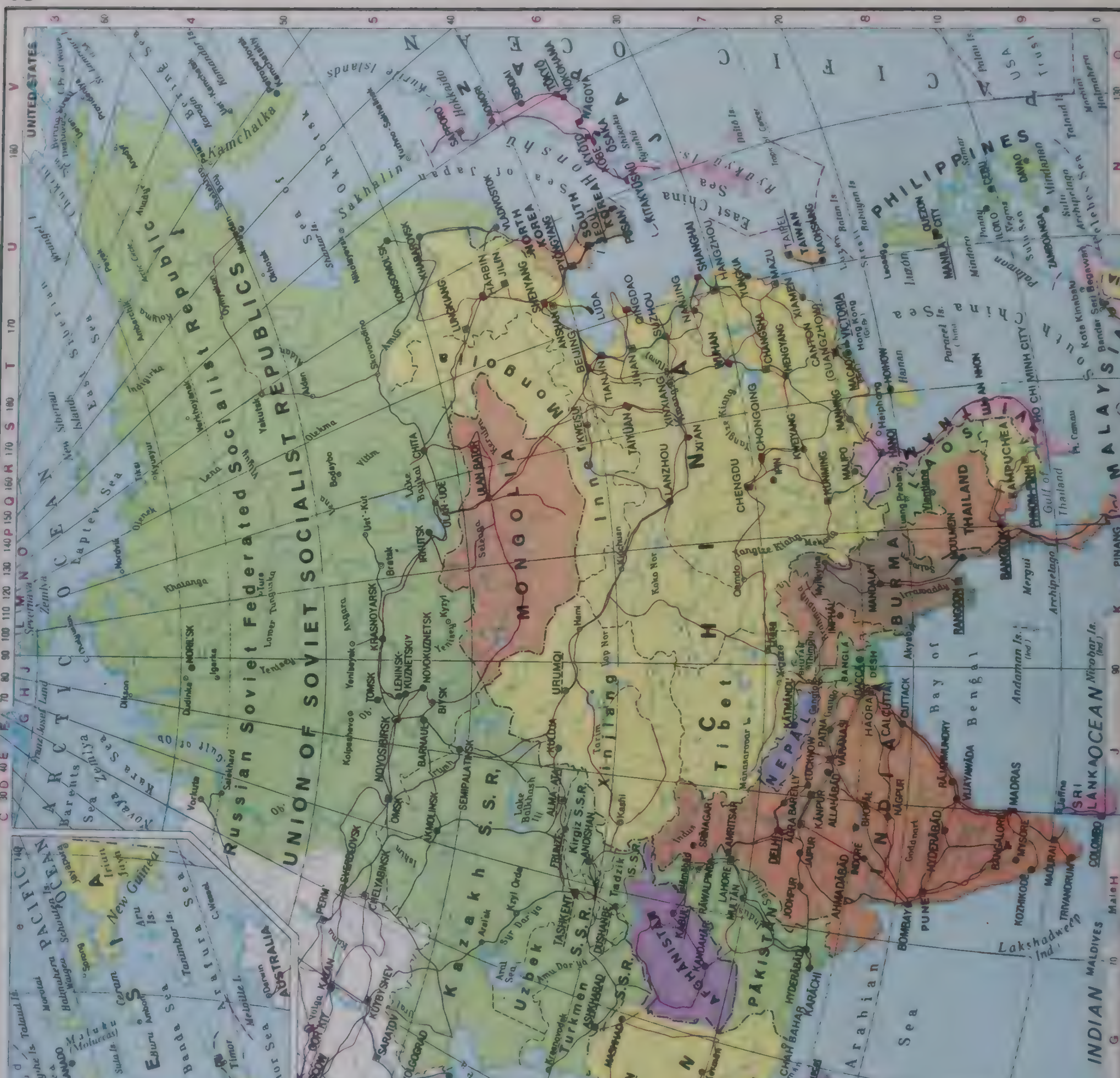
Based upon Survey of India map with the permission of the Surveyor General of India

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.

The boundary

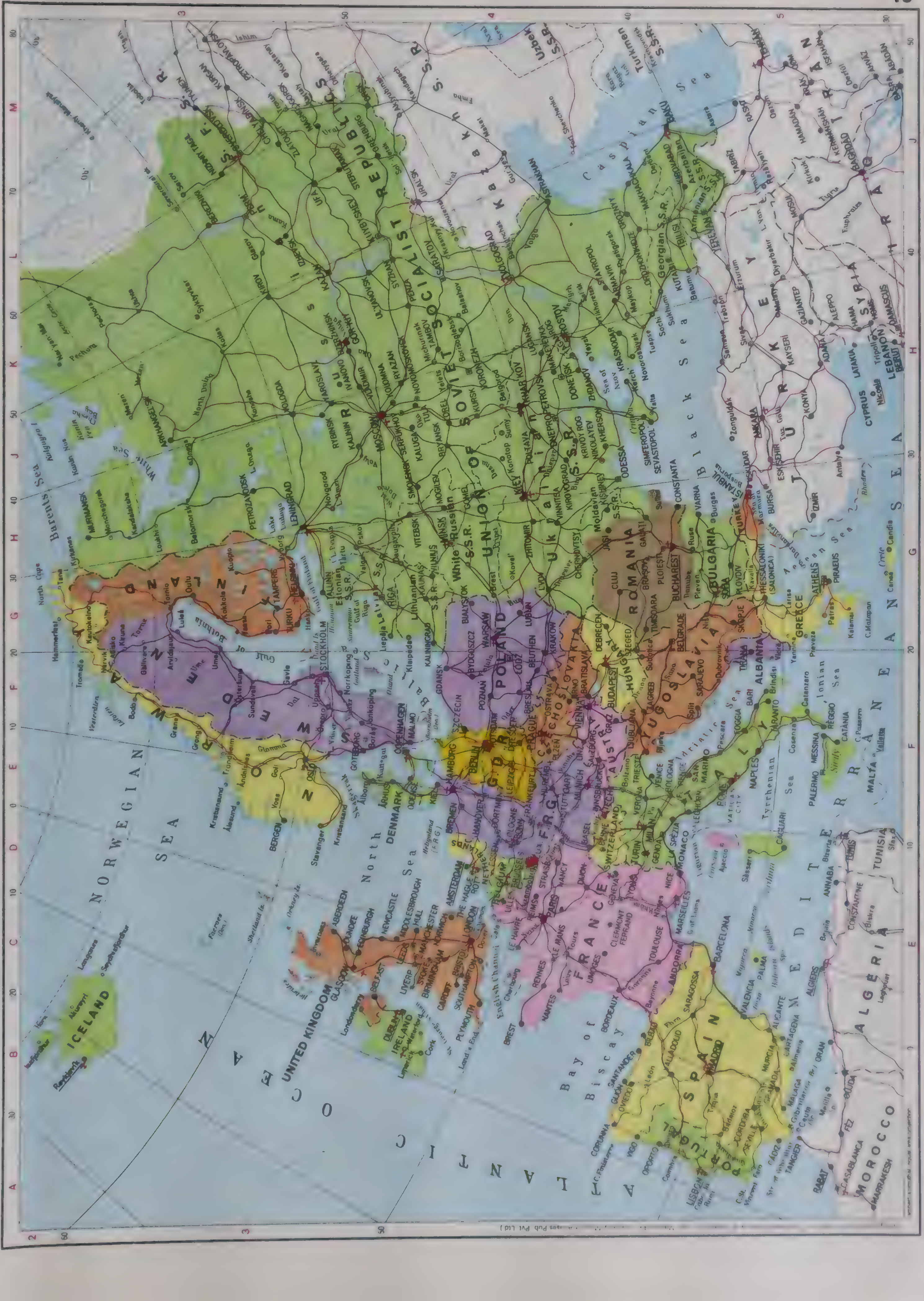
North Eastern Ar

ASIA-POLITICAL


UNION OF SOVIET SOCIALIST REPUBLICS
Russian Soviet Federated Socialist Republic
Kazakh S.S.R.
Uzbek S.S.R.
Turkmen S.S.R.
Kirgiz S.S.R.
Tadzik S.S.R.
MONGOLIA
CHINA
Tibet
Xinjiang
Inner Mongolia
JAPAN
NORTH KOREA
SOUTH KOREA
TAIWAN
PHILIPPINES
VIETNAM
LAOS
KAMPUCHEA
THAILAND
BURMA
MALAYSIA
INDONESIA
BANGLADESH
NEPAL
BHUTAN
INDIA
SRI LANKA
PAKISTAN
AFGHANISTAN
IRAN
IRAQ
SYRIA
TURKEY
SAUDI ARABIA
OMAN
U.A.E.
QATAR
KUWAIT
SOUTHERN YEMEN
YEMEN
EGYPT
SUDAN
ETHIOPIA
SOMALIA
KENYA
UGANDA
TANZANIA
LIBYA
ITALY
GREECE
YUGOSLAVIA
ALBANIA
BULG.
ROMANIA
HUNG.
CYPRUS
ISRAEL
LEBANON
JORDAN
ARCTIC OCEAN
PACIFIC OCEAN
INDIAN OCEAN
Arabian Sea
Bay of Bengal
South China Sea
East China Sea
Sea of Japan
Sea of Okhotsk
Bering Sea
Caspian Sea
Black Sea
MEDITERRANEAN SEA
Red Sea
Aral Sea
Lake Baikal
MOSCOW
BEIJING
SHANGHAI
TOKYO
DELHI
CALCUTTA
BOMBAY
MADRAS
KARACHI
TEHRAN
BAGHDAD
RIYADH
ANKARA
ISTANBUL
CAIRO
RANGOON
BANGKOK
HANOI
MANILA
KUALA LUMPUR
SINGAPORE
JAKARTA
COLOMBO
KATHMANDU
DACCA
KABUL
ULAN BATOR
GREATER SUNDA ISLANDS
LESSER SUNDA ISLANDS
New Guinea
AUSTRALIA
1 Moldavian S.S.R.
2 Georgian S.S.R.
3 Armenian S.S.R.
4 Azerbaijan S.S.R.
U.A.E. United Arab Emirates
● Special relationship with United Kingdom
The territorial waters of India extend into the sea to a distance of

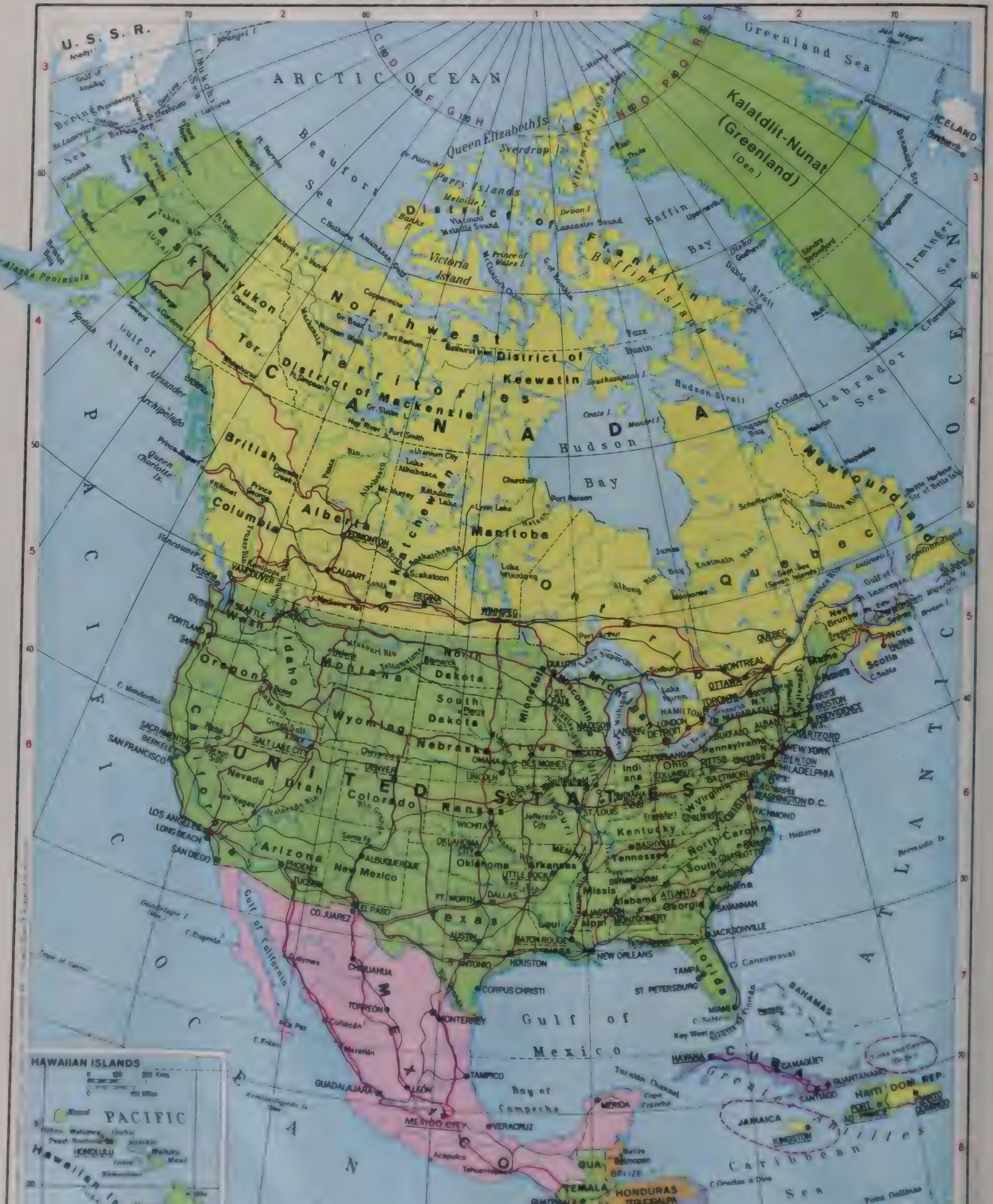
Cartographed and Printed by Tamilnad Printers and Traders Pvt Ltd Madras

EUROPE-POLITICAL

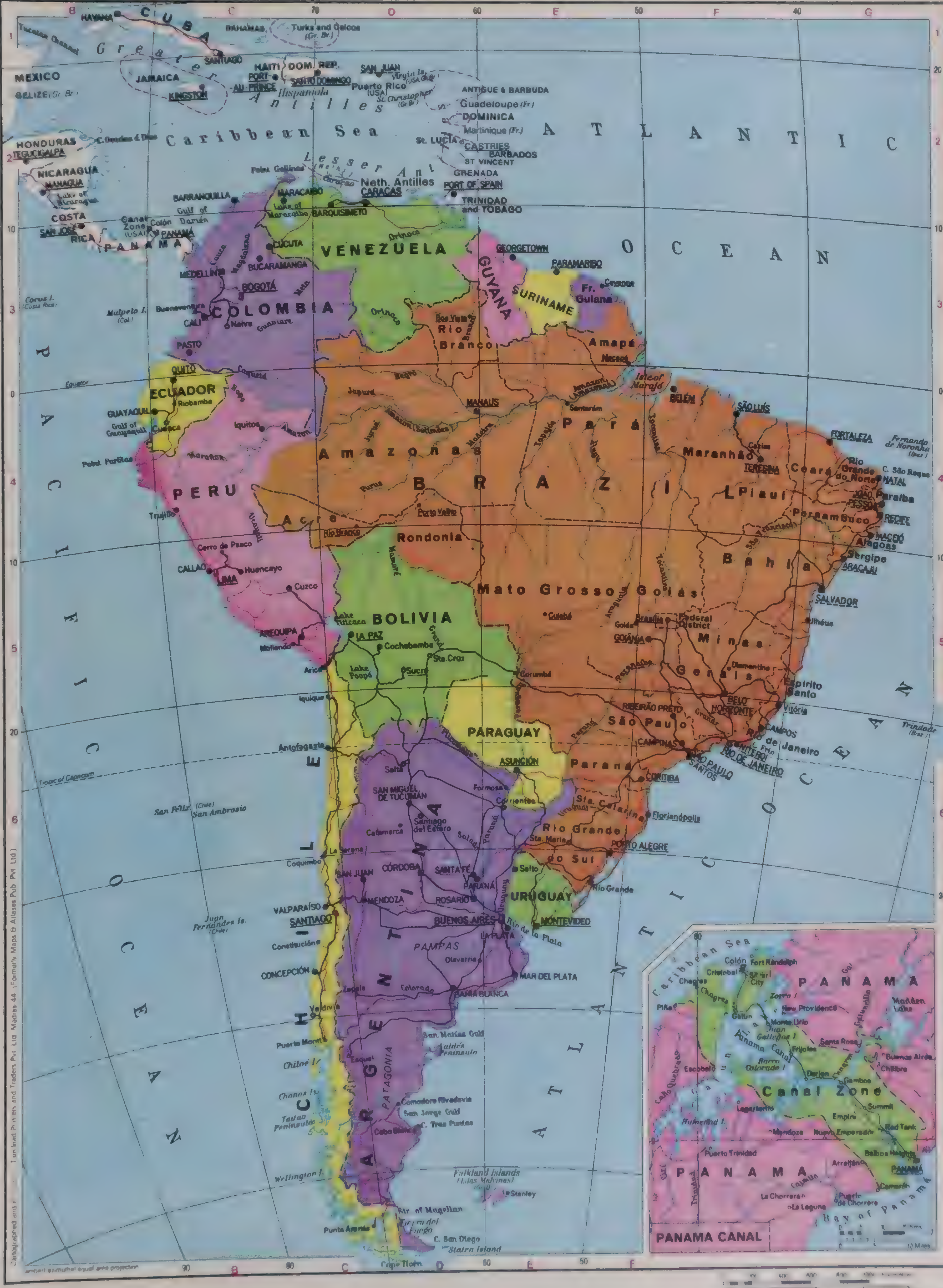

ICELAND
Reykjavik
UNITED KINGDOM
IRELAND
DUBLIN
LONDON
NORWEGIAN SEA
ATLANTIC OCEAN
NORWAY
OSLO
SWEDEN
STOCKHOLM
FINLAND
HELSINKI
DENMARK
COPENHAGEN
North Sea
Baltic Sea
Barents Sea
White Sea
FRANCE
PARIS
Bay of Biscay
SPAIN
MADRID
PORTUGAL
LISBON
ANDORRA
MONACO
SWITZERLAND
BELGIUM
NETHERLANDS
LUX.
F.R.G.
BONN
G.D.R.
BERLIN
POLAND
WARSAW
CZECHOSLOVAKIA
PRAGUE
AUSTRIA
VIENNA
HUNGARY
BUDAPEST
ROMANIA
BUCHAREST
BULGARIA
SOFIA
YUGOSLAVIA
BELGRADE
ALBANIA
TIRANA
GREECE
ATHENS
ITALY
ROME
SAN MARINO
VATICAN CITY
MALTA
Valletta
TURKEY
ANKARA
ISTANBUL
CYPRUS
Nicosia
SYRIA
DAMASCUS
LEBANON
BEIRUT
IRAQ
BAGHDAD
IRAN
TEHRAN
MOROCCO
RABAT
ALGERIA
ALGIERS
TUNISIA
TUNIS
MEDITERRANEAN SEA
Black Sea
Caspian Sea
Adriatic Sea
Tyrrhenian Sea
Ionian Sea
Aegean Sea
UNION OF SOVIET SOCIALIST REPUBLICS
MOSCOW
LENINGRAD
KIEV
Ukrainian S.S.R.
White Russian S.S.R.
MINSK
Lithuanian S.S.R.
Latvian S.S.R.
RIGA
Estonian S.S.R.
TALLINN
Moldavian S.S.R.
KISHINEV
Georgian S.S.R.
TBILISI
Armenian S.S.R.
YEREVAN
Azerbaijan S.S.R.
BAKU
Kazakh S.S.R.
Turkmen S.S.R.
Uzbek S.S.R.
R.S.F.S.R.

THE TIMES OF INDIA DIRECTORY ATLAS

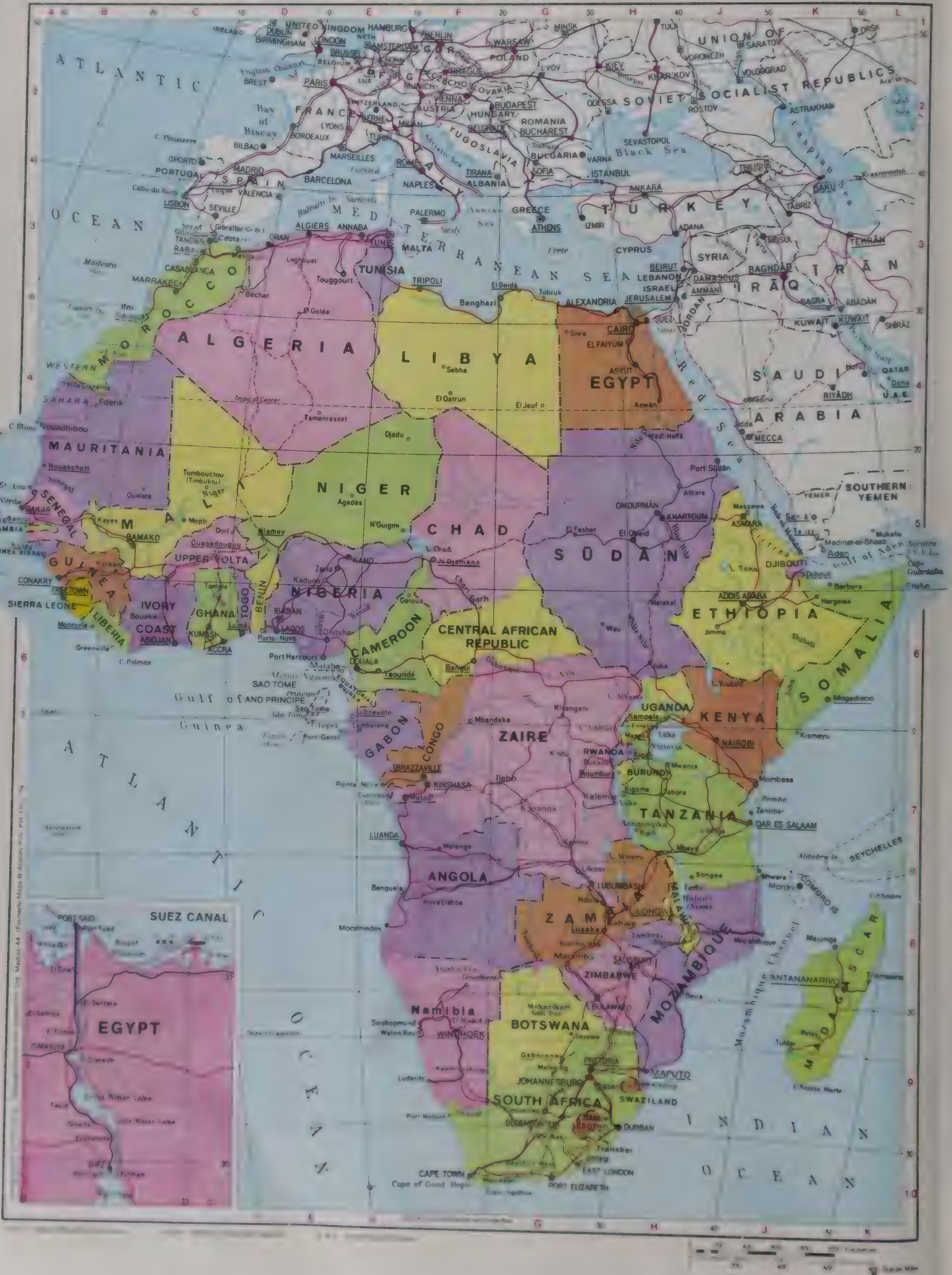
NORTH AMERICA-POLITICAL


U. S. S. R.
ARCTIC OCEAN
Greenland Sea
Kalatdlit-Nunat (Greenland) (Den)
ICELAND
Beaufort Sea
Queen Elizabeth Is.
Sverdrup Is.
Parry Islands
Melville I.
Banks I.
Victoria Island
Prince of Wales I.
Devon I.
Ellesmere Island
Baffin Bay
Baffin Island
Davis Strait
Irminger Sea
Labrador Sea
Bering Sea
Bering Str.
Alaska (USA)
Alaska Peninsula
Kodiak
Gulf of Alaska
Alexander Archipelago
Queen Charlotte Is.
Yukon Ter.
Northwest Territories
District of Franklin
District of Mackenzie
District of Keewatin
CANADA
Hudson Bay
Hudson Strait
Foxe Basin
Southampton I.
James Bay
British Columbia
Alberta
Saskatchewan
Manitoba
Ontario
Quebec
Newfoundland
New Brunswick
Nova Scotia
Gulf of St. Lawrence
EDMONTON
CALGARY
VANCOUVER
Victoria
REGINA
Saskatoon
WINNIPEG
Churchill
Port Nelson
Uranium City
Lake Athabasca
Great Slave L.
Great Bear L.
Hay River
Port Smith
Whitehorse
Dawson
Fairbanks
Anchorage
Schefferville
Port Arthur
Sudbury
OTTAWA
MONTREAL
QUEBEC
TORONTO
HAMILTON
LONDON
Lake Superior
Lake Huron
Lake Michigan
Lake Erie
Lake Ontario
UNITED STATES
Wash.
Oregon
Idaho
Montana
Wyoming
North Dakota
South Dakota
Nebraska
Iowa
Minnesota
Wisconsin
Michigan
California
Nevada
Utah
Colorado
Kansas
Missouri
Illinois
Indiana
Ohio
Pennsylvania
N.Y.
Maine
Arizona
New Mexico
Oklahoma
Texas
Arkansas
Louisiana
Mississippi
Alabama
Georgia
Florida
Tennessee
Kentucky
W. Virginia
Virginia
North Carolina
South Carolina
SEATTLE
SPOKANE
PORTLAND
Salem
Boise
SALT LAKE CITY
SACRAMENTO
BERKELEY
SAN FRANCISCO
Las Vegas
LOS ANGELES
LONG BEACH
SAN DIEGO
PHOENIX
TUCSON
ALBUQUERQUE
Santa Fe
EL PASO
DENVER
Cheyenne
Bismarck
Pierre
OMAHA
LINCOLN
DES MOINES
ST. PAUL
DULUTH
MADISON
CHICAGO
DETROIT
CLEVELAND
COLUMBUS
INDIANAPOLIS
ST. LOUIS
Jefferson City
WICHITA
OKLAHOMA CITY
LITTLE ROCK
MEMPHIS
NASHVILLE
DALLAS
FT. WORTH
AUSTIN
SAN ANTONIO
HOUSTON
CORPUS CHRISTI
BATON ROUGE
NEW ORLEANS
BIRMINGHAM
ATLANTA
MONTGOMERY
JACKSON
SAVANNAH
JACKSONVILLE
TAMPA
ST. PETERSBURG
MIAMI
Key West
C. Canaveral
C. Hatteras
RICHMOND
WASHINGTON D.C.
BALTIMORE
PHILADELPHIA
TRENTON
NEW YORK
HARTFORD
PROVIDENCE
BOSTON
ALBANY
BUFFALO
PITTSBURGH
Frankfort
Charleston
PACIFIC OCEAN
ATLANTIC OCEAN
Gulf of Mexico
Gulf of California
Bay of Campeche
Caribbean Sea
Yucatan Channel
Straits of Florida
BAHAMAS
CUBA
HAVANA
CAMAGUEY
SANTIAGO
GUANTANAMO
JAMAICA
KINGSTON
HAITI
PORT AU PRINCE
DOM. REP.
SANTO DOMINGO
Greater Antilles
Turks and Caicos (Gt. Br.)
Bermuda Is.
MEXICO
CD. JUAREZ
CHIHUAHUA
TORREÓN
MONTERREY
Culiacán
Mazatlán
La Paz
GUADALAJARA
LEÓN
TAMPICO
MEXICO CITY
VERACRUZ
Acapulco
MÉRIDA
GUATEMALA
BELIZE
HONDURAS
TEGUCIGALPA
EL SALVADOR
SAN SALVADOR
NICARAGUA
MANAGUA
COSTA RICA
SAN JOSÉ
PANAMA
COLOMBIA
BARRANQUILLA
VENEZUELA
HAWAIIAN ISLANDS
PACIFIC OCEAN
Hawaiian Islands
HONOLULU
Oahu
Hawaii
Maui
Lambert azimuthal equal area projection
Kilometres
Statute Miles

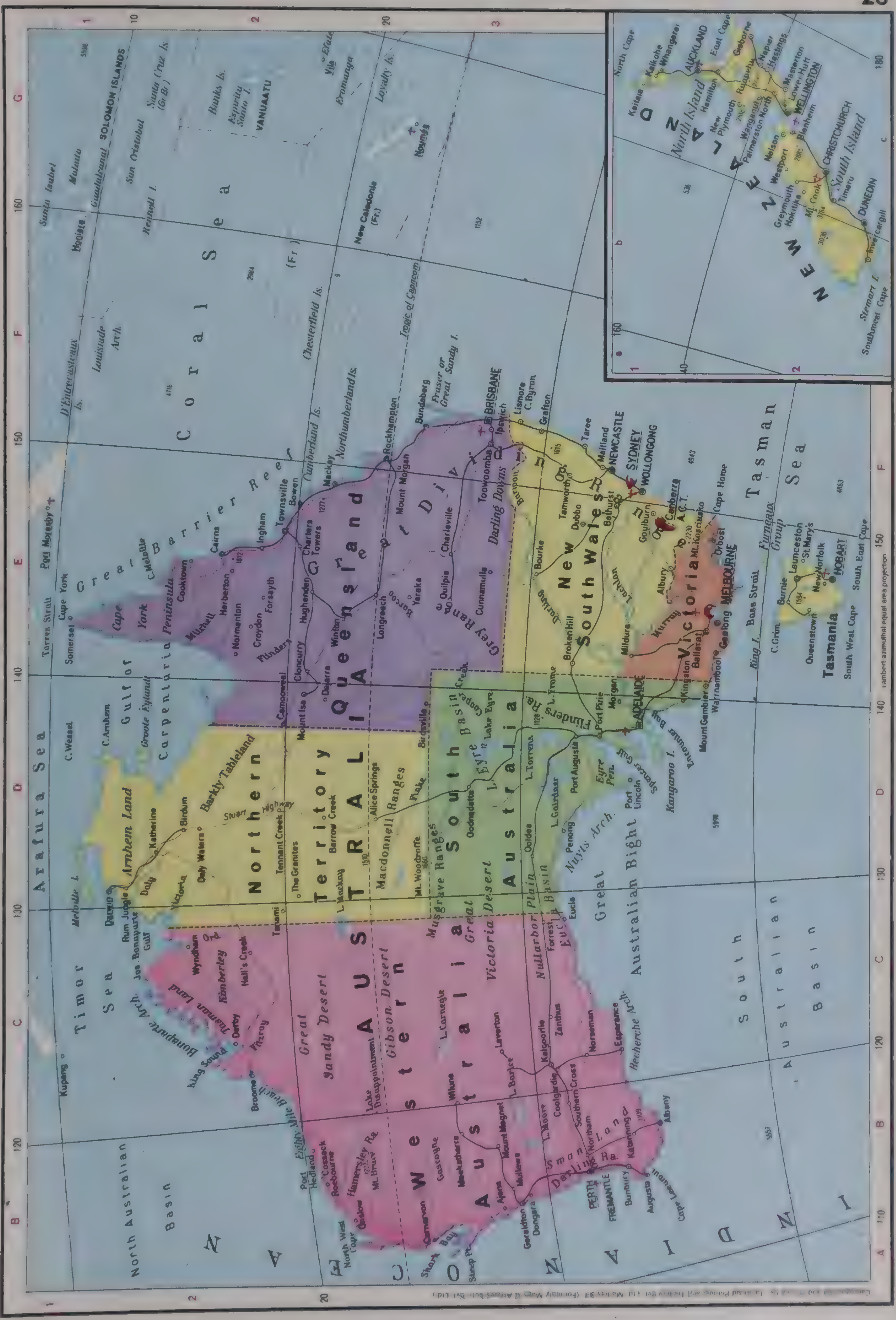
SOUTH AMERICA-POLITICAL


CUBA
HAVANA
Yucatan Channel
Greater Antilles
BAHAMAS
Turks and Caicos (Gr. Br.)
SANTIAGO
MEXICO
BELIZE (Gr. Br.)
JAMAICA
KINGSTON
HAITI
PORT-AU-PRINCE
DOM. REP.
SANTO DOMINGO
Hispaniola
SAN JUAN
Puerto Rico (USA)
Virgin Is. (USA Gr. Br.)
St. Christopher (Gr. Br.)
ANTIGUE & BARBUDA
Guadeloupe (Fr.)
DOMINICA
Martinique (Fr.)
St. LUCIA
CASTRIES
BARBADOS
ST VINCENT
GRENADA
PORT OF SPAIN
TRINIDAD and TOBAGO
Caribbean Sea
Lesser Antilles
HONDURAS
TEGUCIGALPA
C. Gracias á Dios
NICARAGUA
MANAGUA
Lake of Nicaragua
COSTA RICA
SAN JOSE
Canal Zone (USA)
Colón
Darién
PANAMA
Punta Gallinas
Curaçao
Neth. Antilles
CARACAS
MARACAIBO
Lake of Maracaibo
BARQUISIMETO
BARRANQUILLA
Gulf of Darién
CÚCUTA
VENEZUELA
Orinoco
BUCARAMANGA
MEDELLÍN
BOGOTÁ
COLOMBIA
Buenaventura
CALI
Neiva
Guaviare
Meta
Cauca
Magdalena
Malpelo I. (Col.)
Cocos I. (Costa Rica)
PASTO
QUITO
ECUADOR
Riobamba
GUAYAQUIL
Gulf of Guayaquil
Cuenca
Equator
Caquetá
Napo
Iquitos
Amazon
Marañon
Punta Pariñas
PERU
Trujillo
Ucayali
Cerro de Pasco
CALLAO
LIMA
Huancayo
Cuzco
AREQUIPA
Mollendo
Arica
GEORGETOWN
GUYANA
PARAMARIBO
SURINAME
Cayenne
Fr. Guiana
Boa Vista
Rio Branco
Amapá
Macapá
Isle of Marajó
Amazon (Amazonas)
BELÉM
SÃO LUÍS
Negro
Japurá
MANAUS
Santarém
Amazon (Solimões)
Juruá
Madeira
Tapajós
Xingu
Tocantins
Pará
Amazonas
Maranhão
Caxias
TERESINA
FORTALEZA
Ceará
Fernando de Noronha (Braz.)
Rio Grande do Norte
NATAL
C. São Roque
Piauí
JOÃO PESSOA
Paraíba
RECIFE
Pernambuco
BRAZIL
Purus
Acre
Porto Velho
Rio Branco
Rondonia
São Francisco
MACEIÓ
Alagoas
Sergipe
ARACAJU
Bahia
Mamoré
Tocantins
Mato Grosso
Goiás
Araguaia
Cuiabá
Brasília
Federal District
Goiás
GOIÂNIA
SALVADOR
Ilhéus
Minas Gerais
Diamantina
Paranaíba
BELO HORIZONTE
Espírito Santo
Vitória
Lake Titicaca
BOLIVIA
LA PAZ
Cochabamba
Grande
Sta. Cruz
Lake Poopó
Sucre
Corumbá
Paraguay
Iquique
RIBEIRÃO PRETO
São Paulo
Paraná
Grande
CAMPOS
Rio de Janeiro
Trindade (Braz.)
CAMPINAS
NITERÓI
RIO DE JANEIRO
C. Frio
SÃO PAULO
SANTOS
Antofagasta
PARAGUAY
Pilcomayo
ASUNCIÓN
Paraná
CURITIBA
Tropic of Capricorn
Salta
SAN MIGUEL DE TUCUMÁN
Formosa
Corrientes
Sta. Catarina
Uruguai
Florianópolis
San Félix (Chile)
San Ambrosio
Santiago del Estero
Catamarca
Salado
Paraná
Rio Grande do Sul
Sta. Maria
PORTO ALEGRE
La Serena
Coquimbo
SAN JUAN
CÓRDOBA
SANTA FÉ
PARANÁ
Uruguay
Salto
Rio Grande
URUGUAY
VALPARAÍSO
SANTIAGO
MENDOZA
ROSARIO
Juan Fernández Is. (Chile)
BUENOS AIRES
MONTEVIDEO
Río de la Plata
LA PLATA
Constitución
PAMPAS
Olavarría
CONCEPCIÓN
MAR DEL PLATA
Zapala
Colorado
BAHÍA BLANCA
Valdivia
Puerto Montt
San Matías Gulf
Valdés Peninsula
Chiloé I.
Esquel
PATAGONIA
Chonos Is.
Taitao Peninsula
Comodoro Rivadavia
San Jorge Gulf
Cabo Blanco
C. Tres Puntas
Wellington I.
Falkland Islands (Las Malvinas)
Stanley
Str. of Magellan
Punta Arenas
Tierra del Fuego
C. San Diego
Staten Island
Cape Horn
CHILE
ARGENTINA
PACIFIC OCEAN
ATLANTIC OCEAN
B C D E F G
1 2 3 4 5 6
70 60 50 40 20 10 0 10 20 30 80 90
Lambert azimuthal equal area projection
Cartographed and ... Lambert Printers and Traders Pvt Ltd Madras 44 (Formerly Maps & Atlases Pub Pvt Ltd)
Caribbean Sea
Colón
Fort Randolph
Cristobal
Coco Solo
Chagres
Piña
Gatun
New Providence
Monte Lirio
Gatun Lake
Gallegos I.
Panama Canal
Frijoles
Santa Rosa
Escobal
Barro Colorado I.
Darien
Gamboa
Chilibre
Buenos Aires
Madden Lake
Caño Quebrado
Canal Zone
Summit
Lagartera
Empire
Red Tank
Rumeroad I.
Mendoza
Nuevo Emperador
Balboa Heights
PANAMA
Puerto Trinidad
Arraiján
PANAMA
Caimito
Cocolí
La Chorrera
Puerto de Chorrera
La Laguna
Bay of Panama
Miles
PANAMA CANAL
Statute Miles

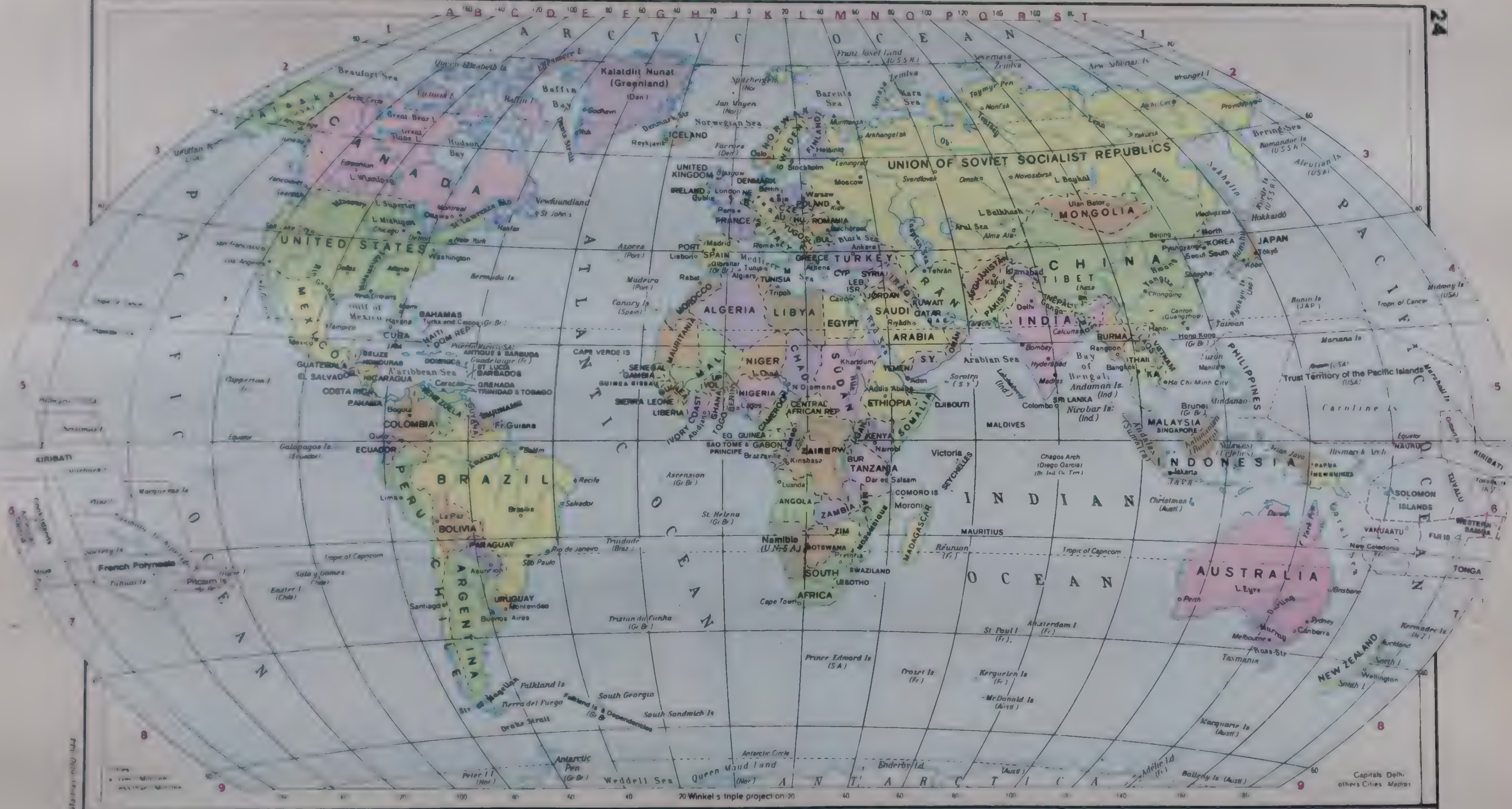
AFRICA-POLITICAL


ATLANTIC OCEAN
MEDITERRANEAN SEA
Gulf of Guinea
ATLANTIC OCEAN
INDIAN OCEAN
Black Sea
Caspian Sea
Red Sea
Gulf of Aden
Bay of Biscay
Mozambique Channel
Tropic of Cancer
Tropic of Capricorn
Equator
UNITED KINGDOM
IRELAND
DUBLIN
BIRMINGHAM
LONDON
BRUSSELS
BELGIUM
NETH
AMSTERDAM
HAMBURG
BERLIN
WARSAW
POLAND
MINSK
TULA
UNION OF SOVIET SOCIALIST REPUBLICS
SARATOV
VORONEZH
VOLGOGRAD
KIEV
KHAR'KOV
LVOV
ORSK
ODESSA
ROSTOV
ASTRAKHAN
PRAGUE
CZECHOSLOVAKIA
MUNICH
VIENNA
AUSTRIA
BUDAPEST
HUNGARY
SWITZERLAND
BERNE
MILAN
TURIN
ROMANIA
BUCHAREST
BELGRADE
YUGOSLAVIA
BULGARIA
SOFIA
VARNA
ISTANBUL
FRANCE
PARIS
BREST
LYONS
BORDEAUX
MARSEILLES
C. Finisterre
BILBAO
OPORTO
PORTUGAL
SPAIN
MADRID
BARCELONA
VALENCIA
LISBON
SEVILLE
Cabo da Roca
Str. of Gibraltar
Gibraltar (Gr.Br.)
Ceuta
TANGIER
RABAT
ROME
ITALY
NAPLES
Corsica
Sardinia
Sicily
PALERMO
TIRANA
ALBANIA
GREECE
ATHENS
Crete
Ionian Sea
ANKARA
TURKEY
IZMIR
ADANA
TBILISI
BAKU
Krasnovodsk
TABRIZ
CYPRUS
SYRIA
BEIRUT
LEBANON
DAMASCUS
ISRAEL
JERUSALEM
AMMAN
JORDAN
MOSUL
BAGHDAD
IRAQ
TEHRAN
IRAN
BASRA
ABADAN
KUWAIT
SHIRAZ
SAUDI ARABIA
RIYADH
QATAR
Doha
U.A.E.
Medina
Jidda
MECCA
YEMEN
SOUTHERN YEMEN
San'a
Mukalla
Madinat-al-Shaab
Aden
Socotra
Cape Guardafui
Hafun
ALGIERS
ANNABA
ORAN
TUNIS
TUNISIA
MALTA
Laghouat
Touggourt
Bechar
El Golea
MOROCCO
CASABLANCA
MARRAKECH
Melilla
Ifni
ALGERIA
Tamanrasset
WESTERN SAHARA
Villa Cisneros
Fderik
Nouadhibou
C. Blanc
MAURITANIA
Nouakchott
St. Louis
C. Verde
DAKAR
SENEGAL
THE GAMBIA
Banjul
Bissau
GUINEA BISSAU
GUINEA
CONAKRY
FREETOWN
SIERRA LEONE
Monrovia
LIBERIA
Greenville
C. Palmas
Kayes
BAMAKO
MALI
Tombouctou (Timbuktu)
Mopti
Niger
Dori
Ouagadougou
UPPER VOLTA
Kankan
IVORY COAST
Bouake
ABIDJAN
GHANA
KUMASI
ACCRA
Tamale
TOGO
Lome
BENIN
Porto-Novo
Niamey
NIGER
Agades
Djado
N'Guigmi
NIGERIA
KANO
Zaria
Kaduna
IBADAN
LAGOS
Onitsha
Port Harcourt
Benue
TRIPOLI
LIBYA
Benghazi
El Beida
Tobruk
Sebha
El Qatrun
El Jauf
ALEXANDRIA
CAIRO
Siwa
EL FAIYUM
ASYUT
EGYPT
Aswan
Wadi Halfa
Nile
Port Sudan
Atbara
OMDURMAN
KHARTOUM
El Fasher
El Obeid
SUDAN
Blue Nile
White Nile
Malakal
Wau
Juba
CHAD
L. Chad
N'Djamena
Sarh
Massawa
ASMARA
Eritrea
L. Tana
DJIBOUTI
Djibouti
Berbera
Hargeisa
ADDIS ABABA
ETHIOPIA
Jimma
SOMALIA
Shibeli
Juba
Mogadiscio
Kismayu
CENTRAL AFRICAN REPUBLIC
Bangui
Ubangi
Garoua
CAMEROON
DOUALA
Yaounde
Malabo
EQUATORIAL GUINEA
SAO TOME AND PRINCIPE
Principe
Sao Tome
Libreville
Lambarene
Port Gentil
GABON
CONGO
BRAZZAVILLE
Pointe Noire
KINSHASA
Matadi
Cabinda
Mbandaka
Kisangani
ZAIRE
Kindu
Ilebo
Kananga
Kalemie
L. Rudolf
L. Albert
UGANDA
Kampala
Entebbe
Lake Victoria
KENYA
NAIROBI
Mombasa
RWANDA
Kigali
BURUNDI
Bujumbura
Mwanza
Tabora
Kigoma
Lake Tanganyika
TANZANIA
Kipili
Iringa
Pemba
Zanzibar
DAR ES SALAAM
Mbeya
L. Mweru
Songea
Mtwara
LUANDA
Malange
ANGOLA
Benguela
Nova Lisboa
Mocamedes
Likasi
LUBUMBASHI
Ndola
ZAMBIA
Lusaka
Kabwe
Zambezi
Maramba
LILONGWE
MALAWI
Lake Malawi (Nyasa)
SALISBURY
ZIMBABWE
BULAWAYO
MOZAMBIQUE
Beira
Mocambique
Aldabra Is.
SEYCHELLES
COMORO IS.
Moroni
MADAGASCAR
Majunga
ANTANANARIVO
Tamatave
Tulear
C. Sainte Marie
Grootfontein
Namibia
(UN-SA)
Swakopmund
Walvis Bay
WINDHOEK
Luderitz
BOTSWANA
Serowe
Gaborone
Mafeking
PRETORIA
JOHANNESBURG
MAPUTO
SWAZILAND
SOUTH AFRICA
Kimberley
BLOEMFONTEIN
Maseru
LESOTHO
DURBAN
Transkei
Umtata
EAST LONDON
PORT ELIZABETH
Port Nolloth
CAPE TOWN
Cape of Good Hope
Worcester
C. Agulhas
Ascension
SUEZ CANAL
PORT SAID
Port Fuad
El Tina
El Qantara
Ballah
El Firdan
ISMAILIYA
Timsah
Great Bitter Lake
Fayid
Little Bitter Lake
Geneifa
El Shallufa
SUEZ
Port Tewfik
EGYPT
Gulf of Suez
A
B
C
D
E
F
G
H
J
K
L
1
2
3
4
5
6
7
8
9
10
20
30
40
50
60
0
31
30
32
33

AUSTRALIA AND NEW ZEALAND-POLITICAL


AUSTRALIA
Western Australia
Northern Territory
Queensland
South Australia
New South Wales
Victoria
Tasmania
A.C.T.
NEW ZEALAND
North Island
South Island
Arafura Sea
Timor Sea
Coral Sea
Tasman Sea
Great Australian Bight
Gulf of Carpentaria
Great Barrier Reef
Great Dividing Range
Great Sandy Desert
Gibson Desert
Great Victoria Desert
Nullarbor Plain
Macdonnell Ranges
Musgrave Ranges
Kimberley
Arnhem Land
Barkly Tableland
Cape York Peninsula
North Australian Basin
South Australian Basin
INDIAN OCEAN
PERTH
FREMANTLE
DARWIN
ADELAIDE
MELBOURNE
SYDNEY
CANBERRA
BRISBANE
HOBART
NEWCASTLE
WOLLONGONG
AUCKLAND
WELLINGTON
CHRISTCHURCH
DUNEDIN
SOLOMON ISLANDS
VANUATU
New Caledonia (Fr.)
Nouméa
Port Moresby
Torres Strait
Bass Strait
Tropic of Capricorn
Lambert azimuthal equal area projection
0 250 500 1000 Kilometres
0 150 250 500 150 Statute Miles

WORLD-POLITICAL


ARCTIC OCEAN
PACIFIC OCEAN
ATLANTIC OCEAN
INDIAN OCEAN
ANTARCTICA
CANADA
UNITED STATES
MEXICO
Kalaallit Nunat (Greenland) (Den.)
ICELAND
UNITED KINGDOM
IRELAND
FRANCE
SPAIN
PORT.
UNION OF SOVIET SOCIALIST REPUBLICS
MONGOLIA
CHINA
TIBET
JAPAN
KOREA
INDIA
PAKISTAN
AFGHANISTAN
IRAN
TURKEY
SAUDI ARABIA
EGYPT
LIBYA
ALGERIA
NIGER
CHAD
SUDAN
NIGERIA
ETHIOPIA
SOMALIA
KENYA
TANZANIA
ZAIRE
ANGOLA
ZAMBIA
SOUTH AFRICA
MADAGASCAR
BRAZIL
PERU
COLOMBIA
BOLIVIA
ARGENTINA
CHILE
AUSTRALIA
NEW ZEALAND
INDONESIA
PHILIPPINES
MALAYSIA
BURMA
SRI LANKA
Winkel's triple projection
Capitals Delhi
others Cities Madras

MEMBERS OF THE UNITED NATIONS ORGANISATION (U.N.O.), (September 1981)

Afghanistan
Albania
Algeria
Angola
Argentina
Australia
Austria
Bahamas
Bahrain
Bangladesh
Barbados
Belgium
Belize
Benin
Bhutan
Bolivia
Botswana
Brazil
Bulgaria
Burma
Burundi
Cameroon
Canada
Cape Verde Is
Central
 African Republic
Chad
Chile
China
Colombia
Comoros Islands
Congo
Costa Rica
Cuba
Cyprus
Czechoslovakia
Denmark
Djibouti
Dominica
Dominican Rep
Ecuador
Egypt
El Salvador
Equatorial Guinea
Ethiopia
Fiji
Finland
France
F.R.G.
Gabon
G.D.R.
Ghana
Greece
Grenada
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Ivory Coast
Jamaica
Japan
Jordan
Kampuchea
Kenya
Kiribati
Kuwait
Laos
Lebanon
Lesotho
Liberia
Libya
Luxembourg
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Mauritania
Mauritius
Mexico
Mongolia
Morocco
Mozambique
Nepal
New Zealand
Nicaragua
Niger
Nigeria
Norway
Oman
Pakistan
Panama
Papua-
 New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Romania
Rwanda
Samoa (Western)
Sao Tome E Principe
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Singapore
Solomon Islands
Somalia
South Africa
South Yemen
Spain
Sri Lanka
St. Lucia
St. Vincent &
 The Grenadines
Sudan
Suriname
Swaziland
Sweden
Syria
Tanzania
Thailand
The Gambia
The Netherlands
Togo
Trinidad & Tobago
Tunisia
Turkey
Tuvalu
U.A.E.
Uganda
U.K. (Britain)
Upper Volta
Uruguay
U.S.A.
U.S.S.R.
Vanuatu
Venezuela
Vietnam
Yemen
Yugoslavia
Zaire
Zambia
Zimbabwe

Note Byelorussia and Ukraine are also full members

ABBREVIATIONS

A.	Albania	Hu.	Hungary
Au.	Austria	Isr.	Israel
B.	Belgium	Jam.	Jamaica
B.D.	Bangladesh	Ka.	Kampuchea
Bh.	Bhutan	M.	Malta
Braz.	Brazil	Mal	Malawi
Bul.	Bulgaria	Ne.	Netherlands
Bur.	Burundi	Rw.	Rwanda
Cyp.	Cyprus	S.	Switzerland
Cze.	Czechoslovakia	S.Y.	Southern Yemen
Dom. Rep.	Dominican Republic	Thai.	Thailand
Fr. Guiana.	French Guiana	Ugan.	Uganda
F.R.G.	Federal Republic of Germany	U.A.E.	United Arab Emirates
G.D.R.	German Democratic Republic	Zim.	Zimbabwe

The territorial waters of India extend into the sea to a distance of twelve nautical miles measured from the appropriate base line.

1 : 152000000

Designed Cartographed and Printed by

INDEX

This index has been arranged alphabetically and comprises all names of India, Nepal and Sri Lanka appearing on Map pages 3 to 13 and selected names of the other countries. Location of a place or feature is indicated in the index against each name with reference to page number of the atlas and then to the rectangle—formed on the map by the intersection of latitude and longitude—within which the name appears.

Abadan 18 EF 6
Aberdeen 19 DE 3
Abidjan 22 D 6
Abohar 3 B 4
Abu 4 B 4
Abu Road 4 B 4
Accra 22 DE 6
Achalpur 11 E 3
Acre 21 CD 4
Adam's Bridge 13 C 6
Addanki 12 CD 3
Addis Ababa 22 HJ 6
Adelaide 23 DE 4
Adelie Land 24 QR 9
Aden, Gulf of 18 EF 8
Adilabad 12 C 1
Adoni 12 B 3
Adra 6 C 4
Adriatic Sea 19 F 4
Adur 13 B 6
Aegean Sea 19 G 5
Afghanistan 18 G 6-7
Africa 24 [illegible]-M 4-7
Agades 22 E 5
Agar 8 C 3
Agartala 7 E 4
Agatti Island 13 b 2
Agra 5 AB 3
Ahmadabad 10 C 2
Ahmadnagar 10 D 4
Ahmadpur 11 E 4
Ahwa 10 C 3
Aizawl 7 F 4
Aiun, El 22 C 4
Ajanta 11 D 3
Ajmer 4 C 3
Akalkot 11 E 5
Akbarpur 5 D 3
Aklavik 20 F 3
Akola 11 E 3
Akot 11 E 3
Aksai Chin 3 D 2
Alabama 20 L 6
Alagoas 21 G 4-5
Alaknanda 5 B 1
Alampur 12 BC 3
Aland 12 B 2
Alaska 20 DE 3
Alaska, Gulf of 20 E 4
Alaska Peninsula 20 CD 4
Albania 19 FG 4
Albany 20 M 5
Alberta 20 H 4
Alborg 19 EF 3
Albuquerque 20 J 6
Aldan 18 N 4
Aldan 18 O 4
Aleutian Islands 24 AB 3
Alexander Archipelago 20 EF 4
Alexandria 22 GH 3
Algeria 22 DE 4
Algiers 22 E 3
Alibag 10 C 4
Aliganj 5 B 3
Aligarh 5 AB 3
Alipur Duar 6 D 2
Allagadda 12 C 3
Allahabad 5 CD 4
Alleppey 13 AB 6
Allur 12 D 3
Alma-Ata 18 H 5
Almora 5 B 2
Along 7 G 1
Alwaye 13 B 5
Amalapuram 12 DE 2
Amalner 11 D 3
Amapa 21 E 3
Amarnath Cave 3 BC 2
Amarwara 8 D 3
Amazon 21 C 4
Ambajogai 11 E 4
Ambalangoda 13 CD 7
Ambalapulai 13 AB 6
Ambasamudram 13 B 6
Ambeno 18 d 3
Ambikapur 9 F 3
Ambur 13 C 4
Amili 7 GH 1
Amindivi Islands 13 b 2
Amman 18 D 6
Amravati 11 E 3
Amreli 10 B 3
Amritsar 3 B 4
Amsterdam 19 E 3
Amsterdam Island 24 NO 7
Amu Dar'ya 18 G 5-6
Anakapalle 12 E 2
Anamalai Hills 2 E 6
Anand 10 C 2
Anandpur 9 H 4
Anantapur 12 B 3
Anantnag 3 B 3
Andaman Islands 1 H 6
Andaman and Nicobar Islands 13 CD 3-4
Andhra Pradesh 12 B 3 E 1
Andola 12 B 2
Andorra 19 E 4
Angmagssalik 20 Q 3
Angola 22 F 8
Angul 8 G 4
Anjangaon 11 E 3
Anjar 10 AB 2
Anjengo 13 B 6
Ankleshwar 10 C 3
Ankola 12 A 3
Annaba 22 E 3
Annapolis 20 M 6
An Nhon (Binh Dinh) 18 LM 8
Annigeri 12 A 3
Anshan 18 MN 5
Antarctica 24 K-Q 9
Antarctic Peninsula 24 G 9
Anupgarh 4 B 2
Anuradhapura 13 CD 6
Aomori 18 P 5
Aonla 5 B 2
Arabian Sea 24 MN 5
Arafura Sea 23 D 1
Aral Sea 18 FG 5
Arambag 6 C 4
Arantangi 13 C 5
Arcot 13 C 4
Arctic Ocean 24 D 2-1
Arequipa 21 C 5
Argentina 21 CD 8-6
Arizona 20 HJ 6
Arjuni 11 G 3
Arkansas 20 K 6
Arkansas River 20 K 6
•Arkonam 13 C 4
Armenian Soviet Socialist Republic 19 J 4-5
Armur 12 C 1
Arani 13 C 4
•Arrah 6 B 3
Arsikere 12 AB 4
Arvi 11 F 3
Asansol 6 C 4
Ashkhabad 18 FG 6
Ashta 10 D 5
Ashti 11 D 4
Asia 18
Asifabad 12 C 1
Asmara 22 HJ 5
Aspur 4 BC 5
Assam 7 E-G 2-3
Astor 3 B 2
Asuncion 21 E 6
Athabasca 20 H 4
Athabasca, Lake 20 J 4
Athens 19 G 5
Atlantic Ocean 24 HJ 3-7
Atmakur 12 C 3
Augusta 23 B 4
Augusta 20 N 5
Aurangabad 6 B 3
Aurangabad 11 D 4
Austin 20 K 6
Australia 23 CE 3
Austria 19 F 4
Avadh 5 CD 3
Avanashi 13 B 5
Avanigadda 12 D 2
Awantipura 3 B 3
Azamgarh 5 D 3
Azerbaijan Soviet Socialist Republic 19 J 4-5
Azimganj 6 D 3
Azov, Sea of 19 H 4

Baberu 5 C 4
Bab El Mandeb 18 E 8
Babuhri 4 A 3
Badagara 13 A 5
Badami 12 A 3
Badampahar 9 H 3
Badnera 11 E 3
Badnawar 8 B 3
•Badrinath 5 B 1
Badulla 13 D 7
Baffin Bay 20 MN 2
Baffin Island 20 L-N 2-3
Bagalkot 12 A 2
Bagh 8 B 3
Baghdad 18 E 6
Baghelkhand 9 EF 3
Bagodar 6 B 3
Bah 5 B 3
Bahama Islands 20 M 7
Baharampur 6 D 3
Baheri 5 B 2
Bahia 21 FG 5
Bahraich 5 C 3
Bahrain 18 F 7
Balaghat 8 E 4
Balangir 9 F 4
Balapur 11 E 3
Balasore 9 H 4
Bali 4 B 4
Bali Guda 9 F 4
Balkhash, Lake 18 H 5
Ballia 6 B 3
Bali 6 D 4
Balod 9 E 4
Balotra 4 B 4
Balrampur 5 D 3
Baltic Sea 19 FG 3
Baltimore 20 M 6
Baltistan 3 BC 2
Baltit 3 B 1
Balurghat 6 D 3
Bamako 22 D 5
Banas 10 B 1-2
Banas 4 D 3
Banas Kantha 10 BC 1
Banda 5 C 4
Bandar = Machilipatnam 12 D 2
Banda Sea 18 de 3
Bandjarmasin 18 c 3
Bandung 18 b 3
Bandra 10 C 4
Bangalore 13 B 4
Bangladesh 18 JH 7
Banganapalle 12 C 3
Bangarapet 13 C 4
Bangkok 18 K 8
Bangriposi 9 H 3
Banjar 3 C 4
Banjul 22 C 5
Banka 6 C 3
Bankipore 6 B 3
Bankura 6 C 4
Bano 6 B 4
Bansihari 6 D 3
Banswara 4 C 5
Bantva 10 B 3
Bapatla 12 D 3
Bara Banki 5 C 3
Barak 7 F 3
Barakar 6 C 3
Baramati 10 D 4
Baramula 3 B 2
Baran 4 D 4
Baratang Islands 13 C 2
Barbados 21 E 2
Barcelona 19 E 4
Barddhaman 6 C 4
Bareilly 5 B 2
Barents Sea 18 DF 2
Bargarh 9 F 4
Barh 6 B 3
Barhaj 5 D 3
Bari 4 D 3
Baripada 9 H 4
Bari Sadri 4 C 4
Barmer 4 A 4
Barnagar 8 B 3
Barpeta 7 E 2
Barquisimeto 21 D 3
Barren Island 13 d 2
Barsi 11 D 4
Barwani 8 B 3
Basantpur 6 C 2
Basavakalyan 12 B 2
Basavana Bagevadi 12 A 2
Basoda 8 C
Basoli 3 B 3
Bass Strait 23 E 4
Bastar 8-9 EF 5
Basti 5 D 3
Batala 3 B 4
Bathurst 23 EF 4
Bathurst, Cape 20 FG 2
Batticaloa 13 D 7
Baudh 9 G 4
Baudh Khondmals 9 FG 5-4
Baykal, Lake 18 LM 4
Bay of Panama 21 B 2
Bazdar 1 C 3
Beale, Lake 10 CD 4
Beas 3 B 4
Beaufort Sea 20 D-F 2
Beawar 4 C 3
Begusarai 6 C 3
Bela 5 CD 4
Bela Island 10 B 2
Belem 21 F 4
Belfast 19 D 3
Belgaum 12 A 3
Belgium 19 E 3
Belgrade 19 G 4
Belize 20 L 8
Bellary 12 B 3
Belonia 7 E 4
Bengal, Bay of 1 F-H 4-6
Berhampur 9 G 5
Bering Sea 20 BC 3
Bering Strait 20 C 3
Berlin 19 F 3
Bermuda Islands 20 N 6
Betul 8 C 4
Betwa 5 B 4
Beypore 13 A 5
Bhabua 6 A 3
Bhadohi 5 D 4
Bhadrachalam 12 D 2
Bhadrakh 9 H 4
Bhadravati 12 A 4
Bhagalpur 6 C 3
Bhalki 12 B 1
Bhandara 11 F
Bharatpur 9 E 3
Bharuch 10 C 3
Bhatapara 9 E 4
•Bhatinda 3 B 4
Bhatkal 12 A 4
Bhatpara 6 D 4
Bhatu 3 B 5
Bhavani 12 B 5
Bhavnagar 10 C 3
Bhawanipatna 9 F 5
Bhawari 4 B 4
Bhilai 9 E 4
Bhima 12 B 2
Bhimunipatnam 12 E 2
Bhind 8 D 1
Bhiwani 3 C 5
Bhiwara 4 C 4
Bhograi 9 H 4
Bhopal 8 C 3
Bhor 10 C 4
•Bhubaneswar 9 G 4
Bhuj 10 A 2
Biaora 8 C 3
Bidar 12 B 2
Bihar 6 AC 3
Bihar 6 B 3
Bijapur 12 A 2
Bijni 7 E 2
Bijnor 5 B 2
Bikaner 4 B 2
Bilara 4 B 3
Bilari 5 B 2
Bilaspur 3 C 4
Bilaspur 9 F 3
Bilauri 5 C 2
Bindki 5 C 3
Bir 11 D 4
Birbhum 6 C 4
Birmingham 19 D 3
Birmingham 20 L 6
Birsilpur 4 B 2
Birur 12 A 4
Biscay Bay of 19 D 4
Bishenpur 7 F 3
Bishnath 7 F 2
Bishnupur 6 C 4
Bismarck 20 J 5
Bismarck Archipelago 24 R 6
Bissamcuttack 9 F 5
Bissau 22 C 5
Biswan 5 C 3
Black Sea 19 H 4
Blantyre 22 H 8
Blenheim 23 c 2
Blue Nile 22 H 5
Boa Vista 21 D 3
Bobbili 12 E 1
Bodhan 12 B 1
Bodinayakkanur 13 B 5-6
Bodo 19 F 2
Bogota 21 C 3
Boipariguda 9 F 5
Boise 20 H 5
Bolivia 21 D 5
Bombay 10 C 4
Bomdila 7 F 2
Bonaigarh 9 G 4
Bonaparte Archipelago 23 C 2
Bonn 19 E 3
Boothia, Gulf of 20 KL 2-3
Bordeaux 19 D 4
Borgampad 12 D 2
Bornholm 19 F 3
Boston 20 MN 5
Bothnia, Gulf of 19 FG 2
Bourke 23 E 4
Bowen 23 E 2-3
Brahmakund 7 H 2
Brahmaputra 7 F 2
Brahmaur 3 C 3
Brasilia 21 F 5
Brasov 19 G 4
Bratislava 19 F 4
Bratsk 18 L 4
Brazil 21 DF 4
Brazzaville 22 F 7
Brest 19 D 4
Brisbane 23 F 3
Bristol 19 D 3
British Columbia 20 G 4
Bunbury 23 B 4
Bundelkhand 8 DE 2
Bundi 4 C 4
Bundu 6B 4
Bunji 3 B 2
Burgas 19 G 4
Burhanpur 8 C 4
Burma 18 K 7
Burnie 23 E 5
Burnpur 6 C 4
Bursa 19 G 4
Buru 18 d 3
Burundi 22 GH 7
Buxar 6 AB 3
Byadagi 12 A 3
Byrambore Reef 13 ab 2
Broome 23 C 2
Bruini 7 H 1
Brunei 18 C 2
Brussels 19 E 3
Bucharest 19 G 4
Budapest 19 F 4
Budaun 5 B 2
•Buddh Gaya 6 B 3
Buenosaires 21 DE 7
Buenosaires 21 b 1
Buffalo 20 M 5
Bukavu 22 G 7
Bukkapatnam 12 B 3
Bulandshahr 5 A 2
Bulawayo 22 GH 9
Buldana 11 E 3
Bulgaria 19 G 4

Cadiz 19 D 5
Cairo 22 GH 4
Calcutta 6 D 4
Calgary 20 H 4
Cali 21 C 3
Calicut = Kozhikode 13 A 5
California 20 GH 5-6
California, Gulf of 20 H 6-7
•Calimere, Point 13 CD 5
Camaron 21 b 2
•Cameroun 22 EF 6
Campos 21 FG 6
Canacona 10 CD 6
Canada 20 GM 3
Canal Zone 20 L 9
Canaberra 23 EF 4
Cannanore 13 A 5
Cannanore Islands 13 b 2
Canoquebrado 21 a 1
Cape Town 22 F 10
Cape Verde 22 C 5
Caracas 21 D 2
Caribbean Sea 20 LM 8
Car Nicobar Island 13 c 4
Casblanca 22 D 3
Caspian Sea 18 EF 5-6
Cauca 21 C 3
Cauvery 13 B 4
Central African Republic 22 FG 6
Chad 22 FG 5
Chad, Lake 22 F 5
Chaibasa 6 B 4
Chakia 5 D 4
Chakradharpur 6 B 4
Chakrata 5 AB 1
Chalisgaon 11 D 3
Challakere 12 B 2
Chamba 3 C 3
Chambal 8 C 1
Chamoli 5 B 1
Champaran 6 B 2
Chamrajnagar 13 B 5
Chandigarh 3 C 4
Chandrapur 11 F 4
Chandur 11 EF 3
Channapatna 13 B 4
•Chapra 6 B 3
Char 3 C 3
Charanwala 4 B 3
Charkhari 5 B 4
Charleville 23 E 3
Charters Towers 23 E 3
Chatra 6 B 3
Chatrapur 9 G 5
Chatsu 4 CD 3
Chengalpattu 13 CD 4
Chengannur 13 B 6
Chenkaladi 13 D 7
Cherbaniani Reef 13 ab 1
Cherbourg 19 D 4
Cherrapunji 7 EF 3
Chetamale 13 c 3
Chetlat Island 13 b 2
Cheyur 13 D 4
Chhabra 4 D 4
Chhatarpur 6 AB 3
Chhatarpur 8 D 2
Chhota Udepur 10 CD 2
Chindwara 8 D 3-4
Chicago 20 KL 5
Chidambaram 13 CD 5
Chikalda 11 3
Chik Ballapur 12 BC 4
Chikhli 10 C 3
Chikhli 11 E 3
Chikmagalur 12 A 4
Chilaw 13 C 7
Chile 21 C 8-6
Chilibre 21 b 1
Chilka Lake 9 G 5
Chimakudi 7 F 3
Chincholi 12 B 2
Chineni 3 B 3
Chinnamanur 13 B 6
Chintalapudi 12
Chintamani 12 C 4
Chipun 10 C 5
Chirala 12 D
Chirang 6-7 E 2
Chirmiri 9 F 3
Chitapur 12 B 2
Chitradurga 12 B 3
Chittaranjan 6 C 4
Chittaurgarh 4 C 4
Chittoor 12 C 4
Chittur 13 B 5
Chodavaram 12 DE 2
Chomun 4 CD 3
Chopda 11 D 3
Chotila 10 B 2
Christmasisland 24 B 5
Chukchi Sea 18 TU 3
Chunchura 6 CD 4
Churachandpur 7 F 3
Churk 5 D 4
Churu 4 C 2
Coats Island 20 L 3
Cochin 13 B 6
Coco Island 12 d 1
Cocos Island 21 B 3
Coimbatore 13 B 5
Colaba Point 10 C 4
Coleroon 13 C 5
Cologne 19 E 3
Colombia 21 CD 3
Colombo 13 C 7
Colon 21 b 1
Colorado 20 H 6
Columbus 20 L 5
Comorin, Cape 13 BC 6-7
Comoro Islands 22 J 8
Conakry 22 C 6
Concepcion 21 C 7
Congo 22 G 6
Connecticut 20 M 5
Constitucion 21 C 7
Coolgardie 23 BC 4
Coondapoor 12 A 4
Copenhagen 19 F 3
Coral Sea 23 FG 2
Cordoba 21 D 7
Corsica 19 E 4
Costa Rica 20 L 8-9
Cuba 20 LM 7
Cuddalore 13 CD 5
Cuddapah 12 C 3
Cumberland Islands 23 EF 3
Cuttack 9 GH 4
Cuzco 21 C 5

Dabhoi 10 C 2
Dabugam 9 F 5
Dacca 18 K 7
Dadra and Nagar Haveli 10 C 3
Dalmau 5 C 3
•Daltonganj 6 B 3
Daman 10 C 3
Damodar 6 C 4
Dandeli 12 A 3
Dankhar Gompa 3 D 3
Danube 19 F 4

•NOTE

Arkonam = Arakkonam
Arrah = Ara
Badrinath = Badarinath
Bhatinda = Bathinda
Bhubaneswar = Bhubaneshwar
Buddh Gaya = Bodh Gaya
Calimere, Point = Kodikkarai
Cameroun = Cameroon
Chapra = Chhapra
Daltonganj = Daltenganj

Dapoli 10 C 5
Dar Es Salaam 22 HJ 7
Darjiling 6 CD 2
Darling 23 E 4
Darling Downs 23 EF 3
Darwin 23 CD 2
Dasuya 3 B 4
Datia 8 D 2
Daudnagar 6 B 3
Daulatabad 11 D 4
Davangere 12 AB 3
Davad 18 N 9
Dehgam 10 C 2
Dehra Compas 3 D 2
Dehra Dun 5 AB 1
Dehri 6 AB 3
Delft Island 13 CD 6
Delhi 3 C 5
Denmark 19 E 3
Denver 20 J 5
Deoband 5 A 2
Deobhong 9 F 5
Deodrug 12 B 2
Deoghar 6 C 3
Deolali 10 C 4
Deora 4 A 3
Deori 8 D 3
Deoria 5 D 3
Detroit 20 L 5
Devakottai 13 C 6
Devarkonda 12 C 2
Devgarh 9 G 4
Devikolam 13 B 5
Devipattinam 13 C 6
Dewas 8 C 3
Dhampur 5 B 2
Dhamtari 9 E 4
Dhanbad 6 C 4
Dhandhuka 10 BC 2
Dhangarhi 5 C 2
Dhanushkodi 13 C 6
Dharapuram 13 B 5
Dharmapuri 13 BC 4
Dharmavaram 12 B 3
Dharmjaygarh 9 F 3
Dharmsala 3 BC 3
•Dharwar 12 A 3
Dhenkanal 9 G 4
Dhuburi 6 D 2
Dhule 10 D 3
Digboi 7 G 2
Diego Garcia 24 N 6
Dihang 7 G 1
Diligent Strait 13 cd 2-3
Dindigul 13 BC 5
Diu 10 B 3
Divi Point 12 D 3
•Djakarta 18 b 3
Djibouti 22 J 5
Dod Ballapur 12 BC 4
Dominican Republic 20 MN 8
Dondra Head 13 D 8
Dongara 23 B 3
Dongargarh 8 E 4
Dori 22 D 5
Dornakal 12 CD 2
Douala 22 E 6
Douro 19 D 4
Dover 19 DE 3
Dras 3 B 2
Dubbo 23 E 4
Dublin 19 D 3
Dubrovnik 19 F 4
Dudhana 11 E 4
Dudhi 5 D 4
Dullabchara 7 F 3
Dum Dum 6 D 4
Dum Duma 7 G 2
Dumka 6 C 3
Dumraon 6 B 3
Duncan Passage 13 c 3
Dunedin 23 c 2
Dungarpur 4 B 5
Durg 9 E 4
Durgapur 6 C 4
Dwarka 10 A 2
Dyer, Cape 20 NO 3

East China Sea 18 N 6-7
East Godavari 12 DE 2
East Khandesh 11 D 3
East London 22 GH 10
East Nimar 8 C 4
East Siberian Sea 18 QT 2
Ecuador 21 C 4
Edinburgh 19 D 3
Eighty Mile Beach 23 BC 2
Elephanta Island 10 C 4
Ellora 11 D 3
Eluru 12 D 2
English Channel 19 DE 3-4
Erandol 11 D 3
Erie, Lake 20 LM 5
Erinpura 4 B 4
Ernakulam 13 AB 5-6
Erode 13 B 5
Espirito Santo 21 FG 5
Estonian Soviet Socialist Republic 19 G 3
Etawah 5 B 3
Ethiopia 22 HJ 6
Eucla Basin 23 CD 4
Euphrates 18 E 6
Europe 19
Eyre, Lake 23 D 3

Faeroes 19 D 2
Faizabad 5 D 3
Fakiragram 6 E 2
Falkland Islands 21 DE 9
False Divi Point 12 D 3
False Point 9 H 4
Faridkot 3 B 4
Faro 19 D 5
Farrukhabad 5 B 3
Fasher, El 22 G 5
Fatehgarh 5 BC 3
Fatehpur 6 B 3
Fatehpur 4 C 3
Fatehpur 5 C 4
Fazilka 3 B 4
Federal District 21 F 5
Fiji Islands 24 S 6
Finisterre, Cape 19 CD 4
Finland 19 G 2
Findland, Gulf of 19 G 2-3
Firozabad 5 B 3
•Firozpur 3 B 4
Flinders Range 23 D 4
Florence 19 F 4
Florida 20 L 6-7
Florida, Straits of 20 LM 7
Foggia 19 F 4
Formosa 21 DE 6
Forrest 23 C 4
Fortaleza 21 G 4
Fort-Gouraud 22 CD 4
Fort Randolph 21 b 1
Fort Simpson 20 G 3
Fort Smith 20 HJ 3
Foul Point 13 D 6
Foxe Basin 20 LM 3
France 19 DE 4
Free Town 22 C 6
French Guiana 21 E 3
Furneaux Group 23 EF 4-5

Gabon 22 F 6-7
Gadag 12 A 3
Gadarwara 8 D 3
Gadhinglaj 10 D 5
Gadwal 12 B 2
Gagariya 4 A 4
Gal 13 D 7
Galapagos Islands 24 DE 6
Galati 19 G 4
Galle 13 D 7
Gallivare 19 FG 2
Galoya 13 D 6
Gambia 22 C 5
Gamboa 21 b 1
Gampola 13 D 7
Gandak 6 B 2
•Gandhi Dham 10 B 2
Gandhinagar 8 B 2
Ganga 5 AB 2
Gangakher 11 E 4
Ganganager 4 BC 2
Gangapur 4 D 3
Gangawati 12 B 3
Gangoh 5 A 2
Gangotri 5 B 1
Gangtok 6 D 2
Ganjam 9 G 5
Garhchiroli 11 G 3
Garhwal 5 B 2
Garoua 22 F 6
Garu 6 B 4
Garwa 6 A 3
Gatun 21 b 1
Gatuncillo 21 b 1
Gauhati 7 EF 2
Gauribidanur 12 B 4
Gavle 19 F 2
Gaya 6 B 3
Genoa 19 E 4
Georgetown 21 E 3
Georgia 20 L 6
Georgian Soviet Socialist Republic 19 J 4
Geraldton 23 B 3
Germany 19 EF 4-3
Ghaghara 5 D 3
Ghana 22 DE 6
Ghazipur 5 D 4
Gibraltar 19 D 5
Giddalur 12 C 3
Gijon 19 D 4
Gilgit 3 B 2
Gilgit 3 A 2
Gilgit Wazarat 3 B 1
Gir Hills 2 D 4
Giridih 6 C 3
Girna 10 D 3
Goa, Daman & Diu 10 B 3, C 3, CD 6
Goalpara 6-7 DE 2
Godavari 11 E 4
Godavari Delta 12 DE 2
Godavari Point 12 E 2
Godhra 10 C 2
Goiania 21 EF 5
Goias 21 E 5
Gokak 12 A 2
Gol 19 E 2
Golaghat 7 FG 2
Golakganj 6 DE 2
Golconda 12 C 2
Golea, El 22 E 3
Gomati 5 C 3
Gonda 5 CD 3
Gondal 10 B 3
Gondia 11 G 3
Good Hope, Cape of 22 F 10
Gooty 12 B 3
Gopalganj 6 B 2
Gorakhpur 5 D 3
Goteborg 19 F 3
Grafton 23 F 3
Grane 19 F 2
Great Australian Bight 23 CD 4
Great Barrier Reef 23 EF 2
Great Bear Lake 20 GH
Great Bitter Lake 22 b 2
Great Dividing Range 23 E 3-4
Greater Antilles 20 LM 7-8
Greater Sunda Islands 18 b-d 2
Great Nicobar 13 d 5
Great Salt Lake 20 H 5
Great Sandy Desert 23 C 3
Great Victoria Desert 23 C 3
Great Slave Lake 20 H 3
Greece 19 G 5
•Greenland 20 P 2-3
Greenland Sea 20 S 2
Grong 19 F 2
Gua 6 B 4
Guadalajara 20 J 7
Guadelupe Islands 20 GH 7
Guantanamo 20 M 7
Guatemala 20 K 8
Guayaquil 21 BC 4
Gubbi 12 B 4
Gudalur 13 B 5
Gudivada 12 D 2
Gudur 12 C 3
Guinea 22 CD 5-6
Guinea, Gulf of 22 DE 6-7
Gujarat 10 AC 2-3
Gulbarga 12 B 2
Gulmarg 3B 2
Gumla 6 B 4
Guna 8 C 2
Gundlupet 13 B 5
Gunnaur 5B 2
Guntakal 12 B 3
Guntur 12 D 2
Gunupur 9 FG 5
Gupis 3 A 1
Gurdaspur 3 B 3
Gurha 4 A 4
Gwalior 8 D 1

Hachi 7 G 2
Haflong 7 F 3
Hafun 22 K 5
Hagari 12 B 4
Haidargarh 5 C 3
Haiti 20 M 8
Haji Langar 3 D 2
Hajipur 6 B 3
Halar 10 AB 2
Halia 5 D 4
Halifax 20 N 5
Hall's Creek 23 C 2
Hambantota 13 D 7
Hamilton 23 c 1
Hamilton River 20 N 4
Hamirpur 3 C 4
Hamirpur 5 C 4
Hanle 3 D 3
Hansi 3 C 3
Hansi 3 BC 5
Hanumangarh 4 BC 2
Haora 6 CD 4
Harsud 8 C 3
Harur 13 C 4
Hassan 13 B 4
Hata 5 D 3
Hathras 5 AB 3
Hatta 8 D 2
Havana 20 L 7
Havelock Island 13 d 3
Haveri 12 A 3
Havre, Le 19 E 4
Hawaiian Islands 20 ab 1-2
Hazaribagh 6 B 3-4
Hebrides 19 D 3
Hebron 20 NO 4
Helsinki 19 G 2
Herbertabad 13 c 3
Himatnagar 10 C 2
Hindaun 4 D 3
Hindupur 12 B 4
Hinganghat 11 F 3
Hingoli 11 E 4
Hirekerur 12 A 3
Hisar 3 B 5
Hobart 23 E 5
Hokitika 23 bc 2
Holalkere 12 B 3
Hole Narsipur 13 B 4
Homnabad 12 B 2
Honduras 20 L 8
Hong Kong 18 M 7
Honnali 12 A 3
Honshu 18 O 5-6
Horn, Cape 21 CD 9
Hosdurga 12 B 4
Hoshangabad 8 CD 3
Hoshiarpur 3 BC 4
Hoskote 12 BC 4
Hospet 12 B 3
Hosur 13 BC 4
Huancayo 21 C 5
Hubli 12 A 3
Hudson Bay 20 KL 3-4
Hudson Strait 20 MN 3
Hugly 6 CD 5
Hukeri 12 A 2
Humedad Island 21 ab 1
Hungary 19 FG 4
Hunsur 13 B 4
Hunterganj 6 B 3
Hunza = Baltit 3 B 1
Huron, Lake 20 L 5
Huzurabad 12 C 1
Huzurnagar 12 C 2
Hyderabad 12 C 2

Iasi 19 G 4
Ibadan 22 E 6
Iceland 19 BC 2
Ichagarh 6 B 4
Ichhawar 8 C 3
Idaho 20 H 5
Ifni 22 C 3-4
Igatpuri 10 C 4
Ilheus 21 G 5
Ilkal 12 B 2-3
Illinois 20 L 5-6
Imphal 7 FG 3
Indapur 11 D 4
Indi 12 AB 2
India 1 D-F 4
Indiana 20 L 5
Indian Ocean 24 MP 6-7
Indonesia 18 ab 2
Indore 8 BC 3
Indravati 8 E 5
Indus 3 B 2
Ingham 23 E 2
Ingraj Bazar 6 CD 3
Inner Mongolia 18 L-N 5
Interview Island 13 c 2
Invercargill 23 bc 2
Iowa 20 K 5
Ipswich 23 F 3
Iquique 21 C 6
Iquitos 21 C 4
Iran 18 EF 6
Iraq 18 E 6
Ireland 19 D 3
Irinjalakuda 13 AB 5
Irminger Sea 20 Q 3
Irrawaddy 18 K 7-8
Islamabad 1 C 2
Israel 18 D 6
Italy 19 F 4
Itarsi 8 C 3
Ivory Coast 22 D 6

Jabalpur 8 DE 3
Jadotville 22 G 8
Jafarabad 10 B 3
Jaffna 13 CD 6
Jagatsingpur 9 H 4
Jagdalpur 9 EF 5
Jagtial 12 C 1
Jahanabad 6 B 3
Jahazpur 4 C 4
Jaigarh 10 C 5
Jaijon 3 BC 4
Jaipur 4 CD 3
Jaisalmer 4 A 3
Jajpur 9 H 4
Jakhal 3 BC 5
Jakhau 10 A 2
Jalahalli 12 B 4
Jalaun 5 B 3
Jalesar 5 B 3
Jalgaon 11 D 3
Jalna 11 DE 4
Jalor 4 B 4
Jalpaiguri 6 D 2
Jamaica 20 LM 8
Jambusar 10 C 2
James Bay 20 LM 4
Jamkhandi 12 A 2
Jamkhed 11 D 4
Jammalamadugu 12 C 3
Jammu 3 B 3
Jammu and Kashmir 3 B-D 2
Jamnagar 10 B 2
Jamner 11 D 3
Jamshedpur 6 BC 4
Jamui 6 C 3
Jangaon 12 C 2
Jangipur 6 CD 3
Jaora 8 B 3
Japan 18 OP 5-6
Japan, Sea of 18 OP 5-6
Japura 21 D 4
Jarwa 5 D 3
Jasdan 10 B 2-3
Jashpurnagar 9 FG 3
Jasmergarh 3 B 3
Jaswantpura 4 AB 4
Jauf, El 22 G 4
Jaunpur 5 D 4
Java 24 P 6
Jawhar 10 C 4
Jaynagar 6 D 4
Jeffersoncity 20 K 6
Jetpur 10 B 3
Jeypore 9 F 5
Jha Jha 6 C 3
Jhalawar 4 D 4
Jhalawar 10 B 2
Jhalida 6 BC 4
Jhansi 5 B 4
Jhargram 6 C 4
Jharsuguda 9 G 4
Jhelum 3 AB 2
Jhunjhunun 4 C 2
Jimma 22 H 6
Jind 3 C 5
Joao Pessoa 21 G 4
Jodhpur 4m B 3
Jodiya Bandar 10 B 2
Jogindarnagar 3 C 4
Jogipet 12 C 2
Johannesburg 22 G 9
Jolarpettai 13 C 4
Jonkoping 19 F 3
Joshimath 5 B 1
Jowai 7 F 3
Juan Gallegos Island 21 b 1
Juba 22 J 6
Juba 22 H 6
Julianehab 20 OP 3
•Jullundur 3 B 4
Junagadh 10 B 3
Junnar 10 CD 4

Kabbani 13 B 5
Kaduna 22 E 5
Kadur 12 B 4
Kagal 10 D 5
Kaikalur 12 D 2
Kaikohe 23 c 1
Kaimganj 5 B 3
Kaira 10 C 2
Kairana 5 A 2
Kaisarganj 5 C 3
Kaitaia 23 c 1
Kakana 13 cd 4
Kakinada 12 E 2
Kalahandi 9 F 4
Kalamai 19 G 5
Kalat 1 C 3
Kalghatgi 12 A 3
Kalgoorlie 23 C 4
Kali 5 C 2
Kalimpang 6 D 2
Kallam 11 DE 4
Kalmunai 13 D 7
Kalnai 9 F 3
Kalol 10 C 2
Kalpa 3 CD 4
Kalpeni Island 13 b 2
Kalpi 5 B 3
Kalpitiya 13 C 6
Kalsubai 10 CD 4
Kalutara 13 CD 7
Kalvan 10 D 3
Kalwakurti 12 C 2
Kamalapuram 12 C 3
Kaman 4 D, 3
Kamareddi 12 C 1
Kamarhati 6 D 4
Kambam 13 B 6
Kameng Frontier District 7 F 2
Kamet 5 B 1
Kamloops 20 GH 4
Kampala 22 H 6
Kampti 11 F 3
Kamrup 7 E 2
Kanakapura 13 B 4
Kanchipuram 13 C 4
Kanchrapara 6 D 4
Kandahar 18 G 6
Kandahar 11 E 4
Kandi 6 CD 4
Kandla 10 AB 2
Kandukur 12 C 3
Kandy 13 D 7
•Kangiri 12 C 3
Kangpokpi 7 F 3
Kangra 3 BC 3-4
Kangra 3 C 3
Kanin Nos 19 J 2
Kankan 22 CD 5
Kanker 9 E 4
Kankesanturai 13 CD 6
Kannauj 5 B 3
Kanniyakumari 13 BC 6
Kannod 8 C 3
Kano 22 EF 5
Kanpur 5 BC 3
Kansas 20 JK 6
Kapadvanj 10 C 2
Kapurthala 3 B 4
Karad 10 D 5
Karaivitu Island 13 C 6
Karaikkudi 13 C 5
Karanja 11 E 3
Karanjia 9 GH 4
Karauli 4 D 3
Karen 13 cd 2
Karera 8 CD 2
Kargil 3 C 2
Karikal 13 CD 5
Karimganj 7 F 3
Karimnagar 12 C 1
Karjat 10 C 4
Karkal 12 A 4
Karmala 11 D 4
Karnataka 12-13 AB 2-4
Karsog 3 C 4
Karwar 12 A 3
Karwi 5 C 4
Kasai 22 G 7
Kasaragod 13 A 4
Kasganj 5 B 3
Kashipur 9 F 5
Kashipur 5 B 2
Kashmir North 3 B 2
Kashmir South 3 B 3
Kasumpti 3 C 4
Katanning 23 B 4
Katchall Island 13 cd 5
Katherine 23 D 2
Kathgodam 5 B 2
Kathiawar 10 AB 3
Kathiraveli 13 D 6
Kathua 3 B 3
Katihar 6 C 3
Katni 8 E 3
Katol 11 F 3
Kattegat 19 F 3
Katwa 6 CD 4
Kauai 20 b 1
Kautokeino 19 G 2
Kavali 12 C 3
Kavalla 19 G 4
Kavaratti Island 13 b 2
Kawardha 9 E 3-4
Kayanakulam 13 B 6
Kayes 22 CD 5
Kazakh Soviet Socialist Republic 18 FH 5
Keetmanshoop 22 F 9
Keewatin, District of 20 KL 3
Kegalla 13 D 7
Ken 5 C 4
Kendrapara 9 H 4
Kennedy, Cape 20 LM 7
Kentucky 20 L 6
Kenya 22 H 6
Keonjhar 9 GH 4
Kerala 13 AB 5-6
Keran 3 AB 2
Keshiyari 6 C 4
Kesigi 12 B 3
Keywest 20 L 7
Khachrod 8 B 3
Khadir Island 10 B 2
Khair 5 A 2-3
Khairagarh 8 E 4
Khalatse 3 C 2
Khalilabad 5 D 3
Khambhat 10 C 2
Khammam 12 D 2
Khapalu 3 C 2
Kharaghoda 10 B 2
Kharagpur 6 C 4
Khargon 8 B 4
Khariar 9 F 4
Khartoum 22 H 5
Khatanga 18 L 2-3
Khavda 10 AB 2
Khed Brahma 10 C 1
Khela 7 G 2
Kheri 5 C 2
Khitai Dawan 3 D 2
Khowai 7 E 3
Khuiala 4 A 3
Khmer Republic 18 L 8
Khunti 6 B 4
Khurai 8 D 2
Khurja 5 AB 2
Khurnak Fort 3 D 3
Kigali 22 H7
Kigoma 22 GH 7

•NOTE

Dharwar = Dharwad
Djakarta = Jakarta
Firozpur = Ferozpur

Gandhi Dham = Gandhidham
Greenland = Kalatdlit-Nunat (Greenland)

Jullundur = Jalandhar
Kangiri = Kani Giri

•Kilakarai 13 C 6
Kilar 3 C 3
Kilik Dawan 3 B 1
Kiltan Island 13 b 2
Kimberley 22 G 9
Kindu 22 G 7
Kingston 23 DE 4
Kingston 20 M 8
Kinnaur 3 CD 4
Kinshasa 22 F 7
Kinwat 11 F 4
Kipili 22 H7
Kiranur 13 C 5
Kirgiz Soviet Socialist Republic 18 H 5
Kiruna 19 G 2
Kisangani 22 G 6
Kishanganga 3 AB 2
Kishanganj 6 CD 2
Kishangarh 4 C 3
Kishangarh 4 A 3
Kishtwar 3 BC 3
Kismayu 22 J 7
Kitimat 20 G 4
Koch Bihar 6 D 2
Kodarma 6 B 3
Kodaikanal 13 B 5
Kodinar 10 B 3
Kohima 7 G 3
Koihoa 13 d 4
Kokkilai 13 D 6
Kokkola 19 G 2
Kolaba 10 C 4
Kolar 13 C 4
Kolaras 8 C 2
Kolar Gold Fields 13 BC 4
Kolayat 4 B 3
Kolhapur 10 D 5
Kollegal 13 B 4
Kolleru Lake 12 D 2
Kolosib 7 F 3
Konarak 9 H 5
Kondagaon 9 E 5
Kone La 3 D 2
Konta 9 E 6
Kòppa 12 A 4
Koppal 12 B 3
Koraput 9 F 5
Korba 9 F 3
Korea North 18 NO 5
Korea South 18 NO 6
Koregaon 10 D 5
Kori Creek 10 A 2
Kosgi 12 B 2
Kota 4 CD 4
Kotapad 9 F 5
Kot Kapura 3 B 4
Koth 3 A 3
Kottagudem 12 D 2
Kottayam 13 B 6
Kotturu 12 B 3
Kovilpatti 13 BC 6
Kovur 12 CD 3
Kovvur 12 D 2
Kozhikode 13 A 5
Krishna 12 D 2
Krishna 12 B 2
Krishna Delta 12 D 3
Krishnagiri 13 C 4
Krishnagarh 6 D 4
Kristiansund 19 E 2
Kuala Lumpur 18 L 9
Kuchchveli 13 D 6
Kulasekarappattinam 13 BC 6
Kulti 6 C 4
Kulu 3 C 4
Kumaun 5 BC 1-2
Kumbakonam 13 C 5
Kumta 12 A 3
Kunch 5 B 4
Kunnamkulam 13 AB 5
Kuopio 19 G 2
Kurduvadi,11 D 4
Kurgiakh 3 C 3
Kuri 4 A 3
Kurnool 12 BC 3
Kuri negala 13 CD 7
•Kutch 10 AB 2
•Kutch, Gulf of 10 A 2
•Kutch, Rann of 10 AB 1
Kutiyana 10 AB 3
Kutru 8 E 5
Kuwait 18 EF 7
Kuwait 18 EF 7
Kyushu 18 O 6

Lachen 6 D 2
Ladakh 3 CD 2
Lagartento 21 b 1
Lagos 22 E 6
Lahore 18 H 6
Lake Eyre Basin 23 D 3
Lakha 4 A 3
Lakhimpur 5 C 3
Lakhipur 7 E 2
Lakhnadon 8 D 3
Lakhpat 10 A 2
Lakshadweep 1 D 6-7
Lakshettipet 12 C 1
Lakshmikantapur 6 D 4
Lala Ghat 7 F 3
Lalganj 6 B 3
Lalgola 6 CD 3
Lalitpur 5 B 4
Lalkua 5 B 2
Lambarene 22 EF 7
Lanak La 3D 2
Lancaster Sound 20 LM 2
Lansdowne 5 B 2
Lansing 20 L 5
Larisa 19 G 5
Las Vegas 20 H 6
Latehar 6 B 4
Lathi 4 A 3
Latur 11 E 4
Latvian Soviet Socialist Republic 19 G 3
Launceston 23 EF 5
Leghorn 19 F 4
Leh 3 C 2
Leon 20 J 7
Lesotho 22 G 9
Liberia 22 CD 6
Libreville 22 EF 6
Liechtenstein 19 EF 4
Ligurian Sea 19 E 4
Lima 21 C 5
Limoges 19 DE 4
Limpopo 22 GH 9
Lincoln 20 K 5
Lingsugur 12 B 2
Lingzi Tang 3 D 2
Lisbon 19 CD 5
Lithuanian Soviet Socialist Republic 19 G 3
Little Andaman 13 cd 3
Little Nicobar 13 d 5
Little Rann 10 B 2
Little Rock 20 K 6
Livingstone 22 G 8
Logtak Lake 7 F 3
Lohardaga 6 B 4
Loharu 3 B 5
Lohawat 4 B 3
Lohit Frontier District 7 H 1
Lonavale 10 C 4
Londa 12 A 3
London 19 DE 3
Long Beach 20 GH 6
Longju 7 F 1
Longreach 23 E 3
Los Angeles 20 GH 6
Louisiana 20 K 6-7
Lourenco Marques 22 H 9
Luanda 22 F 7
Luckeesarai 6 C 3
Lucknow 5 C 3
Ludhiana 3 B 4
Luluabourg 22 G 7
Lumding 7 F 3
Lunavada 10 CD 2
Lungleh 7 F 4
Luni 4 B 3
Lusaka 22 G 8
Luxembourg 19 E 4
Lynn Lake 20 JK 4

Macapa 21 E 3
Macherla 12 C 2
Mackay 23 EF 3
Mackenzie, District of 20 G-J 3
Madanapalle 12 C 4
Madden Lake 21 b 1
Madeira 21 DE 4
Madgaon 10 C 6
Madhupur 6 C 3
Madhya Pradesh 8-9 B-F 3
Madhya Saurashtra 10 B 2
Madinet Al-Shaab 18 E 8
Madison 20 KL 5
Madras 12 D 4
Madrid 19 D 4
Madurai 13 C 6
Madurantakam 13 CD 4
Megellan, Strait of 21 D 9
Mahabaleshwar 10 C 5
Mahad 10 C 4
Mahadeopur 12 CD 1
Mahajan 4 B 2
Mahalingpur 12 A 2
Mahanadi 9 G 4
Mahanadi, Mouths of the 9 H 4-5
Maha Oya 13 D 7
Maharashtra 10-11
Mahasamund 9 F 4
Mahasu 3 C 4
Mahaweli 13 D 7
Mahbubabad 12 C 2
Mahbubnagar 12 BC 2
Mahe 13 A 5
Mahendragarh 3 C 5
Mahesana 10 C 2
Maheshwar 8 B 3
Mahi 4 C 5
Mahim 10 C 4
Maho 13 D 7
Mahoba 5 BC 4
Mahuva 10 BC 3
Maibong 7 F 3
Maihar 8 E 2
Maine 20 MN 5
Mainpuri 5 B 3
Mairabari 7 F 2
Majunga 22 J 8
Makrai 8 C 3
Makrana 4 C 3
Mal 6 D 2
Malabar Coast 13 AB 4-6
Malacca, Strait of 18 ab 1
Malaga 19 D 5
Malagasy Republic 22 J 8-9
Malakal 22 H 6
Malakanagiri 9 EF 5
Malavali 13 B 4
Malawi 22 H 8
Malaysia 18 LM 9
Malda 6 D 3
Maldive Islands 18 H 9
Malegaon 10 D 3
Maler Kotla 3 B 4
Mali 22 DE 5
Maliya 10 B 2
Munabao 4 A 4
Malmo 19 F 3
Malpura 4 C 3
Malta 19 F 5
Malvan 10 C 5
Malwa 8 BC 3
Malwa 3 B 5
Mamallapuram 13 D 4
Managua 20 L 8
Manali 3 C 3
Manamadurai 13 C 6
Manapparai 13 BC 5
Manas 7 E 2
Manaus 21 DE 4
Manawar 3 B 3
Manbazar 6 C 4
Manchester 19 DE 3
Mandalay 18 K 7
Mandalgarh 4 C 4
Mandasor 8 B 2
Mandi 3 C 4
Mandla 8 E 3
Mandvi 10 A 2
Mandvi 10 C 3
Mandya 13 B 4
Mangalagiri 12 D 2
Mangaldai 7 EF 2
Mangalore 13 A 4
Mangan 6 D 2
Mangrik 3 CD 2
Mangrol 10 AB 3
Mangrol 4 D 4
Manikpur 5 C 4
Manipur 7 FG 3
Manitoba 20 JK 4
Maniyachchi 13 BC 6
Manjeri 13 AB 5
Manjra 12 B 1
Mankulam 13 D 6
Manmad 10 D 3
Mannar 13 CD 6
Mannar, Gulf of 13 C 6
Mannargudi 13 C 5
Manoharpur 6 B 4
Manpur 8 E 4
Mans, Le 19 E 4
Mansa 3 B 5
Manvi 12 B 2
Manwat 11 E 4
Maoli 4 C 4
Mao Songsang 7 G 3
Mapuca 10 C 6
Maracaibo 21 CD 2
Maranhao 21 F 4
Margherita 7 G 2
Markha 3 C 3
Marmagao 10 C 6
Marpo La 3 C 2
•Marrakesh 22 CD 3
Marseilles 19 E 4
Marshall Islands 24 S 5
Marwar 4 B 4
Maryland 20 M 6
Masaka 22 GH 7
Maseru 22 G 9
Massachusetts 20 M 5
Masterton 23 c 2
Matadi 22 F 7
Matale 13 D 7
Matara 13 C 8
Mato Grosso 21 DE 5
Mattancheri 13 AB 6
Mau Ranipur 5 B 4
Mauritania 22 CD 5
Mauritius 24 MN 6
Mavelikara 13 B 6
Mawana 5 AB 2
Mayuram 13 CD 5
Mayurbhanj 9 H 4
Mazatlan 20 J 7
Mbabane 22 GH 9
Mbandaka 22 FG 6
Mbeya 22 H 7
McDonald Islands 24 NO 8
McMurray 20 H J 4
Medak 12 BC 2
Medak 12 C 1
Medawachchiya 13 D 6
Medellin 21 C 3
Medicine Hat 20 H 5
Medinipur 6 C 4
Mediterranean Sea 19 E-G 5
Meerut 5 AB 2
Meghalaya 7 EF 3
Megasini 9 H 4
Mehidpur 8 B 3
Mehndawal 5 D 3
Melbourne 23 E 4
Melilla 22 D 3
Melur 13 C 5
Melville, Cape 23 E 2
Memphis 20 KL 6
Mendhar 3 AB 3
Mendoza 21 D 7
Mentawai Islands 18 ab 3
•Mercara 13 A 4
Mergui Archipelago 18 K 8
Merida 20 L 7
Merta 4 C 3
Messina 19 F 5
Mettuppalaiyam 13 B 5
Mewar 4 BC 4
Mexico 20 JK 7-8
Mexico, Gulf of 20 KL 7
Mexico 20 K 8
Mhasvad 10 D 5
Mhow 8 B 3
Miami 20 L 7
Michigan 20 L 5
Michigan, Lake 20 L 5
Middle Andaman 13 cd 2
Middlesbrough 19 DE 3
Midway Islands 24 ST 4
Milan 19 E 4
Minas Gerais 21 F 5
Minicoy Island 13 b 3
Minimarg 3 B 2
Minnesota 20 K 5
Minutang 7 H 1
Miraj 10 D 5
Mirganj 6 B 2
Mirialguda 12 C 2
Mirpur 3 AB 3
Mirzapur 5 D 4
Misrikh 5 C 3
Mississippi 20 KL 6
Mississippi River 20 KL 5
Missouri 20 K 5-6
Missouri River 20 K 5
Mizoram 7 F 4
Mozambique 22 H 8-9
Mozambique 22 HJ 8
Mozambique Channel 22 H-J 8-9
Modasa 10 C 2
Moga 3 B 4
•Mogadishu 22 J 6
Mohana 9 G 5
Mohol 11 D 5
Mokameh 6 B 3
Mokokchung 7 G 2
Moldavian Soviet Socialist Republic 19 GH 4
Mombasa 22 HJ 7
Monaco 19 E 4
•Monghyr 6 C 3
Mongolia 18 K-N 5
Monrovia 22 C 6
Montana 20 HJ 5
Monterrey 20 JK 7
Montreal 20 M 5
Moosonee 20 LM 4
Mopti 22 D 5
Moradabad 5 B 2
Moranhat 7 G 2
Moratuwa 13 C 7
Morena 8 D 1
Morocco 22 CD 3-4
Morbi 10 B 2
Moscow 19 H 3
•Mossamedes 22 EF 8
Motihari 6 B 2
Mount Gambier 23 DE 4
Mount Morgan 23 EF 3
Mtwara 22 J 8
Mudigere 12 AB 4
Muhammadabad 5 D 4
Mul 11 F 3
Mula 10 D 4
Mullaittivu 13 D 6
Mullewa 23 B 3
Mulshi Lake 10 C 4
Munabao 4 A 4
Mungaoli 8 CD 2
Mungeli 9 E 3
Munich 19 F 4
Murliganj 6 C 3
Murray 23 E 4
Murshidabad 6 D 3
Murtajapur 11 E 3
Murud 10 C 4
Murwara 8 E 3
Musi 12 C 2
Musiri 13 C 5
Mussoorie 5 AB 1
Muzaffarabad 3 AB 2
Muzaffarnagar 5 A 2
Muztagh 3 BC 1
Nachna 4 A 3
Nadia 6 D 4
Nadiad 10 C 2
Nagaland 7 G 2-3
Nagappattinam 13 CD 5
Nagar 3 C 3
Nagaram 12 D 1
Nagarjuna Sagar 12 C 2
Nagaur 4 B 3
Nagbhir 11 F 3
Nagda 8 B 3
Nagercoil 13 B 6
Nagina 5 B 2
Naginimara 7 G 2
Nagir 3 B 1
Nagore 13 CD 5
Nagpur 11 F 3
Nahan 3 C 4
Nahorkatiya 7 G 2
Naini Tal 5 B 2
Nainpur 8 E 3
Nainwa 4 CD 4
Nairobi 22 H 7
Najibabad 5 B 2
Nakhtarana 10 A 2
Nalgonda 12 C 2
Namakkal 13 C 5
Namgia 3 D 4
Namibia (South West Africa) 22 F 9
Nanded11 E 4
Nandigama 12 D 2
Nandikotkur 12 C 3
Nandurbar 10 CD 3
Nandyal 12 C 3
Nanguneri 13 B 6
Nanjangud 13 B 4
Nanpara 5 C 3
Nantes 19 D 4
Naples 19 F 4
Narasapur 12 D 2
Narasaraopet 12 CD 2
Narayanganj 1 GH 3
Narayanpet 12 B 2
Narmada 10 CD 3
Narnaul 3 C 5-6
Narsampet 12 CD 2
Narsimhapur 8 D 3
Narsipatnam 12 E 2
Narvik 19 F 2
Narwana 3 C 5
Nashville 20 L 6
Nasik 10 C 3-4
Nasirabad 4 C 3
Natal 21 G 4
Nathana 3 B 4
Nathdwara 4 BC 4
Naushahra 3 B 3
Nautanwa 5 D 3
Navadwip,6 CD 4
Navalgund 12 A 3
Navlakhi 10 B 2
Nawada 6 B 3
Nawalgarh 4 C 3
Nawashahr 3 B 4
Nayagarh 9 G 4
Nayudupeta 12 CD 4
N Djamena 22 F 5
Nebraska 20 JK 5
Negombo 13 C 7
Neill Island 13 d 3
Neiva 21 C 3
Nellore 12 C 3
Nepalganj 5 C 2
Netherlands 19 E 3
Neutral Zone 18 E 7
Nevada 20 H 6
New Brunswick 20 N 5
Newcastle 19 DE 3
Newfoundland 20 NO 4-5
New Hampshire 20 M 5
New Jersey 20 M 5
New Mexico 20 J 6
New Orleans 20 KL 6-7
New Plymouth 23 c 1
New Providence 21 b 1
New York 20 M 5
New Zealand 24 S 7-8
Neyyattinkara 13 B 6
N'guigmi 22 F 5
Niagara Falls 20 M 5
Niamey 22 E 5
Nicaragua 20 L 8
Nicobar Islands 18 JK 9
Nidadavolu 12 D 2
Niger 22 EF 5
Nigeria 22 EF 6
Nighasan 5 C 2
Niihau 20 ab 1
Nilakkottai 13 B 5
Nilambur 13 AB 5
Nilanga 11 E 4
Nileswaram 13 A 4
Nilgiri 13 B 5
Nimach 8 B 2
Nimbahera 4 C 4
Nimes 19 E 4
Nim Ka Thana 4 CD 3
Nine Degree Channel 13 b 3
Nipani 12 A 2
Nirmal 12 C 1
Nirmali 6 C 2
Nizamabad 12 C 1
Nohar 4 C 2
Noncowry Island 13 d 5
Nongpoh 7 E 3
Nongstoin 7 E 3
North Andaman 12 d 2
North Arcot 13 C 4
North Carolina 20 LM 6
North Dakota 20 JK 5
Northern Circars 12 E 1-2
North Island 23 c 1
•North Kanara 12 A 3
North Satara 10 CD 5
North Sentinel 13 c 3
Northumberland Islands 23 F 3
North West Cape 23 B 3
Northwest Territories 20 GN 3
Norway 19 E-G 2-3
Norwich 19 DE 3
Nouakchott 22 C 5
Nova Lisboa 22 F 8
Nova Scotia 20 N 5
Nowgong 7 F 2
Noyil 13 B 5
Nuevo Emperador 21 b 1
Nuwara Eliya 13 D 7
Nuyts Archipelago 23 D 4
Nuzvid 12 D 2
Nyoma Rap 3 D 3

Obeid, El 22 GH 5
Odense 19 EF 3
Oder 19 F 3
Ohio 20 L 5
Okha 10 A 2
Okhotsk, Sea of 18 PQ 4
Oklahoma 20 K6
Oklahoma City 20 JK 6
Olavarria 21 D 7
Omalur 13 C 5
Oman18 F 7-8
Omdurman 22 GH 5
Ongole 12 CD 3
Onitsha 22 E 6
Onslow 23 B 3
Ontario 20 K-M 4-5
Oodnadatta 23 D 3
Ooldea 23 D 4
•Ootacamund 13 B 5
Opanake 13 D 7
Orai 5 B 4
Oran 22 DE 3
Orange 22 F 9
Orbost 23 E 4
Orebro 19 F 3
Oregon 20 GH 5
Orissa 9 FG 4
Osaka 18 O 6
Oslo 19 EF 3
Osmanabad 11 E 4
Ostersund 19 F 2
Ottawa 20 M 5
Oualata 22 D 5

Pachham Island 10 AB 2
Pachmarhi 8 D 3
Pachpadra 4 B 4
Pacific Ocean 24 BC 3-8
Padam 3 C 3
Padmanabhapuram 13 B 6
Padra 10 C 2
Pahigam 3 B 3
Pakaur 6 C 3
Pakistan 18 GH 7
Palakollu 12 DE 2
Palanpur 10 C 1
Palayankottai 13 BC 6
Palel 7 G 3
Palermo 19 F 5
Palghat 13 B 5
Pali 4 B 4
Palkonda 12 EF 1
Palkot 6 B 4
Palk Strait 13 CD 6-5
Palladam 13 B 5
Palma 19 E 5
Palmaner 12 C 4
Palmas, Cape 22 D 6
Palmyra Island 24 AB 5
•Palni 13 B 5
Pamban Isle 13 C 6
Panaji 10 C 6
Panadura 13 C 7
Panama 20 LM 9
Panama, Bay of 21 b 2
Panchmahals 10 CD 2
Pandharpur 11 D 5
Pangong Tso 3 D 3
Panjhra 10 D 3
Panruti 13 C 5
Paraguay 21 DE 6
Paramankudi 13 C 6
Paramaribo 21 E 3
Parana 21 E 6
Parana 21 DE 7
Parbati 8 C 2
Parbhani 11 E 4
Parganas, 24 6 D 4
Parinas, Point 21 B 4
Paris 19 E 4
Parner 10 D 4

•NOTE

Kilakarai = Kilakkarai
Kutch = Kachchh
Kutch, Gulf of = Kachchh, Gulf of
Kutch, Rann of = Kachchh, Rann of
Marrakesh = Marrakech
Mercara = Madikeri
Mogadishu = Mogadiscio
Monghyr = Munger
Mossamedes = Mocamedes
North Kanara = Uttar Kannad
Ootacamund = Odagamandalam
Palni = Palani

Parur 13 B 5
Parvatipuram 12 E 1
Parvatsar 4 C 3
Pasighat 7 G 1
Pasni 1 B 2
Patan 10 C 2
Patan 8 D 3
Patan 10 C 5
Pathankot 3 B 3
Patna 6 B 3
Patnagarh 9 F 4
Patiala 3 C 4
Pattukkottai 13 C 5
Pavagada 12 B 3
Paz, La 21 D 5
Paz, La 20 HJ 7
Peace River 20 H 4
Pearl Harbour 20 b 1
Peddapalli 12 C 1
Pedro, Point 13 D 6
•Peking 18 MN 5-6
Penner 12 B 3
Pennsylvania 20 LM 5
Penong 23 D 4
Penukonda 12 B 3
Perambalur 13 C 5
Pernambuco 21 FG 4
Perth 23 B 4
Peru 21 C 4
Petlad 10 C 2
Phalodi 4 B 3
Phaltan 10 D 5
Philadelphia 20 M 5-6
Philippines 18 N 8-9
Phnom Penh 18 KL 8
Phulbani 9 FG 4
Pidurutalagala 13 D 7
Pilani 4 C 2
Pipar 4 B 3
Pirmed 13 B 6
Pithapuram 12 E 2
Pithoragarh 5 BC 1
Plata, La 21 E 7
Plata, Rio de la 21 E 7
Podanur 13 B 5
•Point Calimere 13 CD 5
Poland 19 FG 3
Polgahawela 13 CD 7
Pollachi 13 B 5
Pondicherry 13 CD 5
Ponnani 13 A 5
Ponneri 12 D 4
Porbandar 10 A 3
Port Arthur [illegible] L [illegible]
Port Augusta 23 D 4
Port Blair 13 cd 3
Port Elizabeth 22 GH 10
Port-Gentil 22 E 7
Port Hedland 23 B 2-3
Port Lincoln 23 D 4
Port Nelson 20 KL 4
Porto Alegre 21 EF 6
Port of Spain 21 DE 2
Porto-Novo 22 E 6
•Porto Novo 13 CD 5
Porto Velho 21 D 4
Port Radium 20 H 3
Port Sudan 22 H 5
Portugal 19 D 4-5
Portuguese Guinea 22 C 5
Pottangi 9 F 5
Pranhita 11 F 4
Pratapgarh 4 C 4
Pratapgarh 5 CD 4
Pravara 10 D 4
Prince George 20 G 4
Proddatur 12 C 3
Puerto Rico 21 D 2
Pulgaon 11 F 3
Pulicat 12 D 4
Pulivendla 12 C 3
Puliyangudi 13 B 6
Punch 3 AB 3
Pune 10 CD 4
Punjab 3 BC 4
Punta Arenas 21 C 9
Puranpur 5 C 2
Puri 9 G 5
Purna 11 E 4
•Purnea 6 C 3
Puttalam 13 CD 6
Puttur 12 C 4
Puttur 13 A 4

Qara Qash - Haji Langar 3 D 2
Qatrun, El 22 F 4
Quebec 20 MN 4
Quebec 20 M 5
Queen Maud Land 24 JK 9
Queensland 23 DE 3
Queenstown 23 E 5
Quilon 13 B 6
Quilpie 23 E 3
Quito 21 C 3

Rabat 22 D 3
Radhanpur 10 B 2
Rae Bareli 5 C 3
Rahuri 10 D 4
Raichur 12 B 2
Raiganj 6 D 3
Raigarh 9 F 4
Raigir 6 B 3
Raipur 9 E 4
Raipur 6 C 4
Rajahmundry 12 DE 2
Rajampet 12 C 3
Rajapalaiyam 13 B 6
Rajapur 10 C 5
Rajasthan 4 AD 3
Rajauli 6 B 3
Rajgarh 4 C 2
Rajgarh 8 C 2
Rajgurunagar 10 CD 4
Rajkot 10 B 2
Raj Nandgaon 9 E 4
Rajpur 8 B 3
Rajura 11 F 4
Ramachandrapuram 12 E 2
Ramanathapuram 13 C 6
Ramdurg 12 A 3
Rameswaram 13 C 6
Ramgarh 4 A 3
Ranchi 6 B 4
Rander 10 C 3
Rangoon 18 K 8
Ranipettai 13 C 4
Rasipuram 13 C 5
Ratangarh 4 C 2
Ratnagiri 10 C 5
Raurkela 9 G 3
Rawalpindi 18 H 6
Rayadrug 12 B 3
Rayagada 9 F 5
Rhine 19 E 4
Rhode Island 20 M 5
•Rhodesia 22 GH 8
Rhone 19 E 4
Richmond 20 M 6
Rio Branco 21 DE 3
Rio Branco 21 D 4-5
Rio de Janeiro 21 FG 6
Rio de Janeiro 21 FG 6
Rio Grande 20 J 6
Rishikesh 5 AB 1
Rohil Khand 5 BC 2
Rome 19 F 4
•Rumania 19 G 4
Russian Soviet Federated Socialist Republic 18 F-R 3
Rutland Island 13 cd 3
Rwanda 22 G 7

Sabari 9 E 5
Sabarmati 10 C 1-2
Sagar 8 D 3
Saharanpur 5 AB 1-2
Saharsa 6 C 3
Saint Christopher 21 D 2
Saint George's Channel 19 D 3
Saint George's Channel 13 d 5
Saint Lawrence Island 20 B 3
Saint-Louis 22 C 5
Saint Mary's 23 EF 5
Sakhalin 18 P 4-5
Salem 13 C 5
Salisbury 22 GH 8
Salt Basin 4 AB 3
Salt Lake 4 C 3
Salt Lake City 20 H 5
Salvador 21 G 5
Salween 18 K 7-8
Salzburg 19 F 4
Samastipur 6 BC 3
Sambalpur 9 F 4
Sambhal 5 B 2
Sambhar Salt Lake 4 C 3
San Francisco 20 G 6
Sangareddipet 12 BC 2
Sangli 10 D 5
•Sanjuan 21 D 2
•Sankaranayinarkovil 13 BC 6
San Marino 19 F 4
San Salvador 20 KL 8
Santa Cruz 21 D 5
Santa Cruz Islands 23 G 2
Santal Parganas 6 C 3
Santa Maria 21 E 6
Santiago 21 C 7
Santiago 20 M 8
Santipur 6 D 4
Sao Paulo 21 EF 6
Saran 6 B 2
Sarda 5 C 2
Sardinia 19 E 5
Sasaram 6 AB 3
Saskatchewan 20 J 4
Satara 10 CD 5
Satyamangalam 13 B 5
Saudi Arabia 18 EF
Savantvadi 10 CD 6
Sawai Madhopur 4 D 4
Secunderabad 12 C 2
Sehore 8 C 3
Shahabad 6 AB 3
Shahabad 12 B 2
Shahabad 5 BC 3
Shahabad 12 BC 2
Shahbad 4 D 4
Shahapur 10 C 4
Shahpura 4 C 4
Shajapur 8 C 3
Shanghai 18 N 6
Sher Qila 3 B 1
Shetland Islands 19 D 2
Shikarpur 6 B 2
Shikoku 18 O 6
Shiliguri 6 D 2
Shillong 7 E 3
Shimoga 12 A 4
Shirpur 10 D 3
Shivpuri 8 C 2
•Sholapur 11 DE 5
Shoranur 13 B 5
Shujalpur 8 C 3
Siang Frontier District 7 G 1
Sibsagar 7 FG 2
Siddapur 12 A 3
Sikandarabad 5 A 2
Sikkim 6 D 2
Sileru 9 F 5
Silvassa 10 C 3
Silver City 21 b 1
Simla 3 C 4
Sind 8 D 2
Singapore 18 b 2
Singhbhum 6 BC 4
Sinkiang 18 HJ 5-6
Sirkazhi 13 CD 5
Siuri 6 C 4
Sivaganga 13 C 6
Society Islands 24 B 6
Sofia 19 G 4
Somalia 22 J 6
Somerset 23 E 2
Sompeta 12 F 1
Somvarpet 13 A 4
Son 5 D 4
Sonamarg 3 B 2
Sonamukhi 6 C 4
Sound Island 13 d 2
South Africa 22 G 9
South America 21
Southampton 19 D 3
Southampton Island 20 L 3
South Andaman 13 cd 3
South Arcot 13 C 4-5
South Carolina 20 LM 6
South China Sea 18 M 8-9
South Dakota 20 JK 5
South Georgia 24 H 8
South Island 23 c 2
•South Kanara 12 A 4
South Koel 6 B4
South Sandwich Islands 24 HJ 8
South Saskatchewan River 20 J 4
South Satara 10, 11 D 5
Southwest Cape 23 E 5
Soviet Socialist Republics, Union of 18 G-P 3
Spain 19 D 4
Spanish Sahara 22 C 4
Srikakulam 12 EF 1
Sri Kalahasti 12 C 4
Srimohangarh 4 A 3
Srinagar 3 B 2
Sriperumbudur 13 CD 4
Srirangam 13 C 5
Srivilliputtur 13 B 6
Srungavarapukota 12 E 1
Stanley 21 E 9
Stanley Reservoir 13 BC 4-5
Stockholm 19 FG 3
Subansiri 7 G 1-2
Subansiri Frontier District 7 FG 2
Subarnarekha 6 C 4
Sudan 22 GH 5
Suez 18 D 6
Suez Bay 22 b 3
Sulina 19 G 4
Sultanpur 5 CD 3
Suluru 12 CD 4
Sundargarh 9 FG 3
Sundarnagar 3 C 4
•Surinam 21 E 3
Sutak 3 C 3
Swaziland 22 H 9
Sweden 19 2-3 F
Switzerland 19 EF 4
Sydney 23 F 4
Sydney 20 NO 5
Syria 18 D 6

Tabora 22 H 7
Tadpatri 12 BC 3
Tadzik Soviet Socialist Republic 18 GH 6
Taihoku 18 N 7
Taipudia 7 G 2
Taiwan 18 N 7
Taiyuan 18 LM 6
•Talaimannar 13 CD 6
Talcher 9 G 4
Talguppa 12 A 3
Taliganja 6 D 4
Talikota 12 AB 2
Tallinn 19 G 3
Tamale 22 D 6
Tamanrasset 22 E 4
•Tamatave 22 JK 8
Tambov 19 J 3
Tamil Nadu 13 BC 6-4
Tampere 19 G 2
Tampico 20 K 7
Tamworth 23 EF 4
Tana 19 GH 1
Tanamalwila 13 D 7
Tanami 23 C 2
•Tananarive 22 J 8
Tanda 5 D 3
Tanda 5 B 2
Tandula Tank 8-9 E 4
Tangalla 13 D 7
Tangi 9 G 5
Tangier 22 D 3
Tanot 4 A 3
Tansa Lake 10 C 4
Tansen 5 D 3
Tantpur 5 A 3
Tanuku 12 D 2
Tanur 13 A 5
Tanzania 22 H 7
Tapajos 21 E 4
Tapi 10 C 3
Tapun 7 H 2
Taranto 19 F 4
Tarapur 10 C 4
Taree 23 F 4
Tarikere 12 A 4
Tashkent 18 G 5
Tasmania 23 E 5
Tasman Sea 23 F 4-5
Tawai 7 H 2
Tawang 7 EF 2
Tegucigalpa 20 L 8
Tehran 18 F 6
Tehri-Garhwal 5 B 1
Tekkali 12 F 1
Tellicherry 13 A 5
Tenali 12 D 2
Ten Degree Channel 13 cd 4
Tenkasi 13 B 6
Tennant Creek 23 D 2
Tennessee 20 L 6
Tennessee 20 L 6
Teonthar 9 E 2
Teresina 21 F 4
Teressa Island 13 cd 4
Terhi 5 B 1
Texas 20 JK 6
Tezpur 7 F 2
Thailand 18 KL 8
Thames 19 E 3
Thane 10 C 4
Thandla 8 B 3
Thanjavur 13 C 5
The Dangs 10 C 3
The Hague 19 E 3
Thessaloniki 19 G 4
Thoubal 7 G 3
Thule 20 N 2
Tibet 18 J 6
Tibrikot 5 D 2
•Tientsin 18 M 6
Tierra Del Fuego 21 D 9
Tigris 18 E 6
Tikamgarh 8 D 2
Tilhar 5 B 3
•Tillanchong Island 13 d 4
Timbuktu = Tombouctou 22 D 5
Tindivanam 13 CD 4
Tinsukya 7 G 2
Tiptur 12 B 4
Tirana 19 FG 4
Tirap Frontier District 7 GH 2
Tirodi 8 D 4
Tirthahalli 12 A 4
Tiruchchendur 13 C 6
Tiruchchirappalli 13 BC 5
Tirukkoyilur 13 C 5
Tirumangalam 13 BC 6
Tirumayam 13 C 5
Tirunelveli 13 B 6
Tirunelveli 13 B 6
Tirupati 12 C 4
Tirutturaippundi 13 CD 5
Tiruvarur 13 C 5
Tiruvannamalai 13 C 4
Tissamaharama 13 D 7
Tista 6 D 2
Titabar 7 FG 2
Titicaca, Lake 21 D 5
Tobruk 22 G 3
Tocantins 21 F 4
Toda Raisingh 4 C 4
Togo 22 E 6
Tokelau Islands 24 AB 6
Tokyo 18 OP 6
Tolti 3 BC 2
Tomsk 18 J 4
Tondi 13 C 6
Tonk 4 C 3
Tons 5 D 4
Tons 5 CD 4
Toowoomba 23 EF 3
Topeka 20 K 5-6
Torne 19 G 2
Tornio 19 G 2
Torreon 20 J 7
Touggourt 22 E 3
Toulouse 19 E 4
Tours 19 E 4
Trabzon 19 H 4
•Tranquebar 13 CD 5
Transkei 22 GH 10
Tree Island 13 b 2
Trenton 20 M 5
Tres Puntas, Cape 21 D 8
Tribal Territory 3 A 2
Trichur 13 AB 5
Trieste 19 F 4
Trincomalee 13 D 6
Trindade 21 G 6
Trinidad 21 ab 2
Trinidad and Tobago 21 DE 2 3
Trinkat Island 13 d 4
Tripoli 22 F 3
Tripura 7 EF 4
Tristan Da Cunha 24 HJ 7
Trivandrum 13 B 6
Tromso 19 F 2
Trondheim 19 EF 2
Trujillo 21 BC 4
Tso Moriri 3 D 3
Tuamotu Archipelago 24 BC 6-7
Tubuai Islands 24 B 7
Tuensang 7 G 2
Tulear 22 J 9
Tuljapur 11 E 4-5
Tumkur 12 B 4
Tundla 5 B 3
Tunga 12 A 3-4
Tunis 22 EF 3
Tunisia 22 EF 3
Turin 19 E 4
Turkey 18 CE 6
Turkmen Soviet Socialist Republic 18 FG 6
Tuticorin 13 C 6

Ucayali 21 C 4-5
Udaipur 4 B 4
Udala 9 H 4
Udayagiri 12 C 3
Udgir 11 E 4
Udhampur 3 B 3
Udipi 12 A 4
Uganda 22 H 6
Ujjain 8 B 3
Ukhrul 7 G 3
Ukhta 19 K 2
Ukrainian Soviet Socialist Republic 19 GH 4
Ulan Bator 18 LM 5
Umbarpada 10 C 3
Umea 19 FG 2
Umrer 11 F 3
Umreth 10 C 2
Umtata 22 GH 10
Ungava Bay 20 N 4
Union of Soviet Socialist Republic 24 M-Q 3
United Arab Republic (Egypt) 22 GH 4
United Arab Emirates 18 F 7
United Kingdom 19 CD 3
United States 20 H-L 6
Upernavik 20 NO 2
Uppervolta 22 DE 5
Ural 18 F 4
Uranium City 20 J 4
Uravakonda 12 B 3
Uri 3 B 2
Uruguai 21 E 6
Uruguay 21 E 7
Uruguay 21 E 7
Uskudar 19 GH 4
Utah 20 H 6
Utnur 12 C 1
Uttarkashi 5 B 1
Uttar Pradesh 5 B-D 2-3
Uzbek Soviet Socialist Republic 18 FG 5
Vaduz 19 E 4
Vaigai 13 C 6
Valencia 19 DE 5
Valladolid 19 D 4
Valparaiso 21 C 7
Valsad 10 C 3
Vancouver 20 GH 5
Vancouver 20 G 5
Vancouver Island 20 FG 5
Vaniyambadi 13 C 4
Varanasi 5 D 4
Varna 19 G 4
Vasai 10 C 4
Vellore 13 C 4
Venezuela 21 D 3
Venice 19 F 4
Venkatagiri 12 C 3-4
Veraval 10 B 3
Verkhoyansk 18 O 3
Vermont 20 M 5
Verona 19 F 4
Vetapalemu 12 D 3
Victoria 18 M 7
Victoria Lake 22 H 7
Victoria Island 20 HJ 2
Vidisha 8 CD 3
Vienna 19 F 4
Vietnam 18 L 7-9
Vijapur 10 C 2
Vijayadurg 10 C 5
Vijayawada 12 D 2
Villa Cisneros 22 C 4
Villupuram 13 C 4-5
Vinukonda 12 CD 2
Viramgam 10 BC 2
Virarajendrapet 13 AB 4
Virginia 20 LM 6
Virudunagar 13 BC 6
Viscount Melville Sound 20 HJ 2
Vishakhapatnam 12 E 2
Visnagar 10 C 2
Vite 10 D 5
Vitoria 21 FG 6
Vizianagaram 12 EF 1
Vladivostok 18 O 5
Volga 19 J 4
Volgograd 19 J 4
Vriddhachalam 13 C 5

Wadhwan 10 B 2
Wadi Halfa 22 H 4
Wainganga 11 F 3
Wani 11 F 3
Wankaner 10 B 2
Wanparti 12 C 2
Warangal 12 CD 1-2
Wardha 11 F 3
Wardha 11 F 3
Warora 11 F 3
Washim 11 E 3
Washington 20 GH 5
Washington 20 M 6
Wellawaya 13 D 7
Wellington 23 c 2
West Bengal 6 CD 4
West Dinajpur 6 D 3
West Godavari 12 D 2
West Indies 20 MN 7
West Irian 18 e 3
West Khandesh 10 CD 3
West Nimar 8 B 4
West Samoa 24 ST 6
West Virginia 20 LM 6
White Nile 22 H 6
White Russian Soviet Socialist Republic 19 GH 3
•Windhok 22 F
Winnipeg 20 K 4
Wollongong 23 F 4
Wyndham C 2

Yadgir 12 B 2
Yamuna 5 A 1
Yanam 12 E 2
Yangi Dawan 3 D 2
Yaounde 22 F 6
Yaraka 23 E 3
Yavatmal 11 F 3
Yellow = Hwang 18 M 6
Yemen 18 E 8
Yokohama 18 OP 6
Yugoslavia 19 FG 4
Yukon Territory 20 F 3

Zagreb 19 F 4
Zahirabad 12 B 2
Zaire 22 FG 6-7
Zambezi 22 H 8
Zambia 22 GH 8
Zanthus 23 C 4
Zanzibar 22 HJ 7
Zapala 21 CD 7
Zaria 22 E 5
Zaskar 3 C 3
Zaskar 3 C 2-3
Zomba 22 H 8

•NOTE

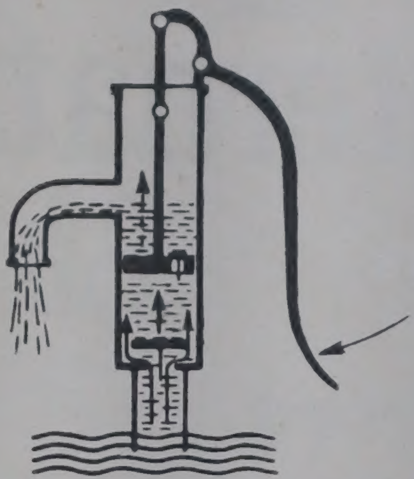
Peking = Beijing
Point Calimere = Kodikkarai
Porto Novo = Parangipettai
Purnea = Purnia
Rhodesia = Zimbabwe
Rumania = Romania
Sanjuan = San Juan
Sankaranayinarkovil = Sankarankovil
Sholapur = Solapur
South Kanara = Dakshin Kannad
Surinam = Suriname
Talaimannar = Taleimannar
Tamatave = Toamasina
Tananarive = Antananarivo
Tientsin = Tianjin
Tillanchong Island = Tillanchang Dwip
Tranquebar = Tarangambadi
Windhok = Windhoek

Library
C.F.T
No. 3087
16 1986

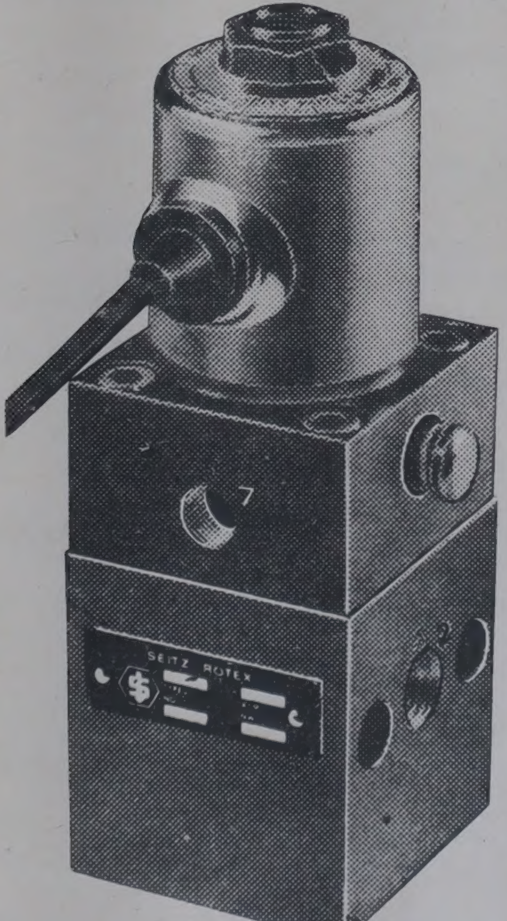
Cartographed and Printed by Tamilnad Printers and Traders Pvt. Ltd. Madras-44.
(Formerly Maps & Atlases Pub. Pvt. Ltd.)

Sai-rm-81A

IT
STARTED
WITH
THIS



HERE'S WHERE WE ARE TODAY



SEITZ-ROTEX
SOLENOID
VALVES

Seitz-Rotex started with the belief in perfecting design and development for individual applications. This far-reaching aim has made ideas like the latest safety engineered Seitz-Rotex Solenoid Valve feasible.
To meet the challenges of the solenoid valve of tomorrow—the changes in time and techniques—Seitz-Rotex constantly researches, innovates and finds solutions. Solenoid Valve is proven the world over in Chemical, Engineering, Airconditioning, Marine, Nuclear Power and other industries.

Manufactured by
ROTEX
MANUFACTURERS & ENGINEERS PVT. LTD.
213 Nav-Rattan, 69 P D'Mello Road
Bombay 400 009
Tel: 327439, 345482
Telex: 011-6387 ROTX
Gram: TEXTILMA Bombay
Factory:
Manpada Road, Dombivli (East)
Thane 421 204 Tel: 86503, 86527, 8652
Gram: ROXMEC, Dombivli

In technical collaboration with
EUGEN SEITZ AG. SWITZERLAND

0 5/7/88
21782

19 th year of publication

International Licensing

29043

A monthly publication circulating world-wide amongst progressively minded industrialists, entrepreneurs, and traders

Contents :

Licences Offered

Manufacturing licences for established products/processes • New technology, patents, and inventions, ready for commercial development • Patents originating from Government and other research intensive organisations • Production know-how • Turn-key projects • Local assembly/packaging, prior to manufacture.

Licences Sought

Requests for products/processes to up-grade, replace, or complement existing products • Local knowledge and production capacity joined with sophisticated foreign technology • Buy-back arrangements • Cross licensing • Entry gained to otherwise inaccessible markets.

Agencies and Distributorships

Exclusive territorial rights for marketing of technically advanced products and equipment • Specialised selling/servicing skills available in new or under-exploited markets.

Joint Venture and Investment Propositions

Industrial expansion programmes embracing financial and technical collaboration. • Openings for equ investment in industrial undertakings in de countries • Production facilities in low la areas.

Industrial Projects Special Interest to Emergent Countries

Industrial projects designed for entrepreneurs setti up small/medium scale industries in areas wher technical skills are limited.

Book Services

A wide selection of books to interest progres minded managers in industry and commerce, some emphasis on technology transfer, licens overseas operations, and foreign investment.

SUBSCRIPTION APPLICATION

To **INTERNATIONAL LICENSING** 92, Cannon Lane, Pinner, Middlesex,
England HA5 1HT.

Please enter a subscription in the name of:
(print/type below name and address)

All overseas countries (including airmail)		Indian Rupees
1 — year	£30·00	Rs. 500·00
2 — years	£48·00	Rs. 800·00
3 — years	£60·00	Rs. 1,000·00

Rupee payments to the credit of :
International Licensing Ltd.
The Chartered Bank
25, Mahatma Gandhi Road,
Post Box No. 558,
Bombay 400 023.

Please send this application to the Chartered Bank with your remittance, receipt of which will be acknowledged.

HB. 92-C

N
P
Pu
Bo
Ma
card
Dia
Ph
wit
& P
spe
of

BA

170, A
Bombay
INDIA.
Telephone

OUS
EETS
orised
“

Rigid ts
Deco e :
Rigid LE
Tran ent,
desig lair
Wel & .
Soli Veld
HIP ysty
Tub (HST.
Bra crew.
Ri
for
“ T
cle

D
5,
Bc
Cable
Phon

---

ers & Dealers in :

ders, Exercise
dies handbags,
ers, Badges, Identity
g card Albums,
ords-Cassettes-
Albums with &
ing, Pouches, Wallets
on articles as per your
Complimentary articles
& foam rexine.

BHAI N. SHAH

Pakitwala

ehman Street,
003,

8387.

OF PVC RIGID

dealers :
” — Caliplast
— PVC —
flexible gaskets, flooring,
heets, PVC Rigid pipes, PVC
DER FOILS opaque,
Translucent, Suede & Pinceal
& Colour sheets, PVC
Solid Rods, PP/HDPE/LDPE —
ing Rods, Block & Sheets,
ene Sheets & Heat Shrinking
Plastic FILE-clips, Strips,
Visiting Cards film-PVC
ransparent in Roll
mm to 0.25 mm &
” make imported Rigid
oll.

IP PLASTICS

msheth Street,
ay 400 002 (INDIA).
“STYLOART”, Bombay 400 002.
330845, 335166 & 335711.

HOUSE OF ZIP FASTENERS

Authorised dealers for ‘TRESSOR’, Polyester zip fasteners, ‘DIP’ & ‘VKK’ metal zip fasteners, ‘FUJI’ Sewing machine needles, Rivet buttons for Jeans, Woven labels, Leather & Metal badges for Jeans, Four Part & show buttons, Leather goods brass fittings, fancy stickers, Buckles & Ironing stickers & other garment materials.

DILIP TRADING COMPANY

5, Shamsheth Street (P.O. Box No. 2758),
Bombay 400 002,
INDIA.
Cable : “DIPZIPPERS”, Kalbadevi.
Bombay 400 002.

Phones : 330845 & 335711.

HOUSE OF PVC TUBINGS

PVC Tubings—opaque—colour & clear—PVC sheetings & films
U-Foam
Polyurethane & Foam sheets, Nylon & metal Zip fasteners, Snap fasteners, eyelets, rivets, T-Rings, Hooks, Plastic-wires, PVC leather cloth & Plastics & leather goods fittings.

PARAS TRADING CO.

49, Mirza Street,
Bombay 400 003,
INDIA.

Phones : 331892 & 333885.

Printed and pu d for the proprietors, BENNETT, COLEMAN & CO. LTD., by T. P. PITHAVALA at Rang Bharati, Bombay, India. Editor :
GIRILAL JAIN. B nches : 7, Bahadurshah Zafar Marg, New Delhi 110002; 139, Ashram Road, Ahmedabad 380009 ; 13/1, Government Place East,
Calcutta 700069 ; 6 , Montieth Road, Madras 600008 ; 407-1, Tirath Bhavan, Quartergate, Pune 411002; 26, Station Approach, Sudbury, Wembley,
Middlesex, U.K. Tel. No. 01-903-9696.

Regd. with the Registrar of Newspapers for India — Reg. No. R. N. 14188/67.